Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Diazinon 0.05 - 0.08 ug/L		Chlorpyrifos 0.014 - 0.083 ug/L		Daphnid 96-hour							Daphnid 7-day							*Pimephales promelas* 96-hour Survival			*Pimephales promelas* 7-day Survival and Growth				
		GMCS (8141A)	ELISA	GMCS (8141A)	ELISA	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC	LOEC	TUa	LT50	Mean % survival Control	LC_{50}	NOEC Survival	LOEC Survival	NOEC Reproduction	TUc Survival	Tuc Sublethal (Reproduction)	Mean % survival Control	LC_{50}	TUa	Mean % survival Control	LC_{50}	NOEC Survival	NOEC Growth	TUc
Station	Sample Date	ug/L	ug/L	ug/L	ug/L	%	%	%	%	%		hours	%	%	%	%	%	%	%	%	%		%	%	%	%	
SD8(1)	3/5/94											36		55	30		30	3.33	3.33								
SD8(1)	11/11/94													17.7	12.5		25	8	4					-	-	-	
SD8(1)	12/25/94													-	-		-							-	-	-	
SD8(1)	1/11/95													50	25		50	4	2					>100	>100	6.25	
SD8(1)	11/1/95					100		35.36			2.83	5.5	100	35	25		25	4	4								
SD8(1)	2/14/95													35.4	25		50	4	2					>100	>100	<6.25	
SD8(1)	4/16/95													37.5	25		50	4	2								
SD8(1)	1/22/96											65	100	71	50		50	2	2		>100		96	>100	>100	50	2
SD8(1)	2/1/96																				>100		98	>100	100	100	1
SD8(1)	3/5/96					100		55			1.83									98	>100	0.62		>100	30	30	3.33
SD8(1)	12/9/96					100	0	64			1.57		90	39	30		30	3.33	3.33	98	>100	0.2	96	>100	100	100	1/1
SD8(1)	1/16/97					100	0	63			1.58	43	100	54	44		<23	>4.3	>4.3	100	>100	0.2		>100	100	100	1/1
SD8(1)	11/10/97					100		36			2.78		100	33	23		23	4.35	4.35	98	>100	0.0	96	>100	100	67	1/1.49
SD8(1)	12/6/97					100		81.8			1.22		100	54.0	44		44	2.27	2.27	100	>100	0.0	98	>100	100	100	1/1
SD8(1)	12/9/97							63			1.59	35		39.0	30		30	3.33	3.33		>100			>100	100	100	1
SD8(1)	11/8/98	0.46		0.1				70.5			1.42	64		48.4	44		<20	2.27	>5					>100	100	<20	1/>5
SD8(1)	1/25/99	0.46						>100			<1.0	100		67	67		67	1.49	1.49					>100	100	44Q	1/>5
SD8(1) [1(ss1)]	3/15/99	0.53	0.54	<0.5	0.08			75	50	100	1.3	87		54	67		67	1.49	1.49								
SD8(1) [2(ss2)]	3/25/99		0.51		0.10			79	50	100	1.3																
SD8(1) [3(ss3)]	4/6/99		0.32		0.11			>100	>100	>100	<1.0																
SD8(1)	2/12/00	0.27*		<0.5		90		>100		NA	<1.0	168	90	78.5	67		44	1.49	2.27				90	>100			
SD8(1)	2/21/00	0.35**		<0.5		100		>100		NA	<1.0	>192	90	>100	100		100	1	1								
SD8(1)	3/5/00	0.20**		0.04*		100		100			1		90	>100	100		100	1	1								
SD8(1)	1/8/01		0.7783		0.087		0	59			1.69																
SD8(1)	2/13/01		0.2381		0.0467		100	>100			<1.0																
SD8(1)	11/12/01		1.0527		0.0972	95	0	25	<50	50	>2																
SD8(2)	2/12/00					100	100	>100		>100	<1.0																
SD8(2)	2/21/00	0.0337		0.433		100	100	>100		>100	<1.0																
SD8(2)	1/8/01		0.5312		0.063		5	86			1.16																
SD8(2)	2/13/01		0.3441		0.0293		100	>100			<1.0																
SD8(2)	11/12/01		1.0397		0.0630	95	0	25	<50	50	>2																
SD8(3)	2/12/00					100	65	>100		>100	<1.0																
SD8(3)	2/21/00	0.0955		0.0429		100	100	>100		>100	<1.0																
SD8(3)	1/8/01		0.642		0.0743		0	59			1.69																
