



Infrastructure, environment, facilities

Mr. Allan Brouillet  
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Michigan Department of Environmental Quality  
Saginaw Bay District  
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Subject:

Monthly Report #171 – February 2009  
GM SMI Plant Property, REALM Inc. Green Point Landfill and  
Drum Remediation Area RI/FS/RAP, and Green Point Landfill Closure

Dear Mr. Brouillet:

On behalf of the General Motors Corporation (GM) and Waste Management, Inc. (WMI), the February 2009 monthly report for the GM SMI Plant Property and the Remediation and Liability Management Company Inc. (REALM) Green Point Landfill Property is attached. Please contact me if you have any questions regarding the enclosed information.

Sincerely,

ARCADIS

Lisa R. Coffey  
Principal Geologist

LRC/plf  
Attachments

Copies:

Ms. Susan Kaelber-Matlock, MDEQ, ERD  
John Fordell Leone, Esq., Department of Attorney General  
Ms. Cheryl Hiatt/Mr. Edward Peterson, GM WFG  
James Walle, Esq., GM Legal  
Mr. Kent Bainbridge, Waste Management, Inc.  
Mr. Jim Forney, Waste Management, Inc.  
Ms. Jo Ann Robertson, ARCADIS

Date:

March 10, 2009

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Our ref:

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Imagine the result

**General Motors Corporation Saginaw Malleable Iron Plant Property and  
REALM Inc. Green Point Landfill and Drum Remediation Area  
February 2009****Key Correspondence and Communications**

- The January 2009 monthly report, dated February 12, 2009, was submitted to the MDEQ.
- The Remedial Action Plan, dated July 30, 2008 and revised on December 31, 2008, was conditionally approved by the MDEQ in a letter dated February 27, 2009, from Mr. Andrew Hogarth (MDEQ) to Ms. Cheryl Hiatt (GM). In summary, the conditional approval is based on submittal of the following items: (1) Affidavits for Unremediated Release(s) for the former Queen Street Dump, dioxin compounds present in the Tittabawassee and Saginaw River flood plains due to Dow Chemical Company activities, impacts from the former Delphi Steering Systems Plant 2, and impacts from the property located west of the former Drum Remediation Area; and (2) provision of survey maps for the SMI property, Green Point Landfill property, REALM Eastern Property Extension, Former Consumers Property, and Former UST 7 Area. The letter also proposes a schedule for the implementation of a Financial Assurance Mechanism, recording of the restrictive covenants, and installation of the permanent markers.

**Significant RI/FS/RAP and Interim Measure Activities and Events**

- The light non-aqueous phase liquid (LNAPL) recovery system located south of the main plant building is not currently operating due to plant decommissioning activities. The recovery wells and the monitoring wells were gauged on February 10, 2009. Small accumulations of LNAPL were recorded (Table 1). The wells in this area will continue to be monitored and bailed, when possible, until power can be restored to the recovery system (once the plant buildings are down).
- The Quench Pit Area was not accessible during the month of February 2009. As allowed by plant decommissioning activities, the wells in this area will be manually bailed until power is restored to the automated recovery system.

**Significant Green Point Landfill Closure Activities and Events**

- None during February 2009.

**Anticipated Activities for March 2009**

- As requested, the schedule proposed by the MDEQ in their letter dated February 27, 2009, will be either approved or an alternate schedule will be proposed in writing by March 27, 2009.
- Continuation of LNAPL recovery activities using manual means.
- Submittal of a monthly report.

