Cooperative Extension
Colorado State University

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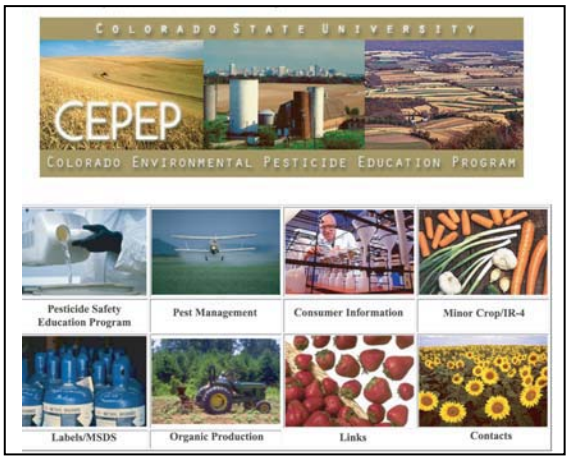
FROM THE GROUND UP

Agronomy News

Colorado Pesticide Issues



Pesticide Regulation, Registration and Labeling in Colorado

Overview of Colorado pesticide regulations with emphasis on the registration process

Pest management is one of the most costly inputs growers (and ultimately consumers) must budget for every year. Pesticides are used extensively in Colorado for a variety of applications. In 2001, Colorado growers reported that $84,277,000 were spent on pesticide inputs alone; the total input expenses were $4,690,339,000 (Colorado Agricultural Statistics, 2002). The registration, use and environmental impact of pesticides and pesticidal devices is carefully controlled by the State of Colorado.

A pesticide is defined by the Colorado Department of Agriculture (CDA) as "any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or any substance or mixture of substances intended for use as a plant growth regulator, defoliant or desiccant." The term pesticide includes many kinds of ingredients used in products, such as insecticides, fungicides, rodenticides, insect repellants, weed killers, antimicrobials, and swimming pool chemicals, which are designed to prevent, destroy, repel, or reduce

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Pesticide Regulation, Registration and Labeling in Colorado (continued)

pests of any sort. Antimicrobial "pesticides" include such common household products as toilet bowl and bathroom disinfectants.

A pesticide device is defined by CDA as "any instrument or contrivance, other than a firearm, intended for trapping, destroying, repelling, or mitigating any pest or any form of plant or animal life (other than man and other living bacteria, viruses or other microorganisms on or living in man and other living animals). Examples of devices include water or air filters that claim to remove microorganisms, insect traps that claim to aid in control, and ultrasonic rodent or insect repellents. Pesticide devices are not required to be registered with the United States Environmental Protection Agency (EPA), but their production site is required to be a registered establishment. This establishment number is required to be on the device label. However, each product requires an individual registration with CDA.

Federal Regulation

Federal regulation of the distribution, sale or use of pesticides is governed by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Administered by the EPA, FIFRA requires that pesticide products be registered and labeling reviewed and accepted by EPA. Additionally, it requires that applicators of pesticides that may be hazardous be certified. This federal regulatory scheme applies to the distribution, sale or use of pesticides in any state. EPA is responsible for regulating labeling and packaging. States are usually delegated authority to administer pesticide programs and may regulate pesticide use and sales as long as it does not conflict with the federal scheme.

State Regulation

Within Colorado, CDA is responsible for enforcing the state's version of the federal regulatory scheme. The Colorado Pesticide Act (35-9-11 B 128 C.R.S) covers pesticide registration requirements and pesticide dealer licensing. The Colorado Pesticide Applicator Act (35-10-102-128 C.R.S.) regulates the use of pesticides by commercial applicators. These state laws are intended to protect Colorado's people and environment from the adverse effects of pesticides.

The Colorado Pesticide Act requires registration of pesticides and pesticidal devices with CDA prior to advertising, distribution or sale. One of the stated intents of the Pesticide Act is "to assure the dissemination of accurate information regarding the proper and prohibited uses of any pesticide or pesticidal device, and to protect the public health, safety, and welfare of the people of Colorado." CDA registers approximately 10,000 pesticide products each year. In 2002, CDA registered 38 devices. To determine if a pesticide is registered in Colorado you may use the registration query site on CDA's web page:

http://www.ag.state.co.us/DPI/Pesticides/PPRS/PPRSQuery.htm.

The site is updated daily so that you can determine if a product is registered for the current year. The site is best searched using Microsoft Internet Explorer. It is highly recommended to proceed the product name with the wild card symbol (%).

The Colorado Pesticide Information Retrieval System (CPIRS) http://state.ceris.purdue.edu/doc/co/stateco.html is another source of information pertaining to pesticides currently registered by CDA. CPIRS

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Web Site: http://www.colostate.edu/Depts/SoilCrop/extension/Newsletters/news.html

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Pesticide Regulation, Registration and Labeling in Colorado (continued)

should be used only for informational purposes. The information may or may not include restrictions specific to Colorado. CPIRS can be searched for specific crops/sites or pests. The data that supports these search features are derived from two different sources the CDA Pesticide Section and the USEPA's Office of Pesticide Programs Pesticide Product Information System (PPIS). This pesticide information is updated approximately once a month. The specific crop/site and pest are based on the "master label" accepted by EPA and may not accurately reflect the CDA accepted label.

Product Registration

Before a pesticide can be sold or used in the United States (U.S.), FIFRA requires that it be registered with the EPA. Under Section 3 of FIFRA, EPA can register pesticides for use throughout the U.S. EPA evaluates the proposed pesticide thoroughly to ensure that it will not harm human health or the environment. Pesticides that pass this evaluation are granted a registration that permits their sale and use according to requirements set by EPA to protect human health and the environment. The process of registering a pesticide is a scientific, legal and administrative procedure through which EPA examines:

- the ingredients of the pesticide,
- the particular site or crop on which it is to be used,
- the amount, frequency and timing of its use, and
- storage and disposal practices.

The registrant (producer) of the pesticide must provide data from a wide variety of scientific studies conducted according to EPA guidelines. These tests evaluate whether a pesticide has the potential to cause adverse effects on humans, wildlife, fish, and plants, including endangered species and non target organisms. The tests also evaluate possible contamination of surface water or groundwater from leaching, runoff and spray drift. Potential human risks range from short term (acute) toxicity to long term (chronic) effects such as cancer and reproductive system disorders. The data are designed to identify possible harmful effects the chemical could have on humans (its toxicity), the amount of the chemical (or breakdown products) likely to remain in or on food, and other possible sources of exposures to the pesticide (e.g., through use in homes or other places). All of this information is used in EPA's risk assessment process.

The risk assessment includes consideration of the amounts and types of food people eat and how widely the pesticide is used (that is, how much of the crop is actually treated with the pesticide), as well as chemistry, toxicity and exposure information. EPA also uses data from U.S. Department of Agriculture (USDA) on what foods people eat and the quantity they eat, collected through the Pesticide Data Program. Through these evaluations, EPA is ensuring the overall safety of proposed pesticide uses, as required by the Food Quality Protection Act (FQPA) of 1996.

Tolerance Establishment

Before allowing the use of a pesticide on food crops, EPA sets a tolerance, or maximum residue limit, which is the amount of pesticide residue allowed to remain in or on each treated food commodity. A wide margin of safety is included to ensure that residues remaining in foods are many times lower than amounts that could actually cause adverse health effects. The tolerance is the residue level that triggers enforcement actions. That is, if residues are found above that level, the commodity will be subject to seizure by the government. In setting the tolerance, EPA must make a safety finding that there is "reasonable certainty that no harm" will result to human health from the aggregate and cumulative exposure to the pesticide. EPA considers the toxicity of each pesticide, how much of the pesticide is applied and how often, and how much of the pesticide (i.e., the residues) remains in or on food. The tolerance applies to food imported into this country, as well as to food grown here in the U.S.

Once tolerances are established, they are enforced by the States and several agencies of the Federal government, working together. Food commodities traveling in commerce, including both domestically grown and imported produce, are monitored by the Food and Drug Administration (FDA) and USDA, working closely with the States. Food crops must be within the tolerances set by EPA, or they are subject to seizure and destruction.

Classification of Pesticides

During the registration process, EPA will classify a pesticide as appropriate for general use, restricted-use or both. Classification depends upon the impact of the pesticide application on the environment. Pesticides which

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will not generally cause unreasonable adverse effects on the environment are classified for general use. Pesticides which, under the same circumstances, may cause injury to the applicator or other persons, or have adverse environmental impact, are classified as restricted-use pesticides (RUP). Federal RUPs are identified by a prominent statement on the label.

CDA is able to further limit or restrict use beyond that of EPA by designating a pesticide as a state restricted-use pesticides. At present all of the Colorado State RUPs are nonselective herbicides used for industrial weed control with long soil persistence. CDA has designated all products containing the active ingredients of bromacil, diuron, prometon, sodium chloride, sodium metaborate, and tebuthiuron, as State RUPs. Sale and use of State RUPs are restricted to certified applicators or persons under their direct supervision. The restricted status of these products is not included on the product label.

