

Appendix D

Example PRZM/EXAMS Output File

Example Output Files for the highest EEC scenario – CA Nursery and the lowest EEC scenarios – CA Right-Of-Way and CA Impervious.

stored as DQNurse.out

Chemical: Diquat Dibromide

PRZM environment: CAnurserySTD_V2.txt modified Tuesday, 27 May 2008 at 11:16:22

EXAMS environment: pond298.exv modified Tuesday, 26 August 2008 at 06:14:08

Metfile: w23188.dvf modified Tuesday, 26 August 2008 at 06:15:38

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	3.489	0.6484	0.2025	0.1112	0.09295	0.05802
1962	12.35	3.198	0.9028	0.7573	0.6767	0.5366
1963	16.69	3.442	1.363	0.9793	0.8737	0.6762
1964	7.034	2.047	1.202	1.071	1.054	0.9975
1965	29.4	8.431	4.004	3.005	2.536	1.749
1966	15.85	5.392	3.413	2.995	2.945	2.719
1967	18.15	6.169	3.943	3.576	3.435	3.219
1968	16.57	5.748	4.05	3.791	3.744	3.645
1969	29.23	8.254	5.099	4.86	4.723	4.49
1970	28.48	8.74	5.626	5.132	5.043	4.901
1971	16.62	7.152	5.76	5.55	5.558	5.338
1972	22.28	9.084	6.643	6.178	5.975	5.662
1973	9.074	6.546	6.157	6.111	6.102	6.07
1974	23.29	9.402	7.222	6.78	6.69	6.535
1975	43.16	13.09	8.487	7.803	7.656	7.331
1976	41.32	15.14	9.72	8.689	8.523	8.192
1977	38.27	13.6	9.728	9.136	9.029	8.8
1978	19.61	12.21	9.926	9.619	9.583	9.489
1979	31.55	13.46	10.66	10.23	10.15	10.02
1980	35.36	14.51	11.52	11.24	11.1	10.85
1981	33.61	14.9	12.16	11.59	11.49	11.3
1982	36.42	16.7	12.93	12.27	12.15	11.9
1983	26.95	15.84	13.19	12.78	12.7	12.54
1984	29.39	15.66	13.65	13.02	12.87	12.64
1985	38.34	17.62	14.69	13.91	13.62	13.16
1986	33.18	17.12	14.57	14.29	14.24	14.09
1987	22.07	15.8	14.79	14.67	14.58	14.39
1988	32.06	19.27	15.91	15.4	15.31	15.08
1989	20.28	16.1	15.39	15.28	15.27	15.23
1990	20.11	16.5	15.6	15.5	15.47	15.44
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	43.16	19.27	15.91	15.5	15.47	15.44
0.0645161290322581	41.32	17.62	15.6	15.4	15.31	15.23
0.0967741935483871	38.34	17.12	15.39	15.28	15.27	15.08
0.129032258064516	38.27	16.7	14.79	14.67	14.58	14.39
0.161290322580645	36.42	16.5	14.69	14.29	14.24	14.09
0.193548387096774	35.36	16.1	14.57	13.91	13.62	13.16

