

Appendix F: PRZM/EXAMS Model Inputs and Outputs for Tribufos Aerial and Ground Applications.

Aerial Application Modeling Inputs and Outputs:

Chemical: Tribufos

PRZM environment: CAcotton_WirrigSTD.txt

modified Tuesday, 29 May 2007 at 12:42:12

EXAMS environment: pond298.exv

modified Thuday, 29 August 2002 at 16:33:30

Metfile: w93193.dvf

modified Wedday, 3 July 2002 at 09:04:24

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	5.242	4.868	3.982	2.757	1.838	0.4532
1962	8.157	7.772	6.595	5.155	4.44	3.19
1963	10.46	10.07	9.065	7.581	6.847	5.693
1964	11.41	11.01	9.785	8.336	7.661	6.594
1965	12.31	11.92	10.94	9.455	8.708	7.703
1966	12.8	12.4	11.21	10.46	9.551	8.34
1967	14.09	13.7	12.6	11.11	10.41	9.712
1968	14.16	13.79	12.61	11.22	10.49	9.715
1969	17.1	16.65	15.14	14.51	14.06	12.62
1970	16.59	16.19	15.17	14.08	13.4	12.73
1971	16.11	15.71	14.47	13	12.57	12.04
1972	16.02	15.71	14.61	12.84	12.02	11.35
1973	15.4	15.01	13.81	12.38	11.71	11.28
1974	15.15	14.76	13.55	12.19	11.5	11
1975	14.98	14.59	13.39	11.93	11.27	10.63
1976	15.76	15.41	14.28	12.74	12.07	11.48
1977	15.32	14.92	13.69	12.42	11.69	11.02
1978	16.11	15.71	14.62	13.11	12.86	12.19
1979	15.26	14.86	13.73	12.23	11.87	11.26
1980	15.63	15.23	14.01	12.52	12.2	11.52
1981	15.12	14.72	13.5	12.02	11.64	11.13
1982	14.99	14.59	13.89	12.7	11.78	10.99
1983	16.36	15.95	14.92	14.03	13.66	12.7
1984	15.49	15.09	14.02	12.66	12.06	11.52
1985	15.26	14.88	13.7	12.33	11.61	11.06
1986	15.61	15.21	13.99	12.9	12.12	11.58
1987	15.85	15.46	14.26	12.75	12.37	11.78
1988	15.73	15.4	14.24	12.92	12.16	11.42
1989	15.47	15.08	13.9	12.45	11.86	11.38
1990	15.68	15.28	14.08	12.61	11.93	11.43

Sorted results

Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032	17.1	16.65	15.17	14.51	14.06	12.73
0.065	16.59	16.19	15.14	14.08	13.66	12.7
0.097	16.36	15.95	14.92	14.03	13.4	12.62
0.129	16.11	15.71	14.62	13.11	12.86	12.19
0.161	16.11	15.71	14.61	13	12.57	12.04
0.194	16.02	15.71	14.47	12.92	12.37	11.78
0.226	15.85	15.46	14.28	12.9	12.2	11.58
0.258	15.76	15.41	14.26	12.84	12.16	11.52
0.290	15.73	15.4	14.24	12.75	12.12	11.52
0.323	15.68	15.28	14.08	12.74	12.07	11.48
0.355	15.63	15.23	14.02	12.7	12.06	11.43

0.387	15.61	15.21	14.01	12.66	12.02	11.42
0.419	15.49	15.09	13.99	12.61	11.93	11.38
0.452	15.47	15.08	13.9	12.52	11.87	11.35
0.484	15.4	15.01	13.89	12.45	11.86	11.28
0.516	15.32	14.92	13.81	12.42	11.78	11.26
0.548	15.26	14.88	13.73	12.38	11.71	11.13
0.581	15.26	14.86	13.7	12.33	11.69	11.06
0.613	15.15	14.76	13.69	12.23	11.64	11.02
0.645	15.12	14.72	13.55	12.19	11.61	11
0.677	14.99	14.59	13.5	12.02	11.5	10.99
0.710	14.98	14.59	13.39	11.93	11.27	10.63
0.742	14.16	13.79	12.61	11.22	10.49	9.715
0.774	14.09	13.7	12.6	11.11	10.41	9.712
0.806	12.8	12.4	11.21	10.46	9.551	8.34
0.839	12.31	11.92	10.94	9.455	8.708	7.703
0.871	11.41	11.01	9.785	8.336	7.661	6.594
0.903	10.46	10.07	9.065	7.581	6.847	5.693
0.935	8.157	7.772	6.595	5.155	4.44	3.19
0.968	5.242	4.868	3.982	2.757	1.838	0.4532
0.100	16.335	15.926	14.89	13.938	13.346	12.577
Average of yearly averages:	10.18367333					

