

Appendix D

Example Output from PRZM/EXAMS (PE5)

For 2,4-D Acid – Hops Scenario Ground Applications

stored as DCAHOPG.out

Chemical: 2,4-D

PRZM environment: ORhopsSTD.txt modified Tuesday, 29 May 2007 at 12:00:46

EXAMS environment: pond298.exv modified Thursday, 29 August 2002 at 15:33:30

Metfile: w24232.dvf modified Wednesday, 3 July 2002 at 08:06:10

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.6867	0.6728	0.618	0.5303	0.5037	0.2358
1962	0.8528	0.8376	0.7776	0.6956	0.6496	0.3452
1963	0.837	0.8225	0.765	0.6833	0.6428	0.355
1964	0.7707	0.7568	0.7019	0.6144	0.5745	0.3205
1965	0.9621	0.9452	0.887	0.7643	0.7229	0.3856
1966	0.7727	0.7581	0.7007	0.616	0.5761	0.3222
1967	0.7541	0.7386	0.6778	0.5947	0.5511	0.2879
1968	0.7774	0.7631	0.7067	0.6131	0.5742	0.3512
1969	1.317	1.29	1.179	0.9914	0.8947	0.511
1970	0.834	0.8168	0.7496	0.6744	0.6213	0.382
1971	1.003	0.9859	0.9064	0.7833	0.7112	0.4181
1972	1.448	1.422	1.318	1.256	1.123	0.5653
1973	0.8243	0.8093	0.7513	0.6696	0.622	0.3773
1974	0.7702	0.7555	0.6977	0.6119	0.5727	0.3121
1975	0.7615	0.7482	0.6954	0.6063	0.5686	0.3082
1976	0.767	0.7545	0.705	0.6129	0.5782	0.3175
1977	0.8777	0.8607	0.7938	0.7104	0.6594	0.3512
1978	1.952	1.921	1.799	1.638	1.451	0.6532
1979	0.8453	0.8293	0.7661	0.6895	0.6364	0.473
1980	1.333	1.311	1.222	1.022	0.904	0.5211
1981	1.526	1.5	1.398	1.34	1.332	0.6824
1982	1	0.9795	0.8981	0.8417	0.797	0.4561
1983	0.8398	0.8245	0.7693	0.6705	0.6337	0.354
1984	3.007	2.957	2.74	2.318	2.253	1.198
1985	1.656	1.624	1.502	1.252	1.118	0.7173
1986	0.8407	0.8236	0.7566	0.6866	0.6512	0.4002
1987	1.739	1.702	1.557	1.272	1.117	0.6057
1988	0.9436	0.9271	0.8618	0.7828	0.7256	0.4603
1989	0.7557	0.7406	0.6813	0.5982	0.5598	0.3127
1990	0.7808	0.7659	0.7073	0.619	0.5729	0.2998
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	3.007	2.957	2.74	2.318	2.253	1.198
0.0645161290322581	1.952	1.921	1.799	1.638	1.451	0.7173
0.0967741935483871	1.739	1.702	1.557	1.34	1.332	0.6824
0.129032258064516	1.656	1.624	1.502	1.272	1.123	0.6532
0.161290322580645	1.526	1.5	1.398	1.256	1.118	0.6057
0.193548387096774	1.448	1.422	1.318	1.252	1.117	0.5653
0.225806451612903	1.333	1.311	1.222	1.022	0.904	0.5211
0.258064516129032	1.317	1.29	1.179	0.9914	0.8947	0.511
0.290322580645161	1.003	0.9859	0.9064	0.8417	0.797	0.473
0.32258064516129	1	0.9795	0.8981	0.7833	0.7256	0.4603

0.354838709677419	0.9621	0.9452	0.887	0.7828	0.7229	0.4561
0.387096774193548	0.9436	0.9271	0.8618	0.7643	0.7112	0.4181
0.419354838709677	0.8777	0.8607	0.7938	0.7104	0.6594	0.4002
0.451612903225806	0.8528	0.8376	0.7776	0.6956	0.6512	0.3856
0.483870967741936	0.8453	0.8293	0.7693	0.6895	0.6496	0.382
0.516129032258065	0.8407	0.8245	0.7661	0.6866	0.6428	0.3773
0.548387096774194	0.8398	0.8236	0.765	0.6833	0.6364	0.355
0.580645161290323	0.837	0.8225	0.7566	0.6744	0.6337	0.354
0.612903225806452	0.834	0.8168	0.7513	0.6705	0.622	0.3512
0.645161290322581	0.8243	0.8093	0.7496	0.6696	0.6213	0.3512
0.67741935483871	0.7808	0.7659	0.7073	0.619	0.5782	0.3452
0.709677419354839	0.7774	0.7631	0.7067	0.616	0.5761	0.3222
0.741935483870968	0.7727	0.7581	0.705	0.6144	0.5745	0.3205
0.774193548387097	0.7707	0.7568	0.7019	0.6131	0.5742	0.3175
0.806451612903226	0.7702	0.7555	0.7007	0.6129	0.5729	0.3127
0.838709677419355	0.767	0.7545	0.6977	0.6119	0.5727	0.3121
0.870967741935484	0.7615	0.7482	0.6954	0.6063	0.5686	0.3082
0.903225806451613	0.7557	0.7406	0.6813	0.5982	0.5598	0.2998
0.935483870967742	0.7541	0.7386	0.6778	0.5947	0.5511	0.2879
0.967741935483871	0.6867	0.6728	0.618	0.5303	0.5037	0.2358
0.1	1.7307	1.6942	1.5515	1.3332	1.3111	0.67948

