



City of
Encinitas

July 20, 2000

Mr. John Robertus, Executive Director
San Diego Regional Water Quality Control Board
9771 Clairemont Mesa Blvd., Ste. B
San Diego, CA 92124

Chuck DuVivier
Mayor

MUNICIPAL STORMWATER PERMIT COMPLIANCE REPORTS (90-42)

Dear Mr. Robertus:

James H. Bond
Deputy Mayor

Enclosed please find the City of Encinitas Semi-Annual Stormwater and Urban Run-off Report. In accordance with the requirements of NPDES Order 90-42, this submittal contains a thorough explanation of the following elements:

Sheila S. Cameron
Council Member

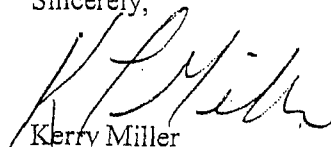
- Compliance Report on the Implementation of the Stormwater / Receiving Water Monitoring Program
- Compliance Report on the Implementation of the Illicit Connection / Illegal Discharge Detection Program
- Compliance Report on the Implementation of the Best Management Practices Program for Stormwater Pollution Control
- Program Analysis

Christy Guerin
Council Member

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Dennis Holz
Council Member

Sincerely,


Kerry Miller
City Manager

San
Elito
Lagoon

Kerry L. Miller
City Manager

Enclosures

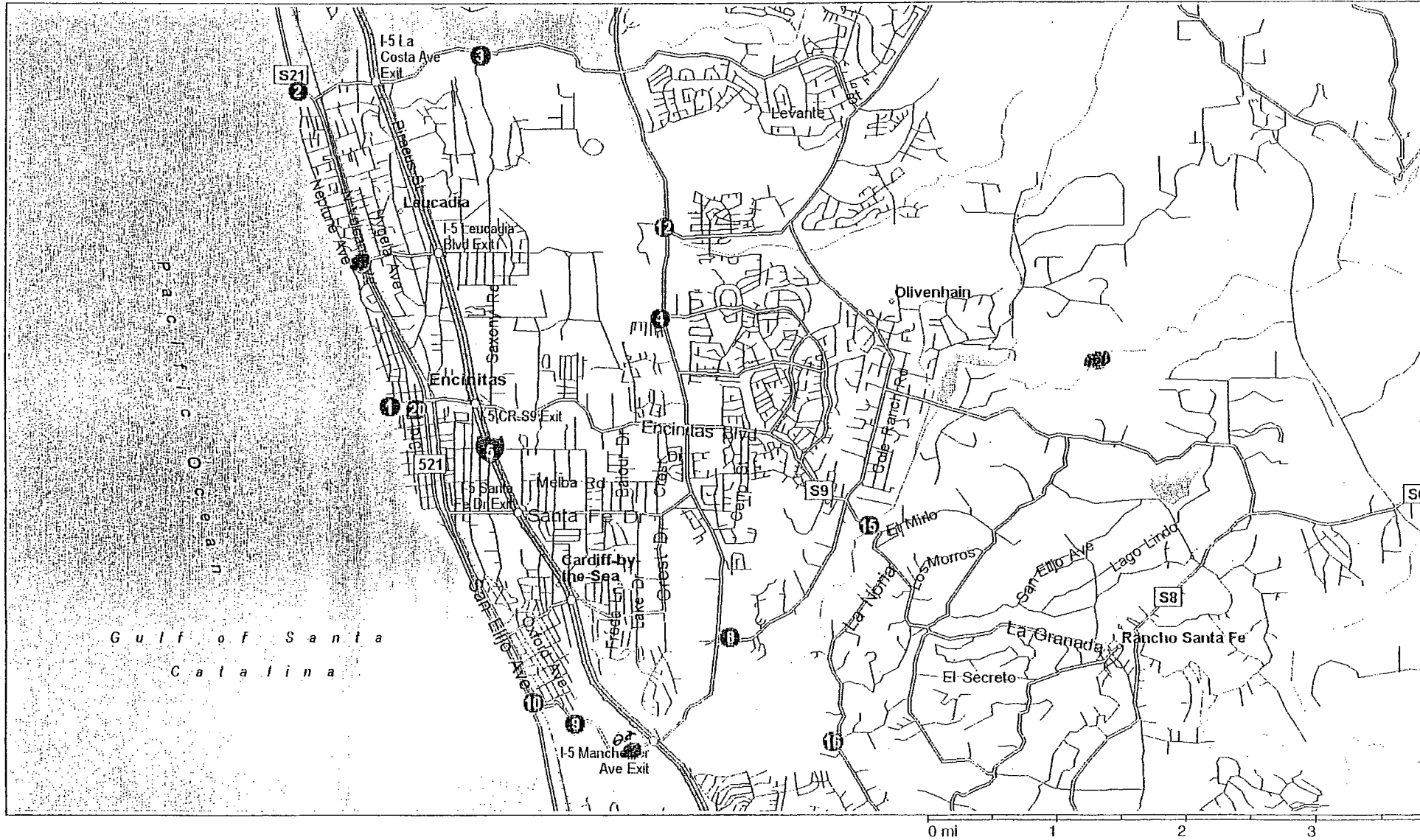
cc: Alan D. Archibald, P.E.
Jace Schwarm