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: Trib3AerKd

Metfile: w93193.dvf

PRZM scenario: CAcotton_WirrigSTD.txt

EXAMS environment file: pond298.exv

Chemical Name: Tribufos

Description	Variable Name	Value	Units	Comments
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Molecular weight	mwt	314.5	g/mol	
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Henry's Law Const.	henry	9.50E-07	atm-m ³ /mol	
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Vapor Pressure	vapr	1.70E-06	torr	
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Solubility	sol	2.3	mg/L	
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Kd	Kd	76.9	mg/L	
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Koc	Koc		mg/L	
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Photolysis half-life	kdp		days	Half-life
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Aerobic Aquatic Metabolism	kbacw	4470	days	Halfife
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Anaerobic Aquatic Metabolism	kbacs	1167	days	Halfife
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Aerobic Soil Metabolism	asm	2235	days	Halfife
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Hydrolysis:	pH 7	0	days	Half-life
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Method:	CAM	2	integer	See PRZM manual
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Incorporation Depth:	DEPI	0	cm	
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Application Rate:	TAPP	2.1016	kg/ha	
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Application Efficiency:	APPEFF	0.95	fraction	
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Spray Drift	DRFT	0.05	fraction of application rate applied to	
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pond

Application Date	Date	11-Nov	dd/mm or dd/mm/ or dd-mm or dd-	
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mmm

Record 17: FILTRA

IPSCND 1

UPTKF

Record 18:

PLVKRT

PLDKRT

Flag for Index Res. Run	FEXTRC	0.5	
Flag for runoff calc.	IR	EPA Pond	
	RUNOFF	none	none, monthly or total(average of entire run)

Ground Application Modeling Inputs and Outputs:

Chemical: Tribufos

PRZM environment: CAcotton_WirrigSTD.txt modified Tuesday, 29 May 2007 at 12:42:12

EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 16:33:30

Metfile: w93193.dvf modified Wedday, 3 July 2002 at 09:04:24

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	1.593	1.502	1.244	0.9167	0.6111	0.1507
1962	3.531	3.409	2.889	2.55	2.448	1.997
1963	5.009	4.926	4.812	4.458	4.329	3.893
1964	5.522	5.424	5.118	4.817	4.739	4.311
1965	6.263	6.163	5.992	5.646	5.494	5.112
1966	8.123	7.925	7.334	6.446	6.119	5.474
1967	7.613	7.506	7.221	6.885	6.803	6.665
1968	7.442	7.37	7.105	6.877	6.741	6.504
1969	13.89	13.44	11.9	11.3	10.89	9.451
1970	11.61	11.39	10.7	10.22	10.04	9.468
1971	9.886	9.818	9.597	9.288	9.118	8.762
1972	9.617	9.49	9.078	8.451	8.228	8.04
1973	8.998	8.9	8.616	8.347	8.21	7.924
1974	8.698	8.604	8.333	7.989	7.848	7.583
1975	7.952	7.861	7.573	7.341	7.296	7.109
1976	10.79	10.52	9.674	8.756	8.405	7.891
1977	8.61	8.504	8.011	7.77	7.639	7.445
1978	10.66	10.46	9.908	9.55	9.393	8.727
1979	8.603	8.57	8.423	8.288	8.214	7.813
1980	10.25	10.06	9.582	8.951	8.711	8.149
1981	9.028	8.913	8.629	8.262	8.116	7.772
1982	9.452	9.304	8.6	8.264	7.924	7.636
1983	12.2	11.9	11.33	10.65	10.32	9.428
1984	8.841	8.822	8.754	8.649	8.542	8.201
1985	8.383	8.31	8.093	7.97	7.876	7.661
1986	10.25	10.07	9.015	8.835	8.583	8.161
1987	9.848	9.757	9.368	8.899	8.774	8.341
1988	8.76	8.697	8.433	8.259	8.105	7.904
1989	8.493	8.438	8.313	8.087	8.078	7.83
1990	9.112	9.021	8.632	8.221	8.015	7.858

