



3rd Quarter, 2010

(July, August, September)

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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

7/1/10-7/2/10 - Extraction was shut down for Pond cleaning & restarting treatment.

7/1/10-7/6/10 - TW-21 (D2) was shut down to adjust the Pond level.

7/3/10-7/6/10 - TW-14 (C3) and TW-18 (E) were shut down to adjust the Pond level.

7/8/10-7/13/10 - TW-1 (C3) was shut down to adjust the Pond level.

7/13/10 - HW-S & TW-21 (D2), TW-2 (C3), PW-1 (Marshy), TW-18 (E), SW extraction, and treatment were shut down for maintenance.

7/19/10 - TW-21 (D2), TW-1 & TW-2 (C3), PW-1 (Marshy), TW-18 (E), SW extraction, and treatment were shut down due to storm related power outages in the area.

7/19/10 - 7/20/10 - HW-S (D2) and TW-11 (E) were shut down due to storm related power outages in the area.

7/20/10 - Evergreen (D2) extraction, TW-14 (C3), and TW-17 (E) were shut down due to storm related power outages in the area.

7/20/10 - System 1A was shut down for storm-related maintenance.

7/20/10, 7/22/10 & 7/23/10 - Maple Road Area Treatment was down due to storm-related power outages in the area.

7/23/10 - 7/26/10 - HW-S (D2) was shut down due to storm-related damage.

7/26/10 - TW-5 & TW-21 (D2) were shut down briefly for maintenance.

7/27/10 - TW-21 (D2) was shut down to adjust the Pond level.

7/27/10 - TW-18 (E) was shut down for maintenance.

7/28/10- Treatment was shut down briefly for maintenance.

7/28/10-7/29/10 - TW-1 (C3) was shut down to adjust the Pond level.

8/5/10 - TW-11 (E) was shut down for maintenance.

8/5/10 - 8/7/10 - TW-21 (D2) and TW-18 (E) were shut down for maintenance.

8/6/10-8/7/10 - System-1B was shut down to adjust the Pond level.

8/22/10 - Maple Treatment was shut down for maintenance.

8/12/10 - TW-9 (D2) was shut down for maintenance.

9/09/10-9/10/10 - TW-10 (C3) was shut down for rehabilitation.

9/13/10-9/15/10 - Evergreen extraction (D2) was shut down for well rehabilitation.

9/15/10-9/22/10 - Maple Area Treatment was shut down during rehabilitation of wells.

9/20/10-9/21/10 - LB-1 (D2) and TW-11 (E) were shut down for maintenance.

9/21/10 - LB-3 and AE-3 (D2) were shut down briefly for maintenance.

9/23/10 - Treatment was shut down briefly for maintenance.

9/23/10 - TW-9 (D2), TW-10 (C3), and TW-17 (E) were shut down to adjust the Pond level.

9/27/10-9/30/10 - TW-9 (D2) was shut down for maintenance.

Field Activities

8/23/10 – MW-124d completed near City Hall (replacement for MW-102d)
8/24/10 – MW-124s completed near City Hall (replacement for MW-102 s)
8/31/10 – MW-125 completed in Saginaw Forest
9/17/10 – MW-126d completed at Lake Stone Apartments
9/20/10 – MW-126s completed at Lake Stone Apartments
9/29/10 – MW-127d completed in Saginaw Forest
9/30/10 – MW-127s completed in Saginaw Forest

Submittals/Responses

07/14/09 PLS submitted Maple Interim Response Operation Report to MDEQ
 PLS submitted Monthly Monitoring Report (NPDES) to MDEQ
 PLS submitted Discharge Monitoring Report (DMR) electronically to MDEQ
 PLS submitted 2nd Quarter 2009 Report to MDEQ

08/18/09 PLS submitted Maple Interim Response Operation Report to MDEQ
 PLS submitted Monthly Monitoring Report (NPDES) to MDEQ
 PLS submitted Discharge Monitoring Report (DMR) electronically to MDEQ