Requirements for Use and Sale of Restricted-use Pesticides

Private Applicators

Private applicators are certified to use RUPs to produce agricultural commodities on land that they or their employers own or lease. An agricultural commodity is defined as "any plant, or part thereof, or animal, or animal product, produced by a person (including farmers, ranchers, vineyardists, plant propogators, Christmas tree growers, aquaculturalists, floriculturisrs, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by man or animals"(CFR 40 20 171.2 a (5)). In Colorado private applicators are certified by EPA Region 8 (1-800-227-8917 X 7283).

Commercial Applicators

Commercial applicators are professionals who are in the business of applying pesticides or making applications that do not fit under the definition of a private applicator. Commercial applicators apply pesticides as a major part of their jobs to land or property that they do not own or lease. Limited Commercial Applicators apply RUPs to their own or their employer's business property. Public Applicators apply RUPs as part of their job with any government agency. Limited commercial or public applicators who apply only general use pesticides are not required to register with CDA.

Pesticide Dealers

Any person who distributes either Federal or State RUPs must be licensed with CDA. Each business location, including branch offices, and each business name must be licensed. In 2002, 253 RUP dealers were licensed with CDA.

Any person who distributes Federal RUPs must also report to the EPA the business name under which they operate and the name and address of the facility. In Colorado, RUP dealers can contact EPA Region 8 at 1-800-227-8917 X 7283. In addition to notifying EPA, businesses are required to maintain records of RUP sales for two (2) years. The information that must be recorded includes the name and address of the person making the purchase, their certification number and its expiration date, the product name and EPA registration number, the quantity and the date purchased. Failure to comply with these requirements could result in a fine from EPA of $5,500 per violation.

Labels and Labeling

The term "label" means the written, printed or graphic matter on, or attached to, the pesticide or device or any of its containers or wrappers. The term "labeling" means all labels and all other written, printed or graphic matter which:

A. accompanies the pesticide or device at any time; or

B. reference is made on the label or in literature accompanying the pesticide or device, except to current official publications of the EPA, USDA, the U.S. Departments of Interior and Health and Human Services, State agricultural colleges, and other similar Federal or State institutions or agencies authorized by law to conduct research in the field of pesticides.

EPA must accept the language that appears on each pesticide label. A pesticide product can only be used legally according to the directions on the labeling accompanying it at the time of sale. Following label instructions carefully and precisely is necessary to ensure safe use.

The EPA registration number indicates that the pesticide label has been accepted by EPA. The first set of numbers identifies the manufacturer or company and the second set

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Pesticide Regulation, Registration and Labeling in Colorado (continued)

identifies the product. If there is a third set of numbers it indicates the product is subregistered by a company other than the primary registrant. All EPA registered pesticides are required to display the registration number on their label.

One of the most important words in FIFRA is "intended." Products are considered to be pesticides if they are intended for preventing, destroying, repelling, or mitigating any pest or intended for use as a plant regulator, nitrogen stabilizer, defoliant, or desiccant.

Intent is determined by claims on the label and/or the composition/mode of action of the product as distributed or sold. If the manufacturer, formulator, packager, or shipper makes statements on labels, advertising, product literature, or even verbally, that a product has pesticidal or plant regulator use, then the product is subject to FIFRA.

Only after EPA has reviewed and accepted the labeling and registered the product can a pesticide product be sold. If the manufacturer wants to change the information in the labeling after the product and labeling are registered, EPA must review and accept the change prior to distribution.

Labeling is required under the federal system and is the primary way through which EPA regulates the use of pesticides. Under federal law, it is unlawful to mislabel a pesticide or to use it in a manner inconsistent with its label. When a pesticide is approved by EPA for registration it is said to be labeled. There are two common types of pesticide labels. Section 3 pesticides are the most familiar pesticide labels. Most pesticide uses are registered this way. Other pesticides are registered by EPA for more limited use in certain states, including Colorado. This would include Section 24c labels.

Section 24c Special Local Needs Registrations

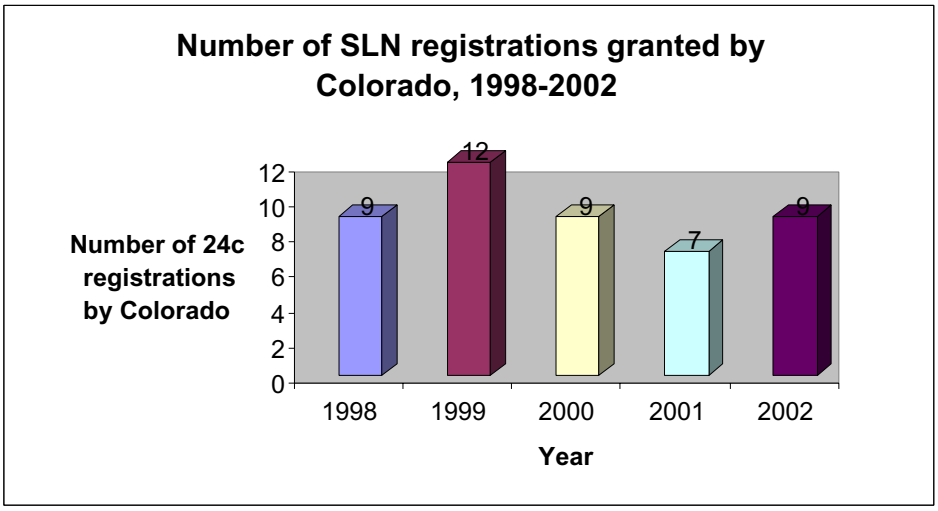
Under Section 24c of FIFRA, States, including Colorado, can register additional uses of a federally registered pesticide. These additional uses are for distribution and use within a particular state to meet a "special local need" (SLN). This is designed to allow states to register uses for needs that may be specific to a small region. Often the potential use area does not represent a large enough market to justify the effort required by a registrant to obtain a full national registration.

Although SLNs can be approved for many different reasons and application sites, most involve use on crops. A certain crop grown within Colorado may be attacked by a particularly damaging pest, or Colorado officials may expect it to be attacked sometime during the growing season, thereby creating a special pest problem. The pesticide must have an established tolerance associated with the crop, or be exempted by EPA from the requirement of a tolerance for that crop.

Currently, Colorado has 50 pesticide crop and/or use combinations approved as Section 24c labels. In 2002, nine new 24c labels were approved; eight new SLNs have been approved so far in 2003. Many of these are for relatively minor crops, including onions, greenhouse tomatoes, potatoes, spinach, dry peas, lentils, chickpeas, and dry beans. A list of Colorado's current 24c labels can be seen at the following website: www.colostate.edu/Depts/SoilCrop/extension/CEPEP/24c/special_needs.htm. This site is updated each time a new 24c label is approved.

SLN Labels

Section 24c labels are valid only in the state of issue. The applicator must possess a copy of the Colorado label when the pesticide is applied. The supplemental 24c labeling prepared



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Pesticide Regulation, Registration and Labeling in Colorado (continued)

by the manufacturer must be obtained from the dealer that supplies the product. In some instances the 24c label is available only to individuals who have signed a waiver of liability and indemnification (i.e., Prowl 3.3EC Herbicide in dry bulb onions). However, these are not label provisions that would be enforceable by EPA or CDA.

Violation of a Section 24c label is a violation of FIFRA. For private applicators, civil penalties of up to $1,000 per offense may be assessed following a warning letter. Commercial applicators may receive civil penalties of up to $5,000 for each violation. Violations can also result in criminal penalties of as much as $25,000 and 1 year in jail.

SLN Requests

The official request for a 24c registration comes from a pesticide manufacturer or formulator to CDA. University researchers, cooperative extension personnel, commodity groups, growers, and others can inform the manufacturer of the need, but the request must come from the registrant.

When there is an existing or expected local pest problem, CDA may grant a SLR registration if there is:

- no EPA registered pesticide for the use in question,
- an EPA registered pesticide, but it is not available or cannot be obtained in a sufficient quantity, or
- an EPA registered pesticide which normally would be suitable when used according to label instructions, but which will not be safe or efficacious when used under local conditions.

CDA has some limitations in what they can register. They may not register:

- pesticides for use on food crops that do not have an established tolerance on that crop,
- pesticides containing active or inert ingredients not contained in any EPA registered products,
- any pesticide products or uses affected by suspension or cancellation action based on human health, environmental or efficacy considerations, or
- pesticide products and/or uses formerly denied registration by EPA.

CDA, in consultation with CSU, determines if the request meets the requirements and then forwards state approved labels to EPA. If the EPA Administrator rejects a state registration, it cannot remain effective for more than 90 days. If not disapproved, it becomes a federal registration for that state only and is then subject to EPA actions such as suspension and cancellation procedures.

Section 18 Emergency Exemptions

Under Section 18 of FIFRA, EPA can allow State and Federal agencies to permit an additional use (not specified by the pesticide's label) during a short term pest management crisis in a specific locality. A Section 18 Exemption is an exemption form the FIFRA requirement for registration due to an emergency situation. Since use under a Section 18 Exemption is an "unregistered use," the manufacturer or distributor is not allowed to advertise or promote the use of the product, even though the use is legal under the conditions of the Section 18 Exemption granted by EPA.

