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WASHINGTON, D. C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

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MEMORANDUM

SUBJECT: Aquatic Expected Environmental Concentrations for Telone In the Pacific Northwest

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TO: Ronald Kendall
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This memorandum presents calculations of estimated environmental concentrations of the soil fumigant telone (1,3-dichloropropene) in the PRZM-EXAMS standard farm pond. The following scenarios (Table 1) were used.

Table 1. Scenarios Used

Scenario	Crop emergence date	Soil type	Application rate kg/ha	Represents
CA almond	Jan. 18	fine sandy loam	404.5	Nuts
CA fruit	Jan. 21	fine sandy loam	404.5	Tree fruit
CA onion	Jan. 11	clay	164.7	Onion, garlic
CA sugarbeet	Feb. 1	Fine sandy loam	164.7	Carrots
OR berries	Apr. 7	Silt loam	164.7	Berries
OR filberts	Mar. 5	Silt loam	404.5	nuts

ID potatoes	May 10	loamy sand	164.7	Potatoes (Irish and sweet)

The application rates were the maximum allowable rates for mineral soils on labels 62719-32 (Telone II CA), 62719-12 (Telone C-17 CA), and 62719-302 (Telone C-35 CA).

Application dates were set at one week before the crop emergence date in the PRZM scenario, except for the tree crops (CA almond and fruit) for which the labels recommend fall soil treatment for spring planting. For these two scenarios, applications was set one week after the harvest date for almonds (Sept. 13 plus 7 days = Sept. 20).

The PRZM and EXAMS input parameters that were used are given in Table 2. As noted, several of the input parameters are taken from a May 6, 1998 PRZM-EXAMS modeling exercise by James Carleton of EFED. EFED shell version pe4v01.pl was used with PRZM version 3.12 beta and EXAMS version 2.98.04.

Table 2. Input Parameters

Input Parameter	Value	Reference/Comment
Henry's Law constant	3.55 E-3 atm-m3/mol	SRC PhysProp Database
Vapor Pressure	34 mmHg @ 25°C cis isomer	SRC PhysProp Database
Solubility in water	2500 ppm	J. Carleton 5/6/1998
Koc	41	J. Carleton 5/6/1998
Chemical Application Method (CAM)	6 (soil applied, linearly decreasing with depth)	J. Carleton 5/6/1998
Incorporation depth	30 cm (12 inches)	Label
Application Efficiency	1.0 (100%)	Soil injection
Spray Drift	0 %	Soil Injection
Number of applications	1	Label
Water half-life	195.2 days (includes parent and hydrolytically stable degradates)	J. Carleton 5/6/1998
Soil half-life	97.6 days	J. Carleton 5/6/1998
Benthic half-life	60 days	J. Carleton 5/6/1998
UPTKF	0	default

PLVKRT	0	default
PLDKRT	0	default
FEXTRC	0.5	Default

Results

The following results were obtained (Table 3). The PRZM-EXAMS input and output files are attached.

Table 3. 1-in-10 year Return Frequency Concentrations (parts-per-billion)

Scenario	Peak	96-hour	21-day	60-day	90-day	Yearly
CA almond	35.3	27.6	12.1	4.5	3.0	0.76
CA fruit	46.0	34.3	13.8	5.2	3.5	0.86
CA onion	212	177	87.2	33.1	22.2	5.5
CA sugarbeet	140	111	56.9	21.5	14.4	3.5
OR berry	45.3	38.2	19.2	7.2	4.8	1.2
OR filbert	234	182	82.0	30.9	20.6	5.1
ID potatoes	30.6	22.0	8.0	2.9	1.9	0.47

