



2nd Quarter, 2009

(April, May, June)

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Summary of Activity

CEB = Central Environmental Building
C3 = C3 aquifer
D2 = D2 aquifer
E = E aquifer
SW = Southwest Property Area
Maple = Maple Road

Treatment Activities

04/01/09-04/30/09 - TW-6 TW-10, TW-14, and TW-20 (C3) and Unit E Extraction wells were shut down periodically during the month to adjust the Pond level.

04/03/09 & 04/05/09 - Southwest Extraction was shut down by power outages due to area storms.

04/05/09, 4/25/09 - Treatment was shut down by a power outage caused by area storms.

04/06/09 - Southwest Extraction was shut down to adjust the Pond level.

04/06/09 - 04/07/09, 4/25/09, & 4/30/09 - TW-9 (D2) was shut down to adjust the Pond level.

04/08/09 -04/13/09 – Maple Treatment was shut down for rehabilitation of injection wells.

04/13/09 - 04/17/09 - All treatment was shut down for scheduled maintenance.

04/25/09 - Extraction (E) was shut down by a power outage caused by area storms.

04/26/09, 04/27/09, 04/30/09 - System 1B was shut down for maintenance.

04/27/09 - TW-5 (D2) was shut down to adjust the Pond level.

05/01/09 - TW-9 (D2), TW-17 (E) and TW-14 (C3) were shut down to adjust the Pond level.

05/10/09-05/12/09 – Maple treatment was shut down for maintenance.

05/31/09 - TW-2 (C3) was shut down briefly due to a power outage.

06/06/09 - 06/08/09 – Maple Treatment was shut down for maintenance.

06/19/09 - The Ann Arbor area was hit by a severe storm. During this storm, PLS experienced damage to its communication system and the treatment systems shut down.

06/20/09 - 06/30/09 - Extraction from various wells was shut down periodically to adjust the Pond level

06/21/09 - 06/22/09 - Evergreen (D2) extraction was shut down to adjust the Pond level

06/24/09 - 06/25/09 - System 2A was shut down for maintenance.

06/25/09 – Maple Treatment was shut down briefly for maintenance.

06/28/09 - 06/30/09 - System 1B was shut down for maintenance.

06/30/09 - System 2A was shut down for maintenance.

Field Activities

05/18/09 MW-123s&d were completed at Bernice & Center.

Submittals/Responses

04/14/09 PLS submitted Discharge Monitoring Report (DMR) electronically to DEQ

04/15/09 PLS submitted Maple Interim Response Operation Report to DEQ
PLS submitted Monthly Monitoring Report (NPDES) to DEQ
PLS submitted 2nd Quarter 2009 Report to DEQ

04/15/09 PLS submitted Work Plan for Well/Boring to DEQ

04/27/09 DEQ correspondence re: Report on Water Level Testing Under Reduced Flow
Conditions – Evergreen March 2009 and Work Plan for Well/Boring April 2009

05/04/09 PLS submitted Comprehensive Remediation Plan to DEQ

05/12/09 PLS submitted Maple Interim Response Operation Report to DEQ
PLS submitted Monthly Monitoring Report (NPDES) to DEQ
PLS submitted Discharge Monitoring Report (DMR) electronically to DEQ

06/01/09 PLS submitted Potentiometric Surface Map to DEQ

06/03/09 PLS submitted Evergreen Area Verification Plan and Amended Monitoring Plan to
DEQ

06/15/09 DEQ correspondence re: Comprehensive Proposal to Modify Cleanup Program,
Evergreen Plan for Verifying Protectiveness of Proposed Remedial Modification,
and Amended Comprehensive Modification Plan

06/15/09 PLS submitted Discharge Monitoring Report (DMR) electronically to DEQ

06/16/09 PLS submitted Maple Interim Response Operation Report to DEQ
PLS submitted Monthly Monitoring Report (NPDES) to DEQ

06/23/09 DEQ correspondence re: Monitoring Well Nest Installation on Nancy Drive

Anticipated Major Activities for the Next Quarter

- Work toward installation of a new extraction well on Wagner Rd.
- Modify the portion of discharge pipeline installed through the old Green Pond

Quarterly Performance Analysis

For the months of April, May, and June 2009, over 600 pounds of 1,4-dioxane were removed and 125,347,088 gallons of water were extracted from the contaminated aquifers, treated and discharged. The total mass of 1,4-dioxane removed since May 1997 is 80,366 pounds and the total volume of water discharged since May 1997 is over 5 billion gallons.