Under FQPA, EPA must establish formal tolerances (maximum allowable residue levels) to cover all pesticide residues in food, even residues resulting from emergency uses. Tolerances established for emergency exemption uses are time limited to correspond to the use season. In establishing a tolerance, EPA must make the finding that there is "reasonable certainty that no harm" will result to human health from aggregate and cumulative exposure to the pesticide, as required by the FQPA health based standard. Establishment of these tolerances, with their expiration dates, are published in the Federal Register.

Emergency exemptions are used when there are no other federally registered pesticides available to control a serious pest problem and there would be significant economic loss without the use of the Section 18 pesticide.

Several Types of Emergency Exemptions Exist:

Specific Exemption

When a pest outbreak has occurred or is about to occur and there is not a registered pesticide for that use or purpose, a request for an EPA exemption from the registration requirement for a particular pesticide that will control the pest may be made by CDA. Information including the nature, scope, and the frequency of the problem; the specific pest(s)

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Pesticide Regulation, Registration and Labeling in Colorado (continued)

involved; which pesticide will be used and in what amounts; the economic benefits anticipated; and an analysis of possible adverse effects must be supplied. EPA grants the exemptions. Reports must be filed when the treatment is over. A specific exemption is only good for a specified amount of time (maximum of one year) and for a designated area.

Quarantine or Public Health Exemption

This exemption may be granted to prevent the introduction or spread of a foreign pest into or throughout the U.S. or to prevent a public health problem. No pesticide that has been suspended by EPA may be used. Information including the nature, scope, and the frequency of the problem; the pest involved; which pesticide or pesticides will be used and in what amounts; the economic benefits anticipated; and an analysis of possible adverse effects must be supplied. Public Health Exemptions requests should include a discussion of the availability of medical treatments for the health problems associated with the pest. EPA grants the exemptions. Reports must be filed when the treatment is over.

Crisis Exemption

A crisis exemption may be used if it is found that there is no readily available pesticide registered to control the pest and there is not time to request and get approval for a specific exemption. No pesticide that has been suspended or cancelled may be used. EPA must be notified 36 hours prior to pesticide use under the crisis provisions when feasible. If the product will be used for more than two weeks after the crisis exemption is declared, then a full Section 18 request must be submitted to EPA within the two weeks.

Colorado Section 18 Emergency Exemptions

A total of 15 Section 18 Emergency Exemptions were issued in 2002 and five were crisis exemptions. All of the crisis exemptions had some relationship to the severe drought conditions in Colorado during 2002. One hundred and sixty-one (161) permits (number of potential users) were issued. A total of 64,874 acres were treated in Colorado under Section 18 permits. To view Colorado's current Section 18's visit: http://www.colostate.edu/Depts/SoilCrop/extension/CEPEP/sec18/exemptions.htm.

You can view EPA's current and recent actions by using the EPA Section 18 Database at http://cfpub1.epa.gov/oppref/section18/search.cfm. The information provided in the database includes: the site (e.g., the crop being protected); the pest posing the emergency; the state or federal agency which applied for the exemption; the date of application and EPA's response. If a tolerance was established, the date of the publication of that tolerance in the Federal Register is given, and the date the tolerance expires. The database is updated biweekly. The options for searching the database are: (1) search by commodity (site), chemical or applicant; (2) search by a specific date; or (3) search by date range.

The Section 18 Process:

1. Growers, in cooperation with CSU extension and research personnel, identify an emergency situation with no registered pesticides.
2. Growers or CSU personnel contact CDA and request that the agency apply to EPA for a Section Emergency Exemption for a particular use.
3. CDA evaluates the requests, decides if the situation qualifies as and emergency and determines if adequate supporting information is available. If the situation qualifies and necessary supporting information is provided, CDA prepares and submits an Emergency Exemption application to EPA.
4. EPA attempts to make decisions on the requests within 50 days of receipt.

The following criteria must be met to get a Section 18 approved:

- no effective registered pesticides are available to control the pest problem,
- no feasible alternative control practices are available,
- proposed pesticide and use has been demonstrated effective in alleviating the emergency,
- sufficient data are available to establish temporary tolerance,
- sufficient information is available for EPA determination of no unacceptable risks to human health, endangered or threatened species, beneficial organisms, and the environment from the proposed use, and
- the situation involves the introduction of a new pest problem or unusual environmental conditions

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Pesticide Regulation, Registration and Labeling in Colorado (continued)

and will result in significant economic loss; or will present significant risks to human health or the environment.

EPA must perform:

- multidisciplinary risk assessment of the requested use, relying largely on data that have already been reviewed for the pesticide,
- dietary risk assessment,
- occupational risk assessment,
- ecological and environmental risk assessment,
- assessment of the emergency, and
- assessment of the progress toward registration for the use.

If the emergency appears valid and the risks are acceptable, EPA approves the Emergency Exemption request. EPA will deny an exemption request if the pesticide use may cause unreasonable adverse effects to health or the environment, or if emergency criteria are not met. Colorado may withdraw an exemption request at any point in the process.

Using Section 18 Products

Pesticide applicators must have and follow the conditions contained in the EPA letter granting the Section 18, as well as the full label for the EPA-registered product. Usually the registrant also prepares supplemental labeling that is distributed with the product, which should include all the restrictions in the EPA letter. Users must have both this supplemental labeling as well as the EPA registered label in their possession at the time of application. Product for Section 18 uses can only be distributed or sold by dealers licensed by CDA.

A permit is required from CDA in order to use the Section 18 product. To obtain a permit contact CDA's Pesticide Registration Section at 303-239-4144. Prior to obtaining a permit, applicators must either be licensed as commercial or private applicator.

Permits can be issued over the phone to allow immediate purchase of the product. Permittees must provide their certified applicator license number. CDA will mail a written permit application within a few days of the phone call. Included in this packet will be an "Application to apply for a permit" for the specific Section 18. The application must be completed and returned within ten (10) days of the date on CDA's letter. If the application is not returned, your right to use the Section 18 product will be revoked and further administrative action could be taken against you. CDA will provide a copy of the EPA approval letter to each permittee with the Section 18 permit application. The supplemental labeling prepared by the manufacturer must be obtained from the dealer that supplies the product.

Permittees must record the following pesticide application information:

1. Customer name and address
2. Location of treated acreage
3. Product applied (brand name and EPA Registration Number, if applicable)
4. Application rate (oz product/A)
5. Dilution rate (gal/A)
6. Date and time of application
7. Number of treated acres
8. Crop or commodity treated (specific)
9. Pest controlled
10. County of treatment site

Section 18 permittees are subject to inspection by CDA Inspectors. CDA Inspectors will request the information outlined above. In 2002, 63% of all Section 18 permittees were inspected.

Permittees are required to submit final reports on the use of the product to CDA. The reports are due on a specific date, which will be indicated in the CDA packet. The final report forms are provided by CDA. In addition to the required records, the final report must provide CDA with:

- Quantity used by county of application
- How well did the product perform?
- Any adverse effects
- Total ounces of formulated product used

Commercial applicators applying Section 18 products must notify the growers of pertinent precautionary information, as outlined in the permit packet.

Section 25b Minimal Risk Labels

Except in very limited circumstances, any substance that makes a pesticidal claim must be registered by EPA before it can be legally sold or distributed. One such exemption to the registration requirement is for

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those pesticides under Section 25b of FIFRA. In 1996, EPA exempted certain minimum risk pesticides from FIFRA requirements if they satisfy certain conditions. EPA exempted the products described in 40 CFR 152.25(g) in part to reduce the cost and regulatory burdens of EPA and to focus EPA's limited resources on pesticides which pose greater risk to humans and the environment.

All pesticides sold in Colorado, including 25b exempted products, must be registered by the Colorado Department of Agriculture. In 2002, CDA registered 58 Section 25b products.