stored as CAalmond.out
Chemical: telone
PRZM environment: CAalmondC.txt modified Satday, 12 October 2002 at 17:30:38
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w23232.dvf modified Wedday, 3 July 2002 at 10:04:22
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	4.936	3.762	2.659	1.1	0.7332	0.1808
1962	160	129	54.6	20.59	13.76	3.397
1963	0.2965	0.237	0.1293	0.05233	0.03492	0.01645
1964	29.98	22.34	9.388	3.476	2.318	0.5701
1965	12.81	9.89	4.234	1.59	1.06	0.2626
1966	134	101	41.86	15.46	10.3	2.542
1967	0.09851	0.08457	0.05483	0.03523	0.02736	0.009376
1968	1.917	1.462	0.6337	0.2354	0.1569	0.03865
1969	0.2239	0.1895	0.0728	0.02548	0.01699	0.004284
1970	4.245	3.199	1.293	0.4746	0.3164	0.07883
1971	0.002298	0.002042	0.001451	0.000939	0.0007233	0.0002396
1972	0.7964	0.5749	0.2126	0.07726	0.05156	0.0127
1973	2.716	2.063	0.8474	0.3116	0.2079	0.05128
1974	0.1369	0.1051	0.04436	0.01616	0.01078	0.002754
1975	0.01228	0.009072	0.003752	0.001389	0.000926	0.0003003
1976	7.942e-006	7.254e-006	5.412e-006	3.289e-006	2.451e-006	6.65e-007
1977	35.84	28.13	12.39	4.668	3.112	0.7801
1978	9.494	7.959	3.723	1.432	0.955	0.2413
1979	27.59	20.09	8.101	3.046	2.032	0.5039
1980	19.54	15.6	7.24	2.677	1.785	0.44
1981	2.852	2.145	0.8982	0.3382	0.2256	0.07775
1982	12.96	9.932	4.46	1.707	1.14	0.2815
1983	5.849	4.498	1.904	0.7029	0.4686	0.1162
1984	0.005677	0.004997	0.00337	0.001988	0.00147	0.0004841
1985	3.767	2.997	1.436	0.5574	0.3716	0.09162
1986	0.07487	0.06021	0.029	0.01167	0.007945	0.002002
1987	13.71	10.91	5.043	1.97	1.314	0.3253
1988	3.839	2.98	1.281	0.4742	0.3161	0.07843
1989	2.555	1.964	0.8758	0.3576	0.2394	0.05981
1990	3.041	2.491	1.24	0.4393	0.2929	0.07248
0.1	35.254	27.551	12.0898	4.5488	3.0326	0.7591
			Average of yearly averages:		0.341274688833333	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:

Output File: CAalmond
Metfile: w23232.dvf
PRZM scenario: CAalmondC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name		Value	Units	Comments
Molecular weight	mwt	110.97	g/mol		
Henry's Law Const.	henry	3.55e-3		atm-m^3/mol	
Vapor Pressure	vapr	34	torr		
Solubility	sol	2500	mg/L		
Kd	Kd		mg/L		
Koc	Koc	41	mg/L		
Photolysis half-life	kdp	0	days	Half-life	
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife	
Anaerobic Aquatic Metabolism		kbacs	60	days	Halfife
Aerobic Soil Metabolism		asm	97.6	days	Halfife
Hydrolysis:	pH 5	0	days	Half-life	
Hydrolysis:	pH 7	0	days	Half-life	
Hydrolysis:	pH 9	0	days	Half-life	
Method:	CAM	6	integer	See PRZM manual	
Incorporation Depth:	DEPI	30	cm		
Application Rate:	TAPP	404.5	kg/ha		
Application Efficiency:		APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond		
Application Date	Date	20-09	dd/mm or dd/mmm or dd-mm or dd-mmm		
Record 17:	FILTRA				
	IPSCND	1			
	UPTKF	0			
Record 18:	PLVKRT	0			
	PLDKRT	0			
	FEXTRC	0.5			
Flag for Index Res. Run		IR	Pond		
Flag for runoff calc.	RUNOFF		none	none, monthly or total(average of entire run)	