Average of yearly averages:

0.442663333333333

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DCAHOPG

Metfile: w24232.dvf

PRZM scenario: ORhopsSTD.txt

EXAMS environment file: pond298.exv

Chemical Name: 2,4-D

Description	Variable	Name	Value	Units	Comments
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Molecular weight	mwt	221	g/mol		
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Henry's Law Const.	henry	1.02e-8		atm-m ³ /mol	
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Vapor Pressure	vapr	1.4e-7	torr		
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Solubility	sol	569	mg/L		
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Kd	Kd		mg/L		
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Koc	Koc	61.7	mg/L		
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Photolysis half-life	kdp	13	days	Half-life	
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Aerobic Aquatic Metabolism	kbacw	45	days	Halfife	
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Anaerobic Aquatic Metabolism	kbacs	231	days	Halfife	
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Aerobic Soil Metabolism	asm	6.2	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	0.56	kg/ha			
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Application Efficiency: APPEFF	0.99	fraction			
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Spray Drift DRFT	0.01	fraction of	application rate applied to pond		
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Application Date	Date	10-04	dd/mm	or dd/mm or dd-mm or dd-mmm	
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Interval 1	interval	30	days	Set to 0 or delete line for single app.	
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app. rate 1	apprate	0.56	kg/ha		
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Interval 2	interval	30	days	Set to 0 or delete line for single app.	
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app. rate 2 apprate 0.56 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)

For 2,4-D Acid – Hops Scenario Aerial Applications

stored as DCAHOPA.out

Chemical: 2,4-D

PRZM environment: ORhopsSTD.txt modified Tuesday, 29 May 2007 at
 12:00:46

EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at
 15:33:30

Metfile: w24232.dvf modified Wedday, 3 July 2002 at 08:06:10

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	3.394	3.325	3.054	2.601	2.445	1.134
1962	3.868	3.799	3.526	3.081	2.896	1.549
1963	3.865	3.798	3.532	3.094	2.927	1.603
1964	3.81	3.742	3.47	3.029	2.834	1.561
1965	3.93	3.861	3.673	3.191	2.99	1.614
1966	3.768	3.697	3.416	2.985	2.796	1.518
1967	3.757	3.679	3.377	2.96	2.743	1.426
1968	3.744	3.675	3.403	2.954	2.766	1.517
1969	3.755	3.677	3.513	3.151	2.997	1.701
1970	3.833	3.753	3.441	3.035	2.809	1.57
1971	3.851	3.787	3.616	3.154	2.997	1.646
1972	4.433	4.352	4.035	3.602	3.325	1.763
1973	3.819	3.749	3.474	3.042	2.837	1.589
1974	3.812	3.739	3.452	3.02	2.829	1.523
1975	3.786	3.719	3.457	3.009	2.823	1.53
1976	3.832	3.77	3.522	3.062	2.888	1.585
1977	3.938	3.861	3.562	3.131	2.931	1.587
1978	4.763	4.662	4.267	3.918	3.566	1.794
1979	3.794	3.721	3.434	3.013	2.798	1.63
1980	4.221	4.151	3.91	3.319	3.133	1.725
1981	4.508	4.431	4.123	3.703	3.455	1.885
1982	3.988	3.904	3.576	3.193	2.963	1.643
1983	3.757	3.713	3.447	2.998	2.822	1.53
1984	5.667	5.573	5.166	4.616	4.416	2.366
1985	4.635	4.546	4.198	3.532	3.301	1.902
1986	3.819	3.74	3.433	3.031	2.848	1.586
1987	3.742	3.664	3.361	3.149	2.999	1.744
1988	3.926	3.856	3.58	3.14	2.929	1.623
1989	3.696	3.622	3.331	2.908	2.725	1.482
1990	3.75	3.678	3.397	2.958	2.741	1.441
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly

