

Attachment 3. Output Files Used in Validation of Equation 1 Sediment Calculations¹

Test Report.xmls Table 20 excerpt.

Table 20.01. Exposure analysis summary: Maximum Events of 1989.

Event Duration		96-hour	21-day	60-day	90-day	1989
***** Ecotoxicological Direct Exposure Concentrations *****						
Water Column dissolved mg/L	Min.	1.222E-02	1.212E-02	1.196E-02	1.183E-02	1.130E-02
	Mean	1.223E-02	1.218E-02	1.208E-02	1.202E-02	1.165E-02
	Peak	1.224E-02	1.224E-02	1.224E-02	1.224E-02	1.224E-02
Benthic Sediment mg/L dissolved in pore water	Min.	1.174E-02	1.174E-02	1.172E-02	1.169E-02	1.136E-02
	Mean	1.174E-02	1.174E-02	1.173E-02	1.172E-02	1.157E-02
	Peak	1.174E-02	1.174E-02	1.174E-02	1.174E-02	1.174E-02
***** Ecotoxicological Trophic Exposure Concentrations *****						
Water Column ug/g dry weight of plankton	Min.	1.89	1.88	1.85	1.83	1.75
	Mean	1.89	1.89	1.87	1.86	1.80
	Peak	1.90	1.90	1.90	1.90	1.90
Benthic Sediment ug/g dry weight of benthos	Min.	1.82	1.82	1.81	1.81	1.76
	Mean	1.82	1.82	1.82	1.82	1.79
	Peak	1.82	1.82	1.82	1.82	1.82
***** Total Media Concentrations *****						
Water Column total mg/L	Min.	1.223E-02	1.213E-02	1.197E-02	1.184E-02	1.131E-02
	Mean	1.224E-02	1.219E-02	1.209E-02	1.202E-02	1.165E-02
	Peak	1.225E-02	1.225E-02	1.225E-02	1.225E-02	1.225E-02
Benthic Sediment total mg/kg dry weight	Min.	0.111	0.111	0.111	0.110	0.107
	Mean	0.111	0.111	0.111	0.111	0.109
	Peak	0.111	0.111	0.111	0.111	0.111

Test2. Table 20 Excerpt for 1988

Table 20.01. Exposure analysis summary: Maximum Events of 1988.

Event Duration		96-hour	21-day	60-day	90-day	1988
***** Ecotoxicological Direct Exposure Concentrations *****						
Water Column dissolved mg/L	Min.	2.978E-03	2.852E-03	2.790E-03	2.780E-03	2.728E-03
	Mean	3.040E-03	2.963E-03	2.868E-03	2.840E-03	2.781E-03
	Peak	3.110E-03	3.110E-03	3.110E-03	3.110E-03	3.139E-03
Benthic Sediment mg/L dissolved in pore water	Min.	2.570E-03	2.568E-03	2.559E-03	2.550E-03	2.505E-03
	Mean	2.570E-03	2.569E-03	2.566E-03	2.562E-03	2.535E-03
	Peak	2.570E-03	2.570E-03	2.570E-03	2.570E-03	2.570E-03
***** Ecotoxicological Trophic Exposure Concentrations *****						
Water Column ug/g dry weight of plankton	Min.	14.3	13.7	13.4	13.3	13.1
	Mean	14.6	14.2	13.8	13.6	13.3
	Peak	14.9	14.9	14.9	14.9	15.1
Benthic Sediment ug/g dry weight of benthos	Min.	12.3	12.3	12.3	12.2	12.0
	Mean	12.3	12.3	12.3	12.3	12.2
	Peak	12.3	12.3	12.3	12.3	12.3
***** Total Media Concentrations *****						
Water Column total mg/L	Min.	3.050E-03	2.922E-03	2.859E-03	2.848E-03	2.795E-03
	Mean	3.114E-03	3.035E-03	2.938E-03	2.910E-03	2.849E-03
	Peak	3.186E-03	3.186E-03	3.186E-03	3.186E-03	3.216E-03
Benthic Sediment	Min.	1.03	1.03	1.02	1.02	1.00

¹ Attachment 3 to the 2014 USEPA/OPP/EFEDgGuidance memo on sediment toxicity testing and risk assessment.

total mg/kg	Mean	1.03	1.03	1.03	1.03	1.02
dry weight	Peak	1.03	1.03	1.03	1.03	1.03

stored as test.out

Chemical: test

PRZM environment:

ORmintSTD.txt modified Tuesday, 29 May 2007 at 13:00:46

EXAMS environment:

pond298.exv modified Tuesday, 26 August 2008 at 05:14:08

Metfile: w24232.dvf modified Tuesday, 26 August 2008 at 05:15:54

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	1.093	1.084	1.051	0.9938	0.9646	0.6149
1962	1.988	1.978	1.942	1.877	1.841	1.468
1963	4.036	4.015	3.933	3.794	3.718	2.915
1964	4.264	4.255	4.219	4.154	4.113	3.783
1965	4.834	4.824	4.786	4.729	4.692	4.343
1966	5.337	5.327	5.289	5.217	5.174	4.84
1967	5.781	5.771	5.732	5.657	5.612	5.265
1968	6.164	6.154	6.133	6.079	6.033	5.681
1969	6.662	6.653	6.617	6.551	6.528	6.231
1970	7.26	7.249	7.207	7.125	7.076	6.745
1971	7.624	7.613	7.571	7.5	7.459	7.134
1972	8.597	8.581	8.52	8.405	8.33	7.791
1973	8.738	8.726	8.681	8.595	8.544	8.192
1974	8.959	8.948	8.905	8.818	8.767	8.405
1975	9.173	9.161	9.116	9.028	8.976	8.613
1976	9.348	9.337	9.292	9.206	9.155	8.792
1977	9.507	9.496	9.46	9.375	9.322	8.957
1978	10.34	10.32	10.25	10.13	10.04	9.461
1979	10.37	10.36	10.31	10.21	10.15	9.807
1980	10.55	10.54	10.49	10.41	10.36	9.984
1981	10.63	10.62	10.58	10.54	10.49	10.11
1982	10.79	10.77	10.73	10.63	10.57	10.2
1983	10.85	10.84	10.79	10.7	10.65	10.27
1984	11.18	11.17	11.11	11.02	10.96	10.48
1985	12.08	12.07	11.99	11.84	11.74	11.08
1986	12.04	12.03	11.97	11.87	11.81	11.41
1987	12.11	12.1	12.05	11.94	11.87	11.58
1988	12.32	12.3	12.25	12.16	12.09	11.7
1989	12.24	12.23	12.18	12.08	12.02	11.65
1990	12.28	12.27	12.22	12.12	12.06	11.64