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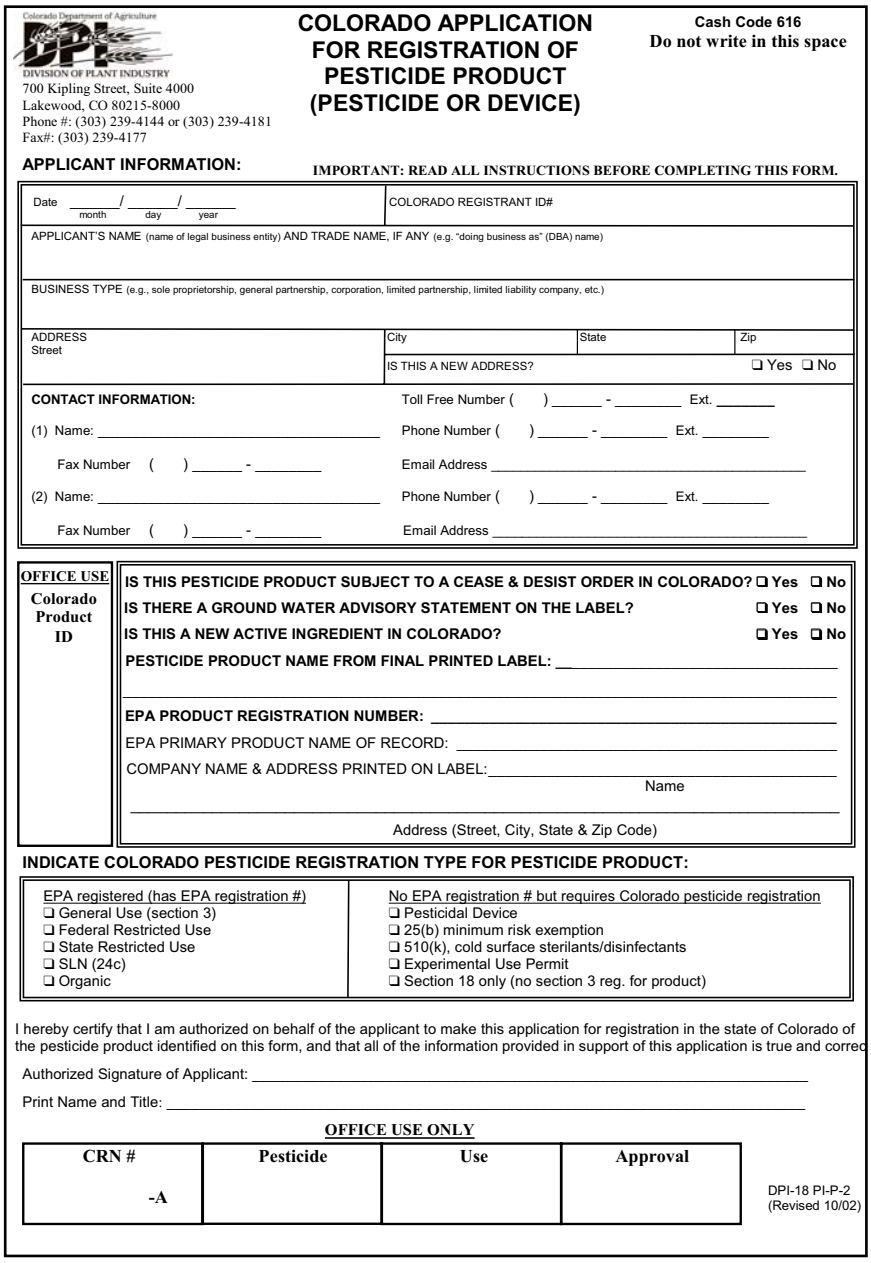
Colorado State University

Laura Quakenbush
Pesticide Registration Specialist
Colorado Department of Agriculture



Colorado Department of Agriculture
DPI
DIVISION OF PLANT INDUSTRY
700 Kipling Street, Suite 4000
Lakewood, CO 80215-8000
Phone #: (303) 239-4144 or (303) 239-4181
Fax#: (303) 239-4177

COLORADO APPLICATION FOR REGISTRATION OF PESTICIDE PRODUCT (PESTICIDE OR DEVICE)

Cash Code 616
Do not write in this space

APPLICANT INFORMATION:

IMPORTANT: READ ALL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

Date _____/_____/_____ (month / day / year) | COLORADO REGISTRANT ID#

APPLICANT'S NAME (name of legal business entity) AND TRADE NAME, IF ANY (e.g. "doing business as" (DBA) name)

BUSINESS TYPE (e.g., sole proprietorship, general partnership, corporation, limited partnership, limited liability company, etc.)

ADDRESS Street | City | State | Zip

IS THIS A NEW ADDRESS? ❑ Yes ❑ No

CONTACT INFORMATION:

Toll Free Number ( ) _____ - _____ Ext. _____

(1) Name: _____ Phone Number ( ) _____ - _____ Ext. _____

Fax Number ( ) _____ - _____ Email Address _____

(2) Name: _____ Phone Number ( ) _____ - _____ Ext. _____

Fax Number ( ) _____ - _____ Email Address _____

OFFICE USE
Colorado Product ID

IS THIS PESTICIDE PRODUCT SUBJECT TO A CEASE & DESIST ORDER IN COLORADO? ❑ Yes ❑ No
IS THERE A GROUND WATER ADVISORY STATEMENT ON THE LABEL? ❑ Yes ❑ No
IS THIS A NEW ACTIVE INGREDIENT IN COLORADO? ❑ Yes ❑ No
PESTICIDE PRODUCT NAME FROM FINAL PRINTED LABEL: _____
EPA PRODUCT REGISTRATION NUMBER: _____
EPA PRIMARY PRODUCT NAME OF RECORD: _____
COMPANY NAME & ADDRESS PRINTED ON LABEL: _____ (Name)
_____ (Address (Street, City, State & Zip Code))

INDICATE COLORADO PESTICIDE REGISTRATION TYPE FOR PESTICIDE PRODUCT:

EPA registered (has EPA registration #)	No EPA registration # but requires Colorado pesticide registration
❑ General Use (section 3)	❑ Pesticidal Device
❑ Federal Restricted Use	❑ 25(b) minimum risk exemption
❑ State Restricted Use	❑ 510(k), cold surface sterilants/disinfectants
❑ SLN (24c)	❑ Experimental Use Permit
❑ Organic	❑ Section 18 only (no section 3 reg. for product)

I hereby certify that I am authorized on behalf of the applicant to make this application for registration in the state of Colorado of the pesticide product identified on this form, and that all of the information provided in support of this application is true and correc

Authorized Signature of Applicant: _____

Print Name and Title: _____

OFFICE USE ONLY

CRN #	Pesticide	Use	Approval
-A			

DPI-18 PI-P-2
(Revised 10/02)

For past issues of the Agronomy News on agricultural topics such as:

- Bio-Pharming
- Drought
- Forages
- Beans
- Sensors in Agriculture
- Dryland Corn
- Precision Agriculture
- Biotechnology
- Carbon Sequestration
- Phosphorus and Runoff

Visit our web site:

http://www.colostate.edu/Depts/SoilCrop/extension/Newsletters/news.html

The Colorado Minor Crop Pest Management Program

Overview of the Colorado Minor Crop Pest Management Program and how to initiate research to expand pesticide labels to include minor crops.

The Minor Crop Pest Management Program (MCPMP) works to ensure that Colorado fruit and vegetable growers have the tools they need to manage pests successfully. The MCPMP is funded in part by the USDA IR 4 Project, a federal/state/private cooperative research program started in 1963 to increase the availability of crop protection chemicals to minor crop producers. A minor crop is defined as any crop grown on less than 300,000 acres nationally. To learn more about the USDA IR-4 Project visit http://pestdata.ncsu.edu/ir 4/.

Sandra McDonald serves as the Project leader and State Liaison Representative. Clark Oman serves as the Field Research Director and is responsible for managing the field and greenhouse trials.

The MCPMP is entering its fourth season. During the past three seasons data have been provided to support the registration of 18 chemicals in 12 different crops. This has involved 35 residue trials and 5 efficacy and performance trials. These include work on all three major classes of pesticides (fungicides, herbicides and insecticides) on a wide variety of fruit, vegetable and field crops. Fruit crops include apple, cherry, and pear. Vegetable crops include cabbage, cantaloupe, carrot, cilantro, cucumber, lettuce (head and leaf), onion, potato, and spinach. Field crops include dry bean, proso millet, sugar beet, and sunflower. Last year marked our first work with greenhouse tomatoes. Because of the success of those trials we will be conducting more greenhouse tomato trials this season and also a greenhouse bell pepper trial. Other trials on the list for this upcoming season include chili peppers and peanuts in the Arkansas Valley, malting barley, dry beans, cabbage, summer squash, and dill seed.

Of the twenty 24c Special Local Needs registrations from 2001 to date, five were IR-4 projects. Some of the field residue data for Distance Insect Growth Regulator for whitefly control on greenhouse tomatoes were collected in Colorado.

The goal of the MCPMP is to provide Colorado growers with safe, effective and economical tools to control pests on minor crops. Toward this end, MCPMP:

- Works with individual growers, grower organizations, nurserymen, crop protection companies, agricultural scientists, and extension personnel to identify specific pest control needs.
- Identifies new pest management strategies and control options.
- Prepares and submits a Pesticide Clearance Request (PCR) to IR 4 if a new pesticide or biopesticide is identified.
- Participates in setting national research priorities. The culmination of this is the annual IR 4 Food Use Workshop.
- Following the PCR selection and approval process, the MCPMP conducts field and greenhouse residue trials according to Environmental Protection Agency's (EPA) Good Laboratory Practice standards, a very strict "code of conduct" used to ensure the quality of the data used by the EPA to set tolerances for allowable levels of pesticide residue on food crops.
- Submits research reports to the Western Region IR 4 Project located at University of California, Davis. The data are reviewed and sent on to IR 4 headquarters at Rutgers University in New Jersey. MCPMP's research is combined with that from other facilities throughout the United States and submitted to the EPA as a petition to request registration of the pesticide for use by growers.
- After a tolerance is set, MCPMP works with the CDA and the manufacturer to develop a label for the pesticide.