stored as CAfruit.out
Chemical: telone
PRZM environment: CAfruitC.txt modified Satday, 12 October 2002 at 17:35:16
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w93193.dvf modified Wedday, 3 July 2002 at 10:04:24
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	22.35	17.55	9.802	3.972	2.648	0.6529
1962	0.5112	0.4316	0.2374	0.1021	0.06974	0.01753
1963	0.5929	0.4671	0.2191	0.08487	0.05658	0.01396
1964	48.64	36.2	15.67	5.885	3.925	0.9652
1965	0.8933	0.6975	0.3081	0.1182	0.0788	0.02185
1966	0.0742	0.06264	0.03486	0.01316	0.008773	0.002355
1967	1.705	1.357	0.6353	0.2453	0.1635	0.04042
1968	20.99	16.11	6.79	3.055	2.043	0.5029
1969	0.0213	0.01725	0.007445	0.004734	0.003709	0.001316
1970	6.127	4.743	2.55	0.9728	0.6485	0.1614
1971	0.1836	0.1442	0.0497	0.0174	0.0116	0.005482
1972	9.854	7.777	3.499	1.322	0.8812	0.218
1973	0.02445	0.02008	0.0109	0.005521	0.004057	0.001163
1974	21.18	15.97	7.186	2.781	1.856	0.4576
1975	1.036	0.7995	0.3847	0.151	0.1008	0.02652
1976	193	149	64.06	23.93	15.99	3.932
1977	12.42	9.714	3.933	1.376	0.9176	0.232
1978	6.764	5.365	2.497	0.9648	0.6432	0.1956
1979	0.08404	0.0667	0.03222	0.01339	0.00924	0.003633
1980	0.0007705	0.0006449	0.00034	0.0001489	0.0001016	2.55e-005
1981	0.1233	0.09728	0.04473	0.01685	0.01125	0.002775
1982	54.34	38.31	14.21	5.345	3.574	0.8816
1983	4.305	3.076	1.209	0.4407	0.2942	0.07358
1984	0.1013	0.07954	0.03664	0.01401	0.009337	0.002388
1985	1.102	0.944	0.4437	0.1712	0.1141	0.02819
1986	9.334	7.538	2.944	1.031	0.687	0.1696
1987	2.452	2.01	0.9518	0.3652 0	.2443	0.0604
1988	0.2263	0.1914	0.09893	0.03463	0.02308	0.005678
1989	0.06227	0.05178	0.02692	0.01087	0.007281	0.0018
1990	0.6986	0.5909	0.3037	0.1169	0.07804	0.01926
0.1	46.011 3	4.335	13.7692	5.2077	3.4814	0.85873
			Average of yearly averages:		0.289904183333333	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:
Output File: CAfruit
Metfile: w93193.dvf
PRZM scenario: CAfruitC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	110.97	g/mol	
Henry's Law Const.	henry	3.55e-3	atm-m^3/mol	
Vapor Pressure	vapr	34	torr	
Solubility	sol	2500	mg/L	
Kd	Kd		mg/L	
Koc	Koc	41	mg/L	
Photolysis half-life	kdp	0	days	Half-life
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	60	days	Halfife
Aerobic Soil Metabolism	asm	97.6	days	Halfife
Hydrolysis: pH 5		0	days	Half-life
Hydrolysis: pH 7		0	days	Half-life
Hydrolysis: pH 9		0	days	Half-life
Method:	CAM	6	integer	See PRZM manual
Incorporation Depth:	DEPI	30	cm	
Application Rate:	TAPP	404.5	kg/ha	
Application Efficiency:	APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond	
Application Date	Date	20-09	dd/mm or dd/mmm or dd-mm or dd-mmm	
Record 17:	FILTRA			
IPSCND	1			
UPTKF	0			
Record 18:	PLVKRT	0		
PLDKRT	0			
FEXTRC	0.5			
Flag for Index Res. Run	IR	Pond		
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	

