**Introduction**

The term "pesticides" includes all **Insecticides, Herbicides, Fungicides, Miticides, Acaracides, Rodenticides, Nematicides, Avicides** and includes many **Disinfectants** and **Chlorine products**.

The laws and regulations concerning pesticide use on the farm or ranch has been increasingly complicated over the past few years. The purpose of this pamphlet is to help guide you through the maze of laws and regulations governing the use of pesticides. The primary goals of this guide are to:

1. Answer commonly asked pesticide use questions;

2. Highlight some of the pesticide regulations and pesticide programs which may affect your operation;

3. Help prepare growers for the laws and regulations questions that appear on the Certified Private Applicator exam. Additional information can be found in the publication **Pesticide Safety - Reference Manual for Growers**, available from the University of California.

Users are responsible to know the requirements for the pesticides they use. They also are responsible to assure that employees handle pesticides properly.

This guide is **not** intended to provide you with a copy of every law and regulation; it is only a guide to alert you to the existence of regulations that may effect you. Contact the Agricultural Commissioner's Office when you need additional information.
Pesticide Labeling

WHAT IS THE PESTICIDE LABEL?

The pesticide label is the printed instructions that appears on the pesticide's container. It also includes supplemental labeling such as Special Local Need registrations and Section 18 labels. A copy of the label must be on each container and at each job site at all times. If a label of a stored pesticide becomes lost or illegible, you must attach another label to the container.

WHAT INFORMATION IS ON THE LABEL?

1. Required personal protective equipment and other precautions to be taken to prevent exposure.

2. Signal Words: Signal words allow the user to determine the toxicity of the pesticide to humans.
   - DANGER = High toxicity
   - WARNING = Moderate toxicity
   - CAUTION = Low toxicity

3. Crop and Rates: The pesticide can only be used on the crop and at the rate listed on the label.

4. Plantback and Pre-Harvest Intervals: A pre-harvest interval is the period of time that must pass from the application to the harvest, A plantback is a restriction on how soon you can plant back certain crops on ground that has been treated.

5. Restricted Entry Interval (REI) Statement: Tells the users how much time must pass before anyone can safely enter the treated area.

6. EPA Registration Number: This number identifies the pesticide and is required on Pesticide Use Reports.

WHAT IS A CONFLICT OF LABEL?

A conflict of label is a use of a pesticide in any matter that is not permitted by the pesticide's labeling. This includes, but is not limited to, the use on a crop not listed on the label, or at rate more than the amount recommended by the label. A use of a pesticide in conflict of it's label is a violation of State and Federal Law and may subject you to serious legal penalties.
Storage / Disposal

WHAT ARE THE REQUIREMENTS FOR STORING PESTICIDES?

1. All pesticide containers which hold or have held a pesticide must be stored in a locked storage facility when not under the direct control of a responsible person.

2. Any storage facility that contains pesticides with the signal word DANGER or WARNING must be posted on all sides of approach with a Pesticide Storage Warning Sign readable from 25 feet.

3. No pesticide may be placed in a container commonly used for food, drink or other household products.

4. If a pesticide should spill, immediate action should be taken to prevent the spill from spreading. Use dirt, kitty litter or an oil absorbent to control a liquid spill. The absorbent and all contaminated materials must be put into containers and shipped to a Class 1 disposal site. The pesticide’s MSDS will provide information on handling spills.

WHAT ARE THE REQUIREMENTS FOR TRANSPORTING PESTICIDES?

Pesticides must be secured and not transported in the same compartment with food, feed or persons. Containers must not be left unattended in the rear of pickup trucks.

WHAT ARE THE REQUIREMENTS FOR DISPOSAL OF EMPTIED PESTICIDE CONTAINERS?

1. All empty pesticide containers must be triple rinsed at the job site and the rinse water placed in the spray tank and applied to the treated area.

2. Empty paper bags may be burned in accordance with local air pollution control laws. Contact the Monterey Bay Air Pollution Control District (647-9411) for more information.

3. Contact Agricultural Commissioner’s Office for a triple rinse inspection (do not crush cans until after inspection).

4. When accompanied with a triple rinse inspection certificate, empty plastic containers may be taken to the John Smith Disposal Site for recycling (call 637-4515) or at the Monterey County container recycling program. Contact this office for details.
**Notice of Intent / Pesticide Use Reports**

**WHAT IS A NOTICE OF INTENT?**

24 hours before the use of a Restricted Use Pesticide, the Permit holder is responsible for filing a "Notice of Intent to Apply Restricted Materials". Notice of Intent forms are available at the Agricultural Commissioner's Office. Your Notice of Intent opens a four day window for your application.