0.032258064516129	5.667	5.573	5.166	4.616	4.416	2.366
0.0645161290322581	4.763	4.662	4.267	3.918	3.566	1.902
0.0967741935483871	4.635	4.546	4.198	3.703	3.455	1.885
0.129032258064516	4.508	4.431	4.123	3.602	3.325	1.794
0.161290322580645	4.433	4.352	4.035	3.532	3.301	1.763
0.193548387096774	4.221	4.151	3.91	3.319	3.133	1.744
0.225806451612903	3.988	3.904	3.673	3.193	2.999	1.725
0.258064516129032	3.938	3.861	3.616	3.191	2.997	1.701
0.290322580645161	3.93	3.861	3.58	3.154	2.997	1.646
0.32258064516129	3.926	3.856	3.576	3.151	2.99	1.643
0.354838709677419	3.868	3.799	3.562	3.149	2.963	1.63
0.387096774193548	3.865	3.798	3.532	3.14	2.931	1.623
0.419354838709677	3.851	3.787	3.526	3.131	2.929	1.614
0.451612903225806	3.833	3.77	3.522	3.094	2.927	1.603
0.483870967741936	3.832	3.753	3.513	3.081	2.896	1.589
0.516129032258065	3.819	3.749	3.474	3.062	2.888	1.587
0.548387096774194	3.819	3.742	3.47	3.042	2.848	1.586
0.580645161290323	3.812	3.74	3.457	3.035	2.837	1.585
0.612903225806452	3.81	3.739	3.452	3.031	2.834	1.57
0.645161290322581	3.794	3.721	3.447	3.029	2.829	1.561
0.67741935483871	3.786	3.719	3.441	3.02	2.823	1.549
0.709677419354839	3.768	3.713	3.434	3.013	2.822	1.53
0.741935483870968	3.757	3.697	3.433	3.009	2.809	1.53
0.774193548387097	3.757	3.679	3.416	2.998	2.798	1.523
0.806451612903226	3.755	3.678	3.403	2.985	2.796	1.518
0.838709677419355	3.75	3.677	3.397	2.96	2.766	1.517
0.870967741935484	3.744	3.675	3.377	2.958	2.743	1.482
0.903225806451613	3.742	3.664	3.361	2.954	2.741	1.441
0.935483870967742	3.696	3.622	3.331	2.908	2.725	1.426
0.967741935483871	3.394	3.325	3.054	2.601	2.445	1.134
0.1	4.6223	4.5345	4.1905	3.6929	3.442	1.8759

Average of yearly averages:

1.62556666666667

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DCAHOPA

Metfile: w24232.dvf

PRZM scenario: ORhopsSTD.txt

EXAMS environment file: pond298.exv

Chemical Name: 2,4-D

Description	Variable	Name	Value	Units	Comments
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Molecular weight	mwt	221	g/mol		
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Henry's Law Const.	henry	1.02e-8	atm-m ³ /mol		
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Vapor Pressure	vapr	1.4e-7	torr		
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Solubility	sol	569	mg/L		
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Kd	Kd	mg/L			
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Koc	Koc	61.7	mg/L		
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Photolysis half-life	kdp	13	days	Half-life	
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Aerobic Aquatic Metabolism	kbacw	45	days	Halfife	
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Anaerobic Aquatic Metabolism	kbacs	231	days	Halfife	
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Aerobic Soil Metabolism	asm	6.2	days	Halfife	
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Hydrolysis: pH 7	0	days	Half-life		
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Method: CAM 2 integer See PRZM manual
 Incorporation Depth: DEPI 0 cm
 Application Rate: TAPP 0.56 kg/ha
 Application Efficiency: APPEFF 0.95 fraction
 Spray Drift DRFT 0.05 fraction of application rate applied to pond
 Application Date Date 10-04 dd/mm or dd/mm or dd-mm or dd-mmm
 Interval 1 interval 30 days Set to 0 or delete line for single app.
 app. rate 1 apprate 0.56 kg/ha
 Interval 2 interval 30 days Set to 0 or delete line for single app.
 app. rate 2 apprate 0.56 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)