To view the IR-4 report card for Colorado visit: http://pestdata.ncsu.edu/ir-4/ReportCards/colorado.pdf. During 1998-2000,

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The Colorado Minor Crop Pest Mangement Program (continued)

alone, Section 18's for Colorado supported by IR-4 data helped to avoid an estimated $42.5 million in potential economic loss.

If you are aware of a pesticide/crop combination that may be efficacious in Colorado but does not yet have a tolerance and label, contact Sandra McDonald or Clark Oman to initiate an pesticide clearance request. Or use the form at: http://www.colostate.edu/Depts/SoilCrop/extension/CEPEP/PCRform.htm.
The required information includes: pesticide common name and manufacturer; crop; use site; local acreage; target pest; why is this use needed; dosage rate (active/acre); application parameters; and any supporting data such as phytotoxicity, efficacy and yield.

Sandra McDonald
Environmental and Pesticide Education Specialist
Colorado State University

Clark Oman
Minor Crop Pest Management Program
Colorado State University

Website on the right:
http://www.colostate.edu/Depts/SoilCrop/extension/CEPEP/PCRform.htm

CEPEP - Pesticide Clearance Request Form

If you would like to initiate a Colorado Pesticide Clearance Request, you will need to provide the requested information and submit it, along with any supporting data, to The Minor Crop Pest Management Program in one of the following ways:

- **Via fax** - Print this form and fax to 970.491.3888
- **Via email** - Email the following information to Sandra McDonald or Clark Oman
- **Via U.S. mail -** Print this form and mail to:

The Minor Crop Pest Management Program
Colorado State University
Campus Delivery 1177
Fort Collins, CO 80523-1177

Requester

Name: _____

Affiliation: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone: _____ **Fax:** _____

Pesticide

Common Name: _____

Manufacturer: _____

Commodity

Crop: _____

Use Site: _____

Parts Consumed: _____

Animal Feed By-Products: _____

Planting Season: _____ **Harvest Season:** _____

Local Acreage: _____ **% of National Acreage:** _____

Target Pests / Potential Effects: _____

_____

_____

Why is this needed? _____

_____

_____

Crop Profiles

Describes crop profiles, how they are used and developed

Crop Profiles were initiated by USDA's Office of Pest Management Policy in May 1998. Each crop profile describes how a commodity is produced, with emphasis on critical pest management needs, including the role of pesticides in integrated pest management (IPM) and resistance management programs. Currently there are over 500 Crop Profiles and several Pest Management Strategic Plans available on the web (http://www.pmcenters.org/) providing a wealth of information in one place.

Crop Profiles are a visible, accessible public tool used by the USDA, EPA, CDA, growers, and others. Profiles set up a snapshot of the commodity and help the industry make pest management strategies for current issues and make educated predictions of future pest management needs by providing information about acreage, value, Colorado's rank in U.S. production for a given crop, common production practices, major pests, and pest management strategies.

Crop Profiles provide information based on specific commodities describing regional or state-specific production systems including crop production methods and pest management strategies. This detailed information about crop production is used by EPA for pesticide decisions. The profiles are used to evaluate and review EPA risk assessments, Reregistration Eligibility Documents (REDs), proposed risk mitigation/management measures, and proposed label modifications (i.e., changes in application rates or pre harvest intervals, crop deletions, buffer zones, reentry intervals, etc.). The Profiles are avenues for stakeholders associated with a specific crop to provide experienced information directly to EPA decision makers. The benefits of each document are numerous.

The Food Quality Protection Act of 1996 instructs USDA and EPA to obtain pesticide use data on major and minor crops. Many currently used pesticides are being reviewed as part of reregistration; these same pesticides are vital to the production of many of our crops. Because some of these uses may be modified or canceled it is important to identify where we stand now, where we need to be in the future, and what research efforts are needed as far as pest management practices are concerned. According to EPA, "the Profiles are used on nearly a daily basis throughout the Office of Pesticide Programs in a myriad of ways."

Crop Profiles have directly effected many EPA assessments and decisions. The EPA uses them to conduct

occupational and environmental risk assessments for pesticide registrations. EPA's Biological and Economic Analysis Division (BEAD) finds the profiles to be "extremely useful as we conduct reregistration and tolerance reassessment activities." Crop Profiles highlight critical pests, pest management strategies or products, and use patterns that must be considered when reviewing certain pesticides.

Information found in the Profiles can also help generate funding and projects to benefit commodities. Often, competitive grants require evidence that proposals address the priorities established by stakeholders. Crop Profiles are generated by the information provided by stakeholders in each individual state.

Generating Crop Profiles requires the coordination of growers, researchers and extension personnel to create an accurate view of the cropping system of a commodity. Colorado Environmental and Pesticide Education Program (CEPEP) at

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Crop Profiles (continued)

Colorado State University has been generating the Crop Profiles for the state of Colorado. Currently, the following profiles are posted at www.colostate.edu/Depts/SoilCrop/extension/CEPEP/pest_management: alfalfa, barley, field corn, dry beans, oats, onions, potatoes, proso millet, soybean, sugarbeets, and winter wheat. Profiles for fruits (apples, cherries and peaches) and greenhouse tomatoes are under construction with several other proposed profiles soon to come.

These Profiles are an important step in establishing a picture of Colorado's pest management issues and concerns while improving and securing Colorado's agricultural production. To help with Colorado's Crop Profiles please contact Lindsay Yerke or Sandra McDonald at CEPEP 970-491-3947, located in the Plant Science Building on Colorado State University campus in Fort Collins, Colorado or email smcdonal@lamar.colostate.edu.

Sandra McDonald
Environmental and Pesticide Education Specialist
Colorado State University

Lindsay Hofsteen
CEPEP Program Assistant
Colorado State University

Colorado Crop Profiles

Crop Profiles currently available:

Alfalfa	Potatoes
Barley	Proso Millet
Corn, Field	Soybean
Dry Beans	Sugarbeets
Oats	Winter Wheat
Onions	

Crop Profiles proposed:

Greenhouse Tomatoes	Carrots
Sunflowers	Corn, Sweet
Lettuce/Mixed Greens	Cantalope
Rangeland	Cucumbers

Crop Profiles currently being written:
Apples
Grapes & Winegrapes
Peaches
Cherries
Winegrapes

Each crop profile describes how a commodity is produced, with emphasis on critical pest management needs - including the role of pesticides in integrated pest management (IPM) and resistance management programs.

To initiate or contribute to a crop profile, the following information is required:

Acreage:
Per acreage value:
Counties grown in:
Rotated with:

Key Diseases:

Key Diseases Management strategies used:

Key Insects:

Key Insects Management strategies used:

Key Weeds:

Key Weeds Management strategies used:

IPM needs:

Suggestions:

Information provided by:

Phone:

WPS in Colorado

A general guide to understanding the Worker Protection Standard (WPS).

The Worker Protection Standard (WPS) was issued in 1992 by the U.S. Environmental Protection Agency (EPA). This regulation applies where pesticides are used in production of agricultural plants for commercial or research purposes on farms, forests, nurseries, greenhouses, and related structures. It covers pesticide applicators, mixer/loaders, disposers of pesticide containers, and those who may be exposed to a pesticide residue on the job. Both general-use and restricted-use pesticide applications are covered by WPS.

The regulations are exposure reduction measures that reduce the risk of pesticide poisonings and injuries among agricultural workers and pesticide handlers. WPS defines two groups of agricultural employees: agricultural workers and pesticide handlers.

WPS requires that an owner of an agricultural establishment provide certain protections and information to workers. Specifically, WPS requires that agricultural establishments:

- train or verify training of handlers and workers
- restrict entry to treated areas
- provide notification of applications
- post specific information regarding applications at a central location
- post safety information at a central location
- provide decontamination supplies
- provide access to emergency medical assistance
- employer/commercial applicator information exchange

WPS is a very complex regulation. This publication is intended only as a general guide to some of the requirements under WPS. Omissions or oversights in this publication do not exempt people from complying with the standard. The complete WPS regulations are detailed in EPA's *The Worker Protections Standard for Agricultural Pesticides - How to Comply, What Employers Need to Know,* EPA 735-B-93-001 (http://agenvsafety.tamu.edu/wps/epawps0.htm). Even though an operation may be exempt from WPS, the standard outlines good safety practices for all individuals who use pesticides.

Pesticide products covered by WPS have the following statement in the "Directions for Use" section of the label:

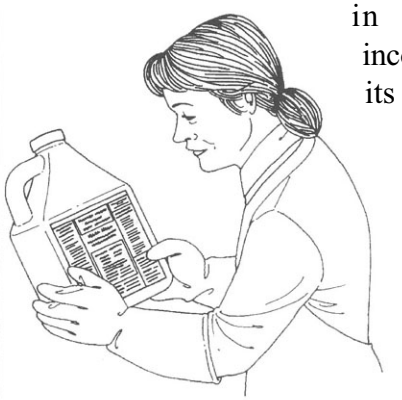
"Agricultural Use Requirements - Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. 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, notification of workers, and restrictedentry intervals."

Pesticides used on sod farms are covered by WPS.

Some pesticide uses are not covered by 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 WPS.