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-147WT reference elevation = 592.07				MW-157WT reference elevation = 591.72				MW-158WT reference elevation = 591.78			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	6.28	2.03	8.31	585.63	--	--	--	--	NP	0.00	7.98	583.80
February 7, 2005	6.57	1.96	8.53	585.34	--	--	--	8.07	NP	0.02	8.09	583.71
March 17, 2005	6.55	2.04	8.59	585.36	7.27	0.66	7.93	584.40	NP	0.00	8.24	583.54
April 13, 2005	6.44	1.74	8.18	585.49	7.18	0.18	7.36	584.53	NP	0.00	8.23	583.55
May 31, 2005	6.53	1.76	8.29	585.40	7.23	0.25	7.48	584.47	NP	0.00	8.14	583.64
June 28, 2005	5.83	1.73	7.56	586.10	6.23	0.21	6.44	585.47	NP	0.00	7.72	584.06
July 29, 2005	5.59	1.58	7.17	586.35	6.21	0.70	6.91	585.45	NP	0.00	7.69	584.09
August 18, 2005	6.19	1.75	7.94	585.74	6.96	0.23	7.19	584.74	NP	0.00	7.98	583.80
September 28, 2005	6.49	1.59	8.08	585.45	7.37	0.04	7.41	584.35	8.33	0.01	8.34	583.45
October 18, 2005	6.85	1.93	8.78	585.07	7.68	0.38	8.06	584.01	NP	0.00	8.56	583.22
November 30, 2005	6.33	1.76	8.09	585.60	7.09	0.03	7.12	584.63	NP	0.00	8.31	583.47
December 26, 2005	6.15	1.96	8.11	585.76	6.89	0.19	7.08	584.81	NP	0.00	8.14	583.64
January 31, 2006	5.21	1.91	7.12	586.71	5.74	0.51	6.25	585.94	NP	0.00	7.53	584.25
February 24, 2006	6.38	1.86	8.24	585.54	6.87	0.27	7.14	584.83	NP	0.00	7.98	583.80
March 22, 2006	5.70	1.63	7.33	586.24	5.68	0.13	5.81	584.83	NP	0.00	7.71	584.07
April 27, 2006	6.23	1.69	7.92	585.70	7.17	0.03	7.20	584.55	8.14	0.01	8.15	583.64
May 25, 2006	NA	NA	NA	NA	6.37	0.14	6.51	585.34	NP	0.00	7.95	583.83
June 27, 2006	6.32	1.70	8.02	585.61	7.20	0.04	7.24	584.52	NP	0.00	8.17	583.61
July 11, 2006	5.99	1.67	7.66	585.95	6.96	0.11	7.07	584.75	NP	0.00	8.03	583.75
August 23, 2006	6.24	1.65	7.89	585.70	7.20	0.01	7.21	584.52	NP	0.00	8.08	583.70
September 26, 2006	5.67	1.64	7.31	586.27	6.69	0.11	6.80	585.02	NP	0.00	7.90	583.88
October 30, 2006	5.36	1.65	7.01	586.58	5.71	0.22	5.93	585.99	7.49	0.02	7.51	584.29
November 27, 2006	6.00	1.66	7.66	585.94	6.89	0.12	7.01	584.82	7.92	0.01	7.93	583.86
December 27, 2006	6.12	1.65	7.77	585.82	7.00	0.02	7.02	584.72	NP	0.00	7.94	583.84
January 25, 2007	NA	NA	NA	NA	7.42	0.04	7.48	584.30	NA	NA	NA	NA
March 6, 2007	7.08	1.60	8.68	584.86	NP	0.00	7.72	584.00	NA	NA	NA	NA
March 23, 2007	6.18	1.64	7.82	585.76	7.23	0.02	7.25	584.49	NP	0.00	8.09	583.69
April 30, 2007	6.13	1.47	7.60	585.82	7.10	0.05	7.15	584.62	8.05	0.01	8.06	583.73
May 17, 2007	6.19	1.57	7.76	585.75	7.16	0.04	7.20	584.56	NA	NA	NA	NA
June 12, 2007	6.30	1.58	7.88	585.64	7.20	0.02	7.22	584.52	NP	0.00	8.11	583.67
July 18, 2007	6.42	1.62	8.04	585.52	7.19	0.02	7.21	584.53	NP	0.00	8.16	583.62
August 28, 2007	5.93	1.51	7.44	586.02	6.71	0.02	6.73	585.01	NP	0.00	7.97	583.81
September 19, 2007	5.99	1.53	7.12	586.36	6.03	0.12	6.15	585.68	NP	0.00	7.51	584.27
October 25, 2007	6.53	1.72	8.25	585.40	7.46	0.08	7.54	584.25	NP	0.00	8.31	583.47
November 27, 2007	6.47	1.58	8.05	585.47	7.06	0.06	7.12	584.66	NP	0.00	7.64	584.14
January 7, 2008	5.46	1.18	6.64	586.52	6.01	0.26	6.27	585.69	NP	0.00	6.49	585.29
February 22, 2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 17, 2008	4.09	1.23	5.32	587.88	NA	NA	NA	NA	NP	0.00	5.42	586.36
April 7, 2008	4.68	0.97	5.65	587.31	4.96	0.31	5.27	586.74	NP	0.00	5.66	586.12
May 5, 2008	5.91	0.74	6.65	586.10	5.72	0.29	6.01	585.98	NP	0.00	6.68	585.10
June 2, 2008	5.98	0.66	6.64	586.04	6.26	0.25	6.51	585.44	NP	0.00	6.81	584.97
July 7, 2008	4.96	0.64	5.60	587.06	5.21	0.18	5.39	586.50	NP	0.00	6.00	585.78
August 13, 2008	5.19	0.63	5.82	586.83	5.32	0.18	5.50	586.39	NP	0.00	6.21	585.57
September 8, 2008	5.45	0.51	5.96	586.58	5.61	0.16	5.52	586.10	NP	0.00	6.35	585.43
October 9, 2008	5.16	0.42	5.58	586.88	5.36	0.16	5.79	586.35	NP	0.00	6.03	585.75
November 20, 2008	5.85	0.30	6.15	586.20	5.66	0.28	5.94	586.04	NP	0.00	6.64	585.14
December 15, 2008	5.55	0.29	5.84	586.50	5.92	0.13	6.05	585.79	NP	0.00	6.37	585.41
January 6, 2009	4.60	0.28	4.88	587.45	NA	NA	NA	NA	NP	0.00	NA	NA
February 10, 2009	5.09	0.19	5.28	586.96	5.31	0.15	5.46	586.40	NP	0.00	5.92	585.86