Sorted results

Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258	12.32	12.3	12.25	12.16	12.09	11.7
0.064516	12.28	12.27	12.22	12.12	12.06	11.65
0.096774	12.24	12.23	12.18	12.08	12.02	11.64
0.129032	12.11	12.1	12.05	11.94	11.87	11.58
0.16129	12.08	12.07	11.99	11.87	11.81	11.41
0.193548	12.04	12.03	11.97	11.84	11.74	11.08
0.225806	11.18	11.17	11.11	11.02	10.96	10.48
0.258065	10.85	10.84	10.79	10.7	10.65	10.27
0.290323	10.79	10.77	10.73	10.63	10.57	10.2
0.322581	10.63	10.62	10.58	10.54	10.49	10.11
0.354839	10.55	10.54	10.49	10.41	10.36	9.984
0.387097	10.37	10.36	10.31	10.21	10.15	9.807
0.419355	10.34	10.32	10.25	10.13	10.04	9.461
0.451613	9.507	9.496	9.46	9.375	9.322	8.957
0.483871	9.348	9.337	9.292	9.206	9.155	8.792
0.516129	9.173	9.161	9.116	9.028	8.976	8.613
0.548387	8.959	8.948	8.905	8.818	8.767	8.405
0.580645	8.738	8.726	8.681	8.595	8.544	8.192
0.612903	8.597	8.581	8.52	8.405	8.33	7.791
0.645161	7.624	7.613	7.571	7.5	7.459	7.134
0.677419	7.26	7.249	7.207	7.125	7.076	6.745
0.709677	6.662	6.653	6.617	6.551	6.528	6.231
0.741935	6.164	6.154	6.133	6.079	6.033	5.681
0.774194	5.781	5.771	5.732	5.657	5.612	5.265
0.806452	5.337	5.327	5.289	5.217	5.174	4.84
0.83871	4.834	4.824	4.786	4.729	4.692	4.343
0.870968	4.264	4.255	4.219	4.154	4.113	3.783
0.903226	4.036	4.015	3.933	3.794	3.718	2.915
0.935484	1.988	1.978	1.942	1.877	1.841	1.468
0.967742	1.093	1.084	1.051	0.9938	0.9646	0.6149
0.1	12.227	12.217	12.167	12.066	12.005	11.634
					Average of yearly averages:	7.971397

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: test

Metfile: w24232.dvf

PRZM scenario: ORmintSTD.txt

EXAMS environment file: pond298.exv

Chemical Name:	test			
Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	222.68	g/mol	
Henry's Law Const.	henry	5.20E-14	atm-m ³ /mol	
Vapor Pressure	vapr	7.50E-10	torr	
Solubility	sol	4250	mg/L	
Kd	Kd		mg/L	
Koc	Koc	227	mg/L	
Photolysis half-life	kdp	34	days	Half-life
Aerobic Aquatic Metabolism	kbacw	1974	days	Half-life
Anaerobic Aquatic Metabolism	kbacs	4116	days	Half-life
Aerobic Soil Metabolism	asm	383	days	Halfife
Hydrolysis:	pH 7	0	days	Half-life
Method:	CAM	2	integer	See PRZM manual
Incorporation Depth:	DEPI		cm	
Application Rate:	TAPP	0.084	kg/ha	
Application Efficiency:	APPEFF	0.95	fraction	
Spray Drift	DRFT	0.05	fraction of application rate applied to pond	
Application Date	Date	15-04	dd/mm or dd/mmm or dd-mm or dd-mmm	
Interval 1	interval	7	days	Set to 0 or delete line for single app.
app. rate 1	apprate	0.11	kg/ha	
Interval 2	interval	7	days	Set to 0 or delete line for single app.
app. rate 2	apprate	0.11	kg/ha	
Interval 3	interval	7	days	Set to 0 or delete line for single app.
app. rate 3	apprate	0.11	kg/ha	
Record 17:	FILTRA			
	IPSCND	1		
	UPTKF			
Record 18:	PLVKRT			
	PLDKRT			
	FEXTRC	0.5		
Flag for Index Res. Run	IR		EPA Pond	
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	

stored as testben.out

Chemical: test

PRZM environment:

ORMintSTD.txt

modified Tuesday, 29 May 2007 at 13:00:46

EXAMS environment:

modified Tuesday, 26 August 2008 at 05:14:08

pond298.exv

Metfile: w24232.dvf modified Tuesday, 26 August 2008 at 05:15:54

Benthic segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.8197	0.8196	0.8189	0.8155	0.8104	0.4514
1962	1.675	1.675	1.675	1.672	1.665	1.292
1963	3.33	3.33	3.33	3.326	3.319	2.575
1964	3.899	3.899	3.899	3.897	3.895	3.651
1965	4.463	4.463	4.462	4.461	4.459	4.204
1966	4.941	4.941	4.94	4.938	4.936	4.717
1967	5.365	5.365	5.365	5.361	5.356	5.148
1968	5.79	5.79	5.789	5.786	5.783	5.559
1969	6.401	6.401	6.401	6.399	6.393	6.059
1970	6.819	6.819	6.818	6.814	6.811	6.625
1971	7.217	7.217	7.217	7.214	7.211	7.008
1972	7.966	7.966	7.965	7.963	7.961	7.593
1973	8.279	8.279	8.278	8.274	8.268	8.091
1974	8.501	8.501	8.501	8.494	8.486	8.306
1975	8.709	8.709	8.708	8.703	8.696	8.515
1976	8.891	8.891	8.891	8.885	8.878	8.7
1977	9.054	9.053	9.052	9.045	9.037	8.864
1978	9.634	9.634	9.633	9.629	9.623	9.27
1979	9.861	9.86	9.86	9.853	9.85	9.689
1980	10.09	10.09	10.09	10.08	10.07	9.895
1981	10.21	10.21	10.21	10.21	10.2	10.01
1982	10.3	10.3	10.3	10.29	10.28	10.12
1983	10.37	10.37	10.37	10.36	10.35	10.18
1984	10.61	10.61	10.61	10.6	10.6	10.36
1985	11.3	11.3	11.3	11.3	11.29	10.85
1986	11.52	11.52	11.52	11.51	11.49	11.32
1987	11.68	11.68	11.68	11.67	11.66	11.44
1988	11.82	11.82	11.81	11.81	11.79	11.63
1989	11.74	11.74	11.74	11.73	11.72	11.57
1990	11.76	11.76	11.76	11.75	11.74	11.56

Sorted results

Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258	11.82	11.82	11.81	11.81	11.79	11.63
0.064516	11.76	11.76	11.76	11.75	11.74	11.57
0.096774	11.74	11.74	11.74	11.73	11.72	11.56
0.129032	11.68	11.68	11.68	11.67	11.66	11.44
0.16129	11.52	11.52	11.52	11.51	11.49	11.32

0.193548	11.3	11.3	11.3	11.3	11.29	10.85
0.225806	10.61	10.61	10.61	10.6	10.6	10.36
0.258065	10.37	10.37	10.37	10.36	10.35	10.18
0.290323	10.3	10.3	10.3	10.29	10.28	10.12
0.322581	10.21	10.21	10.21	10.21	10.2	10.01
0.354839	10.09	10.09	10.09	10.08	10.07	9.895
0.387097	9.861	9.86	9.86	9.853	9.85	9.689
0.419355	9.634	9.634	9.633	9.629	9.623	9.27
0.451613	9.054	9.053	9.052	9.045	9.037	8.864
0.483871	8.891	8.891	8.891	8.885	8.878	8.7
0.516129	8.709	8.709	8.708	8.703	8.696	8.515
0.548387	8.501	8.501	8.501	8.494	8.486	8.306
0.580645	8.279	8.279	8.278	8.274	8.268	8.091
0.612903	7.966	7.966	7.965	7.963	7.961	7.593
0.645161	7.217	7.217	7.217	7.214	7.211	7.008
0.677419	6.819	6.819	6.818	6.814	6.811	6.625
0.709677	6.401	6.401	6.401	6.399	6.393	6.059
0.741935	5.79	5.79	5.789	5.786	5.783	5.559
0.774194	5.365	5.365	5.365	5.361	5.356	5.148
0.806452	4.941	4.941	4.94	4.938	4.936	4.717
0.83871	4.463	4.463	4.462	4.461	4.459	4.204
0.870968	3.899	3.899	3.899	3.897	3.895	3.651
0.903226	3.33	3.33	3.33	3.326	3.319	2.575
0.935484	1.675	1.675	1.675	1.672	1.665	1.292
0.967742	0.8197	0.8196	0.8189	0.8155	0.8104	0.4514
0.1	11.734	11.734	11.734	11.724	11.714	11.548
					Average of yearly averages:	7.841747

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: test

Metfile: w24232.dvf

PRZM scenario: ORmintSTD.txt

EXAMS environment file: pond298.exv

Chemical Name: test

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	222.68	g/mol	
		5.20E-		
Henry's Law Const.	henry	14	atm-m ³ /mol	

Vapor Pressure	vapr	7.50E-10	torr	
Solubility	sol	4250	mg/L	
Kd	Kd		mg/L	
Koc	Koc	227	mg/L	
Photolysis half-life	kdp	34	days	Half-life
Aerobic Aquatic Metabolism	kbacw	1974	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	4116	days	Halfife
Aerobic Soil Metabolism	asm	383	days	Halfife
Hydrolysis:	pH 7	0	days	Half-life
Method:	CAM	2	integer	See PRZM manual
Incorporation Depth:	DEPI		cm	
Application Rate:	TAPP	0.084	kg/ha	
Application Efficiency:	APPEFF	0.95	fraction	
Spray Drift	DRFT	0.05	fraction of application rate applied to pond	
Application Date	Date	15-04	dd/mm or dd/mmm or dd-mm or dd-mmm	
Interval 1	interval	7	days	Set to 0 or delete line for single app.
app. rate 1	apprate	0.11	kg/ha	
Interval 2	interval	7	days	Set to 0 or delete line for single app.
app. rate 2	apprate	0.11	kg/ha	
Interval 3	interval	7	days	Set to 0 or delete line for single app.
app. rate 3	apprate	0.11	kg/ha	
Record 17:	FILTRA			
	IPSCND	1		
	UPTKF			
Record 18:	PLVKRT			
	PLDKRT			
	FEXTRC	0.5		
Flag for Index Res. Run	IR		EPA Pond	
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	

Output using the TAB20AB.exe program

This file provides the pesticide concentration dissolved in pore water for Test1.