For 2,4-D Acid – Turf Scenario Ground Applications

stored as DCAturG1.out

Chemical: 2,4-D

PRZM environment: CATurfRLF.txt modified Tuesday, 20 February 2007 at 11:03:48

EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 15:33:30

Metfile: w23234.dvf modified Wedday, 3 July 2002 at 08:04:22

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	2.496	2.458	2.304	1.996	1.809	0.8228
1962	3.649	3.599	3.393	2.956	2.707	1.328
1963	6.894	6.795	6.466	5.694	5.152	2.39
1964	2.471	2.437	2.3	2.021	1.833	1.001
1965	2.187	2.155	2.071	1.925	1.771	0.8989
1966	2.065	2.041	1.924	1.667	1.503	0.7613
1967	4.262	4.204	3.993	3.564	3.237	1.537
1968	3.008	2.968	2.792	2.438	2.239	1.122
1969	2.238	2.207	2.13	1.916	1.733	0.8703
1970	3.306	3.252	3.047	2.687	2.506	1.195
1971	3.415	3.367	3.217	2.854	2.623	1.281
1972	2.132	2.099	1.973	1.721	1.555	0.7974
1973	2.323	2.291	2.161	1.879	1.691	0.8307
1974	5.628	5.542	5.204	4.681	4.337	2.126
1975	3.316	3.271	3.179	2.873	2.612	1.347
1976	3.612	3.563	3.371	3	2.819	1.36
1977	2.69	2.653	2.502	2.184	1.99	0.9933
1978	4.945	4.864	4.576	4.197	3.855	1.797
1979	3.988	3.928	3.684	3.189	2.872	1.389
1980	3.694	3.64	3.429	3.01	2.816	1.38
1981	2.402	2.368	2.238	1.948	1.756	0.8844
1982	5.601	5.542	5.306	4.659	4.21	1.987

1983	5.13	5.082	4.815	4.212	3.83	1.871
1984	2.164	2.128	2.005	1.742	1.561	0.7975
1985	4.3	4.241	3.973	3.42	3.067	1.406
1986	4.259	4.2	3.95	3.517	3.225	1.538
1987	2.261	2.226	2.088	1.799	1.619	0.8193
1988	1.979	1.951	1.843	1.639	1.48	0.7151
1989	2.267	2.232	2.086	1.781	1.597	0.7693
1990	2.005	1.976	1.855	1.598	1.432	0.6902
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	6.894	6.795	6.466	5.694	5.152	2.39
0.0645161290322581	5.628	5.542	5.306	4.681	4.337	2.126
0.0967741935483871	5.601	5.542	5.204	4.659	4.21	1.987
0.129032258064516	5.13	5.082	4.815	4.212	3.855	1.871
0.161290322580645	4.945	4.864	4.576	4.197	3.83	1.797
0.193548387096774	4.3	4.241	3.993	3.564	3.237	1.538
0.225806451612903	4.262	4.204	3.973	3.517	3.225	1.537
0.258064516129032	4.259	4.2	3.95	3.42	3.067	1.406
0.290322580645161	3.988	3.928	3.684	3.189	2.872	1.389
0.32258064516129	3.694	3.64	3.429	3.01	2.819	1.38
0.354838709677419	3.649	3.599	3.393	3	2.816	1.36
0.387096774193548	3.612	3.563	3.371	2.956	2.707	1.347
0.419354838709677	3.415	3.367	3.217	2.873	2.623	1.328
0.451612903225806	3.316	3.271	3.179	2.854	2.612	1.281
0.483870967741936	3.306	3.252	3.047	2.687	2.506	1.195
0.516129032258065	3.008	2.968	2.792	2.438	2.239	1.122
0.548387096774194	2.69	2.653	2.502	2.184	1.99	1.001
0.580645161290323	2.496	2.458	2.304	2.021	1.833	0.9933
0.612903225806452	2.471	2.437	2.3	1.996	1.809	0.8989
0.645161290322581	2.402	2.368	2.238	1.948	1.771	0.8844
0.67741935483871	2.323	2.291	2.161	1.925	1.756	0.8703
0.709677419354839	2.267	2.232	2.13	1.916	1.733	0.8307
0.741935483870968	2.261	2.226	2.088	1.879	1.691	0.8228
0.774193548387097	2.238	2.207	2.086	1.799	1.619	0.8193
0.806451612903226	2.187	2.155	2.071	1.781	1.597	0.7975
0.838709677419355	2.164	2.128	2.005	1.742	1.561	0.7974
0.870967741935484	2.132	2.099	1.973	1.721	1.555	0.7693
0.903225806451613	2.065	2.041	1.924	1.667	1.503	0.7613
0.935483870967742	2.005	1.976	1.855	1.639	1.48	0.7151
0.967741935483871	1.979	1.951	1.843	1.598	1.432	0.6902
0.1	5.5539	5.496	5.1651	4.6143	4.1745	1.9754

Average of yearly averages:

1.22351666666667

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DCAturG1

Metfile: w23234.dvf

PRZM scenario: CATurfRLF.txt

EXAMS environment file: pond298.exv

Chemical Name: 2,4-D

Description Variable Name Value Units Comments

1976	11.64	11.48	10.84	9.506	8.586	4.25
1977	10.66	10.52	9.905	8.636	7.811	3.878
1978	12.72	12.51	11.72	10.22	9.32	4.523
1979	11.57	11.4	10.71	9.486	8.534	4.135
1980	11.52	11.35	10.66	9.277	8.381	4.184
1981	10.36	10.21	9.596	8.327	7.479	3.691
1982	12.97	12.81	12.12	10.84	9.899	4.834
1983	12.98	12.82	12.08	10.53	9.482	4.609
1984	9.955	9.79	9.16	7.921	7.086	3.433
1985	11.93	11.77	11.03	9.67	8.702	4.117
1986	12.02	11.83	11.08	9.612	8.711	4.265
1987	10.17	10.01	9.368	8.048	7.183	3.505
1988	9.802	9.648	9.032	7.822	7.013	3.364
1989	10.14	9.988	9.33	7.96	7.107	3.438
1990	9.934	9.79	9.187	7.912	7.09	3.395
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	14.44	14.23	13.47	11.89	10.86	5.26
0.0645161290322581	12.98	12.82	12.3	11.01	10	4.954
0.0967741935483871	12.97	12.81	12.12	10.84	9.899	4.834
0.129032258064516	12.91	12.71	12.08	10.53	9.482	4.609
0.161290322580645	12.72	12.51	11.72	10.22	9.32	4.523
0.193548387096774	12.02	11.83	11.08	9.947	9.085	4.434
0.225806451612903	11.93	11.77	11.03	9.67	8.711	4.3
0.258064516129032	11.64	11.48	10.86	9.612	8.702	4.265
0.290322580645161	11.57	11.4	10.84	9.506	8.586	4.25
0.32258064516129	11.53	11.38	10.72	9.486	8.534	4.187
0.354838709677419	11.52	11.35	10.71	9.416	8.524	4.184
0.387096774193548	11.38	11.23	10.66	9.329	8.443	4.178
0.419354838709677	11.18	11.1	10.6	9.312	8.426	4.135
0.451612903225806	11.18	11.02	10.58	9.277	8.381	4.117
0.483870967741936	11.13	10.95	10.25	8.928	8.029	3.964
0.516129032258065	10.91	10.75	10.1	8.806	7.958	3.955
0.548387096774194	10.66	10.52	9.905	8.636	7.811	3.89
0.580645161290323	10.46	10.31	9.713	8.502	7.7	3.878
0.612903225806452	10.36	10.21	9.596	8.431	7.676	3.876
0.645161290322581	10.32	10.18	9.583	8.394	7.563	3.742
0.67741935483871	10.24	10.1	9.555	8.327	7.479	3.691
0.709677419354839	10.17	10.02	9.47	8.305	7.461	3.688
0.741935483870968	10.15	10.01	9.424	8.16	7.357	3.671
0.774193548387097	10.14	9.988	9.368	8.14	7.345	3.65
0.806451612903226	10.13	9.971	9.355	8.048	7.183	3.505
0.838709677419355	10.07	9.923	9.33	7.96	7.107	3.438
0.870967741935484	9.955	9.79	9.187	7.921	7.09	3.433
0.903225806451613	9.934	9.79	9.16	7.912	7.086	3.395
0.935483870967742	9.812	9.664	9.057	7.828	7.036	3.364
0.967741935483871	9.802	9.648	9.032	7.822	7.013	3.226
Average of yearly averages:						
0.1	12.964	12.8	12.116	10.809	9.8573	4.8115

4.01986666666667

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DCAturA1

Metfile: w23234.dvf

PRZM scenario: CATurfRLF.txt

EXAMS environment file: pond298.exv

Chemical Name: 2,4-D

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	221	g/mol	
Henry's Law Const.	henry	1.02e-8		atm-m ³ /mol
Vapor Pressure	vapr	1.4e-7	torr	
Solubility	sol	569	mg/L	
Kd	Kd		mg/L	
Koc	Koc	61.7	mg/L	
Photolysis half-life	kdp	13	days	Half-life
Aerobic Aquatic Metabolism	kbacw	45	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	231	days	Halfife
Aerobic Soil Metabolism	asm	6.2	days	Halfife
Hydrolysis: pH 7	0		days	Half-life
Method:	CAM 1	integer		See PRZM manual
Incorporation Depth:	DEPI	4	cm	
Application Rate:	TAPP	1.68	kg/ha	
Application Efficiency:	APPEFF	0.95		fraction
Spray Drift	DRFT	0.05		fraction of application rate applied to pond
Application Date	Date	01-03	dd/mm	or dd/mm or dd-mm or dd-mmm
Interval 1	interval	21	days	Set to 0 or delete line for single app.
app. rate 1	apprate	2.24	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)