Employers using a pesticide product in the production of an agricultural plant or commodity with labeling that refers to WPS must comply. Otherwise, it is a violation of Federal law, since it is illegal to use a pesticide product in a manner inconsistent with its labeling.


PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (& DOMESTIC ANIMALS)
DANGER:
Personal Protective Equipment
Applicators and other handlers
Mixers and loaders must wear:
User Safety Recommendations:
ENVIRONMENTAL HAZARDS
PHYSICAL AND CHEMICAL HAZARDS
STORAGE AND DISPOSAL
PROHIBITIONS:
STORAGE:
CONTAINER DISPOSAL:
RESTRICTED USE PESTICIDE
VIP DEPESTO I/M
Organophosphate Insecticide
ACTIVE INGREDIENTS:
INERT INGREDIENTS:
KEEP OUT OF REACH OF CHILDREN
DANGER
PELIGRO
STATEMENT OF PRACTICAL TREATMENT
NOTE TO PHYSICIAN
DIRECTIONS FOR USE
AGRICULTURAL USE REQUIREMENTS
CROP:
CROP:
CROP:



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WPS in Colorado (continued)

WPS Enforcement and Penalties

In 2000, the U.S. General Accounting Office (GAO) published a report entitled *Pesticides: Improvements Needed to ensure the Safety of Farmworkers and their Children* (http://www.gao.gov/archive/2000/rc00040.pdf). GAO was critical of WPS implementation and concluded that EPA Regions had been inconsistent in enforcing WPS. In response to the GAO Report, EPA has begun a nationwide reassessment of WPS, which includes examining the regulation itself, the implementation and effectiveness of its provisions, and the enforcement at the state level.

The implementation and enforcement of pesticide requirements, including WPS, are generally carried out by State Departments of Agriculture under cooperative agreements with EPA, except in Colorado and Wyoming. EPA has primary jurisdiction in Wyoming and partial primary jurisdiction in Colorado. In Colorado, the Department of Agriculture's Pesticide Section (CDA) is charged with enforcing WPS regulations for commercial applicators. If a person is found to be in violation, the case may be referred to EPA Region 8 and EPA can levy a fine. EPA Region 8 inspectors are responsible for inspections of agricultural establishments (usually also private applicators). Part of the inspection process will also include interviews of workers. Questions, such as "Were you trained?" or "How were you trained?" and "Where is the central location?" are likely to be asked. In addition, employers who fail to provide WPS protections for employees may be liable in civil court.

In 2001 and 2002, EPA Region 8 inspected a number of greenhouses, nurseries, and farms specifically to assess compliance with WPS. Overall, the rate of compliance was extremely low. The most common violations include failure to:

- assure training,
- post application information in a central location, and
- post safety poster and emergency information in a central location.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires that a private applicator receive a Notice of Warning prior to be being assessed a penalty. Subsequent to receiving a Notice of Warning, a private applicator can be assessed a civil penalty of up to $1,100 per violation. In determining the size of any penalty, EPA considers the size of business of the person charged, the effect on the person's ability to continue in business and the gravity of the violation.

As most of you know, EPA has begun issuing civil penalties for violations of WPS by private applicators and agricultural establishments. Additional rounds of compliance inspections are, and have been occurring this season. **Even if agricultural establishments do not use RESTRICTED USE pesticides, they can be inspected if using general use pesticides on crops.** Any farm, nursery, greenhouse, or forest block where pesticides are used in the production of agricultural plants and commodities are subject to inspections. Everyone should be prepared and in compliance. Agricultural operations that have a number of employees, including those with migrant workers, will be prime candidates for inspections.

WPS Requires Training or Verification of Training of Handlers and Workers

Training is essential for the proper use of pesticides and is key to the success of WPS. To protect the health and safety of workers and handlers, employers are responsible for training them in the safe use of pesticides. WPS requires that all agricultural workers and pesticide handlers are trained about pesticide safety.

Each agricultural worker and pesticide handler must be trained about pesticide safety except those who:

- have been trained within the last 5 years as a WPS handler or WPS worker, even if he or she has changed employers, OR

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WPS in Colorado (continued)

- currently hold a valid Colorado commercial or private applicator license

Handlers must be trained before they perform any handling task, such as mixing, loading or applying pesticides, etc.

Early-entry workers who will enter a treated area and contact anything that has been treated with the pesticide during a restricted-entry interval (REI) must be trained BEFORE they conduct any early entry task.

Workers must be trained before they accumulate more than 5 separate days entry into treated areas on an agricultural establishment where, within the past 30 days, a pesticide has been applied or an REI has been in effect. These 5 days need not be consecutive and may occur over several periods of employment or over several seasons or years.

WPS handler training can be conducted by anyone who meets one of the following criteria:

- Be a certified as a Colorado Private or Commercial pesticide applicator
- Attend a WPS Train-the-Trainer workshop approved by EPA Region 8. Individuals who have attended such a workshop may train both handlers and workers
- Be trained as a handler. Persons trained as handlers under WPS may serve as trainers of workers only. They may not train handlers

To conduct worker or handler training, trainers must:

- use written and/or audiovisual materials
- present the training orally or audiovisually
- present the information in a manner that trainees can understand
- using a translator if necessary, respond to trainees' questions

Anyone who conducts worker training must use non-technical terms the worker can understand

Training Materials

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/topics listed in the specific training section for workers or handlers below.

Basic Pesticide Safety Training

Basic training must be given before the employee begins work. Full training must be completed within 5 days. Basic training requirements will cover the following information:

- Where an individual can come in contact with pesticides
- How to prevent pesticides from entering the body
- That further training will be provided within 5 days

Pesticide Safety Training for Workers

WPS worker safety training must cover, at a minimum, the following concepts/topics:

- Where and in what form pesticides may be encountered during work activities
- Hazards of pesticides resulting from toxicity and exposure, including acute and chronic effects, delayed effects, and sensitization
- How 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 eye flushing techniques
- Hazards from chemigation and drift
- Hazards from pesticide residues on clothing
- Warnings about taking pesticides or pesticide containers home

NOTE: WPS worker training materials must use nontechnical terms that the worker can understand and be able to answer questions.

Pesticide Safety Training for Handlers

WPS training for pesticide handlers must include, at a minimum, the following topics/information:

- Format and meaning of information contained 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 and chronic effects, and sensitization

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WPS in Colorado (continued)

- How pesticides can enter the body
- Emergency first aid for pesticide injuries or poisonings
- How to obtain emergency medical care
- Routine and emergency decontamination procedures, including emergency eye flushing techniques
- Hazards from chemigation and drift
- Need for and appropriate use of personal protective equipment (PPE)
- 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

Documentation of WPS Trained Workers and Handlers

Maintain the following documentation throughout the trainees' employment:

- Name of trainee
- Signature of trainee
- Name of trainer
- Date of training
- Training material used

The possession of an EPA training verification card is acceptable proof of WPS Training. Each plastic EPA training verification card, green for handlers and blue for worker, has a unique identification number.

WPS Requires Restricted Entry to Treated Areas

Restricted-entry interval (REI) is the time immediately after a pesticide application when entry into the treated area is prohibited or very limited. REIs are established for all pesticides used in the production of agricultural plants depending on toxicity. The REI 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.

REIs must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide treated area during the REI, with few narrow exceptions. The duration of REIs ranges from 4 hours to several days. 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, the longer interval must be followed.

There is a no-entry period for 4 hours for all products with WPS labeling; this means no early entry.

WPS Requires Notification of Applications

Employers must notify workers about pesticide applications on the agricultural establishment if they will be on or within a quarter (1/4) mile of the treated area. In most cases, employers may choose between oral warnings or posted warning signs, but they must tell workers which warning method is in effect. All applications must be additionally recorded and displayed at the central location.

Most products allow worker notification either orally or by posting a field warning sign, one or the other is acceptable as long as workers are informed of which method is being used. However, you must provide double notification if the pesticide label has this statement in the "Directions for Use" section 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."

If double notification is specified on the pesticide label workers must be orally notified about REI's and treated fields must be physically posted with warning signs during the REI. It is the agricultural establishment's responsibility to post warning signs in the field if it is required. Farms employing ONLY family members are not required to post the field.

Signs must have the words "Danger-Peligro" and "Pesticides-Pesticidas" at the top and "Keep Out-No Entre" at the bottom. Signs must be at least 14" x 16", with a minimum letter height of one inch. The Spanish portion of the sign may be replaced with a substitute language. In greenhouses and nurseries, smaller signs (4.5" x 5") are acceptable.