stored as CAonion.out
Chemical: telone
PRZM environment: CAonionC.txt modified Monday, 23 December 2002 at 07:48:48
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w23155.dvf modified Wedday, 3 July 2002 at 10:04:20
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	16.78	13.51	5.246	1.892	1.262	0.3113
1962	1.658	1.279	0.5996	0.2242	0.1496	0.0369
1963	23.38	17.64	7.146	2.68	1.791	0.442
1964	252	209	99.84	37.77	25.21	6.205
1965	52.81	43.51	18.76	6.832	4.605	1.138
1966	19.45	15.08	8.69	3.344	2.245	0.554
1967	40.21	31.87	14.5	5.49	5.257	1.306
1968	140	118	58.98	22.36	14.92	3.672
1969	0.728	0.5905	0.2837	0.108	0.07208	0.01779
1970	3.588	2.713	1.106	0.4072	0.2718	0.06704
1971	127	107	50.24	18.83	12.57	3.101
1972	212	175	77.4	28.49	19.06	4.688
1973	11.43	8.798	5.59	2.155	1.438	0.3548
1974	3.043	2.559	1.148	0.519	0.3574	0.08825
1975	205	172	83.24	31.44	20.98	5.177
1976	197	163	73.53	26.95	17.98	4.424
1977	144	107	42.49	15.61	10.43	2.572
1978	4.287	3.255	1.338	0.7092	0.4738	0.1169
1979	36.46	28.03	12.42	4.635	3.094	0.7634
1980	33.29	26.7	12.56	4.773	3.186	0.7841
1981	162	130	61.09	23.22	15.5	3.825
1982	0.1006	0.0779	0.03357	0.0211	0.01414	0.003496
1983	27.96	22.37	14.23	5.37	3.584	0.8843
1984	211	177	87.61	33.31	22.32	5.492
1985	13.8 1	0.69	4.601	1.753	1.363	0.3418
1986	0.03046	0.02318	0.009623	0.00354	0.002362	0.0005845
1987	417	338	158	60.32	40.27	9.937
1988	17.17	13.27	4.297	1.629	1.088	0.2676
1989	186	148	59.12	21.24	14.17	3.495
1990	0.612	0.3966	0.1223	0.04338	0.02893	0.007139
0.1	211.9	176.8	87.173	33.123	22.186	5.4605
			Average of yearly averages:		2.00244665	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:

Output File: CAonion
Metfile: w23155.dvf
PRZM scenario: CAonionC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name		Value	Units	Comments
Molecular weight	mwt	110.97	g/mol		
Henry's Law Const.	henry	3.55e-3		atm-m^3/mol	
Vapor Pressure	vapr	34	torr		
Solubility	sol	2500	mg/L		
Kd	Kd		mg/L		
Koc	Koc	41	mg/L		
Photolysis half-life	kdp	0	days	Half-life	
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife	
Anaerobic Aquatic Metabolism		kbacs	60	days	Halfife
Aerobic Soil Metabolism		asm	97.6	days	Halfife
Hydrolysis:	pH 5	0	days	Half-life	
Hydrolysis:	pH 7	0	days	Half-life	
Hydrolysis:	pH 9	0	days	Half-life	
Method:	CAM	6	integer	See PRZM manual	
Incorporation Depth:	DEPI	30	cm		
Application Rate:	TAPP	164.7	kg/ha		
Application Efficiency:		APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond		
Application Date	Date	04-01	dd/mm or dd/mmm or dd-mm or dd-mmm		
Record 17:	FILTRA				
	IPSCND	1			
	UPTKF	0			
Record 18:	PLVKRT	0			
	PLDKRT	0			
	FEXTRC	0.5			
Flag for Index Res. Run		IR	Pond		
Flag for runoff calc.	RUNOFF		none	none, monthly or total(average of entire run)	