For 2,4-D EHE – Turf Scenario Ground Application

stored as ECAturG1.out

Chemical: EHE

PRZM environment: CATurfRLF.txt modified Tuesday, 20 February 2007 at 11:03:48

EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 15:33:30

Metfile: w23234.dvf modified Wedday, 3 July 2002 at 08:04:22

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.8189	0.5114	0.1717	0.07759	0.05864	0.02107
1962	0.8248	0.5209	0.1795	0.08271	0.06294	0.02488
1963	0.826	0.5152	0.1741	0.08544	0.06625	0.02714
1964	0.8269	0.512	0.1679	0.0766	0.05823	0.0231

		9				
1965	0.8254	0.522 9	0.1754	0.0821	0.06265	0.02516
1966	0.8267	0.526 2	0.1783	0.08345	0.06453	0.02627
1967	0.8268	0.511 4	0.1687	0.08246	0.06317	0.02512
1968	0.8262	0.518 5	0.1789	0.08273	0.06318	0.0249
1969	0.8255	0.517 8	0.1725	0.07891	0.05981	0.02288
1970	0.8248	0.514 2	0.1694	0.07592	0.05762	0.02249
1971	0.825	0.520 4	0.1843	0.08604	0.06607	0.02633
1972	0.8268	0.518 8	0.1723	0.07983	0.06155	0.02545
1973	0.8268	0.518 5	0.174	0.08137	0.06264	0.02556
1974	0.8658	0.547 1	0.1836	0.088	0.06729	0.02681
1975	0.8263	0.506 6	0.1712	0.08489	0.06569	0.02723
1976	0.8274	0.533 2	0.1787	0.08312	0.06356	0.02595
1977	0.8268	0.517 7	0.1773	0.08264	0.06309	0.0253
1978	0.8259	0.521 7	0.2052	0.09777	0.07526	0.02983
1979	0.8275	0.522 2	0.1752	0.08276	0.0637	0.02576
1980	0.8264	0.525 5	0.1798	0.08391	0.06394	0.02561
1981	0.8267	0.523	0.1785	0.08353	0.06379	0.02592
1982	0.8314	0.527 2	0.1781	0.09258	0.07211	0.02933
1983	0.836	0.542 5	0.1921	0.09135	0.07028	0.02828
1984	0.8269	0.508 7	0.1646	0.07513	0.05676	0.02263
1985	0.8252	0.513 7	0.1692	0.07903	0.06034	0.02416
1986	0.8253	0.516 8	0.1994	0.09386	0.07211	0.02932
1987	0.8278	0.522	0.1756	0.08185	0.06276	0.02554
1988	0.8263	0.508 8	0.1645	0.07697	0.0588	0.02358
1989	0.8257	0.517 7	0.1736	0.08077	0.06158	0.02438
1990	0.8259	0.521 7	0.1746	0.08082	0.06209	0.02492
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	0.8658	0.547	0.2052	0.09777	0.07526	0.02983

		1				
0.0645161290322581	0.836	0.5425	0.1994	0.09386	0.07211	0.02933
0.0967741935483871	0.8314	0.5332	0.1921	0.09258	0.07211	0.02932
0.129032258064516	0.8278	0.5272	0.1843	0.09135	0.07028	0.02828
0.161290322580645	0.8275	0.5262	0.1836	0.088	0.06729	0.02723
0.193548387096774	0.8274	0.5255	0.1798	0.08604	0.06625	0.02714
0.225806451612903	0.8269	0.523	0.1795	0.08544	0.06607	0.02681
0.258064516129032	0.8269	0.5229	0.1789	0.08489	0.06569	0.02633
0.290322580645161	0.8268	0.5222	0.1787	0.08391	0.06453	0.02627
0.32258064516129	0.8268	0.522	0.1785	0.08353	0.06394	0.02595
0.354838709677419	0.8268	0.5217	0.1783	0.08345	0.06379	0.02592
0.387096774193548	0.8268	0.5217	0.1781	0.08312	0.0637	0.02576
0.419354838709677	0.8267	0.5209	0.1773	0.08276	0.06356	0.02561
0.451612903225806	0.8267	0.5204	0.1756	0.08273	0.06318	0.02556
0.483870967741936	0.8264	0.5188	0.1754	0.08271	0.06317	0.02554
0.516129032258065	0.8263	0.5185	0.1752	0.08264	0.06309	0.02545
0.548387096774194	0.8263	0.5185	0.1746	0.08246	0.06294	0.0253
0.580645161290323	0.8262	0.5178	0.1741	0.0821	0.06276	0.02516
0.612903225806452	0.826	0.5177	0.174	0.08185	0.06265	0.02512
0.645161290322581	0.8259	0.5177	0.1736	0.08137	0.06264	0.02492
0.67741935483871	0.8259	0.5168	0.1725	0.08082	0.06209	0.0249
0.709677419354839	0.8257	0.5152	0.1723	0.08077	0.06158	0.02488
0.741935483870968	0.8255	0.5142	0.1717	0.07983	0.06155	0.02438
0.774193548387097	0.8254	0.5137	0.1712	0.07903	0.06034	0.02416
0.806451612903226	0.8253	0.5129	0.1694	0.07891	0.05981	0.02358
0.838709677419355	0.8252	0.5114	0.1692	0.07759	0.0588	0.0231
0.870967741935484	0.825	0.5114	0.1687	0.07697	0.05864	0.02288
0.903225806451613	0.8248	0.5088	0.1679	0.0766	0.05823	0.02263
0.935483870967742	0.8248	0.5087	0.1646	0.07592	0.05762	0.02249