In general, the performance of the operation was as expected, purging and treating contaminated groundwater to the existing allowable capacities.

Mass Reduction

MASS REDUCTION SUMMARY
Mass Removed Per Month
(lb)

A	B	C	D	E	F
Month	Mass Removed from Unit E Only	Mass Removed from Southwest Only	Mass Removed from Marshy Only	Mass Removed from Units C3 and D2 Only	Total Mass Removed from Units E, D2, C3, Southwest and Marshy
Aug-00	0	0	8	366	374
Sep-00	0	0	9	332	341
Oct-00	0	5	9	583	597
Nov-00	0	3	12	1160	1175
Dec-00	0	0	10	1040	1050
Jan-01	0	0	7	816	823
Feb-01	0	0	7	1056	1063
Mar-01	0	0	11	1379	1390
Apr-01	0	0	9	1140	1149
May-01	0	1	8	990	999
Jun-01	0	2	8	933	943
Jul-01	0	2	10	1121	1133
Aug-01	0	2	13	1018	1033
Sep-01	0	1	9	909	919
Oct-01	0	5	8	896	909
Nov-01	0	4	5	827	836
Dec-01	0	6	4	768	778
Jan-02	0	6	5	753	764
Feb-02	0	4	6	691	701
Mar-02	0	7	7	663	677
Apr-02	0	6	7	682	695
May-02	100	9	7	898	1014
Jun-02	94	9	6	889	998
Jul-02	56	10	7	640	713
Aug-02	53	8	6	745	812
Sep-02	51	8	6	860	925
Oct-02	33	6	4	603	646
Nov-02	57	8	5	880	950
Dec-02	48	9	5	842	904
Jan-03	45	8	6	839	898
Feb-03	37	6	6	767	816
Mar-03	44	8	7	763	822
Apr-03	39	8	3	716	766
May-03	36	13	5	725	779
Jun-03	34	15	5	683	737
Jul-03	29	15	5	678	727
Aug-03	31	15	6	676	728
Sep-03	27	16	5	644	692
Oct-03	34	17	5	701	757
Nov-03	26	12	5	663	706
Dec-03	29	14	6	635	684
Jan-04	28	15	6	667	716
Feb-04	8	11	5	485	509
Mar-04	23	14	7	573	617
Apr-04	27	15	6	537	585
May-04	16	10	5	439	470
Jun-04	21	11	5	499	536
Jul-04	36	12	5	506	559
Aug-04	54	12	5	480	551
Sep-04	34	9	5	382	430
Oct-04	30	10	5	358	403
Nov-04	30	9	5	395	439
Dec-04	33	11	5	442	491
Jan-05	29	11	4	404	448
Feb-05	26	9	4	390	429
Mar-05	27	9	4	409	450
Apr-05	33	4	3	396	436
May-05	27	8	2	364	401
Jun-05	31	9	3	361	404
Jul-05	31	8	1	279	319