0.225806451612903	33.61	15.84	13.65	13.02	12.87	12.64
0.258064516129032	33.18	15.8	13.19	12.78	12.7	12.54
0.290322580645161	32.06	15.66	12.93	12.27	12.15	11.9
0.32258064516129	31.55	15.14	12.16	11.59	11.49	11.3
0.354838709677419	29.4	14.9	11.52	11.24	11.1	10.85
0.387096774193548	29.39	14.51	10.66	10.23	10.15	10.02
0.419354838709677	29.23	13.6	9.926	9.619	9.583	9.489
0.451612903225806	28.48	13.46	9.728	9.136	9.029	8.8
0.483870967741936	26.95	13.09	9.72	8.689	8.523	8.192
0.516129032258065	23.29	12.21	8.487	7.803	7.656	7.331
0.548387096774194	22.28	9.402	7.222	6.78	6.69	6.535
0.580645161290323	22.07	9.084	6.643	6.178	6.102	6.07
0.612903225806452	20.28	8.74	6.157	6.111	5.975	5.662
0.645161290322581	20.11	8.431	5.76	5.55	5.558	5.338
0.67741935483871	19.61	8.254	5.626	5.132	5.043	4.901
0.709677419354839	18.15	7.152	5.099	4.86	4.723	4.49
0.741935483870968	16.69	6.546	4.05	3.791	3.744	3.645
0.774193548387097	16.62	6.169	4.004	3.576	3.435	3.219
0.806451612903226	16.57	5.748	3.943	3.005	2.945	2.719
0.838709677419355	15.85	5.392	3.413	2.995	2.536	1.749
0.870967741935484	12.35	3.442	1.363	1.071	1.054	0.9975
0.903225806451613	9.074	3.198	1.202	0.9793	0.8737	0.6762
0.935483870967742	7.034	2.047	0.9028	0.7573	0.6767	0.5366
0.967741935483871	3.489	0.6484	0.2025	0.1112	0.09295	0.05802
0.1	38.333	17.078	15.33	15.219	15.201	15.011

Average of yearly averages: 7.90161066666667

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DQNurse

Metfile: w23188.dvf

PRZM scenario: CANurserySTD_V2.txt

EXAMS environment file: pond298.exv

Chemical Name: Diquat Dibromide

Description Variable Name Value Units Comments

Molecular weight mwt 344.05 g/mol

Henry's Law Const. henry atm-m³/mol

Vapor Pressure vapr 1e-10 torr

Solubility sol 700000 mg/L

Kd Kd 4895 mg/L

Koc Koc mg/L

Photolysis half-life kdp 74 days Half-life

Aerobic Aquatic Metabolism kbacw 0 days Halfife

Anaerobic Aquatic Metabolism kbacs 0 days Halfife

Aerobic Soil Metabolism asm 0 days Halfife

Hydrolysis: pH 7 0 days Half-life

Method: CAM 1 integer See PRZM manual

Incorporation Depth: DEPI 0 cm

Application Rate:TAPP 2.0888 kg/ha

Application Efficiency: APPEFF 0.99 fraction

Spray Drift DRFT 0.01 fraction of application rate applied to pond

Application Date Date 15-01 dd/mm or dd/mmm or dd-mm or dd-mmm
 Interval 1 interval 30 days Set to 0 or delete line for single app.
 app. rate 1 apprate 2.0888 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 DQROW.out