0 1 P.C. 1/1 D 1/1 D 1/1 D 1/1 D 1/1 D

			LOCATION	2ND	SAN ELIJO JPA	PONTO	LAKE LEUCADIA	OCEAN COVE	LEUCADIA	GARDEN VIEW	EAST MANCHESTER	SAXONY
			DATE	2/16/00	2/16/00	2/16/00	3/5/00	1/25/00	1/25/00	1/25/00	2/23/00	2/23/00
Analyte	Method	Units	Reporting Limit									
Azinphosmethyl	EPA 8141A	ug/L	1.00	ND	ND	ND		ND	ND	ND	ND	ND
Bolstar	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Chlorpyrifos	EPA 8141A	ug/L	0.05	ND	ND	0.06		ND	ND	ND	0.04	ND
Coumaphos	EPA 8141A	ug/L	0.20	ND	ND	ND		ND	ND	ND	ND	ND
Def	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Demeton-s	EPA 8141A	ug/L	0.20	ND	ND	ND		ND	ND	ND	ND	ND
Diazinon	EPA 8141A	ug/L	0.05	0.09	ND	0.27		2.1	0.38	1.2	0.09	0.13
Dichlorvoz	EPA 8141A	ug/L	0.20	ND	ND	ND		ND	ND	ND	ND	ND
Dimethoate	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Disulfoton	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
EPN	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
EPTC	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Ethion	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Ethoprop	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Fensulfothion	EPA 8141A	ug/L	0.50	ND	ND	ND		ND	ND	ND	ND	ND
Fenthion	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Malathion	EPA 8141A	ug/L	0.12	ND	ND	0.2		1.1	0.67	1.4	ND	ND
Merphos	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Mevinphos	EPA 8141A	ug/L	0.70	ND	ND	ND		ND	ND	ND	ND	ND
Naled	EPA 8141A	ug/L	0.50	ND	ND	ND		ND	ND	ND	ND	ND
Parathion, ethyl	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Parathion, methyl	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Phorate	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Prowl	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	0.31	ND	ND
Ronnel	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Stirophos	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Tokuthion	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Trichloronate	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND
Trifluralin	EPA 8141A	ug/L	0.10	ND	ND	ND		ND	ND	ND	ND	ND

Chemical	Standard	DL	2nd / 20	Ponto / 8	Ocean Cove / 22	Leucadia / 12	Garden View / 4	East Manche / 8	Saxony / 3
Diazinon	0.05 ppb	0.05 ug/L	0.09 2/16/00	0.27 2/16	2.1 1/25	0.38 1/25	1.2 1/25	0.09 2/23	0.13 2/23
Chlorpyrifos	0.014	0.05							
Malathion		0.12	La Bajada / 15 0.22 (on/off)	Escondido / 14 0.3 (on/off)					

City of Encinitas Wet Weather Monitoring Locations July '99 to June '00



WATER QUALITY CRITERIA FOR DIAZINON AND CHLORPYRIFOS

by

DL

Stella Siepmann and Brian Finlayson
California Department of Fish and Game
Pesticide Investigations Unit
1701 Nimbus Rd. Suite F
Rancho Cordova, CA 95670

SUMMARY

Recent toxicity information was reviewed and used to update freshwater and saltwater aquatic life criteria for diazinon and chlorpyrifos. These water quality criteria were compared to criteria developed by the U.S. Environmental Protection Agency (USEPA 1986;1998). The joint toxicity of diazinon and chlorpyrifos was also evaluated.