**HOW DO I FILE THE NOTICE OF INTENT?**

A Notice of Intent can be submitted in person at the office or by FAX (637-9015). For more information concerning Notices of Intent, please check with the Agricultural Commissioner's Office.

**WHAT IS A PESTICIDE USE REPORT?**

A Pesticide Use Report is a document that is used to report a pesticide application to a specific location. On your permit, each field will be assigned a unique Site ID Number. Each Pesticide Use Report will need to indicate the Site ID Number of the treated area. Blank Pesticide Use Report forms are available at the Agricultural Commissioner's Office.

**WHO MUST FILE A PESTICIDE USE REPORT?**

The owner or operator of any property used to produce an agricultural commodity, unless the application was made by a licensed Pest Control Operator. Certain other pesticide applications also must be reported. These include vertebrate pest control work and applications to some non-crop areas.

**HOW DO I FILE THIS REPORT?**

The report may be mailed or hand delivered to the Agricultural Commissioner's Office.

**WHEN DOES THIS REPORT HAVE TO BE FILED?**

Pesticide Use Reports are due by the 10th of each month. Growers are required to keep a copy of all Pesticide Use Reports for two years. This also includes copies of any Reports submitted by a Pest Control Operator.

Pesticide use history be displayed at a central location so that all field workers may view them. See Hazard Communication for more information.
WHAT ARE THE HAZARD COMMUNICATION (RIGHT TO KNOW) REGULATIONS AS THEY APPLY TO PESTICIDES?

The Hazard Communication regulations state that employees have the right to know about the chemicals (pesticides) used at their workplace. Employees must be informed through Material Safety Data Sheets (MSDS), Pesticide Safety Information Series (PSIS), Pesticide Use Reports, posting and other warnings. Employers must tell employees, in a language they understand, about specific pesticides being handled, and how they should protect themselves.

WHAT IS A MSDS? WHAT IS A PSIS?

A MSDS is a pamphlet that is prepared by the manufacturer for each pesticide. The MSDS contains health, emergency and hazard information for the pesticide. They are obtainable from your Pesticide Dealer.

A PSIS is a group of handouts that are available at the Agricultural Commissioner's Office. The PSIS describes the safety requirements for various pesticides and safety topics.

WHAT REQUIREMENTS APPLY TO WORKERS?

In addition to training requirements outlined in the training portion of this handbook, employers must keep all copies of Pesticide Use Reports and a MSDS for each pesticide used on their property. MSDS and Pesticide Use Reports must be made available to your employees upon request. Also, copies of the reports for must be displayed for 30 days past the expiration of the Restricted Entry Interval (REI). At each ranch, PSIS handout A-9 must be posted so that it is visible to each fieldworker.

WHAT REQUIREMENTS APPLY TO HANDLERS?

In addition to the requirements outlined in the Training and Safety portions of this handbook, PSIS handout A-8 is to be posted at your farm headquarters. As with field workers, pesticide handlers have the right to the information found in MSDS, PSIS and Pesticide Use Reports.

WHO IS RESPONSIBLE FOR RESTRICTED ENTRY INTERVAL (REI) NOTIFICATIONS AND FIELD POSTING?

All pesticides have restricted entry intervals (REI) and some may have posting requirements. The grower is responsible to notify employees (including labor contractors)
who may be on the property or will be within a 1/4 mile of a field that will be treated or that a REI is in effect.

Growers are also responsible for posting their treated fields when posting is required. If the pesticide's label allows, field posting can be substituted for having to provide notification to all employees in the area. Restricted entry intervals and posting requirements will be found on the pesticide labeling. For some pesticides on certain crops, California regulations may require a longer REI than is on the label. Consult the Agricultural Commissioner's Office for details.
Employee Training

WHO MUST BE TRAINED?

Field workers must be trained once every five years and pesticide handlers must be trained annually before using any pesticide. All employees must be trained by a qualified person. Qualified persons include Pest Control Advisors, Qualified Applicator cardholders, Farm Advisors, or a person that has taken an approved "Train the Trainer" course. Also, Growers that are Certified Private Applicators may train their own employees.