stored as CAsugarbeet.out
Chemical: telone
PRZM environment: CAsugarbeetC.txt modified Thuday, 29 May 2003 at 16:17:54
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w93193.dvf modified Wedday, 3 July 2002 at 10:04:24
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	118	98.03	47.26	17.97	12	2.96
1962	47.2	40.22	20.97	7.986	5.33	1.315
1963	90.16	74.03	33.36	12.46	8.318	2.053
1964	0.000113	0.0001059	8.554e-005	5.995e-005	4.677e-005	1.298e-005
1965	3.392e-008	3.323e-008	2.967e-008	2.215e-008	1.761e-008	4.935e-009
1966	8.964	7.279	3.327	1.257	0.839	0.207
1967	52.55	42.54	21.5	8.444	5.637	1.391
1968	0.0668	0.05295	0.02385	0.01006	0.006734	0.001661
1969	1240	984	430	159	106	26.26
1970	0.00106	0.0009959	0.0008102	0.0005675	0.0004465	0.0001251
1971	3.279e-007	3.223e-007	2.901e-007	2.113e-007	1.655e-007	4.661e-008
1972	8.039	6.267	2.743	1.021	0.681	0.1676
1973	2.425	1.894	1.04	0.4009	0.2675	0.06601
1974	2.903e-006	2.791e-006	2.392e-006	1.721e-006	1.362e-006	3.801e-007
1975	1.983e-009	1.577e-009	9.834e-010	6.984e-010	6.766e-010	1.881e-010
1976	0.112	0.09304	0.04582	0.0174	0.01161	0.002858
1977	1.69e-007	1.602e-007	1.33e-007	9.175e-008	7.104e-008	1.957e-008
1978	1.381	1.199	0.6118	0.228	0.1521	0.03753
1979	0.3369	0.2618	0.1143	0.0427	0.02849	0.007029
1980	0.08964	0.07192	0.03289	0.01205	0.008042	0.001979
1981	142	112	57.93	21.91	14.62	3.608
1982	9.628e-005	9.325e-005	8.148e-005	5.999e-005	4.724e-005	1.324e-005
1983	335	268	116	42.94	28.66	7.071
1984	0.063	0.04979	0.02255	0.008452	0.005693	0.001405
1985	0.07369	0.06002	0.0294	0.01127	0.007518	0.001855
1986	95.91	73.87	31.26	11.45	7.637	1.884
1987	0.01705	0.0132	0.005965	0.002225	0.001497	0.0003709
1988	3.294e-008	3.169e-008	2.724e-008	2.042e-008	1.619e-008	4.516e-009
1989	0.7801	0.6288	0.3072	0.1178	0.07863	0.0194
1990	3.083	2.412	1.065	0.3992	0.2664	0.06572
0.1	139.6	110.603	56.863	21.516 1	4.358	3.5432
			Average of yearly averages:		1.57075232253064	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:
Output File: CAsugarbeet
Metfile: w93193.dvf
PRZM scenario: CAsugarbeetC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	110.97	g/mol	
Henry's Law Const.	henry	3.55e-3	atm-m^3/mol	
Vapor Pressure	vapr	34	torr	
Solubility	sol	2500	mg/L	
Kd	Kd		mg/L	
Koc	Koc	41	mg/L	
Photolysis half-life	kdp	0	days	Half-life
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	60	days	Halfife
Aerobic Soil Metabolism	asm	97.6	days	Halfife
Hydrolysis: pH 5		0	days	Half-life
Hydrolysis: pH 7		0	days	Half-life
Hydrolysis: pH 9		0	days	Half-life
Method:	CAM	6	integer	See PRZM manual
Incorporation Depth:	DEPI	30	cm	
Application Rate:	TAPP	164.7	kg/ha	
Application Efficiency:	APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond	
Application Date	Date	25-01	dd/mm or dd/mmm or dd-mm or dd-mmm	
Record 17:	FILTRA			
IPSCND	1			
UPTKF	0			
Record 18:	PLVKRT	0		
PLDKRT	0			
FEXTRC	0.5			
Flag for Index Res. Run	IR	Pond		
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	