Chemical: Diquat Dibromide

PRZM environment: CArightofwayRLF_V2.txt

modified Wedday, 26 March

2008 at 10:38:28

EXAMS environment: pond298.exv

modified Tuesday, 26 August 2008 at

06:14:08

Metfile: w23234.dvf modified Tuesday, 26 August 2008 at 06:15:38

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.9169	0.1594	0.04053	0.029	0.02355	0.01048
1962	1.472	0.5985	0.1891	0.1259	0.1173	0.06412
1963	1.053	0.3805	0.1814	0.1653	0.16	0.1475
1964	1.854	0.4774	0.2508	0.2301	0.2207	0.1987
1965	1.68	0.5398	0.3789	0.3305	0.3077	0.2702
1966	1.413	0.66	0.4927	0.4279	0.4023	0.3614
1967	6.531	1.665	0.8402	0.6536	0.6394	0.5979
1968	2.36	1.155	0.7903	0.7438	0.727	0.7007
1969	3.1	1.345	1.005	0.9524	0.9422	0.9062
1970	4.225	1.898	1.317	1.191	1.146	1.082
1971	2.443	1.377	1.225	1.206	1.2	1.187
1972	5.336	2.136	1.479	1.436	1.404	1.262
1973	5.928	2.509	1.842	1.773	1.71	1.615
1974	3.555	2.063	1.864	1.824	1.817	1.803
1975	4.533	2.397	2.07	1.991	1.974	1.951
1976	7.587	2.942	2.193	2.083	2.059	2.017
1977	5.812	2.728	2.302	2.256	2.225	2.18
1978	6.904	3.423	2.702	2.63	2.605	2.574
1979	8.31	4.165	3.125	2.952	2.927	2.855
1980	5.995	3.984	3.503	3.29	3.25	3.195
1981	9.614	4.546	3.699	3.611	3.549	3.413
1982	24.12	7.165	4.455	4.304	4.229	4.095
1983	9.952	5.708	4.885	4.766	4.689	4.578
1984	9.119	5.53	5.053	4.91	4.86	4.752
1985	8.554	5.52	5.088	4.993	4.969	4.927
1986	10.33	6.83	5.602	5.475	5.409	5.292
1987	8.562	6.21	5.589	5.484	5.459	5.418
1988	7.933	6.276	5.746	5.638	5.607	5.559
1989	7.816	6.06	5.784	5.748	5.729	5.681
1990	8.415	6.212	5.863	5.825	5.818	5.805
Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	24.12	7.165	5.863	5.825	5.818	5.805
0.0645161290322581	10.33	6.83	5.784	5.748	5.729	5.681
0.0967741935483871	9.952	6.276	5.746	5.638	5.607	5.559
0.129032258064516	9.614	6.212	5.602	5.484	5.459	5.418
0.161290322580645	9.119	6.21	5.589	5.475	5.409	5.292
0.193548387096774	8.562	6.06	5.088	4.993	4.969	4.927
0.225806451612903	8.554	5.708	5.053	4.91	4.86	4.752
0.258064516129032	8.415	5.53	4.885	4.766	4.689	4.578
0.290322580645161	8.31	5.52	4.455	4.304	4.229	4.095

0.32258064516129	7.933	4.546	3.699	3.611	3.549	3.413
0.354838709677419	7.816	4.165	3.503	3.29	3.25	3.195
0.387096774193548	7.587	3.984	3.125	2.952	2.927	2.855
0.419354838709677	6.904	3.423	2.702	2.63	2.605	2.574
0.451612903225806	6.531	2.942	2.302	2.256	2.225	2.18
0.483870967741936	5.995	2.728	2.193	2.083	2.059	2.017
0.516129032258065	5.928	2.509	2.07	1.991	1.974	1.951
0.548387096774194	5.812	2.397	1.864	1.824	1.817	1.803
0.580645161290323	5.336	2.136	1.842	1.773	1.71	1.615
0.612903225806452	4.533	2.063	1.479	1.436	1.404	1.262
0.645161290322581	4.225	1.898	1.317	1.206	1.2	1.187
0.67741935483871	3.555	1.665	1.225	1.191	1.146	1.082
0.709677419354839	3.1	1.377	1.005	0.9524	0.9422	0.9062
0.741935483870968	2.443	1.345	0.8402	0.7438	0.727	0.7007
0.774193548387097	2.36	1.155	0.7903	0.6536	0.6394	0.5979
0.806451612903226	1.854	0.66	0.4927	0.4279	0.4023	0.3614
0.838709677419355	1.68	0.5985	0.3789	0.3305	0.3077	0.2702
0.870967741935484	1.472	0.5398	0.2508	0.2301	0.2207	0.1987
0.903225806451613	1.413	0.4774	0.1891	0.1653	0.16	0.1475
0.935483870967742	1.053	0.3805	0.1814	0.1259	0.1173	0.06412
0.967741935483871	0.9169	0.1594	0.04053	0.029	0.02355	0.01048
0.1	9.9182	6.2696	5.7316	5.6226	5.5922	5.5449

Average of yearly averages: 2.48327333333333

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DQROW

Metfile: w23234.dvf

PRZM scenario: CARightofwayRLF_V2.txt

EXAMS environment file: pond298.exv

Chemical Name: Diquat Dibromide

Description Variable Name Value Units Comments

Molecular weight mwt 344.05 g/mol

Henry's Law Const. henry atm-m³/mol

Vapor Pressure vapr 1e-10 torr

Solubility sol 700000 mg/L

Kd Kd 4895 mg/L

Koc Koc mg/L

Photolysis half-life kdp 74 days Half-life

Aerobic Aquatic Metabolism kbacw 0 days Halfife

Anaerobic Aquatic Metabolism kbacs 0 days Halfife

Aerobic Soil Metabolism asm 0 days Halfife

Hydrolysis: pH 7 0 days Half-life

Method: CAM 1 integer See PRZM manual

Incorporation Depth: DEPI 0 cm

Application Rate:TAPP 2.0888 kg/ha

Application Efficiency: APPEFF 0.99 fraction

Spray Drift DRFT 0.01 fraction of application rate applied to pond

Application Date Date 15-07 dd/mm or dd/mm or dd-mm or dd-mm

Interval 1 interval 30 days Set to 0 or delete line for single app.