Test

PORE WATER DISSOLVED CONCENTRATION (PPB)

YEAR	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
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1961	0.820	0.820	0.820	0.819	0.815	0.810	0.451
1962	1.675	1.675	1.675	1.675	1.672	1.665	1.292
1963	3.330	3.330	3.330	3.330	3.326	3.319	2.575
1964	3.899	3.899	3.899	3.899	3.897	3.895	3.651
1965	4.463	4.463	4.463	4.462	4.461	4.459	4.204
1966	4.941	4.941	4.941	4.940	4.938	4.936	4.717
1967	5.365	5.365	5.365	5.365	5.361	5.356	5.148
1968	5.790	5.790	5.790	5.789	5.786	5.783	5.559
1969	6.401	6.401	6.401	6.401	6.399	6.393	6.059
1970	6.819	6.819	6.819	6.818	6.814	6.811	6.625
1971	7.217	7.217	7.217	7.217	7.214	7.211	7.008
1972	7.966	7.966	7.966	7.965	7.963	7.961	7.593
1973	8.279	8.279	8.279	8.278	8.274	8.268	8.091
1974	8.501	8.501	8.501	8.501	8.494	8.486	8.306
1975	8.709	8.709	8.709	8.708	8.703	8.696	8.515
1976	8.891	8.891	8.891	8.891	8.885	8.878	8.700
1977	9.054	9.054	9.053	9.052	9.045	9.037	8.864
1978	9.634	9.634	9.634	9.633	9.629	9.623	9.270
1979	9.861	9.861	9.860	9.860	9.853	9.850	9.689
1980	10.090	10.090	10.090	10.090	10.080	10.070	9.895
1981	10.210	10.210	10.210	10.210	10.210	10.200	10.010
1982	10.300	10.300	10.300	10.300	10.290	10.280	10.120
1983	10.370	10.370	10.370	10.370	10.360	10.350	10.180
1984	10.610	10.610	10.610	10.610	10.600	10.600	10.360
1985	11.300	11.300	11.300	11.300	11.300	11.290	10.850
1986	11.520	11.520	11.520	11.520	11.510	11.490	11.320
1987	11.680	11.680	11.680	11.680	11.670	11.660	11.440
1988	11.820	11.820	11.820	11.810	11.810	11.790	11.630
1989	11.740	11.740	11.740	11.740	11.730	11.720	11.570
1990	11.760	11.760	11.760	11.760	11.750	11.740	11.560

SORTED FOR PLOTTING

PROB	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
0.032	11.820	11.820	11.820	11.810	11.810	11.790	11.630
0.065	11.760	11.760	11.760	11.760	11.750	11.740	11.570
0.097	11.740	11.740	11.740	11.740	11.730	11.720	11.560
0.129	11.680	11.680	11.680	11.680	11.670	11.660	11.440
0.161	11.520	11.520	11.520	11.520	11.510	11.490	11.320
0.194	11.300	11.300	11.300	11.300	11.300	11.290	10.850
0.226	10.610	10.610	10.610	10.610	10.600	10.600	10.360
0.258	10.370	10.370	10.370	10.370	10.360	10.350	10.180
0.290	10.300	10.300	10.300	10.300	10.290	10.280	10.120
0.323	10.210	10.210	10.210	10.210	10.210	10.200	10.010
0.355	10.090	10.090	10.090	10.090	10.080	10.070	9.895
0.387	9.861	9.861	9.860	9.860	9.853	9.850	9.689
0.419	9.634	9.634	9.634	9.633	9.629	9.623	9.270
0.452	9.054	9.054	9.053	9.052	9.045	9.037	8.864
0.484	8.891	8.891	8.891	8.891	8.885	8.878	8.700
0.516	8.709	8.709	8.709	8.708	8.703	8.696	8.515
0.548	8.501	8.501	8.501	8.501	8.494	8.486	8.306
0.581	8.279	8.279	8.279	8.278	8.274	8.268	8.091
0.613	7.966	7.966	7.966	7.965	7.963	7.961	7.593
0.645	7.217	7.217	7.217	7.217	7.214	7.211	7.008

0.677	6.819	6.819	6.819	6.818	6.814	6.811	6.625
0.710	6.401	6.401	6.401	6.401	6.399	6.393	6.059
0.742	5.790	5.790	5.790	5.789	5.786	5.783	5.559
0.774	5.365	5.365	5.365	5.365	5.361	5.356	5.148
0.806	4.941	4.941	4.941	4.940	4.938	4.936	4.717
0.839	4.463	4.463	4.463	4.462	4.461	4.459	4.204
0.871	3.899	3.899	3.899	3.899	3.897	3.895	3.651
0.903	3.330	3.330	3.330	3.330	3.326	3.319	2.575
0.935	1.675	1.675	1.675	1.675	1.672	1.665	1.292
0.968	0.820	0.820	0.820	0.819	0.815	0.810	0.451
1/10	11.734	11.734	11.734	11.734	11.724	11.714	11.548

This file describes the pesticide concentration in bulk sediment on a dry weight basis for Test 1.

Test

BENTHIC SEDIMENT CONCENTRATION (ug/kg)