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WPS in Colorado (continued)

Warning signs must be:

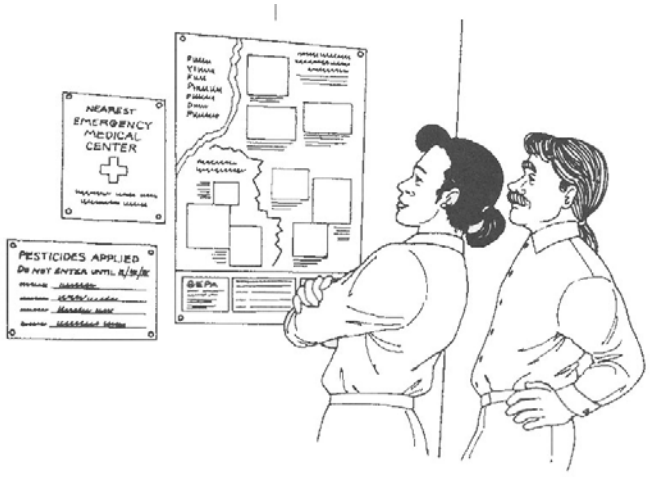
- Posted 24 hours or less before application
- Removed within three (3) days after the end of the REI
- Posted so they can be seen at all normal entrances to treated areas, including borders adjacent to labor camps
- If no employees were involved with treatment, or the employees do not come within a quarter (1/4) mile, no posting is required

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

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

WPS Requires Specific Information Regarding Applications and Safety Be Posted at a Central Location

WPS requirement that information be posted (displayed) at a central location is cited by EPA as one of the most commonly violated provisions. Employers must provide current and specific information about the pesticides being applied for the benefit of their employees (handlers and workers). Employees must be informed of the central location and allowed access.



Employers (owner/operator of agricultural establishments) must post the following information just prior to applications and for 30 days after the REI has expired whenever pesticide handlers or workers are on the agricultural establishment:

- an approved EPA safety poster or an equivalent
- emergency medical information, including the name, address and telephone number of the nearest emergency medical care facility
- a list of dates and times that pesticides have been applied within the last 30 days, including a description of each treated area, and the product name, EPA registration number, active ingredient(s) and REI for each pesticide on that list

The information at the central location must be easily seen and read. Workers and handlers must be informed where it is and given access. By "access," EPA wants the workers to be able to view the information without having to ask anyone to let them see it. Some examples of a central location include: field or forest entrance; parking area; common areas; break areas; port-a-pots. The central location cannot be in a treated area.

The EPA safety poster or an equivalent that shows how to keep pesticides from getting on or entering the body and information about how to clean up if an individual comes in contact with pesticides.

If the emergency medical information changes, update the posted information in the central location and ensure that it remains legible.

Pesticide applications must remain on the list from before each application begins and remain posted through 30 days after the REI has expired. The list must remain accessible by the workers for the entire required

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WPS in Colorado (continued)

posting period at the designated central location.

Handlers and workers must be informed of pesticide label requirements and information. A grower must have all the material safety data sheets (MSDS) of the labeled pesticides he/she is using on file and available upon request.

WPS Requires Providing Decontamination Sites

Employers must establish a decontamination site for all workers and handlers for washing off pesticides and pesticide residues. A decontamination site must be within a quarter (1/4) mile of the employees' work site.

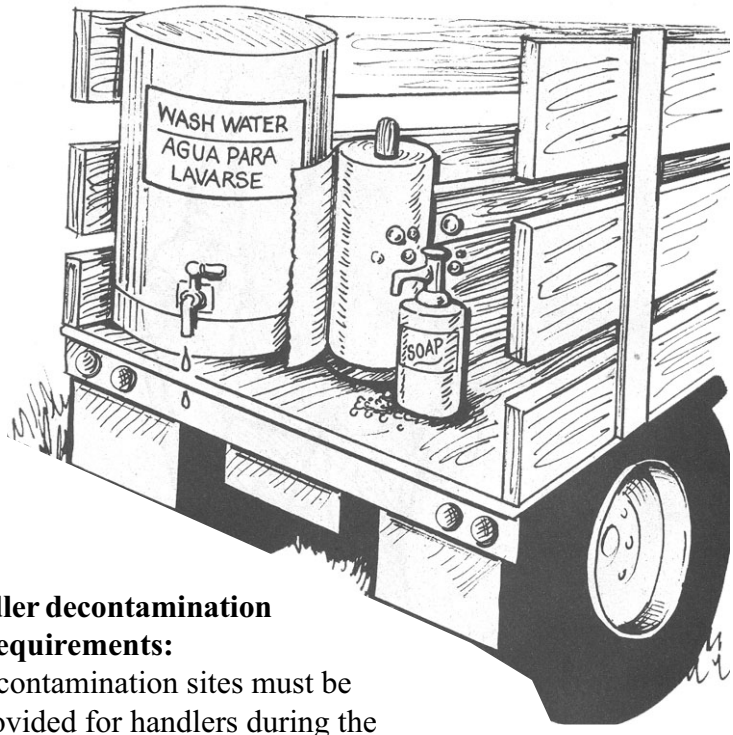
Employers must provide a site where workers and handlers can wash pesticide residue from their hands and body. A decontamination site should supply:

- Enough water for routine and emergency wholebody washing and for eye flushing.
- Plenty of soap and single use towels.
- Employers also must provide water that is safe and cool enough for washing, eye flushing, and drinking. Employers may not use tank stored water that also is used for mixing or diluting pesticides.

Specific requirements differ depending whether employees are doing worker or handler tasks.

Worker decontamination site requirements:

- Decontamination sites must be provided for workers from application to 30 days after expiration of the REI.
- Worker decontamination sites may not be in areas being treated or under an REI.



Handler decontamination site requirements:

- Decontamination sites must be provided for handlers during the handling task.
- Soap, clean towels and water must be provided when handlers remove their PPE and must have enough water for entire-body washing and a clean change of clothes.
- The site for handlers must be where they are mixing and loading.
- Handler decontamination sites may be in the treated area in which the handler is working, as long as the materials are stored in enclosed containers.
- When the label requires protective eyewear, handlers must be provided one pint of emergency eye-flush water.
- Employers must provide handlers with the previously mentioned supplies at each mixing site and at the place where protective equipment is removed at the end of a task.

If the work site is more than a quarter (1/4) mile from the nearest point of vehicular access, the decontamination site may be located at the nearest access point. 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 decontamination site.

WPS Requires Providing Access to Emergency Medical Assistance

When there is a possibility that a handler or worker has been poisoned or injured by a pesticide, an employer

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WPS in Colorado (continued)

must promptly provide transportation to an appropriate medical facility. The employer is responsible for providing transportation, which includes paying when there is a charge for transportation.

Additionally, the employer must provide to the victim and medical personnel the following information:

- describe how the pesticide was being used
- describe how the individual became exposed to the pesticide
- product name
- EPA Registration #
- active ingredient
- all first aid & medical information from label

The product name, active ingredient and EPA Registration number must already be recorded in the pesticide application list at the central location. Additionally the name, address and phone number of the nearest emergency medical facility must also be legibly posted at the central location.

Key Definitions Relating to WPS
It is important to review several key definitions to assist understanding the regulation.

Agricultural establishment - any farm, forest nursery or greenhouse. WPS applies to owners or managers of ag establishments that employ people who may come in contact with pesticides.

Agricultural plant - any plant grown or maintained for commercial or research purposes and includes, but is not limited to, food, feed, and fiber plants; trees; turfgrass; flowers; shrubs; ornamentals; and seedlings.

Agricultural worker - a person, including a self employed individual, who works for salary, wages or other compensation and who must enter a field or area treated or under a REI within the past 30 days to perform tasks such as harvesting, weeding cultivating, watering, pruning, topping, sucker removal, packing produce in the field, thinning, etc. related to the production of an agricultural plant.

Agricultural employer - any person who hires or contracts for services of workers/handlers, for any type of compensation, to perform activities related to the production of agricultural plants, or any person who is an owner or responsible for the management or condition of an agricultural establishment that uses workers/handlers.

Commercial pesticide handling establishment -An ag dealership that employs individuals to apply pesticides on farms. Farmers must provide certain information to employers at commercial handling establishments.

Crop advisors - those that access pest numbers or damage, pesticide distribution, or the status, condition, or requirements of agricultural plants. Includes independent crop consultants, crop scouts, and IPM monitors.

Early entry workers - any person who performs "worker" tasks during the REI.

Handler - any person, including a self employed person, who mixes, loads, transfers, applies, disposes pesticides or pesticide containers, cleans, adjusts, handles or repairs application equipment, acts as a flagger, etc. (certified or licensed crop advisors and persons working under their direct supervision are now exempt).

Handler employer - any person who hires people to do pesticide handling tasks, or if you do them yourself, WPS considers you a handler employer

Immediate family - includes spouse; children; stepchildren; foster children; parents; stepparents; foster parents; brothers; sisters; and in-laws.

Personal protective equipment (PPE) - Clothing and other equipment such as goggles, gloves, boots, aprons, coveralls and respirators, that

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WPS in Colorado (continued)

provide protection from exposure to pesticides.

Restricted entry interval (REI) - the time after the completion of a pesticide application during which entry into the treated area is restricted.

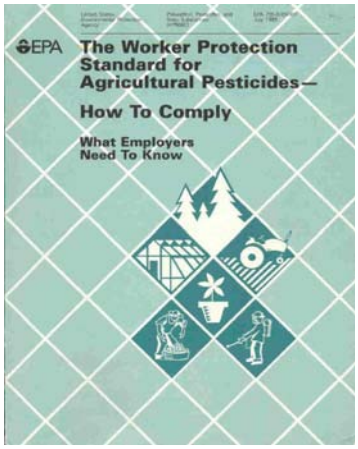
Worker employers - any person who hires or contracts for people to do agricultural worker tasks, or if you do them yourself, WPS considers you a worker employer.

