

SAMPLING FOR PESTICIDE RESIDUES IN CALIFORNIA WELL WATER

Correction to the 1997 Update of the Well Inventory Database

**For Sampling Results Reported From
July 1, 1996 through June 30, 1997**

In the Annual Well Inventory Report "Sampling for Pesticide Residues in California Well Water: 1997 Update to the Well Inventory Database. Twelfth Annual Report to the Legislature, State Department of Health Services, Office of Environmental Health Hazard Assessment, and the State Water Resources Control Board, Pursuant to the Pesticide Contamination Prevention Act." Section III. Pesticide Contamination Prevention Act Annual Report to the Legislature State Water Resources Control Board October 1997 (pages 81-92) was misprinted. That section contains a duplicate of the 1996 actions taken by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs).

Attached is the correct 1997 text for Section III. PESTICIDE CONTAMINATION PREVENTION ACT ANNUAL REPORT TO THE LEGISLATURE. STATE WATER RESOURCES CONTROL BOARD OCTOBER 1997.



**California Environmental Protection Agency
DEPARTMENT OF PESTICIDE REGULATION**

February 2000

EH98-04 - Correction

**III. PESTICIDE CONTAMINATION PREVENTION ACT
ANNUAL REPORT TO THE LEGISLATURE
STATE WATER RESOURCES CONTROL BOARD
OCTOBER 1997**

Actions taken by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) to prevent economic poisons from migrating to ground waters of the State are as follows:

A. SWRCB

SWRCB staff participated in the following activities:

- Reviewed and commented on DPR's proposed regulations to amend AB 2021 (Pesticide Contamination Prevention Act).
- Involved in ongoing consultations with pesticide manufacturers to design monitoring studies and BMPs.
- Regularly attended meetings sponsored by the DPR, including the interagency Pesticide Advisory Committee (PAC), Pesticide Registration and Evaluation Committee (PREC), Pest Management Advisory Committee (PMAC), the Interagency Coordinating Committee for Agricultural Regulatory Programs, and the Air Resources Board's Pesticide Bag Burning Work Group.
- Participated in discussions with U.S. Geological Survey scientists on studies dealing with pesticides and water quality.
- Participated in the California Department of Health Services' Interagency Workgroup to develop Source Water Assessment Program (SWAP) mandated by the 1996 amendments of the Federal Safe Drinking Water Act.
- Participated in outreach with Yolo County growers regarding alternatives to pesticide use through best management practices (BMPs).
- Reviewed, on an ongoing basis, DPR Notices of "Materials Entering Evaluation" and advised DPR on potential water quality impacts of pesticide registration and use decisions.
- Developed draft policy to implement California Toxics Rule, which includes pesticide water quality criteria.

- Reviewed and commented on DPR's proposed studies on pesticide and water quality pursuant to the Management Agency Agreement (MAA) with DPR.
- Authored a book on ecological relevance of toxicity testing results which has been accepted for publication by U.S. Environmental Protection Agency.
- Made several presentations on toxicity testing and its ecological relevance at various professional organizations' annual meetings and conferences.
- Contracted with University of California Cooperative Extension to:
 - Develop alternative agricultural and irrigation practices to prevent or reduce off-site movement of pesticides;
 - Educate growers and others regarding the pesticide-caused problems and outreach the alternative practices to the agricultural community; and
 - Design and initiate monitoring projects to assess the success of the alternative practices.
- Contracted with University of California, Davis' Aquatic Toxicity Laboratory for water quality monitoring (including toxicity testing, toxicity identification evaluations, and chemical analysis) to identify the spatial and temporal extent of the toxicity, as well as the chemical causes and sources of toxicity for the following five projects:
 - Central Valley Codling Moth Pesticide Runoff Project,
 - Sacramento River Watershed Project,
 - Yolo County Resource Conservation District Project,
 - Revlon Slough Project in Ventura County, and
 - Salton Sea Project in Imperial County.

B. RWQCB

Information on actions to prevent economic poisons from migrating to the ground waters of the State by each of the nine RWQCBs is listed in Tables 1 through 10.