Sorted results

Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032	13.89	13.44	11.9	11.3	10.89	9.468
0.065	12.2	11.9	11.33	10.65	10.32	9.451
0.097	11.61	11.39	10.7	10.22	10.04	9.428
0.129	10.79	10.52	9.908	9.55	9.393	8.762
0.161	10.66	10.46	9.674	9.288	9.118	8.727
0.194	10.25	10.07	9.597	8.951	8.774	8.341
0.226	10.25	10.06	9.582	8.899	8.711	8.201
0.258	9.886	9.818	9.368	8.835	8.583	8.161
0.290	9.848	9.757	9.078	8.756	8.542	8.149
0.323	9.617	9.49	9.015	8.649	8.405	8.04

0.355	9.452	9.304	8.754	8.451	8.228	7.924
0.387	9.112	9.021	8.632	8.347	8.214	7.904
0.419	9.028	8.913	8.629	8.288	8.21	7.891
0.452	8.998	8.9	8.616	8.264	8.116	7.858
0.484	8.841	8.822	8.6	8.262	8.105	7.83
0.516	8.76	8.697	8.433	8.259	8.078	7.813
0.548	8.698	8.604	8.423	8.221	8.015	7.772
0.581	8.61	8.57	8.333	8.087	7.924	7.661
0.613	8.603	8.504	8.313	7.989	7.876	7.636
0.645	8.493	8.438	8.093	7.97	7.848	7.583
0.677	8.383	8.31	8.011	7.77	7.639	7.445
0.710	8.123	7.925	7.573	7.341	7.296	7.109
0.742	7.952	7.861	7.334	6.885	6.803	6.665
0.774	7.613	7.506	7.221	6.877	6.741	6.504
0.806	7.442	7.37	7.105	6.446	6.119	5.474
0.839	6.263	6.163	5.992	5.646	5.494	5.112
0.871	5.522	5.424	5.118	4.817	4.739	4.311
0.903	5.009	4.926	4.812	4.458	4.329	3.893
0.935	3.531	3.409	2.889	2.55	2.448	1.997
0.968	1.593	1.502	1.244	0.9167	0.6111	0.1507
0.100	11.528	11.303	10.6208	10.153	9.9753	9.3614
Average of yearly averages:	7.10869					

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: Trib3GNDKd

Metfile:

w93193.dvf

PRZM scenario:

CACotton_WirrigSTD.txt

EXAMS environment file:

pond298.exv

Chemical Name:

Tribufos

Description

Variable Name

Value

Units

Comments

Molecular weight

mwt

314.5

g/mol

Henry's Law Const.

henry

9.50E-07

atm-m³/mol

Vapor Pressure

vapr

1.70E-06

torr

Solubility

sol

2.3

mg/L

Kd

Kd

76.9

mg/L

Koc

Koc

mg/L

Photolysis half-life

kdp

days

Half-life

Aerobic Aquatic Metabolism

kbacw

4470

days

Halfife

Anaerobic Aquatic Metabolism

kbacs

1167

days

Halfife

Aerobic Soil Metabolism

asm

2235

days

Halfife

Hydrolysis:

pH 7

0

days

Half-life

Method:

CAM

2

integer

See PRZM manual

Incorporation Depth:

DEPI

0

cm

Application Rate:

TAPP

2.1016

kg/ha

Application Efficiency:

APPEFF

0.99

fraction

Spray Drift

DRFT

0.01

fraction of application rate applied to

pond

Application Date

Date

11-Nov

dd/mm or dd/mm/ 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. run)	RUNOFF	none	none, monthly or total(average of entire