stored as ORberry.out
Chemical: telone
PRZM environment: ORberriesC.txt modified Satday, 12 October 2002 at 18:17:16
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w24232.dvf modified Wedday, 3 July 2002 at 10:06:10
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.7554	0.5878	0.3421	0.1302	0.0869	0.02145
1962	11.12	8.095	3.304	1.221	0.8149	0.2011
1963	31.41	23.81	9.634	3.529	2.355	0.5812
1964	0.0001767	0.0001565	0.0001149	8.659e-005	7.132e-005	2.186e-005
1965	11.14	8.516	3.482	1.275	0.8507	0.2099
1966	6.965e-005	6.653e-005	5.657e-005	4.25e-005	3.438e-005	1.033e-005
1967	3.196e-006	2.366e-006	9.045e-007	3.283e-007	2.191e-007	6.402e-008
1968	0.1931	0.1542	0.07015	0.02589	0.01727	0.004251
1969	0.0464	0.03464	0.01375	0.005	0.005078	0.001259
1970	8.755e-005	6.539e-005	2.616e-005	9.677e-006	6.46e-006	1.769e-006
1971	224	171	75.51	28.02	18.7	4.617
1972	6.024	4.61	1.931	0.7195	0.4803	0.1184
1973	0.02162	0.01689	0.007362	0.002712	0.001825	0.0004556
1974	4.838e-007	3.876e-007	1.865e-007	1.072e-007	8.75e-008	3.841e-008
1975	0.07283	0.05541	0.0229	0.00859	0.005734	0.001415
1976	6.678	5.209	2.335	0.8808	0.5881	0.1448
1977	0.2611	0.1995	0.08307	0.03038	0.02027	0.005011
1978	0.03503	0.02683	0.01205	0.007015	0.004697	0.00116
1979	0.01011	0.007755	0.00333	0.001216	0.0008114	0.0002004
1980	37.59	30.59	14.72	5.587	3.731	0.9182
1981	14.86	11.16	5.824	2.407	1.607	0.3967
1982	9.072	6.957	3.177	1.196	0.798	0.197
1983	255	198	86.95	32.54	21.72	5.362
1984	46.19	39	19.7	7.351	4.907	1.208
1985	10.74	8.023	3.112	1.126	0.7511	0.1854
1986	1.906	1.397	0.5324	0.1925	0.1286	0.03175
1987	6.639	5.064	2.094	0.7629	0.509	0.1261
1988	16.98	12.8	5.293	2.006	1.339	0.3296
1989	9.209e-005	8.715e-005	7.27e-005	5.658e-005	4.576e-005	1.369e-005
1990	11.7	8.982	3.63	1.33	0.8874	0.219
0.1	45.33	38.159 1	9.202	7.1746	4.7894 1	.17902
			Average of yearly averages:		0.496046658381	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:

Output File: ORberry
Metfile: w24232.dvf
PRZM scenario: ORberriesC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	110.97	g/mol	
Henry's Law Const.	henry	3.55e-3	atm-m^3/mol	
Vapor Pressure	vapr	34	torr	
Solubility	sol	2500	mg/L	
Kd	Kd		mg/L	
Koc	Koc	41	mg/L	
Photolysis half-life	kdp	0	days	Half-life
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	60	days	Halfife
Aerobic Soil Metabolism	asm	97.6	days	Halfife
Hydrolysis: pH 5		0	days	Half-life
Hydrolysis: pH 7		0	days	Half-life
Hydrolysis: pH 9		0	days	Half-life
Method:	CAM	6	integer	See PRZM manual
Incorporation Depth:	DEPI	30	cm	
Application Rate:	TAPP	404.5	kg/ha	
Application Efficiency:	APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond	
Application Date	Date	31-03	dd/mm or dd/mmm or dd-mm or dd-mmm	
Record 17:	FILTRA			
IPSCND	1			
UPTKF	0			
Record 18:	PLVKRT	0		
PLDKRT	0			
FEXTRC	0.5			
Flag for Index Res. Run	IR	Pond		
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	