09/10/09 PLS submitted Maple Interim Response Operation Report to MDEQ
PLS submitted Monthly Monitoring Report (NPDES) to MDEQ
PLS submitted Discharge Monitoring Report (DMR) electronically to MDEQ

Anticipated Major Activities for the Next Quarter

- Finalize the Global Remediation Plan
- Investigate elevated 1,4-dioxane levels at MW-125
- Install a new series of monitoring wells for the West and East plumes
- PLS is planning to terminate the use of Mobile O3 Unit positioned at the Maple Village beginning January 2011

Quarterly Performance Analysis

For the months of July, August, and September 2010, over 597 pounds of 1,4-dioxane were removed and 146,456,089 gallons of water were extracted from the contaminated aquifers, treated and discharged. The total mass of 1,4-dioxane removed since May 1997 is over 83,356 pounds and the total volume of water discharged since May 1997 is over 5.7 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

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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
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

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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
Jul-09	38	5	1	152	196
Aug-09	39	7	2	202	250
Sep-09	36	6	2	223	267
Oct-09	36	8	2	206	251
Nov-09	32	7	1	167	208
Dec-09	32	8	1	171	212
Jan-10	34	8	1	175	219
Feb-10	30	7	1	161	198
Mar-10	33	7	1	173	214
Apr-10	33	7	1	175	216
May-10	33	7	1	176	217
Jun-10	29	6	1	130	165
Jul-10	20	7	1	171	200
Aug-10	23	7	1	188	220
Sep-10	21	6	1	148	177
Total to date	5086	898	491	55643	62118

MASS REDUCTION DETAIL BY AQUIFER

July 1 - July 31, 2010

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	1,315,671	29	0.1	1.7	153
TW-2 (Dolph)	2,429,547	54	0.1	1.6	81
TW-3	-	0	0.0	0.0	44
TW-6	-	0	0.0	0.0	66
TW-10	3,689,145	83	0.7	21.2	684
TW-14	3,191,450	71	0.1	2.7	101
TW-20	2,523,098	57	1.1	32.8	1554
MW-22	-	0.0	0.0	0.0	1706
<i>Sub-Totals</i>	13,148,911	295	2	60	
Marshy					
PW-1	239,507	5	0.0	1.2	589
<i>Sub-Totals</i>	239,507	5	0	1	
E					
TW-11	2,699,091	60	0.2	5.7	254
TW-12	-	0	0.0	0.0	20
TW-17	3,646,212	82	0.1	3.0	99
TW-18	3,900,652	87	0.4	11.6	350
MW-64	-	0	0.0	0.0	56
<i>Sub-Totals</i>	10,245,955	230	1	20	
Southwest					
Active Wells*	1,615,685	36	0.2	7.2	533
MW-10d	-	0.0	0.0	0.0	1073
MW-75	-	0	0.0	0.0	49
MW-45d	-	0.0	0.0	0.0	335
<i>Sub-Totals</i>	1,615,685	36	0	7	
D2					
LB-1	4,058,754	91	0.6	18.9	555
LB-3	3,076,993	69	0.4	12.9	502
AE-3	644,553	14	0.0	0.7	135
HW-S	1,112,390	25	0.3	8.4	911
TW-5	3,420,390	77	0.9	27.1	948
TW-9	3,690,969	83	1.0	30.4	981
TW-21	3,874,897	87	0.4	12.9	417
MW-11d	-	0	0.0	0.0	180
<i>Sub-Totals</i>	19,878,946	445	4	111	
Overall Totals	45,129,004	1,011	6.5	200.0	