Table III-1. Actions taken by the Regional Water Quality Control Board, North Coast (Region I), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Del Norte	Smith River Plains	Aldicarb, 1,2-D	Ongoing monitoring program.
Humboldt	U.S. Forest Service Nursery McKinleyville	Dithiocarbamate	USFS monitoring with RWQCB support.
	Blue Lake Forest Products	Pentachlorophenol, Tetrachlorophenol, Copper 8-Quinolinolate	State Superfund Site with ongoing assessment.
	Carlotta Lumber Company	Pentachlorophenol, Tetrachlorophenol	Ongoing contamination assessment and cleanup.
	Beaver Lumber Company, Arcata	Pentachlorophenol, Tetrachlorophenol	Contamination cleanup.
	Sun Valley Bulb Farms	Chlorothalonil, Dithiocarbamate, Oxamyl	Ongoing monitoring and assessment to prevent discharges to surface water and ground water under RWQCB direction.
	Pacific Lumber Co. Carlotta	Pentachlorophenol Tetrachlorophenol	Ongoing contamination assessment
Mendocino	Marcel Peterson	Chlordane	Remediation underway; new well.
Siskiyou	Mount Heron	Strychnine	Source removal.
	Hi-Ridge Lumber Company	Pentachlorophenol, Tetrachlorophenol	Ongoing contamination assessment and cleanup.
	Pine Mountain Lumber Company	Pentachlorophenol, Tetrachlorophenol	Ongoing contamination assessment and cleanup.
Trinity	Stone Forest Industries, Burnt Ranch	Pentachlorophenol, Tetrachlorophenol	Ongoing contamination assessment.

Table III-2. Actions Taken by the Regional Water Quality Control Board, San Francisco Bay (Region 2),
In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Alameda	Parker & Amchem	2,4-D	No monitoring for 2,4-D is required after many years of non-detect levels of 2,4-D.
	Jones-Hamilton	Pentachlorophenol	RWQCB Order No. 89-110 specified time schedule for investigation/cleanup. Ground water cleanup underway. No sampling of ground water for pesticides.
	Port of Oakland (Embarcadero Cove)	Chlordane, Pentachlorophenol, DDT, Endosulfan, 2,3,7,8-TCDD, DDD	Department of Toxic Substances Control (DTSC) has lead and has approved a Remedial Action Plan including continuous ground water monitoring.
	Lincoln Properties (Orsett) Site)	DDE, 2,4-D	DDE and 2,4-D were non-detect in monitoring wells and are no longer monitored.
	Peerless Southern Pacific Railroad	Pentachlorophenol	City of Berkeley Health Department has lead. Additional soil and ground water investigations required.
	FMC, Newark	EDB	RWQCB Order No. 89-055 specified time schedule for investigation and cleanup. Ground water cleanup underway.
	3830 Old Santa Rita Road, Pleasanton	Dicamba, Dichloroprop, 2,4-D, 2,4,5-T	Pesticide found in grab water samples. One monitoring well installed on-site. Alameda County Department of Environmental Health lead on this site. Site closed October 1990.
Contra Costa	Chevron	Endrin, Lindane, Dieldrin, DDT, Arsenic	Submitted closure plan for Class I impoundment. A cut-off wall with a ground water extraction trench around the impoundment has been constructed.
	Levin Metals	Aldrin, 4,4'-DDD, 4,4'-DDE, o,p.-DDT, Dieldrin, BHC	U.S. Environmental Protection Agency (U.S. EPA) lead on-site cleanup. Awaiting report of completion for remedial dredging project.
	FMC, Richmond	DDT, DDD, DDE, Dieldrin, Chlordane, Tedlon, Endosulfan, Ethion, Carbophenothion, Heptachlor	California Department of Health Services (DHS) lead on-site cleanup. Cleanup completed. Monitor to assure remaining pollutants do not migrate.
Marin	Former Sonoma Mosquito Abatement District, San Rafael	DDD, DDE, DDT, Dieldrin	DTSC is lead agency. Some soil removal has already taken place (approximately 3000 yd ³ in 1992). Old monitoring wells destroyed. Seven new wells were installed in 1996. DTSC has mailed out draft deed restriction and draft O&M Agreement for site.

Table III-3. Actions Taken By the Regional Water Quality Control Board, Central Coast (Region 3), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Monterey	Monterey Soil Service, King City	EDB, 1,2-D, DDT, DBCP, Toxaphene	Site is being actively remediated.
	WFS-Salinas	Dinoseb	Site is being actively remediated.
	Castlerock Estates	Toxaphene, beta-BHC, delta-BHC, 4,4'-DDE, 4,4'-DDT, 4,4-DDE, 4,4-DDT, 4,4-DDD	Bioremediation pilot study conducted at the site.
Santa Barbara	J.R. Simplot Inc., Guadalupe	Benzene, Toluene, Xylenes	Remediation completed.
Santa Clara	Castle-Veg-Tech, Morgan Hill	Toxaphene, Endrin, Lindane, Endosulfan	Site is being actively remediated.
Santa Cruz	PUREGRO, Watsonville	1,2-DCP	Remediation completed.
	WFS-Greengro, Watsonville	1,2-DCP, Endosulfan	Bioremediation pilot study conducted at the site.
	WFS, Watsonville	DDT, DDD, Toxaphene	Site is being actively remediated.