SD8(3)	2/13/01		0.2051		0.052		100	>100			<1.0																
SD8(3)	11/12/01		0.6146		0.0738	95	0	25	<50	50	>2																
SD8(4)	2/12/00	<1		<1																							
SD8(4)	2/21/00	<1		<1																							
SD8(4)	2/23/00																										
SD8(5)	2/12/00																										
SD8(5)	2/21/00					100	100	>100		>100	<1.0																
SD8(5)	1/8/01		0.8086		0.092		0	81			1.23																
SD8(5)	2/13/01		0.2184		0.0535		100	>100			<1.0																
SD8(5)	11/12/01		0.9043		0.0527	95	90	>100	100	>100	1																

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Diazinon 0.05 - 0.08 ug/L		Chlorpyrifos 0.014 - 0.083 ug/L		Daphnid 96-hour							Daphnid 7-day							*Pimephales promelas* 96-hour Survival			*Pimephales promelas* 7-day Survival and Growth				
		GMCS (8141A)	ELISA	GMCS (8141A)	ELISA	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC	LOEC	TUa	LT50	Mean % survival Control	LC_{50}	NOEC Survival	LOEC Survival	NOEC Reproduction	TUc Survival	Tuc Sublethal (Reproduction)	Mean % survival Control	LC_{50}	TUa	Mean % survival Control	LC_{50}	NOEC Survival	NOEC Growth	TUc
Station	Sample Date	ug/L	ug/L	ug/L	ug/L	%	%	%	%	%		hours	%	%	%	%	%	%	%	%	%		%	%	%	%	
SD8(6)	2/12/00		0.3376		0.0717	100	80	>100		>100	<1.0																
SD8(6)	2/21/00		0.0509		0.03400	95	100	>100		>100	<1.0																
SD8(6)	1/8/01		0.5234		0.0684		55	>100			<1.0																
SD8(6)	2/13/01		0.4101		0.01646		100	>100			<1.0																
SD8(6)	11/12/01		1.0932		0.05090	95	0	25	<50	50	>2																

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Diazinon 0.05 - 0.08 ug/L		Chlorpyrifos 0.014 - 0.083 ug/L		Daphnid 96-hour							Daphnid 7-day							*Pimephales promelas* 96-hour Survival			*Pimephales promelas* 7-day Survival and Growth				
		GMCS (8141A)	ELISA	GMCS (8141A)	ELISA	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC	LOEC	TUa	LT50	Mean % survival Control	LC_{50}	NOEC Survival	LOEC Survival	NOEC Reproduction	TUc Survival	Tuc Sublethal (Reproduction)	Mean % survival Control	LC_{50}	TUa	Mean % survival Control	LC_{50}	NOEC Survival	NOEC Growth	TUc
Station	Sample Date	ug/L	ug/L	ug/L	ug/L	%	%	%	%	%		hours	%	%	%	%	%	%	%	%	%		%	%	%	%	
DPR(1)	1/8/01		0.7899		0.082		0	59			1.69																
DPR(1)	2/13/01		0.2765		0.0354		100	>100			<1.0																
DPR(1)	11/13/01		0.8794		0.0514	95	0	65	50	75	2																
DPR(2)	1/8/01		0.5173		0.084		0	87			1.15																
DPR(2)	2/13/01		0.4624		0.0483		55	>100			<1.0																
DPR(2)	11/13/01		1.3743		0.0550	95	0	58	50	75	2																
DPR(3)	1/8/01		0.3709		0.1103		80	>100			<1.0																
DPR(3)	2/13/01		0.0748		0.046		95	>100			<1.0																
DPR(3)	11/13/01		0.6257		0.050	95	0	84	75	100	1.33																
DPR(4)	1/8/01		0.5932		0.104		65	>100			<1.0																
DPR(4)	2/13/01		0.3221		0.0611		100	>100			<1.0																
DPR(4)	11/12/01		0.6222		0.0650	95	0	61	50	75	2																
NF-1	9/1/00		0.0134		0.0133	100	100	>100		>100	<1.0																