YEAR	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
----	-----	-----	-----	-----	-----	-----	-----
1961	7.747	7.747	7.746	7.739	7.707	7.659	4.266
1962	15.830	15.830	15.830	15.830	15.800	15.740	12.210
1963	31.470	31.470	31.470	31.470	31.440	31.360	24.330
1964	36.850	36.850	36.850	36.840	36.830	36.810	34.510
1965	42.180	42.180	42.180	42.170	42.160	42.140	39.730
1966	46.690	46.690	46.690	46.690	46.670	46.650	44.580
1967	50.710	50.710	50.710	50.700	50.670	50.620	48.660
1968	54.720	54.720	54.720	54.710	54.690	54.650	52.540
1969	60.500	60.500	60.500	60.500	60.480	60.420	57.260
1970	64.440	64.440	64.440	64.440	64.400	64.370	62.610
1971	68.210	68.210	68.210	68.200	68.180	68.150	66.230
1972	75.280	75.280	75.280	75.280	75.260	75.230	71.760
1973	78.240	78.240	78.240	78.240	78.200	78.140	76.460
1974	80.350	80.350	80.350	80.340	80.280	80.200	78.500
1975	82.310	82.310	82.310	82.300	82.260	82.190	80.470
1976	84.030	84.030	84.030	84.020	83.980	83.910	82.220
1977	85.560	85.560	85.560	85.550	85.480	85.410	83.770
1978	91.050	91.050	91.050	91.040	91.000	90.940	87.610
1979	93.190	93.190	93.190	93.180	93.120	93.090	91.570
1980	95.330	95.330	95.330	95.320	95.260	95.180	93.520
1981	96.540	96.540	96.540	96.530	96.450	96.360	94.600
1982	97.320	97.320	97.320	97.310	97.250	97.160	95.650
1983	98.010	98.010	98.010	98.000	97.930	97.840	96.260
1984	100.000	100.000	100.000	100.000	100.000	100.000	97.890
1985	107.000	107.000	107.000	107.000	107.000	107.000	103.000
1986	109.000	109.000	109.000	109.000	109.000	109.000	107.000
1987	110.000	110.000	110.000	110.000	110.000	110.000	108.000
1988	112.000	112.000	112.000	112.000	112.000	111.000	110.000
1989	111.000	111.000	111.000	111.000	111.000	111.000	109.000
1990	111.000	111.000	111.000	111.000	111.000	111.000	109.000

SORTED FOR PLOTTING

PROB	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
0.032	112.000	112.000	112.000	112.000	112.000	111.000	110.000
0.065	111.000	111.000	111.000	111.000	111.000	111.000	109.000
0.097	111.000	111.000	111.000	111.000	111.000	111.000	109.000
0.129	110.000	110.000	110.000	110.000	110.000	110.000	108.000
0.161	109.000	109.000	109.000	109.000	109.000	109.000	107.000
0.194	107.000	107.000	107.000	107.000	107.000	107.000	103.000
0.226	100.000	100.000	100.000	100.000	100.000	100.000	97.890
0.258	98.010	98.010	98.010	98.000	97.930	97.840	96.260
0.290	97.320	97.320	97.320	97.310	97.250	97.160	95.650
0.323	96.540	96.540	96.540	96.530	96.450	96.360	94.600
0.355	95.330	95.330	95.330	95.320	95.260	95.180	93.520
0.387	93.190	93.190	93.190	93.180	93.120	93.090	91.570
0.419	91.050	91.050	91.050	91.040	91.000	90.940	87.610
0.452	85.560	85.560	85.560	85.550	85.480	85.410	83.770
0.484	84.030	84.030	84.030	84.020	83.980	83.910	82.220
0.516	82.310	82.310	82.310	82.300	82.260	82.190	80.470
0.548	80.350	80.350	80.350	80.340	80.280	80.200	78.500
0.581	78.240	78.240	78.240	78.240	78.200	78.140	76.460
0.613	75.280	75.280	75.280	75.280	75.260	75.230	71.760
0.645	68.210	68.210	68.210	68.200	68.180	68.150	66.230
0.677	64.440	64.440	64.440	64.440	64.400	64.370	62.610
0.710	60.500	60.500	60.500	60.500	60.480	60.420	57.260
0.742	54.720	54.720	54.720	54.710	54.690	54.650	52.540
0.774	50.710	50.710	50.710	50.700	50.670	50.620	48.660
0.806	46.690	46.690	46.690	46.690	46.670	46.650	44.580
0.839	42.180	42.180	42.180	42.170	42.160	42.140	39.730
0.871	36.850	36.850	36.850	36.840	36.830	36.810	34.510
0.903	31.470	31.470	31.470	31.470	31.440	31.360	24.330
0.935	15.830	15.830	15.830	15.830	15.800	15.740	12.210
0.968	7.747	7.747	7.746	7.739	7.707	7.659	4.266
1/10	110.900	110.900	110.900	110.900	110.900	110.900	108.900

Test2 Pore Water Concentrations from pe5 output file
stored as test2ben.out

Chemical: test2

PRZM environment: CAlettuceSTD.txt modified Tuesday, 21 February 2006 at 14:38:22

EXAMS environment: pond298.exv modified Wedday, 15 November 2006 at 12:47:26

Metfile: w23273.dvf modified Wedday, 3 July 2002 at 09:04:22

Benthic segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.2415	0.2414	0.241	0.2112	0.2061	0.1903
1962	1.108	1.108	1.106	1.097	1.088	0.946
1963	1.358	1.358	1.357	1.349	1.34	1.232
1964	1.33	1.33	1.328	1.318	1.314	1.23
1965	1.321	1.321	1.318	1.306	1.294	1.23
1966	1.363	1.362	1.36	1.349	1.338	1.236
1967	1.746	1.746	1.743	1.73	1.72	1.574
1968	1.571	1.571	1.569	1.557	1.551	1.432
1969	2.163	2.163	2.159	2.145	2.13	1.946
1970	2.121	2.121	2.116	2.096	2.078	1.937
1971	1.924	1.924	1.921	1.905	1.89	1.768