Table III-4. Actions Taken by the Regional Water Quality Control Board, Los Angeles (Region 4), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Los Angeles	Dominquez Park Landfill, Redondo Beach	Bis (2-ethylhexyl) phthalate	Additional ground water monitoring was required.
	Bixby Village Sanitary Landfill (City Dump Salvage No. 1), Long Beach	Aldrin, Beta-BHC, Alpha-BHC, Bis (2-ethylhexyl) phthalate, Delta-BHC, 4,4'-DDE, 4,4'-DDT, 1,4-Dichlorobenzene, Dieldrin, 2,4-Dinitrophenol, Endosulfan I, Endrin, Endrin aldehyde, Lindane, Heptachlor	Monitoring has not adequately demonstrated that the subject disposal site is not the source of pollutants and listed pesticides detected in ground water monitoring wells downgradient of the disposal site. Two additional semiannual sampling events must be performed for U.S. EPA Method 625. A workplan must be submitted to the RWQCB.
	Market Place Sanitary Landfill (City Dump Salvage No. 2), Long Beach	Alpha-BHC, Bis (2-ethylhexyl) phthalate, Delta-BHC, 4,4'-DDE, 4,4'-DDT, Endosulfan I, Lindane, Heptachlor	Monitoring has not adequately demonstrated that the subject disposal site is not the source of pollutants and listed pesticides detected in ground water monitoring wells downgradient of the disposal site. Two additional semiannual sampling events must be performed for U.S. EPA Method 625. A workplan must be submitted to the RWQCB.
	Studebaker-Loynes Sanitary Landfill (City Dump Salvage No. 3), Long Beach	Alpha-BHC, Bis (2-ethylhexyl) phthalate, 4,4'-DDD, 4,4'-DDE, Di-n-octyl-phthalate, Endosulfan I, Endosulfan II, Endrin, Lindane, Heptachlor	Monitoring has not adequately demonstrated that the subject disposal site is not the source of pollutants and listed pesticides detected in ground water monitoring wells downgradient of the disposal site. Two additional semiannual sampling events must be performed for U.S. EPA Method 625. A workplan must be submitted to the RWQCB.
	Peter Pitchess Honor Rancho Landfill, Castaic Junction	Bis (2-ethylhexyl) phthalate	It appears that the subject landfills may have affected ground water in the vicinity with pesticide and other compounds. Two additional semiannual Solid Waste Assessment Test (SWAT) monitoring events were required. A workplan was also required. Received two additional SWAT monitoring events, with no detections.
	Royal Boulevard Land Reclamation Site, Torrance	Lindane, 1,3-Dichloropropene	The responsible party is monitoring ground water pursuant to their closure requirements. Semiannual data received, under review.
	Port Disposal Landfill, Wilmington	Bis (2-ethylhexyl) phthalate, Di-n-Octyl-phthalate	Chemical compounds were detected in excess of the regulatory levels, and the site was directed to submit a workplan to assess the nature and extent of the releases and to develop a corrective action program.
	Port Disposal Banning Pit and Macco Pit, Wilmington	Bis (2-ethylhexyl) phthalate, Napthalene, Di-n-Butyl phthalate, 2-Methyl-naphthalene	Chemical compounds were detected in excess of the regulatory levels, and the site was directed to submit a workplan to assess the nature and extent of the releases and to develop a corrective action program.
	City of Compton Landfill	Di(2-ethylhexyl) phthalate (DEHP), Di-n-Octyl-phthalate	Two semiannual ground water monitoring events were required.

