

WHAT YOU NEED TO KNOW about

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION



California Department of Pesticide Regulation

1001 I Street
P.O. Box 4015
Sacramento, CA 95812-4015
916-445-4300
www.cdpr.ca.gov

BRANCHES

Enforcement
916-324-4100

Northern Regional Office
916-324-4100

Central Regional Office
559-243-8111

Southern Regional Office
714-279-7690

Environmental Monitoring
916-324-4039

Fiscal Operations
916-324-1350

Information Technology
916-445-4110

Medical Toxicology
916-445-4233

Product Compliance
916-445-4159

Pest Management and Licensing
916-445-3914

Licensing/Certification
916-445-4038

Personnel
916-322-4553

Pesticide Registration
916-445-4400

Worker Health and Safety
916-445-4222

Rules for dormant season insecticides

During winter when tree and vine crops are dormant, pesticide applications are made to kill overwintering pests and diseases. Because there are no leaves on the plants, dormant season applications are more effective in helping control pests later in the growing season.

But many pesticides used as dormant sprays cause problems when drift occurs or when rain washes residues into Central Valley rivers and streams. Continuing problems prompted the Department of Pesticide Regulation (DPR) to impose regulatory controls in 2006.

Why do we need to regulate dormant spray insecticides?

Water quality monitoring over a decade has consistently shown contamination of Central Valley streams and rivers by dormant spray residues. The highest detections were of diazinon, and coincided with flooding of orchards and vineyards by winter rains. Other dormant insecticides were also detected.

This prompted the State to place several major Central Valley rivers on a list of impaired waterways, meaning that pollution adversely impacts use of the water. These listings required specific actions to eliminate harmful residues in the watersheds.

In the late 1990s, DPR launched a five-year plan to see if voluntary practices could be developed and adopted to reduce the movement of these pesticides to surface waters. However, monitoring during this period showed that more progress is needed to reduce contamination problems. As a result, DPR adopted

regulations controlling dormant spray applications. They went into effect in August 2006.

What is a dormant insecticide?

Dormant insecticides include oils (petroleum distillates, petroleum hydrocarbons, unclassified petroleum oils and mineral oils) with other insecticides added, or other insecticides used alone. They are applied to deciduous plants. Insecticides added to oils or used alone include organophosphate pesticides, such as diazinon, methidathion and chlorpyrifos, and pyrethroids, a large class of synthetic insecticides produced to duplicate or improve on the natural insecticide produced by chrysanthemum flowers.

Are there dormant spray products that are exempt from the new controls?

Dormant oils (petroleum distillates, petroleum hydrocarbons, unclassified petroleum oils, and mineral oils), or biocontrol agents such as (but not limited to) spinosad or *Bacillus* sp. can be used without restriction, either alone or in combination.

What applications are allowed without restriction?

There are three approaches you can take to make a dormant spray application without restriction. You can: 1) use dormant oil or spinosad **OR** *Bacillus* sp. either alone or in combination; **OR** 2) apply to a hydrologically isolated site; **OR** 3) hold runoff for 72 hours before releasing into a sensitive aquatic site.

DPR will continue to monitor progress toward eliminating problems in surface water from dormant spray residues. Should additional measures be needed, the Department has a wide range of additional regulatory options.

What is a hydrologically isolated site?

A hydrologically isolated site is any treated area that does not produce runoff that can enter any irrigation or drainage ditch, canal, or other body of water.

What is a sensitive aquatic site?

All surface water bodies are sensitive aquatic sites, unless the water body resides exclusively on private property.

What if I can't meet the application criteria for non-restricted applications?

If you want to use other dormant insecticides, you must: 1) get a written recommendation from a licensed pest control adviser (PCA); **AND** 2) provide a 100-foot buffer zone from any sensitive aquatic site; **AND** 3) apply when the wind speed is between 3 and 10 miles an hour.

Under what circumstances can I apply dormant insecticides by air?

Aerial applications are allowed if: 1) soil conditions do not allow field entry or approaching bloom conditions require an aerial application; **AND** 2) you have a written recommendation from a PCA; **AND** 3) you maintain a 100-foot buffer zone from any sensitive aquatic site; **AND** 4) you make your application when the wind speed is between 3 and 10 miles an hour.

Why was the wind speed range of 3 to 10 miles an hour chosen?

Applications taking place at wind speeds above or below the specified wind speed range enable pesticide application droplets to drift from the application site and impact non-target organisms.

Are there times when NO dormant spray applications are allowed?

Yes. If your soil is already saturated with water, or field runoff is likely to occur if it rains, no dormant spray application is allowed if the National Oceanic and Atmospheric Administration or National Weather Service has forecast a storm to occur within 48 hours after a scheduled dormant spray application.

How will DPR know if the restrictions are improving water quality?

The extent to which the dormant spray regulations reduce pesticide contamination will be determined through ongoing monitoring of rivers and streams. If the regulations do not solve the problems, then other mitigation measures will be carried out to protect water quality.

DPR has placed chlorpyrifos and diazinon, the two dormant spray pesticides found most often in streams and rivers, into a special review status. Manufacturers are being required to conduct studies to document the factors that result in the pesticides contaminating waterways. They must also develop mitigation strategies that will reduce or eliminate these residues in surface water.

If diazinon and chlorpyrifos are the major problems, why do the new regulations apply to other pesticides, like the pyrethroids?

Over the past few years, we have seen increasing problems with other insecticides used as dormant sprays as farmers have searched for alternatives to organophosphates.

Who can I contact if I have site-specific or situation-specific questions about dormant spray applications?

If you have questions about dormant spray applications on specific sites you can contact your county agricultural commissioner.

Where can I get more information about DPR's dormant spray program?

For information on DPR's Dormant Spray Program, contact Roy Rutz of DPR's Enforcement Branch, 916-445-4279, rrutz@cdpr.ca.gov. You can link to the dormant spray regulations at www.cdpr.ca.gov, click on the "A-Z Index," on "Dormant Spray Water Quality Initiative," then on the regulations link.



Single copies of this handout are available from DPR by calling 916-445-3974, and can be downloaded from DPR's Web site, www.cdpr.ca.gov, click "A-Z Index," then "Dormant Spray Water Quality Initiative."