stored as ORfilbert.out
Chemical: telone
PRZM environment: ORfilbertsC.txt modified Satday, 12 October 2002 at 18:18:04
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w24232.dvf modified Wedday, 3 July 2002 at 10:06:10
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	175	129	72.82	26.99	18.01	4.447
1962	1.627	1.36	0.5646	0.2063	0.1377	0.03407
1963	8.775	6.971	3.341	1.277	0.8524	0.2105
1964	18.69	14.21	6.317	2.343	1.564	0.385
1965	12.86	9.87	4.201	1.752	1.215	0.3001
1966	38.16	31.59	15.28	5.636	3.761	0.9283
1967	1.15	0.9551	0.3964	0.1457	0.09725	0.02402
1968	5.47	4.309	2.027	0.779	0.5202	0.1281
1969	0.02763	0.0209	0.008112	0.003558	0.003115	0.0007754
1970	6.374	4.92	2.103	0.7771	0.5186	0.128
1971	36.8	30.58	14.74	5.492	3.666	0.905
1972	286	226	103	38.45	25.67	6.319
1973	38.91	30.03	12.85	4.83	3.224	0.796
1974	119	93.66	38.84	14.31	9.55	2.357
1975	9.609	7.553	4.002	2.24	1.497	0.3698
1976	423	323	137	51.48	34.38	8.466
1977	125	96.09	41.61	15.45	10.32	2.547
1978	0.361	0.2765	0.1187	0.04542	0.03033	0.007539
1979	78.85	61.7	35.06	13.44	8.971	2.214
1980	13.32	10.6	4.872	1.853	1.238	0.3047
1981	240	188	83.08	31.32	20.91	5.161
1982	66.81	51.45	21.86	8.127	5.425	1.339
1983	55.29	43.68	18.49	6.837	4.563	1.126
1984	4.306	3.341	1.435	0.5331	0.3558	0.08761
1985	12.54	10.09	4.814	1.795	1.199	0.296
1986	52.82	39.38	16.39	6.202	4.14	1.022
1987	28.32	21.65	9.925	3.695	2.466	0.6087
1988	6.384	4.808	2.394	1.063	0.7095	0.1746
1989	156	116	46.58	17.22	11.49	2.837
1990	26.67	20.5	9.138	3.44	2.297	0.567
0.1	233.5	182.1	82.054	30.887	20.62	5.0896
			Average of yearly averages:		1.46969381333333	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:

Output File: ORfilbert
Metfile: w24232.dvf
PRZM scenario: ORfilbertsC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name		Value	Units	Comments
Molecular weight	mwt	110.97	g/mol		
Henry's Law Const.	henry	3.55e-3		atm-m^3/mol	
Vapor Pressure	vapr	34	torr		
Solubility	sol	2500	mg/L		
Kd	Kd		mg/L		
Koc	Koc	41	mg/L		
Photolysis half-life	kdp	0	days	Half-life	
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife	
Anaerobic Aquatic Metabolism		kbacs	60	days	Halfife
Aerobic Soil Metabolism		asm	97.6	days	Halfife
Hydrolysis:	pH 5	0	days	Half-life	
Hydrolysis:	pH 7	0	days	Half-life	
Hydrolysis:	pH 9	0	days	Half-life	
Method:	CAM	6	integer	See PRZM manual	
Incorporation Depth:	DEPI	30	cm		
Application Rate:	TAPP	404.5	kg/ha		
Application Efficiency:		APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond		
Application Date	Date	27-02	dd/mm or dd/mmm or dd-mm or dd-mmm		
Record 17:	FILTRA				
	IPSCND	1			
	UPTKF	0			
Record 18:	PLVKRT	0			
	PLDKRT	0			
	FEXTRC	0.5			
Flag for Index Res. Run		IR	Pond		
Flag for runoff calc.	RUNOFF		none	none, monthly or total(average of entire run)	