Thirteen new tests on the acute toxicity of diazinon to aquatic organisms were evaluated and 12 were accepted. These new values were pooled with values previously evaluated (Menconi and Cox 1994). The freshwater Final Acute Value (FAV) for diazinon was 0.16 $\mu\text{g/L}$. The freshwater Criterion Maximum Concentration (CMC) for diazinon was 0.08 $\mu\text{g/L}$. The draft CMC proposed by USEPA (1998) was 0.09 $\mu\text{g/L}$. No saltwater acute or chronic criteria were developed due to inadequate data. Six tests on the chronic toxicity of diazinon to aquatic organisms were evaluated and five were accepted. The freshwater Final Chronic Value (FCV) for diazinon was 0.05 $\mu\text{g/L}$. The freshwater Criterion Continuous Concentration (CCC) for diazinon was 0.05 $\mu\text{g/L}$. The USEPA (1998) did not propose a FCV or CCC for diazinon.

Twenty-five new tests on the acute toxicity of chlorpyrifos to aquatic organisms were evaluated and 13 were accepted. These new values were pooled with values previously evaluated (Menconi and Paul 1994). The freshwater FAV for chlorpyrifos was 0.05 $\mu\text{g/L}$. The freshwater CMC for chlorpyrifos was 0.02 $\mu\text{g/L}$. The freshwater CMC calculated by USEPA (1986) was 0.083 $\mu\text{g/L}$. The saltwater FAV for chlorpyrifos was 0.03 $\mu\text{g/L}$. The saltwater CMC was 0.02 $\mu\text{g/L}$. The saltwater CMC calculated by USEPA (1986) was 0.011 $\mu\text{g/L}$. One chronic toxicity test for chlorpyrifos was reviewed and accepted. The freshwater and saltwater FCVs for chlorpyrifos were 0.014 and 0.009 $\mu\text{g/L}$, respectively. The freshwater and saltwater CCCs for chlorpyrifos were 0.014 and 0.009 $\mu\text{g/L}$, respectively. Freshwater and saltwater CCCs calculated by USEPA (1986) were 0.041 and 0.0056 $\mu\text{g/L}$, respectively.

The Frause Group and Pacific Rim Resources with King County Department of Natural Resources and Seattle Public Utilities. 1999. Natural Lawn Care Campaign, A Detailed Examination 1996-1999. Executive Summary and Campaign summary. 17pp.

Russick, K. and Lee M. 2000. DRAFT Sacramento/Feather river organophosphate pesticide management plan: Water Quality Targets for diazinon. 24pp.

Russick, K. Sacramento diazinon and chlorpyrifos data from 1990 through 1996.

San Diego Regional Water Quality Control Board (SDRWQCB). 1994. Water quality control plan for the San Diego basin (9).

Scanlin J and Cooper A., 1997. Outdoor use of diazinon and other insecticides in Alameda County. Prepared for California State Water Resources Control Board and Alameda County Flood Control and Water Conservation District. 19pp. + appendices.

Scanlin J and Feng A., 1997. Characterization of the presence and sources of diazinon in the Castro Valley Creek watershed. Prepared for the California State Water Resources Control Board and Alameda County Flood Control and Water Conservation District.

Scanlin J and Gosselin S. 1997. Strategy to reduce diazinon levels in creeks in the San Francisco Bay area. Prepared for the California State Water Resources Control Board and Alameda County Flood Control and Water Conservation District. Contract No. 5-103-120-0. 30pp. + appendices.

Siepmann S and Finlayson B. 2000. Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. California Department of Fish and Game. 59pp.

Southern California Coastal Water Research Project (SCCWRP). 1999. "Characterization of Stormwater Toxicity in Chollas Creek, San Diego." Prepared in collaboration with: City of San Diego, Port of San Diego, and Regional Water Quality Control Board, San Diego Region. 55pp + appendices.

Storm Water Pollution Prevention Program, City of San Diego. 2000. Semi-annual Waste Discharge Compliance Reports for RWQCB Order 90-42. Prepared for the Regional Water Quality Control Board. July 31, 2000.

Templeton, Scott, R.; Zilberman, D. and Yoo, S. J. 1997. Microeconomy of Outdoor Residential Pesticide Use: Demand, Supply and Comparisons to Agricultural Use. Draft paper, May 20, 1997. U.C. Berkeley Find this report

U.S. Department of Agriculture. 2000. Pesticide Properties Database: <http://wizard.arsusda.gov/acsl/ppdb.html> accessed 7/17/2001.

Diazinon

Chlorpyrifos