WHAT TRAINING IS REQUIRED FOR PESTICIDE HANDLERS?

Training is required for all pesticides, including lower toxicity pesticides such as Roundup. Handlers include applicators, mixer/loaders, flaggers and persons who works on or cleans contaminated spray equipment. Each grower must have a documented Training Program and maintain individual Training Records for each employee that handles pesticides.

WHAT IS A TRAINING PROGRAM?

Employers must establish a written training program describing materials and documents which are used for training handlers. Examples include study guides, pamphlets, pesticide labels, MSDS sheets, Pesticide Safety Information Series (PSIS) handouts, videos, etc.

WHAT MUST BE INCLUDED IN THE TRAINING RECORD?

After developing a training program, document your handler training on individual training records. You may develop your own form or you can use one that the Agricultural Commissioner's Office has available. Each employee must sign and date his record and growers must keep them on file for two years.

WHAT MUST BE INCLUDED IN HANDLER TRAINING?

Training must be specific to each pesticide an employee handles. It must include: 1. How to read the pesticide label; 2. Immediate and long term hazards of the pesticide; 3. Safety procedures, equipment and gear such as closed systems and protective clothing; 4. Emergency procedures, symptoms, spill and decontamination procedures, where to obtain medical treatment; 5. Medical supervision requirements when organophosphate or carbamate pesticides are used; 6. Applicable laws and
regulations; 7. Prevention and first aid for heat stress; 8. The hazards of taking pesticides or containers home; 9. Environmental concerns such as drift and runoff; and 10: Employees rights to obtain information of the pesticides they handle, including MSDS sheets, PSIS handouts, exposure records, training records, hazardous communication information and the right to obtain this information without fear of discharge or discrimination.

WHAT TRAINING IS REQUIRED FOR FIELD WORKERS?

All field workers must be trained once every five years as required by the Federal Worker Protection Standard. You do not have to provide this training if you can verify that an employee has received this training during the past five years. The training must include: 1. The importance of washing after leaving the field; 2. Restricted entry intervals and what posting is; 3. How workers could be exposed to pesticides; 4. The hazard of pesticides including the common symptoms of poisoning (such as blurred vision or nausea); 5. First aid, decontamination, and how to obtain emergency medical care; 6. The hazards of taking pesticides and containers home; 7. Worker rights to Pesticide Use Reports and MSDS, and the right to obtain this information without fear of retaliatory action.
**Pesticide Employee Safety**

Listed below are a few commonly asked questions on employee safety for pesticide handlers and field workers. For a more complete listing, consult the Pesticide Safety Information Series handouts or the Agricultural Commissioner's Office.

**WHAT PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED TO BE WORN BY EMPLOYEES WHO HANDLE PESTICIDES?**

All personal protective gear as specified in the *precautionary statement* section of the *pesticide's label*. In addition to label requirements California regulations require the following:

1. In most situations, **gloves** and **eye protection** is required when employees are handling pesticides. Unless the label specifies otherwise, eye protection can consist of either a set of goggles, a face shield, approved protective glasses or a respirator with built in eye protection.

2. When working with pesticides with the signal word DANGER or WARNING, employees must be furnished daily with a clean pair of **coveralls**.

**WHAT IS REQUIRED BEFORE AN EMPLOYEE WEARS A RESPIRATOR?**

There has been a substantial change in regulations concerning respiratory requirements for employees. These new regulations are effective 1-1-2008. A complete overview of these changes is available on the Department of Pesticide Regulation’s website at [www.cdpr.ca.gov](http://www.cdpr.ca.gov). Follow the link under: “Help With Complying With New Respiratory Protection Regulations”.

**WHEN IS MEDICAL SUPERVISION (BLOOD TEST) NEEDED?**

When an employee handles a **Organophosphate/Carbamate (OP/CARB)** type pesticide with the signal words DANGER or WARNING for more than 6 days in any 30 day period. Some examples of OP/CARB pesticides are: **Diazinon**, **Dimethoate**, **Di-Syston**, **Dyfonate**, **Guthion**, **Lannate**, **Lorsban**, **Metasystox-R**, **Sevin**, **Temik**, **Vydate**. See PSIS A-11 for details.
WHEN IS A CLOSED SYSTEM REQUIRED?