stored as IDpotato.out
Chemical: telone
PRZM environment: IDpotatoC.txt modified Satday, 12 October 2002 at 18:00:44
EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 17:33:30
Metfile: w24156.dvf modified Wedday, 3 July 2002 at 10:04:38
Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	23.88	16.35	5.662	2.013	1.342	0.3312
1962	0.001525	0.001515	0.001464	0.001298	0.0009742	0.0002488
1963	5.814	4.293	1.663	0.6022	0.4017	0.09913
1964	0.03567	0.02481	0.008495	0.003012	0.002009	0.0006021
1965	0.3552	0.2489	0.08602	0.03137	0.02092	0.005166
1966	14.49	10.12	3.516	1.252	0.8352	0.2061
1967	13.74	9.737	3.684	1.371	0.915	0.2259
1968	1.277	0.9175	0.3368	0.1206	0.08047	0.01989
1969	5.944	4.21	1.502	0.5357	0.3573	0.08821
1970	34.57	25.22	9.461	3.402	2.269	0.5601
1971	0.5735	0.408	0.1468	0.05257	0.03507	0.009149
1972	0.0001378	9.685e-005	6.575e-005	5.838e-005	4.267e-005	1.267e-005
1973	1.58	1.066	0.3493	0.1272	0.08487	0.02095
1974	112	75.47	24.7	8.746	5.833	1.439
1975	15.1	10.43	3.557	1.264	0.843	0.2092
1976	0.001699	0.001167	0.0008511	0.0007563	0.0005623	0.0001674
1977	3.871	2.773	1.007	0.359	0.2394	0.05906
1978	1.735	1.228	0.4372	0.1561	0.1041	0.02571
1979	0.0209	0.01457	0.005079	0.001836	0.001225	0.0003447
1980	0.1309	0.09507	0.03747	0.01351	0.009012	0.002219
1981	5.669	4.079	1.545	0.5547	0.37	0.09131
1982	31.39	22.57	8.282	2.974	1.984	0.4899
1983	2.106	1.51	0.6126	0.2298	0.1533	0.03824
1984	0.1827	0.1278	0.0446	0.01663	0.0111	0.002762
1985	0.1159	0.08133	0.02852	0.0109	0.007306	0.00181
1986	0.9146	0.6647	0.2785	0.09977	0.06654	0.01642
1987	6.784	5.261	1.886	0.6721	0.4483	0.1106
1988	0.001656	0.001126	0.000456	0.0002887	0.0001965	7.427e-005
1989	0.03766	0.02618	0.009032	0.003217	0.002146	0.0005368
1990	1.243	0.8838	0.3093	0.1104	0.07361	0.01816
0.1	30.639	21.948	8.02	2.8779	1.9198	0.47403
			Average of yearly averages:		0.135739091333333	

Inputs generated by pe4.pl - 8-August-2003

Data used for this run:
Output File: IDpotato
Metfile: w24156.dvf
PRZM scenario: IDpotatoC.txt
EXAMS environment file: pond298.exv
Chemical Name: telone

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	110.97	g/mol	
Henry's Law Const.	henry	3.55e-3	atm-m^3/mol	
Vapor Pressure	vapr	34	torr	
Solubility	sol	2500	mg/L	
Kd	Kd		mg/L	
Koc	Koc	41	mg/L	
Photolysis half-life	kdp	0	days	Half-life
Aerobic Aquatic Metabolism	kbacw	195.2	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	60	days	Halfife
Aerobic Soil Metabolism	asm	97.6	days	Halfife
Hydrolysis: pH 5		0	days	Half-life
Hydrolysis: pH 7		0	days	Half-life
Hydrolysis: pH 9		0	days	Half-life
Method:	CAM	6	integer	See PRZM manual
Incorporation Depth:	DEPI	30	cm	
Application Rate:	TAPP	164.7	kg/ha	
Application Efficiency:	APPEFF	1.0	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond	
Application Date	Date	03-05	dd/mm or dd/mmm or dd-mm or dd-mmm	
Record 17:	FILTRA			
	IPSCND	1		
	UPTKF	0		
Record 18:	PLVKRT	0		
	PLDKRT	0		
	FEXTRC	0.5		
Flag for Index Res. Run	IR	Pond		
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	