*SW Active = TW-8, TW-13

MASS REDUCTION DETAIL BY AQUIFER

August 1 - August 31, 2010

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	1,660,971	37	0.1	2.0	145
TW-2 (Dolph)	2,498,510	56	0.1	1.8	86
TW-3	-	0	0.0	0.0	44
TW-6	-	0	0.0	0.0	66
TW-10	3,812,293	85	0.7	22.6	710
TW-14	3,851,470	86	0.1	3.4	105
TW-20	2,681,442	60	1.2	37.3	1667
MW-22	-	0.0	0.0	0.0	1706
<i>Sub-Totals</i>	14,504,686	325	2	67	
Marshy					
PW-1	235,044	5	0.0	1.1	573
<i>Sub-Totals</i>	235,044	5	0	1	
E					
TW-11	2,698,321	60	0.2	5.6	250
TW-12	-	0	0.0	0.0	20
TW-17	3,918,714	88	0.1	3.3	101
TW-18	4,821,977	108	0.5	14.1	350
MW-64	-	0	0.0	0.0	56
<i>Sub-Totals</i>	11,439,012	256	1	23	
Southwest					
Active Wells	1,650,286	37	0.2	7.4	538
MW-10d	-	0.0	0.0	0.0	1073
MW-75	-	0	0.0	0.0	49
MW-45d	-	0.0	0.0	0.0	335
<i>Sub-Totals</i>	1,650,286	37	0	7	
D2					
LB-1	4,242,566	95	0.7	20.2	572
LB-3	3,214,616	72	0.5	14.5	540
AE-3	667,289	15	0.0	0.8	144
HW-S	1,292,971	29	0.3	10.8	997
TW-5	3,524,028	79	0.9	26.5	903
TW-9	4,029,884	90	1.1	33.8	1005
TW-21	4,894,428	110	0.5	14.3	351
MW-11d	-	0	0.0	0.0	180
<i>Sub-Totals</i>	21,865,782	490	4	121	
Overall Totals	49,694,810	1,113	7.1	219.5	

*SW Active = TW-8, TW-13

MASS REDUCTION DETAIL BY AQUIFIER

September 1 - September 30, 2010

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	1,605,527	37	0.1	1.6	121
TW-2 (Dolph)	2,399,768	56	0.1	1.5	76
TW-3	-	0	0.0	0.0	44
TW-6	-	0	0.0	0.0	66
TW-10	3,377,706	78	0.6	17.1	605
TW-14	3,849,842	89	0.1	3.0	94
TW-20	2,504,247	58	1.0	29.4	1403
MW-22	-	0.0	0.0	0.0	1706
<i>Sub-Totals</i>	13,737,090	318	2	53	
Marshy					
PW-1	171,727	4	0.0	1.1	768
<i>Sub-Totals</i>	171,727	4	0	1	
E					
TW-11	2,442,671	57	0.1	4.3	210
TW-12	-	0	0.0	0.0	20
TW-17	3,849,041	89	0.1	2.7	83
TW-18	5,506,000	127	0.5	14.4	314
MW-64	-	0	0.0	0.0	56
<i>Sub-Totals</i>	11,797,712	273	1	21	
Southwest					
Active Wells	1,560,313	36	0.2	6.2	475
MW-10d	-	0.0	0.0	0.0	1073
MW-75	-	0	0.0	0.0	49
MW-45d	-	0.0	0.0	0.0	335
<i>Sub-Totals</i>	1,560,313	36	0	6	
D2					
LB-1	3,711,215	86	0.5	14.7	473
LB-3	3,025,966	70	0.4	11.3	446
AE-3	603,411	14	0.0	0.6	122
HW-S	1,207,035	28	0.3	8.9	882
TW-5	3,423,098	79	0.7	22.4	785
TW-9	3,509,013	81	0.8	24.7	834
TW-21	5,414,929	125	0.4	13.2	292
MW-11d	-	0	0.0	0.0	180
<i>Sub-Totals</i>	20,894,667	484	3	96	
Overall Totals	48,161,509	1,115	5.9	177.0	

*SW Active = TW-8, TW-13