1972	1.746	1.745	1.743	1.728	1.714	1.575
1973	2.378	2.378	2.375	2.365	2.349	2.145
1974	2.429	2.428	2.424	2.412	2.395	2.242
1975	2.394	2.394	2.39	2.383	2.37	2.195
1976	2.337	2.337	2.334	2.317	2.301	2.131
1977	2.146	2.146	2.142	2.122	2.113	2.01
1978	2.84	2.84	2.834	2.811	2.793	2.552
1979	2.753	2.752	2.747	2.735	2.724	2.511
1980	2.913	2.913	2.91	2.888	2.865	2.642
1981	2.886	2.886	2.883	2.861	2.84	2.617
1982	2.565	2.565	2.562	2.55	2.547	2.384
1983	3.064	3.063	3.058	3.041	3.024	2.733
1984	2.55	2.549	2.545	2.525	2.506	2.272
1985	2.17	2.17	2.166	2.158	2.148	1.963
1986	2.204	2.204	2.201	2.191	2.176	2.013
1987	2.141	2.141	2.137	2.118	2.099	1.956
1988	1.997	1.997	1.993	1.978	1.973	1.854
1989	1.829	1.829	1.827	1.818	1.806	1.648
1990	1.695	1.695	1.694	1.685	1.675	1.53

Sorted results

Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly		
0.032258064516129			3.064	3.063	3.058	3.041	3.024	2.733
0.0645161290322581			2.913	2.913	2.91	2.888	2.865	2.642
0.0967741935483871			2.886	2.886	2.883	2.861	2.84	2.617
0.129032258064516			2.84	2.84	2.834	2.811	2.793	2.552
0.161290322580645			2.753	2.752	2.747	2.735	2.724	2.511
0.193548387096774			2.565	2.565	2.562	2.55	2.547	2.384
0.225806451612903			2.55	2.549	2.545	2.525	2.506	2.272
0.258064516129032			2.429	2.428	2.424	2.412	2.395	2.242
0.290322580645161			2.394	2.394	2.39	2.383	2.37	2.195
0.32258064516129			2.378	2.378	2.375	2.365	2.349	2.145
0.354838709677419			2.337	2.337	2.334	2.317	2.301	2.131
0.387096774193548			2.204	2.204	2.201	2.191	2.176	2.013
0.419354838709677			2.17	2.17	2.166	2.158	2.148	2.01
0.451612903225806			2.163	2.163	2.159	2.145	2.13	1.963
0.483870967741936			2.146	2.146	2.142	2.122	2.113	1.956
0.516129032258065			2.141	2.141	2.137	2.118	2.099	1.946
0.548387096774194			2.121	2.121	2.116	2.096	2.078	1.937
0.580645161290323			1.997	1.997	1.993	1.978	1.973	1.854
0.612903225806452			1.924	1.924	1.921	1.905	1.89	1.768
0.645161290322581			1.829	1.829	1.827	1.818	1.806	1.648
0.67741935483871			1.746	1.746	1.743	1.73	1.72	1.575
0.709677419354839			1.746	1.745	1.743	1.728	1.714	1.574
0.741935483870968			1.695	1.695	1.694	1.685	1.675	1.53
0.774193548387097			1.571	1.571	1.569	1.557	1.551	1.432
0.806451612903226			1.363	1.362	1.36	1.349	1.34	1.236
0.838709677419355			1.358	1.358	1.357	1.349	1.338	1.232
0.870967741935484			1.33	1.33	1.328	1.318	1.314	1.23
0.903225806451613			1.321	1.321	1.318	1.306	1.294	1.23
0.935483870967742			1.108	1.108	1.106	1.097	1.088	0.946
0.967741935483871			0.2415	0.2414	0.241	0.2112	0.2061	0.1903

0.1 2.8814 2.8814 2.8781 2.856 2.8353 2.6105
Average of yearly averages: 1.85647666666667

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: test2
Metfile: w23273.dvf
PRZM scenario: CAlettuceSTD.txt
EXAMS environment file: pond298.exv

Chemical Name: test2

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	419.9	g/mol	
Henry's Law Const.	henry	1.4E-12	atm-m ³ /mol	
Vapor Pressure	vapr	4.5E-7	torr	
Solubility	sol	0.006	mg/L	
Kd	Kd		mg/L	
Koc	Koc	10000	mg/L	
Photolysis half-life	kdp	0	days	Half-life
Aerobic Aquatic Metabolism	kbacw	276	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	462	days	Halfife
Aerobic Soil Metabolism	asm	138	days	Halfife
Hydrolysis:	pH 7	0	days	Half-life
Method:CAM	1	integer		See PRZM manual
Incorporation Depth:	DEPI	0	cm	
Application Rate: TAPP	1.0	kg/ha		
Application Efficiency:	APPEFF	0.95	fraction	
Spray Drift	DRFT	0.05	fraction of application rate applied to pond	
Application Date	Date	05-01	dd/mm or dd/mmm or dd-mm or dd-mmm	
Record 17:	FILTRA			
	IPSCND	1		
	UPTKF			
Record 18:	PLVKRT			
	PLDKRT			
	FEXTRC	0.5		
Flag for Index Res. Run	IR	EPA Pond		
Flag for runoff calc.	RUNOFF	none	none, monthly or total (average of entire run)	

Excerpt of report.xms file for test 2

1Exposure Analysis Modeling System -- EXAMS Version 2.98.04, Mode 3
Ecosystem: Mississippi OPP Farm Pond (MLRA P134, WBAN 03940)
Chemical: test2
Table 20.01. Exposure analysis summary: Maximum Events of 1980.