When employees are mixing or loading one of the following:
1. Liquid pesticides with the signal word DANGER*; or
2. Liquid Minimal Exposure Pesticides*; or
3. Liquid mixes derived from dry pesticides with the signal word DANGER.

*Closed system is not required when employees handle less than one gallon per day from a one gallon container.

WHAT IS REQUIRED TO BE AT THE WORKSITE WHEN AN EMPLOYEE IS MIXING OR LOADING PESTICIDES?

1. **Soap, Water and Towels.** Mix/Load sites must have water, soap and towels for routine washing of hands and water for emergency eye flushing. There must be enough water for emergency washing of the entire body if necessary. One extra pair of clean **coveralls** must be also at the site.

2. Name, address and phone number for a physician or facility for emergency medical care. If you plan to utilize Hazel Hawkins Hospital for emergencies, their address is 911 Sunset Drive, Hollister, phone number is 637-5711.

3. For those pesticides that the label requires eye protection, one pint of emergency eye wash water must be carried on the application vehicle.

WHAT WASHING FACILITIES DO FIELD WORKERS NEED?

When working in fields that have had a Restricted Entry Interval (REI) within 30 days, sufficient water, soap and towels must be within 1/4 mile of the field workers. This decontamination facility must have equipment for emergency eye washing.
Application Considerations

Many factors lead to the decision of the property operator to use pesticides. Carefully monitoring your fields is essential to ensure that you pest control activities are appropriate to the type, location and life stage of the pest to be controlled. The University of California has many publications available to assist you in making pest control decisions for your crop.

The user must also consider environmental, safety and equipment factors before using a pesticide. Some of these are:

**GROUNDWATER PROTECTION:** Some pesticides (especially the pre-emergence herbicides) if improperly used, can effect the groundwater. Groundwater can also be protected by using a backflow prevention device when drawing water from a well into a pesticide mix tank.

**LABEL RESTRICTIONS:** All pesticides have varying re-entry and harvest limitations. Re-entry and harvest times must be considered when selecting a pesticide.

**ENVIRONMENTAL PROTECTION:** When planning a pest control program, you should use techniques which protect natural enemies (beneficials) whenever possible.

**DRIFT/EQUIPMENT USE:** Damage from pesticide drift can be reduced by the use of low spray pressure and the use of proper nozzles for your equipment. Generally, there is less drift potential for larger spray droplets than small droplets.

Water used to fill the spray tank should be clean to avoid clogging the equipment. Some pesticides (such as wettable powders) need to be constantly agitated in the tank to keep the pesticide in solution. If application equipment needs to cleaned, the best place to clean it is usually at the application site.

When mixing different formulations in a tank, the mixing order is important for a compatible and uniform mixture. Pesticide formulations should be mixed in the following order: (1) wettable powders, (2) flowables (3) water soluble concentrates (4) emulsifiable concentrates.
Grower Inspections

WHEN CAN I EXPECT A PESTICIDE INSPECTION?

As a grower, your pesticide activities will probably be inspected at some time by an inspector from the Agricultural Commissioner's Office. An inspection may be initiated for several reasons:

1. Routine Grower Audit
2. Application Inspection
3. Complaint
4. Episode Investigation

HOW DO I PREPARE FOR AN INSPECTION?

If you know about the inspection in advance, review any old inspection forms for past problems and ask the inspector what documents you will need to gather to make the procedure go quickly and smoothly.

1. **Routine Grower Audit:** The inspector will be looking at your employee training records, posting requirements, Pesticide Use Reports, Permit or ID Number, application equipment and pesticide storage.

2. **Application Inspection:** An application inspection is most often made unannounced but may also be arranged in advance. The inspector will be looking at your application procedures and equipment to make certain that you are following all label directions (and worker safety regulations if the applicator is an employee) and any applicable permit conditions in order to verify that you are performing pest control in a safe and effective manner.

3. **Complaints:** The Agricultural Commissioner's Office receives pesticide-related complaints from the public every year. Since these investigations can range so broadly in description, it is impossible to anticipate what questions will be asked. The best advice is to keep good records and answer all questions to the best of your knowledge.

4. **Episode Investigation:** These investigations may be initiated by a complaint or a doctor's illness report. Usually, there is an illness or property damage claim involved in this type of investigation. Similar to a complaint investigation, the best way to prepare for this type of inspection is to keep complete and up to date pesticide use and training records.