NF-2	9/1/00		0.0207		0.0151	100	100	>100		>100	<1.0																
NF-3	9/1/00		0.1301		0.0274	100	100	>100		>100	<1.0																
NF-4	9/1/00		0.0228		0.0417	100	0	≤25		50	4.00																
SF-1	9/1/00		0.1043		0.0790	100	100	>100		>100	<1.0																
SD5	11/11/94													35.4	25		25	4	4					-	-	-	
SD5	12/25/94													30.8	25		25	4	4					>100	>100	<6.25	
SD5	1/11/95													56.1	50		50	2	2					-	-	-	
SD5	2/14/95													70.7	50		50	2	2					>100	>100	6.25	1
SD5	1/22/96							>100			<1.0	108		71	50		50	2	2								
SD5	2/1/96							55			1.82	36		55	30		30	3.33	3.33		>100			>100	100	100	1
SD5	2/22/96							>100			<1.0	>168		100	100		100	1	1								
SD5	3/5/96												90		30	100	30	3.33	3.33		100	0.48	98	>100	100	100	1
SD5	10/31/96					100	40	95			1.05	99	100	54	44		44	2.27	2.27	100	>100	0.21					
SD5	11/22/96					100	0	82			1.22	60	100	54	44		44	2.27	2.27	98	>100	0.2					
SD5	11/11/97					100		67			1.49		100		30		30	3.33	3.33	98	>100	0.0	96		100	100	1/1
SD5	10/30/96					100	40	95			1.05		100		44		44	2.27	2.27	100	>100	0.21		>100	100	100	1
SD5	11/22/96																			100	>100	0.2	98	>100	100	100	1/1
SD5	12/6/97					100		81.8			1.22		90		44		44	2.27	2.27	100	>100	0.2	98		100	100	1/1
SD5	3/26/98					100		67			1.49				44		44	2.27	2.27	100	>100	0.0	100		100	100	1
SD5	11/8/98	0.40		<0.05				>100			<1.0	117		44.8	30		<20	3.33			>100			>100	100	<20	1/>5
SD5	1/25/99	0.28						>100			<1.0	140		78.5	67		67	1.49	1.49		>100			>100	100	100Q	1/>5
SD5	3/15/99	0.41		<0.5				>100			<1.0	>168		>100	100		67	1	1.49								
SD5	2/12/00	0.30*	0.2577	<0.5	0.0795	80		>100			<1.0		80	81.9	67		20	1.49	5				90	>100			
SD5	2/20/00	0.39**		<0.5		100		>100			<1.0		80	>100	100		100	1	1								
SD5	3/5/00	0.18		<0.5		100		>100			<1.0		100	>100	100		100	1	1								
AH1	11/8/98	0.16		<0.05																							
AH1	1/31/99	<0.50																									
AH1	3/15/99	0.38		<0.5																							
AH1	1/25/00	<0.5		<0.5																							
AH1	2/20/00	0.47**		<0.5																							
AH1	3/5/00	0.29		<0.05																							
SD13	11/22/96							33			3.03	35		17	<23			>4.3									
SD13	12/9/96					100	0	17			6.04		100		<23			>4.3									
SD13	12/12/96							17			5.88	5.5		6	<23			>4.3									

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Diazinon 0.05 - 0.08 ug/L		Chlorpyrifos 0.014 - 0.083 ug/L		Daphnid 96-hour							Daphnid 7-day							*Pimephales promelas* 96-hour Survival			*Pimephales promelas* 7-day Survival and Growth				
		GMCS (8141A)	ELISA	GMCS (8141A)	ELISA	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC	LOEC	TUa	LT50	Mean % survival Control	LC_{50}	NOEC Survival	LOEC Survival	NOEC Reproduction	TUc Survival	Tuc Sublethal (Reproduction)	Mean % survival Control	LC_{50}	TUa	Mean % survival Control	LC_{50}	NOEC Survival	NOEC Growth	TUc
Station	Sample Date	ug/L	ug/L	ug/L	ug/L	%	%	%	%	%		hours	%	%	%	%	%	%	%	%	%		%	%	%	%	
SD13	11/28/98	0.72																									
SD13	1/25/99	0.47																									
SD13	3/15/99	0.79		<0.5																							
SD13	2/12/00	0.43*		<0.5																							