MASS REDUCTION SUMMARY					
Mass Removed Per Month					
(lb)					
A	B	C	D	E	F
Month	Mass Removed from Unit E Only	Mass Removed from Southwest Only	Mass Removed from Marshy Only	Mass Removed from Units C3 and D2 Only	Total Mass Removed from Units E, D2, C3, Southwest and Marshy
Aug-05	12	6	2	275	295
Sep-05	13	8	2	327	350
Oct-05	16	6	3	297	322
Nov-05	13	7	4	291	315
Dec-05	12	8	4	325	349
Jan-06	115	7	3	308	433
Feb-06	144	7	3	290	444
Mar-06	148	8	3	331	490
Apr-06	125	7	3	291	426
May-06	137	9	3	402	551
Jun-06	119	5	2	329	456
Jul-06	107	8	3	310	427
Aug-06	104	8	2	307	421
Sep-06	97	9	3	300	409
Oct-06	93	9	3	327	432
Nov-06	80	7	2	268	357
Dec-06	68	6	2	238	314
Jan-07	91	8	2	305	406
Feb-07	84	8	2	284	378
Mar-07	91	8	3	306	408
Apr-07	84	8	2	280	374
May-07	82	8	2	288	380
Jun-07	81	8	2	279	370
Jul-07	66	8	2	256	332
Aug-07	73	8	2	270	353
Sep-07	77	8	2	247	334
Oct-07	73	8	2	244	327
Nov-07	68	8	2	263	341
Dec-07	69	8	2	260	339
Jan-08	65	7	2	237	311
Feb-08	53	6	2	203	264
Mar-08	56	7	2	220	285
Apr-08	54	7	2	200	263
May-08	55	7	2	206	270
Jun-08	52	6	2	195	256
Jul-08	39	1	2	139	181
Aug-08	50	7	2	198	256
Sep-08	43	5	2	177	227
Oct-08	45	5	2	187	239
Nov-08	45	7	2	197	251
Dec-08	45	5	2	187	239
Jan-09	39	8	2	124	173
Feb-09	34	8	2	122	164
Mar-09	35	8	2	122	166
Apr-09	32	6	1	119	158
May-09	45	7	2	201	254
Jun-09	39	5	1	157	202
Total to date	4615	796	473	53025	58908

MASS REDUCTION DETAIL BY AQUIFER

April 1 - April 30, 2009

Extraction Well	Month To Date Gallons Extracted	Month To Date Average Daily Flow Rate GPM	Month To Date Average Daily Pounds Removed	Month To Date Pounds Removed	Month To Date Average Concentration ppb
C3					
TW-1	-	0	0.0	0.0	173
TW-2 (Dolph)	2,091,081	48	0.1	1.7	99
TW-3	-	0	0.0	0.0	66
TW-6	180,082	4	0.0	0.2	131
TW-10	1,151,891	27	0.3	7.9	818
TW-14	733,465	17	0.0	0.8	130
TW-20	1,542,225	36	0.8	23.5	1818
MW-22	-	0.0	0.0	0.0	4134
<i>Sub-Totals</i>	<i>5,698,744</i>	<i>132</i>	<i>1</i>	<i>34</i>	
Marshy					
PW-1	192,497	4	0.0	1.5	924
<i>Sub-Totals</i>	<i>192,497</i>	<i>4</i>	<i>0</i>	<i>1</i>	
E					
TW-11	-	0	0.0	0.0	263
TW-12	5,760	0	0.0	0.0	17
TW-17	1,084,102	25	0.0	0.9	105
TW-18	9,468,370	219	1.0	31.2	396
MW-64	-	0	0.0	0.0	63
<i>Sub-Totals</i>	<i>10,558,232</i>	<i>244</i>	<i>1</i>	<i>32</i>	
Southwest					
Active Wells*	1,272,406	29	0.2	5.8	547
MW-10d	-	0.0	0.0	0.0	1150
MW-75	-	0	0.0	0.0	88
MW-45d	-	0.0	0.0	0.0	311
<i>Sub-Totals</i>	<i>1,272,406</i>	<i>29</i>	<i>0</i>	<i>6</i>	
D2					
LB-1	3,645,960	84	0.5	16.2	532
LB-3	3,009,498	70	0.4	13.4	535
AE-3	556,692	13	0.0	0.5	107
HW-S	819,134	19	0.2	6.6	963
TW-5	2,882,161	67	0.8	24.9	1038
TW-9	2,150,811	50	0.8	23.5	1310
MW-11d	-	0	0.0	0.0	293
<i>Sub-Totals</i>	<i>13,064,256</i>	<i>302</i>	<i>3</i>	<i>85</i>	
Overall Totals	30,786,135	713	5.3	158.5	

