Reducing Smog-Producing Emissions from Nonfumigrant Pesticide Products

Pest Control Adviser Fact Sheet

General Information

Regulations by the Department of Pesticide Regulation (DPR) adopted to cut smog-producing emissions of volatile organic compounds (VOCs) from pesticides went into effect in 2013. These regulations set a trigger level of emissions that, if exceeded, would invoke pesticide use limitations to reduce VOC emissions from certain nonfumigant pesticide products (Title 3, California Code of Regulations, sections 6558, 6577, 6880, 6881, 6883, 6884, and 6886). *VOC emissions in 2013 exceeded the trigger, and therefore limitations will go into effect on May 1, 2015.*

Sales restrictions apply to:
- High-VOC products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen
- Applied in the San Joaquin Valley.

Use restrictions apply to:
- High-VOC products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen
- Applied in the San Joaquin Valley
- Between May 1 and October 31
- To alfalfa, almonds, citrus, cotton, grapes, pistachios, or walnuts.

*What are volatile organic compounds (VOCs)?*
VOCs are gases that can combine with other substances in the air to form ground-level ozone (smog). Ozone can damage lung tissue, cause respiratory illness, and harm farm crops. Statewide, pesticides account for about two percent of all VOCs but in several regions they are among the top ten sources.

*What are high-VOC products?*
As described in section 6880, the regulations apply to certain products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen. Products containing these four active ingredients are designated as either high-VOC, low-VOC, or excluded from the regulations. VOC requirements pertain only to high-VOC products. For the specific criteria used to designate high-VOC products, and list of products, go to www.cdpr.ca.gov, click on “A-Z Index,” then “VOC nonfumigant regulations.”

*What is the area affected?*
For these regulations, the San Joaquin Valley includes all of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare counties and the valley portion of Kern County. Pesticide VOC emissions in the San Joaquin Valley are not consistently low enough to meet reduction goals even with prior application method restrictions on fumigants, so additional control measures on nonfumigants have been adopted.
Why are these products and crops regulated?
DPR included products containing these four active ingredients and applications to these seven crops because the inert ingredients in these products and their application to these crops are among the highest pesticide VOC contributors in the San Joaquin Valley. Additionally, DPR has determined that use of low-VOC products for these pesticides and crops are feasible and will ensure that the needed VOC reductions will be achieved.

Pest Control Adviser (PCA) Requirements

Which PCAs are affected?
As described in section 6883, PCAs who make recommendations for the following pesticide applications are affected:

- High-VOC products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen
- Applied in the San Joaquin Valley
- Between May 1 and October 31
- To alfalfa, almonds, citrus, cotton, grapes, pistachios, or walnuts.

What are the use restrictions?
In order to use the high-VOC products described in section 6883 in the San Joaquin Valley between May 1 and October 31 on the designated crops, growers must obtain a written recommendation from a licensed PCA. Because use limitations have been triggered for the San Joaquin Valley between May 1 and October 31, high-VOC products containing the four specified active ingredients cannot be recommended by PCAs or used on the seven named crops. For the specific criteria that determine a high-VOC product, and list of products, go to www.cdpr.ca.gov, click on “A-Z Index,” then “VOC nonfumigant regulations.” Pest control dealers must inform the purchaser of these restrictions.

The only exceptions to the prohibition on use of high-VOC products are in the following situations described in section 6884:

- Chlorpyrifos to control aphids on cotton
- Gibberellins applied at no more than 16 grams active ingredient/acre
- Oxyfluorfen applied at no more than 0.125 (1/8) pounds active ingredient/acre
- Emergency exemption from registration (Section 18)
- Special Local Need (Section 24(c)) registration
- Applications required by the U.S. Department of Agriculture, the California Department of Food and Agriculture, or county agricultural commissioner to control, suppress or eradicate pests
- Applications with a precision sprayer that meets the criteria of the California Office of the Natural Resources Conservation Service’s Environmental Quality Incentives Program.

To be eligible for these exceptions, growers must obtain a written recommendation from a licensed PCA, and the recommendation must identify the exception, as described in section 6558.

How do PCAs know if high-VOC prohibitions are in effect?
DPR notifies interested parties through its VOC email list. To sign up for the VOC email list, go to www.cdpr.ca.gov, and click on “Join E-lists” at the bottom left-hand corner.
DPR determines if high-VOC prohibitions are triggered once each year. DPR publishes a draft report of pesticide VOC emissions in late summer or early fall and it includes a comparison of the emissions to the trigger level. If triggered, the high-VOC product prohibitions described above would be implemented for the upcoming May-October period, and remain in effect for at least two years. Emissions for May-October 2013 exceeded the trigger level, so high-VOC prohibitions will begin on May 1, 2015.

**When are the PCA requirements in effect?**

The requirement to obtain a PCA recommendation became effective on May 1, 2014, and is in effect every year during May 1 to October 31.

**What other information do PCAs need to know?**

As described in section 6558, if a PCA recommends the use of a high-VOC product for one of the exceptions when high-VOC prohibitions are in effect, the exception must be identified. A PCA must retain a recommendation for a high-volatile organic compound product for at least two years.

The regulations place much of the burden for compliance on PCAs. PCAs are responsible for knowing:

- Which products are high-VOC and which are low-VOC
- Whether or not the high-VOC use prohibitions in effect
- What are the exceptions to the high-VOC prohibitions if they are in effect

The regulations include a process for DPR to grant approval for additional exceptions if certain criteria are met. Any additional exceptions will be described in DPR’s annual emissions report.

In addition, section 6556 requires PCAs to certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted. PCAs must consider and recommend low-VOC products when feasible even if the high-VOC prohibitions are not in effect. Voluntary use of low-VOC products will assist in keeping emissions below the trigger level for high-VOC prohibitions.

**Additional Information – Contact Person**

Additional information is available at DPR’s website: [www.cdpr.ca.gov](http://www.cdpr.ca.gov). Click on “A-Z Index” then “Volatile Organic Compound Emissions from Pesticides Project.”

Pam Wofford, Environmental Program Manager I
Pam.Wofford@cdpr.ca.gov
(916) 324-4297