0.967741935483871	0.8189	0.506 6	0.1645	0.07513	0.05676	0.02107
0.1	0.8310 4	0.532 6	0.1913 2	0.09245 7	0.07192 7	0.02921 6

Average of yearly averages:

0.0254966666666667

Inputs generated by pe5.pl - November 2006

Data used for this run:

Output File: ECAturG1

Metfile: w23234.dvf

PRZM scenario: CATurfRLF.txt

EXAMS environment file: pond298.exv

Chemical Name: EHE

Description Variable Name Value Units Comments

Molecular weight mwt 333.26 g/mol

Henry's Law Const. henry 5.78e-5 atm-m³/mol

Vapor Pressure vapr 4.57e-6 torr

Solubility sol 0.32 mg/L

Kd Kd mg/L

Koc Koc 10500 mg/L

Photolysis half-life kdp 128 days Half-life

Aerobic Aquatic Metabolism kbacw 48 days Halfife

Anaerobic Aquatic Metabolism kbacs 0 days Halfife

Aerobic Soil Metabolism asm 24 days Halfife

Hydrolysis: pH 7 48 days Half-life

Method: CAM 1 integer See PRZM manual

Incorporation Depth: DEPI 4 cm

Application Rate: TAPP 1.68 kg/ha

Application Efficiency: APPEFF 0.99 fraction

Spray Drift DRFT 0.01 fraction of application rate applied to pond

Application Date Date 01-03 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. RUNOFF none none, monthly or total(average of entire run)

For 2,4-D EHE – Turf Scenario Aerial Application

stored as ECAturA1.out

Chemical: EHE

PRZM environment: CATurfRLF.txt modified Tuesday, 20 February 2007 at 11:03:48

EXAMS environment: pond298.exv modified Thuday, 29 August 2002 at 15:33:30

Metfile: w23234.dvf modified Wedday, 3 July 2002 at 08:04:22

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	4.095	2.557	0.8329	0.3725	0.2807	0.1002