*SW Active = TW-8, TW-13, MW-50

MASS REDUCTION DETAIL BY AQUIFER

May 1 - May 31, 2009

Extraction Well	Month To Date Gallons Extracted	Month To Date Average Daily Flow Rate GPM	Month To Date Average Daily Pounds Removed	Month To Date Pounds Removed	Month To Date Average Concentration ppb
C3					
TW-1	-	0	0.0	0.0	182
TW-2 (Dolph)	2,589,295	58	0.1	2.2	100
TW-3	-	0	0.0	0.0	66
TW-6	662,532	15	0.0	0.6	113
TW-10	4,404,111	99	1.2	36.3	987
TW-14	3,752,108	84	0.1	3.6	114
TW-20	2,233,686	50	1.2	36.1	1935
MW-22	-	0.0	0.0	0.0	2620
<i>Sub-Totals</i>	13,641,732	306	3	79	
Marshy					
PW-1	231,757	5	0.1	1.8	932
<i>Sub-Totals</i>	231,757	5	0	2	
E					
TW-11	-	0	0.0	0.0	263
TW-12	-	0	0.0	0.0	22
TW-17	5,335,140	120	0.2	6.4	144
TW-18	11,328,935	254	1.2	38.2	404
MW-64	-	0	0.0	0.0	71
<i>Sub-Totals</i>	16,664,075	373	1	45	
Southwest					
Active Wells	1,506,938	34	0.2	6.5	517
MW-10d	-	0.0	0.0	0.0	1083
MW-75	-	0	0.0	0.0	257
MW-45d	-	0.0	0.0	0.0	335
<i>Sub-Totals</i>	1,506,938	34	0	7	
D2					
LB-1	4,239,525	95	0.6	19.3	545
LB-3	4,018,007	90	0.6	17.6	525
AE-3	669,247	15	0.0	0.6	110
HW-S	1,072,872	24	0.3	8.8	987
TW-5	3,677,130	82	1.1	32.6	1063
TW-9	3,903,834	87	1.4	43.6	1340
MW-11d	-	0	0.0	0.0	290
<i>Sub-Totals</i>	17,580,615	394	4	123	
Overall Totals	49,625,117	1,112	8.2	254.3	

*SW Active = TW-8, TW-13

MASS REDUCTION DETAIL BY AQUIFER

June 1 - June 30, 2008

Extraction Well	Month To Date Gallons Extracted	Month To Date Average Daily Flow Rate GPM	Month To Date Average Daily Pounds Removed	Month To Date Pounds Removed	Month To Date Average Concentration ppb
C3					
TW-1	-	0	0.0	0.0	182
TW-2 (Dolph)	2,227,426	52	0.1	1.7	92
TW-3	-	0	0.0	0.0	66
TW-6	397,822	9	0.0	0.3	97
TW-10	3,569,411	83	0.8	25.1	842
TW-14	2,522,131	58	0.1	2.3	107
TW-20	1,725,937	40	1.0	30.5	2118
MW-22	-	0.0	0.0	0.0	2620
<i>Sub-Totals</i>	<i>10,442,727</i>	<i>242</i>	<i>2</i>	<i>60</i>	
Marshy					
PW-1	168,026	4	0.0	1.3	907
<i>Sub-Totals</i>	<i>168,026</i>	<i>4</i>	<i>0</i>	<i>1</i>	
E					
TW-11	-	0	0.0	0.0	263
TW-12	-	0	0.0	0.0	23
TW-17	3,550,978	82	0.1	3.5	118
TW-18	10,632,034	246	1.2	35.8	404
MW-64	-	0	0.0	0.0	71
<i>Sub-Totals</i>	<i>14,183,012</i>	<i>328</i>	<i>1</i>	<i>39</i>	
Southwest					
Active Wells	1,155,637	27	0.2	4.5	469
MW-10d	-	0.0	0.0	0.0	1083
MW-75	-	0	0.0	0.0	257
MW-45d	-	0.0	0.0	0.0	335
<i>Sub-Totals</i>	<i>1,155,637</i>	<i>27</i>	<i>0</i>	<i>5</i>	
D2					
LB-1	3,990,131	92	0.6	17.9	537
LB-3	3,782,366	88	0.5	14.9	471
AE-3	628,967	15	0.0	0.6	113
HW-S	981,115	23	0.2	7.1	867
TW-5	2,943,522	68	0.7	22.2	903
TW-9	3,348,010	78	1.1	34.5	1234
MW-11d	-	0	0.0	0.0	290
<i>Sub-Totals</i>	<i>15,674,111</i>	<i>363</i>	<i>3</i>	<i>97</i>	
Overall Totals	41,623,513	964	6.7	202.1	

*SW Active = TW-8, TW-13