

**California Environmental Protection Agency
Department of Pesticide Regulation**

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(This news release is of special interest to media in the following counties, where pesticide residues were detected in well water: Del Norte, Fresno, Glenn, Kern, Lassen, Los Angeles, Monterey, Orange, Placer, Sacramento, San Luis Obispo, Santa Clara, Santa Barbara, Santa Cruz, Stanislaus, and Tulare. Information on county detections is contained in the chart that follows news release.)

**ANNUAL REPORT RELEASED ON
GROUND WATER MONITORING FOR PESTICIDES**

SACRAMENTO -- Cal/EPA's Department of Pesticide Regulation today released its sixth annual report on the results of ground water monitoring for pesticides.

The report, delivered to the Legislature today, summarizes the results of 49 ground water studies submitted to DPR between July 1, 1990 to September 1, 1991. The monitoring of domestic and municipal wells was done by various government agencies, and private firms, between 1985 and 1991. Among other provisions mandated by the Pesticide Contamination Prevention Act of 1985 (AB 2021, Connelly), anyone who tests well water for pesticide residues must report the results to DPR.

"This reporting mechanism provides valuable information in that it helps DPR and other agencies target further monitoring," said DPR Director James W. Wells.

"However, the data in the report are the results of studies designed and conducted by various agencies and companies, for different purposes, and with different methods. Some counties sample more wells than others, and sampling is typically not done for all pesticides used in any particular county," said Wells. "Though this report is a valuable archival record, it can't be used as a basis for firm conclusions about ground water in California."

In the test results submitted to DPR, samples were taken from 1,556 wells in 30 counties. Pesticide residues were detected in 146 wells in 16 counties. Most samples were analyzed for various numbers of chemicals. Overall, the tests targeted a combined total of 165 pesticide active ingredients and breakdown products. Of these, 11 different chemicals were detected.

The pesticides detected were: 2,3,5,6-tetrachloroterephthalic acid (TPA), a breakdown product of the herbicide, chlorthal-dimethyl; atrazine, bromacil, diuron, simazine, prometon and molinate, all herbicides; aldicarb sulfone and aldicarb sulfoxide, breakdown products of the insecticide, aldicarb; xylene, an active ingredient in many pesticide formulations, and also used as a solvent in gasoline; and ortho-dichlorobenzene, a soil fumigant that is no longer registered in California.

There were no pesticides found in ground water that have not been previously detected elsewhere in California ground water. When a pesticide reaches ground water as a result of normal agricultural use practices, DPR either restricts or prohibits its use in the areas where contamination is found. The use of aldicarb, for example, has been prohibited since 1983 in Del Norte and Humboldt counties, the only counties where it has been found in ground water in California.

DPR investigates all reported detections, first analyzing additional samples from the positive wells to verify the detections, and then testing nearby wells to determine the extent of contamination. If levels of contamination found exceed those considered safe, immediate corrective action may be taken. Actions in the past have included revocation of permits to use pesticides, or suspension or cancellation of registration.

After a detection is confirmed, the investigation focuses on whether the pesticide reached ground water because of routine agricultural use (application to crops, for example). Industrial or point sources of pollution (such as a pesticide spill into a well) are referred to the State Water Resources Control Board for further action.

Single copies of the report are available free of charge. For a copy, please request, "1991 Update, Well Inventory Data Base" from: California Department of Pesticide Regulation, Environmental Monitoring and Pest Management Branch, 1220 N Street, Sacramento 95814.

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Note: Attached is supplementary information excerpted from the report.

**Summary Information, 1991 Update, Well Inventory Data Base
Department of Pesticide Regulation**

Pesticide detected	# of counties, # of wells sampled	# of counties, wells with confirmed finds	Counties with confirmed finds, # of wells	Range of concentrations found	Comments
Aldicarb sulfone (breakdown product of insecticide, aldicarb)	8 counties, 164 wells tested	Detected in 1 county, 7 wells	Del Norte, 7 wells	0.10 to 0.48 ppb	Aldicarb has been banned since 1983 in Del Norte and Humboldt counties, the only places in California where it has been found in ground water
Aldicarb sulfoxide (breakdown product of insecticide, aldicarb)	8 counties 164 wells	1 county 9 wells	Del Norte, 9	0.20 to 0.98 ppb	
Atrazine (herbicide for field crops and along rights-of-way)	25 counties 526 wells	5 counties 8 wells	Glenn, 1; Los Angeles, 2; Orange, 1; Sacramento, 1, Tulare, 3	0.1 to 0.19 ppb	Regulations have been or will be adopted prohibiting its use in areas* where it has been found in ground water
Bromacil (herbicide for citrus and along rights-of-way)	23 counties 476 wells	4 counties 46 wells	Fresno, 2; Los Angeles, 1; Placer, 1; Tulare, 42	0.1 to 15.2 ppb	Regulations have been or will be adopted restricting use of bromacil and diuron in areas* where they have been found in ground water
Diuron (herbicide for citrus, alfalfa, rights-of-way)	24 counties 540 wells	4 counties 67 wells	Fresno, 4; Orange, 1; Stanislaus, 1; Tulare, 61	0.1 to 3.0 ppb	
Molinate (rice herbicide)	4 counties 13 wells	1 county 1 well	Glenn, 1	0.63 to 4.09 ppb	Contamination was not a result of routine agricultural use; point source
Ortho-dichlorobenzene (variety of uses)	9 counties 815 wells	1 county 1 well	Santa Clara, 1	1.65 to 7.2 ppb	No longer registered for use in California
Prometon (herbicide, non-crop areas, rights-of-way)	24 counties 528 wells	1 county 2 wells	Tulare, 2	0.11 to 0.32 ppb	Regulations have been or will be adopted prohibiting use of prometon and restricting use of simazine in areas* where detected in ground water
Simazine (herbicide, vineyards and citrus)	25 counties 519 wells	3 counties 80 wells	Fresno, 8; Orange, 8; Tulare, 64	0.1 to 2.4 ppb	
TPA (breakdown product of the herbicide, chlorthal-	8 counties 75 wells	7 counties 26 wells	Fresno, 2; Kern, 5; Los Angeles, 3; Monterey, 5;	0.1 to 15.0 ppb	Most detections the result of special DPR monitoring for TPA

dimethyl)			San Luis Obispo, 1; Santa Barbara, 4; Santa Clara, 6		
Xylene (active ingredient in certain pesticide products)	12 counties 827 wells	3 counties 5 wells	Lassen, 1; Placer, 1; Santa Cruz, 3	2.2 to 1,100 ppb	Xylene also a solvent in gasoline; Placer, Lassen wells contaminated by gasoline

* These areas (called "pesticide management zones," or PMZs) are one-square-mile sections of land where a pesticide has been detected in ground water as a result of normal agricultural practices, and which therefore is determined to be sensitive to pesticide contamination. Use of the detected pesticide may be prohibited or restricted in one or several PMZs, depending on the extent of contamination.