SD13	2/20/00	0.48**		<0.5																							
SD13	3/5/00	0.08		<0.05																							
SV1	12/9/96						100	>100			0	>168	100	>100	100		100	1	1	98	>100	0.48	96	>100	100	100	1/1
SV1	1/16/97					100	0	54			1.84	51	100	54	44		23	2.27	4.35	100	>100	0	100	>100	100	100	1/1
SV1	11/28/98	0.23		<0.5																							
SV1	1/25/99	<0.5																									
SV1	3/15/99	<0.5		<0.5																							
SV1	1/25/00	<0.5		<0.5																							
SV1	3/5/00	<0.05		<0.5																							
SV1	4/17/00	<0.5		<0.5																							
La Bajada	4/18/00	0.22																									
La Bajada	5/24/00	<0.05																									
Esc Creek	4/18/00	0.3000																									
Esc Creek	5/24/00	<0.05																									
2nd	2/16/00	0.0900																									
San Elijo JPA	2/16/00	<0.05																									
Ponto	2/16/00	0.2700																									
Ocean Cove	1/25/00	2.1000																									
Leucadia	1/25/00	0.3800																									
Garden View	1/25/00	1.2000																									
East Manchester	2/23/00	0.0900																									
Saxony	2/23/00	0.1300																									
AC-CC	9/29/98																							100	100	1/1
AC-CC	11/8/98						5 (48 hr)														90	0.59					
AC-CC	1/20/99						100 (48 hr)														50	1.0					
AC-EC	9/29/98																				100	0.0		100	100	1/1	
AC-EC	11/8/98						0 (48 hr)														100						
AC-EC	1/20/99						0 (48 hr)														70	0.87					
AC-DF	9/29/98						0 (48 hr)														100	0.0		100	100	1/1	
AC-DF	11/8/98						0 (48 hr)														100						
AC-DF	1/20/99						100 (48 hr)														45	<1.0					
AC-SC	9/29/98						0 (48 hr)																	100	100	1/1	
AC-SC	11/8/98						0 (48 hr)														90	0.59					
AC-SC	1/20/99						0 (48 hr)														80	0.76					
AC-PCH	9/29/98																				90	0.59					
AC-PCH	11/8/98						0 (48 hr)														90						
AC-PCH	1/20/99						15 (48 hr)														75	0.82					

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Hyaella Survival 96-hour					Hyaella Survival 7-day						*Strongylocentrotus purpuratus* Sea Urchin Fertilization				Mysidopsis bahia 96-hour survival			
		Mean % survival Control	%Survival in 100% Concentration	LC_{50}	LOEC	LT50	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC Survival	NOEC Survival/Growth	TUc Survival/Sublethal	EC50 (reduced fertilization)	NOEC	LOEC	TU	EC50	NOEC	LOEC	TU
Station	Sample Date	%	%	%	%	hours	%	%	%	%	%		%	%	%		%	%	%	
SD8(1)	3/5/94																			
SD8(1)	11/11/94																			
SD8(1)	12/25/94																			
SD8(1)	1/11/95																			
SD8(1)	11/1/95																			
SD8(1)	2/14/95																			
SD8(1)	4/16/95																			
SD8(1)	1/22/96																			
SD8(1)	2/1/96																			
SD8(1)	3/5/96																			
SD8(1)	12/9/96																			
SD8(1)	1/16/97																			
SD8(1)	11/10/97																			
SD8(1)	12/6/97																			
SD8(1)	12/9/97																			
SD8(1)	11/8/98																			
SD8(1)	1/25/99																			