Table III-5. Actions Taken By The Regional Water Quality Control Board, Central Valley (Region 5, Sacramento), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Colusa	Moore Aviation	Atrazine, 2,4,5-TP, 2,4-D, 2,4-Dichlorophenol, 4-Nitrophenol	Ground water remediation ongoing. Soils bioremediation complete for most constituents.
Glenn	Barber Cashew Supply Corporation, Willows	Nitrate, ammonia, 1,2-DCE, PCE, TCE, toluene, carbon tetrachloride, chloroform, chlorobenzene	Cleanup and Abatement Order (CAO) issued. Need to define the ground water plume.
Merced	Merced Municipal Airport	1,2 Dichlorobenzene, 1,2 Dichloroethane, 1,2 Dichloroethane (cis), 1,2 Dichloroethane (trans), 1,3 Dichloropropane (cis), Alachlor, Benzene, Captan, Carbophenothion (trithion), Chloroform, DDT (total), Dicofol (Kethane), Dieldrin, Endosulfan I, II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, Ethylbenzene, Heptachlor epoxide, Methoxychlor, Tetrachloroethylene (PCE), Toluene, Toxaphene, TPH-diesel, TPH-gasoline, Trichloroethylene (TCE), Vinyl chloride, Xylenes	Health Assessment completed. Feasibility study submitted.
	J.R. Simplot, Winton	1,2-DCP, Dieldrin, Benefin, 1,2,3-TCP, DBCM, DBCP, Endrin, Alachlor	Ground water remediation underway.
	BAC, Inc.	Chromium, Arsenic, Copper	RWQCB Lead Agency. Ground water extraction and treatment system in pilot study phase. Plume spreading due to ground water flow direction change. Implementing well reinjection, infiltration gallery, and National Pollutant Discharge Elimination System (NPDES) discharges.
	Western Farm Service, Merced	1,2-DCP, DBCP, dinoseb, dalapon, nitrate, ammonia	Off-site assessment underway. MRP issued for quarterly groundwater monitoring.
Sacramento	Sacramento Army Depot	Diazinon, Dursban	Assessment report requested. Federal Superfund work in progress. Cleanup of pesticides completed.
	Natomas Field	Alachlor, Dicofol, DDE, DDT, Toxaphene, Gamma-BHC, Dieldrin	CAO drafted. Meetings have been held with the responsible parties.
	Franklin Field Airport	Toxaphene	Requested feasibility study for soil cleanup and additional ground water sampling.
	McClellan Air Force Base	Aldrin, Alpha-BHC, Beta-BHC, Delta-BHC, Gamma-BHC, (Lindane), 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Dieldrin, Alpha Endosulfan, Endosulfan Sulfate, Heptachlor, Heptachlor Epoxide, 2,4-D, 2,4,5-T, 2,4,5-TP	Ground water cleanup underway. For the last 4-5 years, no pesticides found in ground water.
	Bureau of Land Management, Fitzgerald Ranch	Toxaphene	Buried empty pesticide containers found on land purchased by Bureau of Land Management (BLM). Soil containing toxaphene excavated and stockpiled onsite. BLM has proposed a pilot study for bioremediation of the stockpiled soils. No pesticides detected in three monitoring wells.

Table III-5. (cont.) Central Valley (Region 5, Sacramento)

