



California Notice 2006-13

POST UNTIL October 6, 2006

## **NOTICE OF DECISION TO BEGIN REEVALUATION OF CERTAIN PESTICIDE PRODUCTS CONTAINING PYRETHROIDS**

Pursuant to Article 8, Subchapter 1, Chapter 2, Division 6 of Title 3 of the California Code of Regulations, the Director of the Department of Pesticide Regulation (DPR) notices her decision to begin a reevaluation of certain pesticide products containing one or more pyrethroid active ingredients. Interested persons may comment on this decision up to and including the date shown on the top-right corner of this notice to the Department of Pesticide Regulation, Pesticide Registration Branch, 1001 I Street, P.O. Box 4015, Sacramento, California 95812-4015.

### REEVALUATION

DPR is hereby commencing a reevaluation of certain pesticide products containing one or more of the pyrethroid active ingredients listed below. This reevaluation involves 123 registrants and 608 pesticide products. DPR determined that the number of products included in this reevaluation were too numerous to list within this notice. A list of products included in the reevaluation is available upon written request to the address listed above or on DPR's website at <http://www.cdpr.ca.gov/docs/registration/reevaluation/chemicals/pyrethroids.htm>.

### BASIS OF REEVALUATION

DPR initiates this reevaluation based on recent monitoring surveys and toxicity studies revealing the widespread presence of synthetic pyrethroid residues in the sediment of both agricultural and urban dominated California waterways at levels toxic to *Hyalella azteca* (*H. azteca*). Scientists conducted sediment bioassays using *H. azteca*, a resident species found in some Central Valley water bodies. Scientists commonly use *H. azteca*, an aquatic crustacean, as an indicator of environmental health and water quality in streams, lakes, and other bodies of water. Significant toxicity was observed at numerous sites. There was a high correlation between concentrations of pyrethroids and observed toxicity. Findings further indicate that the unique physical, chemical, and toxicological properties of the pyrethroid class of chemicals contribute to their propensity to accumulate in sediment at toxic levels.

Pyrethroids are synthetic insecticides. Pyrethrins, which are natural insecticides, are found in *Chrysanthemum cinerariaefolium*, a perennial plant with a daisy-like appearance. DPR did not include pesticide products containing naturally occurring pyrethrins in this reevaluation because pyrethrins are known to break down rapidly in the environment.



PYRETHROID CLASS GROUPING

For purposes of data requirements, DPR has divided pyrethroid chemicals into three groups. The first group (Group I) consists of the first generation or “Type I” photosensitive pyrethroids. Typically, these pyrethroids are used indoors and around residential areas. The second (Group II) and third groups (Group III) consist of the newer second-generation pyrethroids. The more toxic Group II and Group III pyrethroids, most of which are “Type II” pyrethroids, are less photosensitive, and persist longer in the environment. The two active ingredients identified as belonging in Group II have not been detected (or monitored for) in California aquatic sediments. Group III pyrethroids have been detected on aquatic sediments, and both Group II and III pyrethroids are widely used in both agricultural and urban settings.

The following table identifies the group into which each pyrethroid active ingredient has been placed for purposes of data requirements:

DPR Chemical Code	Common Name	Group
4038	Bioallethrin	1
2293	D-Allethrin	1
5327	Imiprothrin	1
2093	Phenothrin	1
3985	Prallethrin	1
2119	Resmethrin	1
1695	Tetramethrin	1
2195	Tau-Fluvalinate	2
2329	Tralomethrin	2
3866	(S)-Cypermethrin	3
3956	Beta-Cyfluthrin	3
2300	Bifenthrin	3
2223	Cyfluthrin	3
2171	Cypermethrin	3
3010	Deltamethrin	3
2321	Esfenvalerate	3
2234	Fenpropathrin	3
5877	Gamma-Cyhalothrin	3
2297	Lambda-Cyhalothrin	3
2008	Permethrin	3

DPR used the following criteria to determine which pesticide products to include in the reevaluation:

1. Contain at least one of the pyrethroid active ingredients listed above.
2. All formulation types except products:
  - (a) Formulated as pressurized liquids, pressurized gasses, or pressurized dusts;
  - (b) Where the chemical is impregnated into another material (e.g., ear tags, pet flea collars, ant disks/stakes, (not including fabric)); and
  - (c) Labeled solely for manufacturing use.

DPR excluded these formulation categories because it is unlikely that the pyrethroids in these types of products will move into surface waters.

3. Actively registered as of July 31, 2006.

Pursuant to this reevaluation, registrants with products containing active ingredients in Group I are required to submit:

- ❖ Environmental fate data, which may include water solubility, octanol/water partition coefficient, soil adsorption coefficient, hydrolysis, photolysis, and/or aerobic and anaerobic half-life (metabolism) studies.

Registrants with products containing active ingredients in Group II are required to submit:

- ❖ Sediment data, which include aerobic and anaerobic aquatic California sediment half-life (metabolism) studies, sediment acute and chronic toxicity studies on *Chironomus tentans* and *Hyallela azteca*, sediment analytical methods, and monitoring in areas appropriate to use patterns.

Registrants with products containing active ingredients in Group III are required to submit:

- ❖ Environmental fate data, sediment data, and data/information relating to the reduction or elimination of offsite movement of pyrethroid residues. These studies may include aerobic and anaerobic aquatic California sediment half-life (metabolism) studies, sediment acute and chronic toxicity studies on *Chironomus tentans* and *Hyallela azteca*, sediment analytical methods, and monitoring in areas appropriate to certain use patterns.

For information regarding the reevaluation process, please contact Ms. Denise Webster, Program Specialist, Pesticide Registration Branch, by e-mail at <dwebster@cdpr.ca.gov> or by telephone at (916) 324-3522.

*Original signed by*

*August 31, 2006*

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Barry Cortez, Chief  
Pesticide Registration Branch  
(916) 445-4377

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Date

cc: Ms. Denise Webster