Event Duration		96-hour	21-day	60-day	90-day	1980
***** Ecotoxicological Direct Exposure Concentrations *****						
Water Column dissolved mg/L	Min.	5.339E-03	3.349E-03	3.019E-03	3.019E-03	2.425E-03
	Mean	5.645E-03	4.321E-03	3.718E-03	3.538E-03	2.994E-03
	Peak	6.067E-03	6.067E-03	6.067E-03	6.067E-03	6.352E-03
Benthic Sediment mg/L dissolved in pore water	Min.	2.912E-03	2.904E-03	2.847E-03	2.795E-03	2.222E-03
	Mean	2.913E-03	2.910E-03	2.888E-03	2.865E-03	2.642E-03
	Peak	2.913E-03	2.913E-03	2.913E-03	2.913E-03	2.913E-03

***** Ecotoxicological Trophic Exposure Concentrations *****						
Water Column	Min.	25.6	16.1	14.5	14.5	11.6
ug/g dry weight	Mean	27.1	20.7	17.8	17.0	14.4
of plankton	Peak	29.1	29.1	29.1	29.1	30.5
Benthic Sediment	Min.	14.0	13.9	13.7	13.4	10.7
ug/g dry weight	Mean	14.0	14.0	13.9	13.7	12.7
of benthos	Peak	14.0	14.0	14.0	14.0	14.0
***** Total Media Concentrations *****						
Water Column	Min.	5.469E-03	3.431E-03	3.093E-03	3.093E-03	2.484E-03
total mg/L	Mean	5.783E-03	4.427E-03	3.809E-03	3.624E-03	3.067E-03
	Peak	6.215E-03	6.215E-03	6.215E-03	6.215E-03	6.508E-03
Benthic Sediment	Min.	1.17	1.16	1.14	1.12	0.890
total mg/kg	Mean	1.17	1.17	1.16	1.15	1.06
dry weight	Peak	1.17	1.17	1.17	1.17	1.17

Output using the TAB20AB.exe program

This file provides the pesticide concentration dissolved in pore water for Test2

PORE WATER DISSOLVED CONCENTRATION (PPB)

YEAR PEAK 24HOUR 96HOUR 21 DAY 60 DAY 90 DAY ANNUAL

YEAR	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
1961	0.242	0.242	0.241	0.241	0.211	0.206	0.190
1962	1.108	1.108	1.108	1.106	1.097	1.088	0.946
1963	1.358	1.358	1.358	1.357	1.349	1.340	1.232
1964	1.330	1.330	1.330	1.328	1.318	1.314	1.230
1965	1.321	1.321	1.321	1.318	1.306	1.294	1.230
1966	1.363	1.363	1.362	1.360	1.349	1.338	1.236
1967	1.746	1.746	1.746	1.743	1.730	1.720	1.574
1968	1.571	1.571	1.571	1.569	1.557	1.551	1.432
1969	2.163	2.163	2.163	2.159	2.145	2.130	1.946
1970	2.121	2.121	2.121	2.116	2.096	2.078	1.937
1971	1.924	1.924	1.924	1.921	1.905	1.890	1.768
1972	1.746	1.746	1.745	1.743	1.728	1.714	1.575
1973	2.378	2.378	2.378	2.375	2.365	2.349	2.145
1974	2.429	2.429	2.428	2.424	2.412	2.395	2.242
1975	2.394	2.394	2.394	2.390	2.383	2.370	2.195
1976	2.337	2.337	2.337	2.334	2.317	2.301	2.131
1977	2.146	2.146	2.146	2.142	2.122	2.113	2.010
1978	2.840	2.840	2.840	2.834	2.811	2.793	2.552
1979	2.753	2.752	2.752	2.747	2.735	2.724	2.511
1980	2.913	2.913	2.913	2.910	2.888	2.865	2.642
1981	2.886	2.886	2.886	2.883	2.861	2.840	2.617
1982	2.565	2.565	2.565	2.562	2.550	2.547	2.384
1983	3.064	3.063	3.063	3.058	3.041	3.024	2.733
1984	2.550	2.550	2.549	2.545	2.525	2.506	2.272
1985	2.170	2.170	2.170	2.166	2.158	2.148	1.963
1986	2.204	2.204	2.204	2.201	2.191	2.176	2.013
1987	2.141	2.141	2.141	2.137	2.118	2.099	1.956
1988	1.997	1.997	1.997	1.993	1.978	1.973	1.854
1989	1.829	1.829	1.829	1.827	1.818	1.806	1.648
1990	1.695	1.695	1.695	1.694	1.685	1.675	1.530

SORTED FOR PLOTTING

PROB	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
0.032	3.064	3.063	3.063	3.058	3.041	3.024	2.733
0.065	2.913	2.913	2.913	2.910	2.888	2.865	2.642
0.097	2.886	2.886	2.886	2.883	2.861	2.840	2.617
0.129	2.840	2.840	2.840	2.834	2.811	2.793	2.552
0.161	2.753	2.752	2.752	2.747	2.735	2.724	2.511
0.194	2.565	2.565	2.565	2.562	2.550	2.547	2.384
0.226	2.550	2.550	2.549	2.545	2.525	2.506	2.272
0.258	2.429	2.429	2.428	2.424	2.412	2.395	2.242
0.290	2.394	2.394	2.394	2.390	2.383	2.370	2.195
0.323	2.378	2.378	2.378	2.375	2.365	2.349	2.145
0.355	2.337	2.337	2.337	2.334	2.317	2.301	2.131
0.387	2.204	2.204	2.204	2.201	2.191	2.176	2.013
0.419	2.170	2.170	2.170	2.166	2.158	2.148	2.010
0.452	2.163	2.163	2.163	2.159	2.145	2.130	1.963
0.484	2.146	2.146	2.146	2.142	2.122	2.113	1.956
0.516	2.141	2.141	2.141	2.137	2.118	2.099	1.946
0.548	2.121	2.121	2.121	2.116	2.096	2.078	1.937
0.581	1.997	1.997	1.997	1.993	1.978	1.973	1.854
0.613	1.924	1.924	1.924	1.921	1.905	1.890	1.768
0.645	1.829	1.829	1.829	1.827	1.818	1.806	1.648
0.677	1.746	1.746	1.746	1.743	1.730	1.720	1.575
0.710	1.746	1.746	1.745	1.743	1.728	1.714	1.574
0.742	1.695	1.695	1.695	1.694	1.685	1.675	1.530
0.774	1.571	1.571	1.571	1.569	1.557	1.551	1.432
0.806	1.363	1.363	1.362	1.360	1.349	1.340	1.236
0.839	1.358	1.358	1.358	1.357	1.349	1.338	1.232
0.871	1.330	1.330	1.330	1.328	1.318	1.314	1.230
0.903	1.321	1.321	1.321	1.318	1.306	1.294	1.230
0.935	1.108	1.108	1.108	1.106	1.097	1.088	0.946
0.968	0.242	0.242	0.241	0.241	0.211	0.206	0.190
1/10	2.881	2.881	2.881	2.878	2.856	2.835	2.610.