SD8(1) [1(ss1)]	3/15/99												46.6	12	25	2.2	>100	>100	>100	<1
SD8(1) [2(ss2)]	3/25/99												18.2	6	12.5	5.5	>100	>100	>100	<1
SD8(1) [3(ss3)]	4/6/99												27.7	6	12.5	3.6	>100	>100	>100	<1
SD8(1)	2/12/00	90	100	>100		125	80	40	81.8	100	100	1/1Q								
SD8(1)	2/21/00	90	80	>100		>168	90	90	>100	100	100	1/1Q								
SD8(1)	3/5/00	80	80	>100		>168	80	50	>100	100	100	1/1Q								
SD8(1)	1/8/01		2	36																
SD8(1)	2/13/01		66	>100																
SD8(1)	11/12/01	100	4	33																
SD8(2)	2/12/00	94	8	49	<50															
SD8(2)	2/21/00	98	12	65	<50															
SD8(2)	1/8/01		0	39																
SD8(2)	2/13/01		18	68																
SD8(2)	11/12/01	100	2	27																
SD8(3)	2/12/00	94	4	30	<50															
SD8(3)	2/21/00	98	10	34	<50															
SD8(3)	1/8/01		26	50																
SD8(3)	2/13/01		22	52																
SD8(3)	11/12/01	100	0	65																
SD8(4)	2/12/00																			
SD8(4)	2/21/00																			
SD8(4)	2/23/00																			
SD8(5)	2/12/00																			
SD8(5)	2/21/00	98	32	77	<50															
SD8(5)	1/8/01		14	38																
SD8(5)	2/13/01		36	78																
SD8(5)	11/12/01	100	22	49																

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Hyaella Survival 96-hour					Hyaella Survival 7-day						*Strongylocentrotus purpuratus* Sea Urchin Fertilization				Mysidopsis bahia 96-hour survival			
		Mean % survival Control	%Survival in 100% Concentration	LC_{50}	LOEC	LT50	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC Survival	NOEC Survival/Growth	TUc Survival/Sublethal	EC50 (reduced fertilization)	NOEC	LOEC	TU	EC50	NOEC	LOEC	TU
Station	Sample Date	%	%	%	%	hours	%	%	%	%	%		%	%	%		%	%	%	
SD8(6)	2/12/00	94	34	74	<50															
SD8(6)	2/21/00	98	52	>100	<50															
SD8(6)	1/8/01		28	38																
SD8(6)	2/13/01		84	>100																
SD8(6)	11/12/01	100	16	49																

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Hyaella Survival 96-hour					Hyaella Survival 7-day						*Strongylocentrotus purpuratus* Sea Urchin Fertilization				Mysidopsis bahia 96-hour survival			
		Mean % survival Control	%Survival in 100% Concentration	LC_{50}	LOEC	LT50	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC Survival	NOEC Survival/Growth	TUc Survival/Sublethal	EC50 (reduced fertilization)	NOEC	LOEC	TU	EC50	NOEC	LOEC	TU
Station	Sample Date	%	%	%	%	hours	%	%	%	%	%		%	%	%		%	%	%	
DPR(1)	1/8/01		28	67																
DPR(1)	2/13/01		6	36																
DPR(1)	11/13/01	100	72	>100																
DPR(2)	1/8/01		32	71																
DPR(2)	2/13/01		34	82																
DPR(2)	11/13/01	100	26	68.5																
DPR(3)	1/8/01		40	85																
DPR(3)	2/13/01		88	>100																
DPR(3)	11/13/01	100	78	>100																
DPR(4)	1/8/01		12	52																
DPR(4)	2/13/01		52	>100																
DPR(4)	11/12/01	100	10	36.8																
NF-1	9/1/00	100	82	>100	>100															
NF-2	9/1/00	100	100	>100	>100															
NF-3	9/1/00	100	98	>100	>100															