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
San Joaquin	Occidental Chemical	EDB, DBCP, Sulfolane	Site remediation occurring pursuant to stipulation and judgement approving settlement (1981).
	Defense Depot, Tracy	Dieldrin, Simazine	Assessment ongoing as part of the site-wide remedial investigations. Draft Remedial Information Report complete.
	Sharpe Army Depot, Stockton	Bromacil	Assessment ongoing.
	Marley Cooling	Arsenic, Copper, Chromium	Ground water cleanup underway.
	U.S. Navy Communication Station	DDD, DDE	Assessment ongoing. Soil removal actions have occurred and more are planned. Ground water assessment underway.
	Triple "E" Produce	Chloroform	Bioremediation began September 1993. A downgradient ground water extraction system began operation in the spring of 1996. The effectiveness of this extraction system is currently being evaluated.
	Pure Gro/Brea Agricultural Service, Stockton	1,2-DCP, Chloroform, PCE, Bromoform, 1,1-DCA, Dibromochloromethane, bromochloromethane, bromodichloromethane	Soil and ground water investigation ongoing. Off-site plume definition continuing. Two soil areas capped. MRP issued for semi-annual ground water monitoring and long-term cap maintenance.
	Former Oxychem/ Simplot/ PureGro	DBCP, 1,2-DCP, 1,1-DCE, 1,2-DCA, Chlorobenzene, 1,1,2-TCA, Mevinphos, Fensulfothion, Dinoseb, Dicamba, 2,4,5-T, Atrazine, Monuron, Carbaryl, Carbofuran, Propham, Diuron, Propoxur, 1,1,2,2-TCA, atraton, 2,4-DB, bromocil, chloromethane, tebuthiuron, simazine, methiocarb, MCP, fenuron, chloroform, chloroxuron, dichloroprop, EDB, oxamyl	Health risk assessment completed. Target cleanup level calculations underway. Off-site plume definition report submitted.
	Cal Farm Supply	b-BHC, Dieldrin, Prometon, Simazine, Atrazine, 2,4,5-TP, Dinoseb	Soils cleaned up. Ground water investigation continues.
	Western Farm Service, Vernalis	DBCP, EDB, diuron, methiocarb, diazinon, aldrin, nitrate, ammonia, 1,2-DCP	Extent of the off-site ground water plume is being defined. MRP issued for quarterly ground water monitoring.
Solano	Wickes Forest Industries	Chromium (Cr ³⁺ and Cr ⁶⁺), Arsenic, Copper	Ground water cleanup ongoing.
Stanislaus	Chemurgic Agricultural Chemicals	BHC, DDT	1993 CAO rescinded. Waste Discharge Requirements adopted in June 1997 for a ground water extraction and treatment system. Excavation of areas with elevated BHC in soil completed by December 1995. Ground water monitoring ongoing.
	Geer Road Landfill	1,1-DCA, 1,1,1-TCA, TCE, Chlordazon, Freons	Ground water cleanup underway.
	PureGro, Modesto	DBCP, EDB, nitrate, ammonia	Requested off-site plume definition. Issued MRP for quarterly ground water monitoring.
	Rhone-Poulenc (formerly Union Carbide) Test Plots	Aldicarb	Monitoring has ended and wells were abandoned under the oversight of Stanislaus County Department of Environmental Resources. Site was closed in the spring of 1995.
	Shell Agricultural Research Facility	Cyanazine, Atrazine, Chloroform, Planavin, 1,1-DCE, DBCP, Nitrate	Requested feasibility study for groundwater cleanup.
	Valley Wood	Copper, Chromium, Arsenic	Out-of-court settlement. Federal Superfund site. Interim cleanup in progress.

Table III-5 (cont.) Central Valley (Region 5, Sacramento)

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Sutter	Bowles Flying Service	2,4-D, Thiobencarb, Diuron, Metalaxyl, Molinate, Simazine	Cease and Desist Order issued under the TPCA program. On DTSC's list as needing a Preliminary Endangerment Assessment. Monitoring wells installed.
	PureGro, Robbins	alachlor, aldrin, dicofol, monuron, 1,2-DCA, 1,2-DCP, diphenamid	MRP issued for quarterly ground water monitoring. Additional ground water characterization requested.
Yolo	Frontier Fertilizer Company, Davis	EDB, DCP, DBCP, Carbon tetrachloride	DTSC installed interim ground water treatment system. U.S. EPA expanded the system and is conducting an investigation to determine extent of plume.
	U.C. Davis	Chlorpyrifos, Dicamba, Atrazine, Aldrin, Simazine, Dieldrin, Endrin, DDT	New CAO and MRP issued.
	J.R. Simplot, Courtland	EDB, 2,4-DB, Dicofol, Dicamba, 2,4,5-TP, Carbophenithion, DDT, Dieldrin, Dinoseb, Picloram	Health risk assessment inadequate and must be resubmitted. Ground water remediation underway.

Table III-6. Actions Taken By The Regional Water Quality Control Board, Central Valley (Region 5, Fresno), in FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Fresno	Blue Hills Disposal Site County of Fresno	Dicamba, 2,4-D, Silvex	Site characterization nearly complete. Corrective action plan will be developed.
	Thompson Hayward Agriculture & Nutrition	Alpha-BHC, Beta-BHC, Gamma-BHC, Dieldrin, DBCP, Diphenamid, Heptachlor, Heptachlor Epoxide	State Superfund site. Contamination assessment ongoing.
	Occidental Chemical/ J.R. Simplot	Dieldrin	Monitoring of ground water continues.
	FMC Corporation	Aldrin, Dieldrin, DDT, DDD, DDE, Heptachlor, Lindane, Toxaphene, Ethyl Parathion, Malathion, Ethion, Endosulfan, Dimethoate, Furadan, Dinitrocresol, Dinoseb (DNBP)	State Superfund site. Remedial investigation/ feasibility study in progress. Interim ground water removal process began December 1994. Final soil RAP approved June 1997.
	Britz, Inc., Five Points	Toxaphene, DDT, DNBP	State Superfund site. Remedial investigation and health assessment report submitted. Soil and ground water remediation feasibility study also submitted. Additional contamination assessment ongoing.
	Fresno County Wells	DBCP, EDB, 1,2-D	Pesticides detected in 146 wells (AB 1803 sampling). San Joaquin Valley DBCP Advisory Committee is overseeing studies on remedial alternatives for DBCP problems.
	Coalinga Airport	DDT, Chlorpyrifos, DEF, Ethion, Disyston	Contamination assessment needed.
	Union Carbide Test Plot	Aldicarb	Additional contamination assessment needed.
	Spain Air	Ethion, DEF, Parathion, Trithion, Dinoseb, Paraquat, DDE, DDT, Endosulfan II	Assessment needed.