app. rate 1 apprate 2.0888 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 DQImpR.out

Chemical: Diquat Dibromide

PRZM environment: CAImperviousRLF.txt modified Tuesday, 20 February 2007
at 13:05:44

EXAMS environment: pond298.exv modified Tuesday, 26 August 2008 at
06:14:08

Metfile: w23234.dvf modified Tuesday, 26 August 2008 at 06:15:38

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0.01028	0.001792	0.0004602	0.0003444	0.0002829	0.0001893
1962	0.01205	0.002481	0.0008339	0.0006223	0.0005455	0.0004433
1963	0.01079	0.002374	0.001119	0.0008903	0.0008678	0.0007502
1964	0.01105	0.002602	0.001349	0.001185	0.001113	0.001012
1965	0.01136	0.002879	0.001729	0.001585	0.001489	0.001379
1966	0.01178	0.003298	0.002275	0.001991	0.001885	0.001764
1967	0.01701	0.00537	0.003361	0.002773	0.002715	0.002483
1968	0.01302	0.004791	0.003394	0.003141	0.003079	0.002925
1969	0.01793	0.006211	0.004488	0.004215	0.004029	0.003728
1970	0.01714	0.007909	0.005315	0.00486	0.004649	0.004382
1971	0.01482	0.00637	0.005123	0.004976	0.004935	0.004845
1972	0.01796	0.008269	0.006167	0.005958	0.005811	0.005308
1973	0.02238	0.01139	0.007482	0.007211	0.006965	0.006576
1974	0.01712	0.009096	0.00783	0.007617	0.007505	0.007354
1975	0.02168	0.01063	0.008929	0.008587	0.008446	0.00815
1976	0.02658	0.01186	0.009165	0.008809	0.008691	0.008541
1977	0.02424	0.0116	0.009853	0.009539	0.009373	0.009167
1978	0.02801	0.01613	0.01177	0.01128	0.0111	0.01073
1979	0.03159	0.01689	0.01301	0.01235	0.01218	0.01185
1980	0.02893	0.01818	0.0155	0.01396	0.01366	0.01316
1981	0.03732	0.01912	0.01558	0.01504	0.01479	0.0142
1982	0.07808	0.02614	0.01802	0.01746	0.01707	0.01651
1983	0.04164	0.02395	0.0204	0.01991	0.01942	0.01884
1984	0.0402	0.02381	0.02142	0.02062	0.0204	0.01972
1985	0.03874	0.02427	0.02179	0.02121	0.02105	0.02077
1986	0.04983	0.03241	0.02477	0.02378	0.0233	0.02256
1987	0.04357	0.02994	0.02449	0.0239	0.02368	0.02333
1988	0.03993	0.02857	0.02554	0.02487	0.02464	0.02431
1989	0.04213	0.0281	0.0259	0.02566	0.02556	0.02527
1990	0.04441	0.03069	0.02694	0.02658	0.02637	0.02618

Sorted results						
Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258064516129	0.07808	0.03241	0.02694	0.02658	0.02637	0.02618
0.0645161290322581	0.04983	0.03069	0.0259	0.02566	0.02556	0.02527
0.0967741935483871	0.04441	0.02994	0.02554	0.02487	0.02464	0.02431
0.129032258064516	0.04357	0.02857	0.02477	0.0239	0.02368	0.02333
0.161290322580645	0.04213	0.0281	0.02449	0.02378	0.0233	0.02256
0.193548387096774	0.04164	0.02614	0.02179	0.02121	0.02105	0.02077