NF-4	9/1/00	100	96	>100	>100															
SF-1	9/1/00	100	96	>100	>100															
SD5	11/11/94																			
SD5	12/25/94																			
SD5	1/11/95																			
SD5	2/14/95																			
SD5	1/22/96																			
SD5	2/1/96																			
SD5	2/22/96																			
SD5	3/5/96																			
SD5	10/31/96																			
SD5	11/22/96																			
SD5	11/11/97																			
SD5	10/30/96																			
SD5	11/22/96																			
SD5	12/6/97																			
SD5	3/26/98																			
SD5	11/8/98																			
SD5	1/25/99																			
SD5	3/15/99																			
SD5	2/12/00	90	70	>100			80	70	>100	100	100Q	1/1Q								
SD5	2/20/00	90	100	>100			80	90	>100	100	100Q	1/1Q								
SD5	3/5/00	80	50	100			60	50	67	67	100Q	1.49/1Q								
AH1	11/8/98																			
AH1	1/31/99																			
AH1	3/15/99																			
AH1	1/25/00																			
AH1	2/20/00																			
AH1	3/5/00																			
SD13	11/22/96																			
SD13	12/9/96																			
SD13	12/12/96																			

Appendix B. Summary of Surface Water Monitoring for Diazinon, Chlorpyrifos and Toxicity

		Hyaella Survival 96-hour					Hyaella Survival 7-day						*Strongylocentrotus purpuratus* Sea Urchin Fertilization				Mysidopsis bahia 96-hour survival			
		Mean % survival Control	%Survival in 100% Concentration	LC_{50}	LOEC	LT50	Mean % survival Control	%Survival in 100% Concentration	LC_{50}	NOEC Survival	NOEC Survival/Growth	TUc Survival/Sublethal	EC50 (reduced fertilization)	NOEC	LOEC	TU	EC50	NOEC	LOEC	TU
Station	Sample Date	%	%	%	%	hours	%	%	%	%	%		%	%	%		%	%	%	
SD13	11/28/98																			
SD13	1/25/99																			
SD13	3/15/99																			
SD13	2/12/00																			
SD13	2/20/00																			
SD13	3/5/00																			
SV1	12/9/96																			
SV1	1/16/97																			
SV1	11/28/98																			
SV1	1/25/99																			
SV1	3/15/99																			
SV1	1/25/00																			
SV1	3/5/00																			
SV1	4/17/00																			
La Bajada	4/18/00																			
La Bajada	5/24/00																			
Esc Creek	4/18/00																			
Esc Creek	5/24/00																			
2nd	2/16/00																			
San Elijo JPA	2/16/00																			
Ponto	2/16/00																			
Ocean Cove	1/25/00																			
Leucadia	1/25/00																			
Garden View	1/25/00																			
East Manchester	2/23/00																			
Saxony	2/23/00																			
AC-CC	9/29/98																			
AC-CC	11/8/98																			
AC-CC	1/20/99																			
AC-EC	9/29/98																			
AC-EC	11/8/98																			
AC-EC	1/20/99																			
AC-DF	9/29/98																			
AC-DF	11/8/98																			
AC-DF	1/20/99																			
AC-SC	9/29/98																			
AC-SC	11/8/98																			
AC-SC	1/20/99																			
AC-PCH	9/29/98																			
AC-PCH	11/8/98																			
AC-PCH	1/20/99																			