Table III-6 (cont.) Central Valley (Region 5, Fresno)

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Kern	Brown & Bryant, Inc., Arvin	1,2-D, 1,3-D, DBCP, Dinoseb, EDB	Federal Superfund site. U.S. EPA has prepared Remedial Information Feasibility Study Report.
	Puregro Company, Bakersfield	DBCP	State Superfund site. Further assessment conducted. The waste discharge requirements for closure of a former dry well were issued March 1994 and amended March 1996.
	Guimarra Vineyard	DBCP	Contamination assessment and pond closure plan needed.
	Dick Garriott Crop Dusting, Bakersfield	Chlordane, DDE, DDT, PCNB, Endosulfan I & II, Methoxychlor, Carbofuran, Carbaryl, Bufencarb, DEF, Tedion, Diazinon, Chlorpyrifos, Ethyl Parathion, Diuron, Dinoseb, Dicamba	CAO issued in 1993. TPCA site. Hydrogeological Assessment Report completed in 1993. Work in progress to determine extent of ground water degradation. Impoundment is covered.
	USDA, Shafter	Dichlobenil, EPTC, Prometryne, DDT, DDE, DDD, Dieldrin, Toxaphene, Silvex, PCP, Chlorpropham, Ametryn, Atrazine	Developing a closure plan.
	Brown and Bryant, Inc., Shafter	Chlordane, DDD, DDE, DDT, Dieldrin, Endrin, Heptachlor, Toxaphene	State Superfund site. Contamination assessment ongoing.
	Kern County Wells	DBCP, 1,2-D, EDB	Pesticides detected in 57 wells (AB 1803 sampling). No assessment underway.
Madera	Chowchilla Municipal Airport	Dieldrin, Alpha-BHC, Endosulfan, PCNB, DDT, DDE, Lindane	Contamination assessment needed.
	Madera County Wells	DBCP, 1,2-D, EDB	DBCP detected in two wells (AB 1803 sampling). No assessment underway.
	Western Farm Service, Inc.	Dinoseb, DBCP, Dieldrin	Assessment ongoing. Impoundment closed. Impacted soils have been capped.
	Madera Municipal Airport	DDT, DDE, Toxaphene, Dicofol, Endrin	Soil and ground water investigation underway. Impacted soils will be capped.
Kings	Lemoore N.A.S.	Unspecified	Investigation ongoing.
	Blair Field	2,4-D, Dicofol, Diazinon, Propargite	Assessment needed.
	Blair Aviation	Trifluralin, Mevinphos, Phorate	Contamination assessment needed.
	Lakeland Dusters	DDT, Toxaphene	Contaminated soils excavated and stockpiled on site. Remediation underway.
Tulare	Mefford Field, City of Tulare	p,p'-DDT, p,p'-DDE, 2,4,5-TCP, Dicamba, DNBP, Diuron	Contamination assessment and mitigation reports needed.
	Tulare Airport	2,4-D, DNBP	Assessment needed.
	Kaweah Crop Dusters	DDT, 2,4-D, 2,4,5-T, Methoxychlor	DHS Remedial Action Order issued January 1984. Cleanup ongoing.
	Tulare County Wells	1,2-D	Detected in wells through AB 1803 sampling. No assessment underway.
Tuolumne	Tuolumne County Wells	Methylene Chloride	Detected in one well (AB 1803 sampling).
Yuba	Beale Air Force Base	Lindane	Ground water investigation underway.

Table III-7. Actions Taken By The Regional Water Quality Control Board, Lahontan (Region 6), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Inyo	Hawee Reservoir	Copper sulfate	Potential for ground water contamination will be evaluated.