0.225806451612903	0.0402	0.02427	0.02142	0.02062	0.0204	0.01972
0.258064516129032	0.03993	0.02395	0.0204	0.01991	0.01942	0.01884
0.290322580645161	0.03874	0.02381	0.01802	0.01746	0.01707	0.01651
0.32258064516129	0.03732	0.01912	0.01558	0.01504	0.01479	0.0142
0.354838709677419	0.03159	0.01818	0.0155	0.01396	0.01366	0.01316
0.387096774193548	0.02893	0.01689	0.01301	0.01235	0.01218	0.01185
0.419354838709677	0.02801	0.01613	0.01177	0.01128	0.0111	0.01073
0.451612903225806	0.02658	0.01186	0.00985 3	0.00953 9	0.00937 3	0.00916 7
0.483870967741936	0.02424	0.0116	0.00916 5	0.00880 9	0.00869 1	0.00854 1
0.516129032258065	0.02238	0.01139	0.00892 9	0.00858 7	0.00844 6	0.00815
0.548387096774194	0.02168	0.01063	0.00783	0.00761 7	0.00750 5	0.00735 4
0.580645161290323	0.01796	0.00909 6	0.00748 2	0.00721 1	0.00696 5	0.00657 6
0.612903225806452	0.01793	0.00826 9	0.00616 7	0.00595 8	0.00581 1	0.00530 8
0.645161290322581	0.01714	0.00790 9	0.00531 5	0.00497 6	0.00493 5	0.00484 5
0.67741935483871	0.01712	0.00637	0.00512 3	0.00486	0.00464 9	0.00438 2
0.709677419354839	0.01701	0.00621 1	0.00448 8	0.00421 5	0.00402 9	0.00372 8
0.741935483870968	0.01482	0.00537	0.00339 4	0.00314 1	0.00307 9	0.00292 5
0.774193548387097	0.01302	0.00479 1	0.00336 1	0.00277 3	0.00271 5	0.00248 3
0.806451612903226	0.01205	0.00329 8	0.00227 5	0.00199 1	0.00188 5	0.00176 4
0.838709677419355	0.01178	0.00287 9	0.00172 9	0.00158 5	0.00148 9	0.00137 9
0.870967741935484	0.01136	0.00260 2	0.00134 9	0.00118 5	0.00111 3	0.00101 2
0.903225806451613	0.01105	0.00248 1	0.00111 9	0.00089 03	0.00086 78	0.00075 02
0.935483870967742	0.01079	0.00237 4	0.00083 39	0.00062 23	0.00054 55	0.00044 33
0.967741935483871	0.01028	0.00179 2	0.00046 02	0.00034 44	0.00028 29	0.00018 93
0.1	0.04432 6	0.02980 3	0.02546 3	0.02477 3	0.02454 4	0.02421 2

Average of yearly averages: 0.01054756

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: DQImpR

Metfile: w23234.dvf

PRZM scenario: CAImperviousRLF.txt
 EXAMS environment file: pond298.exv
 Chemical Name: Diquat Dibromide
 Description Variable Name Value Units Comments
 Molecular weight mwt 344.05 g/mol
 Henry's Law Const. henry atm-m³/mol
 Vapor Pressure vapr 1e-10 torr
 Solubility sol 700000 mg/L
 Kd Kd 4895 mg/L
 Koc Koc mg/L
 Photolysis half-life kdp 74 days Half-life
 Aerobic Aquatic Metabolism kbacw 0 days Halfife
 Anaerobic Aquatic Metabolism kbacs 0 days Halfife
 Aerobic Soil Metabolism asm 0 days Halfife
 Hydrolysis: pH 7 0 days Half-life
 Method: CAM 1 integer See PRZM manual
 Incorporation Depth: DEPI 0 cm
 Application Rate: TAPP 0.0234 kg/ha
 Application Efficiency: APPEFF 0.99 fraction
 Spray Drift DRFT 0.01 fraction of application rate applied to pond
 Application Date Date 15-01 dd/mm or dd/mmm or dd-mm or dd-mmm
 Interval 1 interval 30 days Set to 0 or delete line for single app.
 app. rate 1 apprate 0.0234 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)