1962	4.122	2.603	0.8726	0.3997	0.3036	0.1193
1963	4.128	2.574	0.85	0.3963	0.3055	0.1238
1964	4.13	2.56	0.8353	0.3794	0.2878	0.113
1965	4.126	2.614	0.8764	0.406	0.3093	0.1237
1966	4.132	2.63	0.8909	0.4165	0.3219	0.1308
1967	4.134	2.557	0.8345	0.3909	0.2982	0.1178
1968	4.128	2.59	0.8638	0.3958	0.3014	0.1178
1969	4.125	2.587	0.8566	0.3897	0.2949	0.1122
1970	4.123	2.546	0.8242	0.3684	0.2792	0.1087
1971	4.124	2.601	0.8766	0.4042	0.3094	0.1225
1972	4.131	2.591	0.8584	0.3963	0.305	0.1251
1973	4.133	2.591	0.8607	0.3998	0.3074	0.1251
1974	4.169	2.633	0.8818	0.4125	0.3145	0.1248
1975	4.128	2.53	0.8203	0.3837	0.2949	0.1205
1976	4.131	2.606	0.8663	0.4	0.305	0.1229
1977	4.132	2.586	0.8609	0.3971	0.3024	0.1204
1978	4.128	2.599	0.8944	0.4163	0.318	0.1247
1979	4.129	2.603	0.8683	0.4002	0.3066	0.1215
1980	4.129	2.599	0.8675	0.4026	0.3062	0.122
1981	4.131	2.613	0.8792	0.408	0.311	0.1256
1982	4.136	2.622	0.8831	0.4205	0.3245	0.1299
1983	4.14	2.65	0.9074	0.4234	0.3241	0.1285
1984	4.13	2.539	0.8193	0.3722	0.2806	0.1107
1985	4.125	2.568	0.841	0.3859	0.2942	0.1173
1986	4.126	2.583	0.8805	0.4068	0.3107	0.1253
1987	4.131	2.603	0.8691	0.4019	0.3072	0.1229
1988	4.13	2.542	0.8211	0.3794	0.289	0.1151
1989	4.128	2.587	0.8577	0.3975	0.3028	0.1195
1990	4.129	2.608	0.8722	0.4034	0.3096	0.1238
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	4.169	2.65	0.9074	0.4234	0.3245	0.1308
0.0645161290322581	4.14	2.633	0.8944	0.4205	0.3241	0.1299
0.0967741935483871	4.136	2.63	0.8909	0.4165	0.3219	0.1285
0.129032258064516	4.134	2.622	0.8831	0.4163	0.318	0.1256
0.161290322580645	4.133	2.614	0.8818	0.4125	0.3145	0.1253
0.193548387096774	4.132	2.613	0.8805	0.408	0.311	0.1251
0.225806451612903	4.132	2.608	0.8792	0.4068	0.3107	0.1251
0.258064516129032	4.131	2.606	0.8766	0.406	0.3096	0.1248
0.290322580645161	4.131	2.603	0.8764	0.4042	0.3094	0.1247
0.32258064516129	4.131	2.603	0.8726	0.4034	0.3093	0.1238
0.354838709677419	4.131	2.603	0.8722	0.4026	0.3074	0.1238
0.387096774193548	4.13	2.601	0.8691	0.4019	0.3072	0.1237
0.419354838709677	4.13	2.599	0.8683	0.4002	0.3066	0.1229
0.451612903225806	4.13	2.599	0.8675	0.4	0.3062	0.1229
0.483870967741936	4.129	2.591	0.8663	0.3998	0.3055	0.1225
0.516129032258065	4.129	2.591	0.8638	0.3997	0.305	0.122
0.548387096774194	4.129	2.59	0.8609	0.3975	0.305	0.1215
0.580645161290323	4.128	2.587	0.8607	0.3971	0.3036	0.1205
0.612903225806452	4.128	2.587	0.8584	0.3963	0.3028	0.1204
0.645161290322581	4.128	2.586	0.8577	0.3963	0.3024	0.1195
0.67741935483871	4.128	2.583	0.8566	0.3958	0.3014	0.1193
0.709677419354839	4.128	2.574	0.85	0.3909	0.2982	0.1178

0.741935483870968	4.126	2.568	0.841	0.3897	0.2949	0.1178
0.774193548387097	4.126	2.56	0.8353	0.3859	0.2949	0.1173
0.806451612903226	4.125	2.557	0.8345	0.3837	0.2942	0.1151
0.838709677419355	4.125	2.557	0.8329	0.3794	0.289	0.113
0.870967741935484	4.124	2.546	0.8242	0.3794	0.2878	0.1122
0.903225806451613	4.123	2.542	0.8211	0.3725	0.2807	0.1107
0.935483870967742	4.122	2.539	0.8203	0.3722	0.2806	0.1087
0.967741935483871	4.095	2.53	0.8193	0.3684	0.2792	0.1002
0.1	4.1358	2.6292	0.89012	0.41648	0.32151	0.12821

Average of yearly averages:

0.120513333333333

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: ECAturA1

Metfile: w23234.dvf

PRZM scenario: CATurfRLF.txt

EXAMS environment file: pond298.exv

Chemical Name: EHE

Description	Variable Name	Value	Units	Comments
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Molecular weight	mwt	333.26	g/mol	
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Henry's Law Const.	henry	5.78e-5		atm-m ³ /mol
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Vapor Pressure	vapr	4.57e-6	torr	
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Solubility	sol	0.32	mg/L	
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Kd	Kd		mg/L	
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Koc	Koc	10500	mg/L	
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Photolysis half-life	kdp	128	days	Half-life
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Aerobic Aquatic Metabolism	kbacw	48	days	Halfife
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Anaerobic Aquatic Metabolism	kbacs	0	days	Halfife
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Aerobic Soil Metabolism	asm	24	days	Halfife
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Hydrolysis: pH 7	48	days	Half-life	
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Method:	CAM	1	integer	See PRZM manual
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Incorporation Depth:	DEPI	4	cm	
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Application Rate:	TAPP	1.68	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 pond		
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Application Date	Date	01-03 dd/mm or dd/mm or dd-mm or dd-mmm		
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Record 17: FILTRA

IPSCND	1
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UPTKF

Record 18: PLVKRT

PLDKRT

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