Table III-8. Actions Taken By the Regional Water Quality Control Board, Colorado River Basin (Region 7), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Imperial	Central Brave Agricultural Service	4,4'-DDE, Endosulfan	Recalcitrant Discharger. Referred to Attorney General for nonpayment of fees.
	City of Brawley	4,4'-DDE, Dieldrin	Contaminated soil excavated and transported to Class I facility. Site closed.
	Visco Flying Service	4,4'-DDE, 4,4'-DDD, 4,4'-DDT, Endosulfan I & II	Impoundment remediated, capped, and closed in place.
	J.R. Simplot Company, Sandin Siding Facility	Dieldrin, 4,4'-DDT, Endrin	CAO issued. Site in remediation. Risk base corrective action in-progress
	Stoker Company	Endosulfan I & II, Dinoseb, 2,4-DB	Land treatment facility undergoing closure.
	Ross Flying Service	4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Dieldrin	Closure of surface impoundment.
Riverside	West Coast Flying	Endosulfan I & II, Disulfoton	Recalcitrant discharger. Referred to Attorney General for nonpayment of fees.
	Woten Aviation Services	Disyston, DEF, Ethyl Parathion, Methyl Parathion	CAO issued. U.S. EPA has lead in cleanup.
	Foster Gardner, Inc., Coachella Facility	1,2-Dichloroethane, 1,2-D, Ethylene Dibromide	CAO issued October 1991 by RWQCB. Imminent and Substantial Endangerment Order issued by DTSC on August 21, 1992. Cleanup on-going.
	Farmers Aerial Service, Inc.	4,4'-DDE, Endosulfan I	Closure of disposal area.
	Coachella Valley Mosquito Abatement District	DDT	Under investigation. Pesticide contamination insignificant, UST Cleanup only.
	Crop Production Services, Blythe (Formerly Pure Gro MW-24)	1,2-Dichloropropane	Undergoing cleanup.

Table III-9. Actions Taken By The Regional Water Quality Control Board, Santa Ana (Region 8), In FY 1996-97.

There are currently 103 confirmed detections of pesticides in the Santa Ana Region. Only one of these has been attributed to a point source discharge. Ground water extraction and treatment at this site is being performed under an order issued by the RWQCB. With the exception of this, all detections on this list are from domestic and agricultural production wells. One hundred and one of these wells contain dibromochloropropane (DBCP), four contain simazine, and one contains 1,2-dichloropropene (three wells contain both DBCP and simazine).

The presence of DBCP in the Region's ground water has resulted in both an actual and threatened impact on the beneficial use of water as a drinking water supply since 80 of the 101 wells containing DBCP are drinking water wells.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Orange	Great Lakes Chemical Corporation (formerly Great Western Savings), Irvine	1,2-D, EDB, 1,2-DCE	A new NPDES permit was issued July 7, 1995. Ground water extraction and treatment continuing. GLCC was issued a CAO by RWQCB on 4/17/97 for off-site remediation of impacted ground water.
Riverside	Sunnymead Mutual Water Company (North and South Well)	DBCP	Both wells were sold to Eastern Municipal Water District in February 1991. Customers are being served by the new District from other supply sources. North Well has been completely rehabilitated. South Well will be used for emergency purposes only.
	Arlington Basin	DBCP	Construction of a 7 MGD reverse osmosis plant with partial flow through a GAC unit for treatment of TDS, NO ₃ and DBCP was completed in September 1990. About 4 MGD of ground water is treated and 2 MGD is bypassed. Treated water is mixed with the bypassed water and discharged to a local channel for ground water recharge purposes. Salt brine (0.8 MGD) is discharged to the Santa Ana Regional Interceptor which discharges to the ocean via the Orange County sewage treatment plant. A second parallel transmission line has been completed to bring extracted ground water from three wells to the reverse osmosis unit. Possible sale of this water to City of Corona in near future.
	City of Corona (Well 8, mun.)	Simazine	Well has been completely rehabilitated. Simazine was not detected in the sampling after rehabilitation work. No further action being taken. Trace of TCE has been detected in recent sampling. No further action being taken.
	Home Gardens County Water District (Wells 2 & 3, mun.)	DBCP, Simazine	Water purveyor has closed these wells and is now purchasing water from the City of Riverside.
	City of Riverside, Twin Spring, mun.	DBCP	Well is out of service. No mitigation measures in effect.
	Victoria Farms MWC (Well 01 & 03, mun.)	DBCP	Water purveyor has closed these wells and is now purchasing water from the City of San Bernardino.
	City of Corona (Well 17, mun.)	Simazine, DBCP	Well is being used. Trace of DBCP was detected in March 1991 sampling. Trace of TCE has been detected in recent sampling.
	City of Riverside (Russell "B")	Simazine, DBCP	Water is being blended with other supply wells in the area.
	City of Riverside (1st Street)	DBCP	Well is not being used due to high concentrations of DBCP. No mitigation measures in effect.
	City of Riverside (Electric Street, mun.)	DBCP	Well water is being blended with water from other supply wells; blended water is sampled on a bi-weekly basis.
	City of Riverside (Palmyrita, mun.)	DBCP	Well is not being used due to high concentrations of DBCP. No mitigation measures in effect.
	City of Riverside (3 wells, mun.)	DBCP	Water from Hunt Wells No. 6, 10, and 11 is being blended with other wells in the area.
	City of Riverside (3 wells, emergency, Downtown Riverside)	DBCP	No mitigation measures in effect. These three wells are also contaminated with industrial organic solvents.