Output using the TAB20AB.exe program

This file provides the pesticide concentration in bulk sediment on a dry weight basis for Test2.

BENTHIC SEDIMENT CONCENTRATION (mg/kg)

YEAR	PEAK	24HOUR	96HOUR	21 DAY	60 DAY	90 DAY	ANNUAL
1961	0.097	0.097	0.097	0.097	0.085	0.083	0.076
1962	0.444	0.444	0.444	0.443	0.439	0.436	0.379
1963	0.544	0.544	0.544	0.543	0.540	0.537	0.493
1964	0.533	0.533	0.533	0.532	0.528	0.526	0.492
1965	0.529	0.529	0.529	0.528	0.523	0.518	0.493

1966	0.546	0.546	0.546	0.545	0.540	0.536	0.495
1967	0.699	0.699	0.699	0.698	0.693	0.689	0.630
1968	0.629	0.629	0.629	0.628	0.623	0.621	0.573
1969	0.866	0.866	0.866	0.864	0.859	0.853	0.779
1970	0.849	0.849	0.849	0.847	0.839	0.832	0.776
1971	0.770	0.770	0.770	0.769	0.763	0.757	0.708
1972	0.699	0.699	0.699	0.698	0.692	0.686	0.631
1973	0.952	0.952	0.952	0.951	0.947	0.941	0.859
1974	0.972	0.972	0.972	0.971	0.966	0.959	0.898
1975	0.959	0.959	0.959	0.957	0.954	0.949	0.879
1976	0.936	0.936	0.936	0.935	0.928	0.921	0.853
1977	0.859	0.859	0.859	0.858	0.850	0.846	0.805
1978	1.140	1.140	1.140	1.130	1.130	1.120	1.020
1979	1.100	1.100	1.100	1.100	1.100	1.090	1.010
1980	1.170	1.170	1.170	1.170	1.160	1.150	1.060
1981	1.160	1.160	1.160	1.150	1.150	1.140	1.050
1982	1.030	1.030	1.030	1.030	1.020	1.020	0.954
1983	1.230	1.230	1.230	1.220	1.220	1.210	1.090
1984	1.020	1.020	1.020	1.020	1.010	1.000	0.910
1985	0.869	0.869	0.869	0.867	0.864	0.860	0.786
1986	0.883	0.883	0.883	0.881	0.877	0.871	0.806
1987	0.857	0.857	0.857	0.856	0.848	0.841	0.783
1988	0.800	0.800	0.800	0.798	0.792	0.790	0.742
1989	0.732	0.732	0.732	0.731	0.728	0.723	0.660
1990	0.679	0.679	0.679	0.678	0.675	0.671	0.613

SORTED FOR PLOTTING

 PROB PEAK 24HOUR 96HOUR 21 DAY 60 DAY 90 DAY ANNUAL

0.032	1.230	1.230	1.230	1.220	1.220	1.210	1.090
0.065	1.170	1.170	1.170	1.170	1.160	1.150	1.060
0.097	1.160	1.160	1.160	1.150	1.150	1.140	1.050
0.129	1.140	1.140	1.140	1.130	1.130	1.120	1.020
0.161	1.100	1.100	1.100	1.100	1.100	1.090	1.010
0.194	1.030	1.030	1.030	1.030	1.020	1.020	0.954
0.226	1.020	1.020	1.020	1.020	1.010	1.000	0.910
0.258	0.972	0.972	0.972	0.971	0.966	0.959	0.898
0.290	0.959	0.959	0.959	0.957	0.954	0.949	0.879
0.323	0.952	0.952	0.952	0.951	0.947	0.941	0.859
0.355	0.936	0.936	0.936	0.935	0.928	0.921	0.853
0.387	0.883	0.883	0.883	0.881	0.877	0.871	0.806
0.419	0.869	0.869	0.869	0.867	0.864	0.860	0.805
0.452	0.866	0.866	0.866	0.864	0.859	0.853	0.786
0.484	0.859	0.859	0.859	0.858	0.850	0.846	0.783
0.516	0.857	0.857	0.857	0.856	0.848	0.841	0.779
0.548	0.849	0.849	0.849	0.847	0.839	0.832	0.776
0.581	0.800	0.800	0.800	0.798	0.792	0.790	0.742
0.613	0.770	0.770	0.770	0.769	0.763	0.757	0.708
0.645	0.732	0.732	0.732	0.731	0.728	0.723	0.660
0.677	0.699	0.699	0.699	0.698	0.693	0.689	0.631
0.710	0.699	0.699	0.699	0.698	0.692	0.686	0.630

0.742	0.679	0.679	0.679	0.678	0.675	0.671	0.613
0.774	0.629	0.629	0.629	0.628	0.623	0.621	0.573
0.806	0.546	0.546	0.546	0.545	0.540	0.537	0.495
0.839	0.544	0.544	0.544	0.543	0.540	0.536	0.493
0.871	0.533	0.533	0.533	0.532	0.528	0.526	0.493
0.903	0.529	0.529	0.529	0.528	0.523	0.518	0.492
0.935	0.444	0.444	0.444	0.443	0.439	0.436	0.379
0.968	0.097	0.097	0.097	0.097	0.085	0.083	0.076
1/10	1.158	1.158	1.158	1.148	1.148	1.138	1.047