



# Department of Pesticide Regulation

*K. Cummins*



Peter M. Rooney  
Secretary for  
Environmental  
Protection

James W. Wells, Director  
1020 N Street • Sacramento, California 95814-5624 • www.cdpr.ca.gov

Pete Wilson  
Governor

May 28, 1998

Ms. Debbie Stubbs, State Regulatory Manager  
Novartis Crop Protection, Inc.  
P. O. Box 18300  
Greensboro, North Carolina 27419-8300

Dear Ms. Stubbs:

The Department of Pesticide Regulation (DPR) investigated the norflurazon residues found in the ground water in Fresno County. The Director has determined, based on the results of that investigation, that the residues resulted from legal agricultural pesticide use.

DPR intends to initiate the cancellation process for the products Predict Herbicide, Solicam DF Herbicide, and Zorial Rapid 80 Herbicide 30 days after the date of the Notice of Norflurazon Residue Finds, unless a hearing is requested.

Attached are the following documents: Notice of Norflurazon Residue Finds in California Ground Water and Registrant Opportunity to Request a Hearing, Information Regarding the Determination that Norflurazon Residues in Fresno County Resulted from Legal Agricultural Pesticide Use, and the chart that indicates the detections in Fresno County.

If you have any questions, please contact Ms. Kay Cummins, of my staff, at (916) 323-6133.

Sincerely,

Paul H. Gosselin, Assistant Director  
Division of Registration and  
Health Evaluation  
(916) 445-3984

Attachments

cc: see next page

Ms. Debbie Stubbs  
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cc: Ms. Kay Cummins  
State Water Resources Control Board  
Office of Environmental Health Hazard Assessment

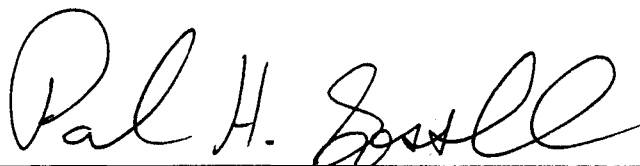
NOTICE OF NORFLURAZON RESIDUE FINDS  
IN CALIFORNIA GROUND WATER AND REGISTRANT  
OPPORTUNITY TO REQUEST A HEARING

Norflurazon is the active ingredient in pesticide products registered for sale in California as preemergence herbicides for weed control. The product names and EPA Registration Numbers are as follows: Predict Herbicide, EPA No. 55947-78-ZA; Solicam DF Herbicide, EPA No. 100-849-AA; and Zorial Rapid 80 Herbicide, EPA No. 100-848-AA. Recently, norflurazon residues have been identified in the ground water in Fresno County. Based on the results of an investigation by the Department of Pesticide Regulation (DPR), the Director determined that the norflurazon residues found in the ground water resulted from legal agricultural pesticide use.

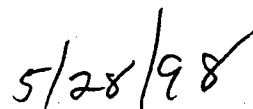
Pursuant to section 13149(b) of the Food and Agricultural Code (FAC), notice is hereby given of the Director's determination and that the registrant of norflurazon herbicides has 30 days after this notice is issued to request a hearing.

A hearing will be held within 180 days after DPR receives a timely written request for a hearing. During the hearing, the registrant will be required to submit a report with documented evidence to support the continued registration, sale, and use of norflurazon. Notice of the date, time and location of the hearing will be mailed to the norflurazon registrant together with information regarding the report and documented evidence required for the hearing. If a hearing is not requested within 30 days after this notice is issued, the Director of DPR is required to cancel the registration of the norflurazon pesticide products pursuant to FAC section 13149(c).

The written hearing request and requests for additional information should be directed to Ms. Kay Cummins, DPR, Division of Registration and Health Evaluation, 1020 N Street, Room 100, Sacramento, California 95814. Ms. Cummins can be reached by telephone at (916) 323-6133.



Paul H. Gosselin, Assistant Director  
Division of Registration and  
Health Evaluation



Date

**Information Regarding the Determination that Norflurazon  
Residues in Fresno County Resulted from  
Legal Agricultural Pesticide Use**

Pursuant to Food and Agricultural Code section 13149(a)(2), the Department of Pesticide Regulation (DPR) completed an investigation to determine if the norflurazon residues found in well water in Fresno County were the result of agricultural pesticide use. After norflurazon residues were verified in one well in section 14S/23E-28, five additional wells were sampled in three sections, including the section containing the original norflurazon detection. Norflurazon residues were verified in the additional well sampled in section 14S/23E-28 and in one well in section 14S/23E-33. With three norflurazon positive wells in two adjoining sections, expanded well monitoring was conducted in Fresno County during December 1996 to determine the extent of the norflurazon contamination.

Twenty-six additional wells located in 15 sections were sampled where there was documented norflurazon use. Of those 15 sections, norflurazon residues were verified in single wells in the following five sections: 14S/23E-26, 15S/23E-02, 14S/22E-12, 15S/23E-12, 14S/23E-22. The greatest distance between any two of the sections is approximately six miles.

Assisted by the Fresno County Agricultural Commissioner, DPR investigated the seven sections where the contaminated wells are located. Most of the sections with norflurazon contamination were located over an old river bottom. The investigation included a search for pesticide mixing/loading sites, pesticide storage sheds, and other possible point sources for norflurazon ground water contamination. Agricultural pesticide use reports for each of the seven sections were examined. The reports revealed that numerous norflurazon applications were made to fields in those sections. The applications were permitted by pesticide label directions.

Following the investigation, the Director determined that the norflurazon residues in well water resulted from legal agricultural use. The reasons are as follows:

1. The investigation showed that norflurazon has been applied for agricultural use in the vicinity of the wells where norflurazon residues have been found in ground water.
2. The investigation revealed no evidence that the residues resulted from a point source, nonagricultural use, or illegal agricultural use.

## Department of Pesticide Regulation

### Norflurazon Detections In Fresno County

Township/Range-Section	Sample Date	Norflurazon Detections, parts per billion (ppb)			
		Primary Sample	Testing Laboratory	Backup Sample	Testing Laboratory
14S/23E-28 Tract Q	08/13/96	0.24	Quantera, MDL 0.10	0.29	Alta, MDL 0.050
14S/23E-28 Tract A	10/09/96	0.69	Quanterra, MDL 0.10	0.79	Alta, MDL 0.050
14S/23E-33 Tract M	10/09/96	0.16	Quanterra, MDL 0.10	0.21	Alta, MDL 0.050
14S/23E-26 Tract G	12/17/96	0.093	Quanterra, MDL 0.050	Unequivocal method, no second laboratory required	
15S/23E-02 Tract J	12/17/96	0.72	Quanterra, MDL 0.050		
14S/22E-12 Tract N	12/18/96	0.091	Quanterra, MDL 0.050		
15S/23E-12 Tract M	12/18/96	0.10	Quanterra, MDL 0.050		
14S/23E-22 Tract J	12/18/96	0.20	Quanterra, MDL 0.050		
					DJW 5/13/98