Table III-9 (cont.) Santa Ana (Region 8).

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
Riverside	Riverside County Hall Record, (pr)	DBCP	No mitigation measures in effect. Volatile organic chemicals such as Trichloroethylene and Perchloroethylene have also been found. Well is used for emergency purposes only.
	Loma Linda University, Arlington, (Wells 1 & 2, mun.)	DBCP	The University water supply system is tied into the City of Riverside domestic water supply distribution system. These two wells are used for irrigation purposes at the school.
	City of Riverside (Moor-Griffith, mun.)	DBCP	Well is out of service.
	Lake Hemet MWD (Wells A and B, mun.)	DBCP	Well A is being used for irrigation purposes by the District. Well B is being used by a local farmer for irrigation purposes.
	Buschlen, Dwight (mun.)	DBCP	Well was abandoned about nine years ago. A second well on the property with traces of DBCP is being used for irrigation only.
San Bernardino	Gage System Wells (12 wells, mun.)	DBCP	The City of Riverside operates the Gage System which consists of 15 wells located along the Santa Ana River. These wells are being blended for domestic use. Trace amounts of radon have been detected in some of these wells. The City installed three deep wells in the area to increase blending capacity. New wells are in operation.
	Bunker Hill Basin: Crafton/Redlands area (36 wells)	DBCP	The City of Redlands started construction of a 6,000 gpm granular activated carbon (GAC) treatment system in September 1991. This GAC system treats ground water from two wells. Treated water is being put into the local water supply distribution system. Funding for this system is from the SWRCB (\$2.8 million) and bond money through the State Expenditure Plan (\$1.9 million) which is managed by DTSC. The system has been off line since July 1997 due to presence of perchlorate above provisional Action Level in both production wells..
San Bernardino	South San Bernardino Company Water District (4 wells, mun.)	DBCP	All four wells are out of service. The City of San Bernardino Water Department purchased the water district in July 1991. The City now supplies all the customers in the area.
	Cucamonga CWD (4 wells, mun.)	DBCP	Well No. 13 has not been used since 1991. The other three wells are standby wells and are used on a limited basis. Water is being purchased from Metropolitan Water District (MWD).
	Monte Vista CWD (3 wells, mun.)	DBCP	All three wells are on standby status. Water is being purchased from MWD.
	City of Upland (14 wells)	DBCP	Seven wells are out of operation. Three wells are currently on standby. Four wells are being used and are being blended with other supply wells.
	City of Loma Linda (6 wells, mun.)	DBCP	Two wells have been abandoned. One well is out of operation due to high nitrates. The City also purchases treated water from the City of San Bernardino. A new well will be on line next year.

Table III-10. Actions Taken By The Regional Water Quality Control Board, San Diego (Region 9), In FY 1996-97.

COUNTY	SITE	PESTICIDE	PREVENTION ACTION
San Diego	City of Oceanside Water Utility District (Well No. 12-11S/ 4W-18L1 S)	1,2-DCP (1,2-Dicloropropane)	This backup drinking water well is located in the San Luis Rey River Valley. Up to 2.3 ppm has been detected in this well. The City of Oceanside is continuing monitoring of this well and reports to the State's DHS.
	Truly Nolen Exterminating, Inc.	Aldrin, Dieldrin, Chlordane	This is an on-site abandoned well which allegedly received pesticide wastes several years ago. Contaminated soil has been removed. Trace levels still exist in ground water. No further monitoring required. (RWQCB lead)
	San Pasqual Valley Union School (three wells)	Ethylene dibromide	Three drinking water wells impacted with Ethylene dibromide above MCL. City of San Diego monitored the wells until last year, wells were washed out by flood in 1993.