WPS labeling - all pesticide products affected by WPS carry a statement in the Agricultural Use Requirements section on the label. This statement will inform users that they must comply with all WPS provisions. If you are using a pesticide product with WPS labeling to produce an agricultural commodity, WPS requirements must be followed. WPS requirements are not in effect if an agricultural pesticide is used as labeled for a nonagricultural use.

Note: By definition, "workers" do not apply pesticides or handle pesticide containers or equipment. Someone may be a "worker" while completing one task and a "handler" while completing a different task.

WPS Resources

EPA's 40 Code of Federal Regulations Part 170 Worker Protection Standard includes all amendments as of October 3, 1997. (http://www.epa.gov/pesticides/safety/workers/PART170.htm)



The EPA Worker Protection Standard for Agricultural Pesticides How to Comply - manual, prepared by EPA, provides the information necessary for employers to comply with the requirements of the 1992 WPS, but does not include subsequent revisions. It can be viewed as a scanned copy at http://agenvsafety.tamu.edu/wps/epawps0.htm. Please refer to the printed document from EPA for the actual legal guidelines. To print a copy go to http://www.epa.gov/cgi-bin/claritgw?opDisplay&document=clserv:OPPTS:0079 or to order a printed version see Sources of WPS Resources below.

WPS Amendments 1997 can be found at http://www.epa.gov/oppfead1/safety/workers/amendmnt.htm.

WPS SUMMARY. Summary of the Worker Protection Standard for Agricultural Pesticides by Jack L. Runyan, USDA Economic Research Service, December 1993. http://www.usda.gov/oce/oce/labor-affairs/wpssumm.txt

EPA's WPS Penalty Policy can be found at http://www.epa.gov/compliance/resources/policies/civil/fifra/workprotecrpt.pdf.

The Agricultural Worker Protection Standard 40 CFR Parts 156 &170 Interpretive Policy addresses questions posed to EPA by the regional offices, statelead pesticide agencies, and the public - http://www.epa.gov/pesticides/safety/workers/wpsinterpolicy.htm.

WPS Q&A. EPA's FAQ. Frequently asked questions answered by EPA's Interpretive Guidance Work Group. http://www.usda.gov/oce/oce/labor-affairs/wp-sq&a.035.

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WPS Resources (continued)

WPS FORUM an internet discussion group for EPA WPS, provided as a public service of the University of California, Berkeley. Forum participants pool their knowledge, identify common problems, share solutions, distribute timely advice, ask questions, or just lurk and learn. An archive of forum discussions, reference documents, and other useful material is offered. Subscribe to WPS Forum at http://are.berkeley.edu/cgi-bin/lwgate/WPS-FORUM/.

Additional EPA WPS PUBLICATIONS - EPA's National Agricultural Compliance Center (www.epa.gov/agriculture) offers a series of Worker Protection Standard factsheets.

WPS Websites
EPA's Worker Safety page - http://www.epa.gov/pesticides/health/worker.htm
CSU CEPEP WPS page - http://www.colostate.edu/Depts/SoilCrop/extension/CEPEP/wpsResources.htm
USDA Agricultural Labor Affairs - WPS - http://www.usda.gov/oce/oce/labor-affairs/wpspage.htm

Sources of WPS Resources
Iowa State University Extension has WPS materials available and will provide one free copy to out-of-state individuals. Please contact ISUE at http://pubs.extension.iastate.edu or Iowa State University Continuing Education and Communication Services, Extension Distribution Center; Ames, Iowa 50011; Phone: 515-294-5247; Email: pubdist@iastate.edu. Please provide them with the Reference number (RN#) when ordering:

RN# - PAT 0012 The Worker Protection Standard for Agricultural Pesticides - How to Comply - What Employers Need to Know
RN# - PAT 0012A EPA: Worker Protection Standard Program Update - Five Amendments April 1995
RN# - PAT 0013 Sources of Protective Apparel and Gear - Personal Protective Equipment for Agriculture
RN# - PAT 0014 Sprayer Calibration Worksheet
RN# - PAT 0015 Duties of Ag Dealers That Employ Commercial Pesticide Applicators - A Quick Reference Guide to WPS (poster)
RN# - PAT 0016 Protect Yourself from Pesticides Guide for Agricultural Workers/Protejase de los Pesticidas Guia para los Trabajadores Agricolas
RN# - PAT 0017 Guide for Pesticide Handlers Protect Yourself from Pesticides
RN# - PAT 0017A Protejase de los Pesticidas Guia para los que Manejan Pesticidas
RN# - PAT 0018 EPA Safety Poster Protect Yourself from Pesticides/Protejase de los Pesticidas
RN# - PAT 0018A EPA WPS Safety Poster (NCR 544) Protect Yourself from Pesticides (English only, 11x17)
RN# - PAT 0019 Quick Reference Guide to the 1992 Worker Protection Standard 17 x 22 poster
RN# - PAT 0020 A Guide to Heat Stress in Agriculture - EPA
RN# - PAT 0021 Safety Training for Agricultural Workers Protect Yourself from Pesticides

GEMPLER'S WPS Reference Guide How to Comply
Includes complete official version of EPA's "How to Comply Manual" for employers plus technical information on pesticide safety, as well as a complete product guide for safety equipment and signage required for WPS compliance. 156 pages. Contains up-to-date addendum of WPS changes. Item No. EPA6 ($5.05) Go to Gempler's Catalog http://www.gemplers.com/ to order or call Phone Orders: 800-382-8473 or fax 800-551-1128.

Gempler's Inc. provides a wide variety of EPA approved WPS materials such as English and/or Spanish training manuals & videos, flipcharts, decontamination supplies, as well as a broad range of personal protective equipment.

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WPS Resources (continued)

For More Information
Contact the National Agriculture Compliance Center toll free: 1-800-663-2155,
Internet: http://www.epa.gov/oppfead1/safety/workers.htm.
or contact:

U.S. Environmental Protection Agency
Region 8 Toxic Substances Branch (8ART-TS)
One Denver Place, Suite 500999, 18th St.
Denver, CO 80202-2405
(303) 293-1730

You need to comply because it is the law, but that is not the only reason. When violations are publicized (whether injury has occurred or not) some people think that the answer is to further limit the use of pesticides. By practicing pesticide safety we protect not only ourselves, our workers, and the environment against pesticides, we also safeguard the use of these chemicals in agriculture. WPS outlines good safety practices for all individuals who use pesticides. Even if compliance is not required, consider using WPS as a guide to develop your own safe practices and habits.

And remember, the label is the law. Always read the label and follow precautionary statements carefully

Sandra McDonald, and Lindsay Hofsteen
Environmental and Pesticide Education Specialist, and CEPEP Program Assistant
Colorado State University

Resources available from Colorado State University

For WPS factsheets and an overview of WPS in Colorado:
http://www.colostate.edu/Depts/SoilCrop/extension/CEPEP/wpsResources.htm

The Colorado Environmental and Pesticide Education Program (CEPEP) has the following WPS resources available for distribution:
Training videos that meet WPS training requirements for agricultural workers and pesticide handlers in both English and Spanish. Visit the CEPEP website for a complete video listing. www.colostate.edu/Depts/SoilCrop/extension/CEPEP/movies.htm Note: These videos can only be checked out by CSU Cooperative Extension personnel of pesticide applicators licensed through CDA.

EPA Safety Poster (English only)
These posters will meet the requirement of central location poster requirement and include a place to write in emergency medical facility information.

WPS Training Materials (available in English and Spanish)

- EPA's Protect Yourself from Pesticides - Guide for Agricultural Workers — Details WPS pesticide safety training criteria that employers must provide to workers on farm, forest, nursery and greenhouse operations.
- EPA's Protect Yourself from Pesticides - Guide for Pesticide Handlers — Details WPS pesticide safety training criteria that employers must provide to handlers in farm, forest, nursery and greenhouse operations.

To order contact Sandra McDonald at 970-491-6027 or Sandra.McDonald@colostate.edu.

NPIC – National Pesticide Information Center

NPIC operates...
6:30 a.m. to 4:30 p.m. Pacific time,
7 days a week, excluding holidays.

Phone: 1-800-858-7378
FAX: 1-541-737-0761
Email: npic@ace.orst.edu

Mail written requests to:
NPIC
Oregon State University
333 Weniger
Corvallis, OR 97331-6502

NPIC is ...

- a cooperative effort of Oregon State University and U.S. EPA
- a toll-free telephone service that provides pesticide information to any caller in the U.S.
- a service that provides objective, science-based information about a wide variety of pesticide-related subjects, including:
  - pesticide products
  - recognition and management of pesticide poisoning
  - toxicology
  - environmental chemistry
- staffed by highly qualified and trained pesticide specialists who have the toxicology and environmental chemistry education and training needed to provide knowledgeable answers to pesticide questions
- a source of factual chemical, health, and environmental information about more than 600 pesticide active ingredients incorporated into over 50,000 different products registered for use in the U.S. since 1947