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-160WT reference elevation = 591.53				MW-169WT reference elevation = 591.82				MW-172WT reference elevation = 591.51			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	8.21	0.35	8.56	583.29	NA	NA	NA	NA	NA	NA	NA	NA
February 7, 2005	8.10	0.11	8.21	583.42	NP	0.00	8.17	583.65	8.00	0.19	8.19	583.49
March 17, 2005	8.43	0.13	8.56	583.09	NA	NA	NA	NA	8.34	0.28	8.62	583.15
April 13, 2005	8.39	0.13	8.52	583.13	NA	NA	NA	NA	8.33	0.35	8.68	583.15
May 31, 2005	8.39	0.15	8.54	583.13	NP	0.00	8.20	583.62	8.29	0.38	8.67	583.19
June 28, 2005	8.14	0.09	8.23	583.38	NP	0.00	7.92	583.90	8.06	0.04	8.10	583.45
July 29, 2005	8.13	0.04	8.17	583.40	NP	0.00	7.92	583.90	8.06	0.02	8.08	583.45
August 16, 2005	8.30	0.04	8.34	583.23	NA	NA	NA	NA	8.24	0.17	8.41	583.26
September 28, 2005	8.46	0.02	8.48	583.07	NA	NA	NA	NA	8.36	0.21	8.57	583.13
October 18, 2005	8.66	0.06	8.72	582.87	NA	NA	NA	NA	8.51	0.42	8.93	582.87
November 30, 2005	8.52	0.01	8.53	583.01	NA	NA	NA	NA	8.41	0.32	8.73	583.07
December 26, 2005	8.44	0.01	8.45	583.09	NA	NA	NA	NA	8.32	0.35	8.67	583.16
January 31, 2006	NP	0.00	8.21	583.32	NA	NA	NA	NA	8.08	0.27	8.35	583.41
February 24, 2006	NP	0.00	8.38	583.15	NA	NA	NA	NA	8.32	0.33	8.65	583.16
March 22, 2006	8.24	0.01	8.25	583.29	NA	NA	NA	NA	8.17	0.08	8.25	583.33
April 27, 2006	NP	0.00	8.43	583.10	NA	NA	NA	NA	8.33	0.11	8.44	583.17
May 25, 2006	NA	NA	NA	NA	NA	NA	NA	NA	8.20	0.18	8.38	583.30
June 27, 2006	NP	0.00	8.44	583.09	NA	NA	NA	NA	8.39	0.31	8.70	583.10
July 11, 2006	NP	0.00	8.40	583.13	NA	NA	NA	NA	8.27	0.36	8.63	583.21
August 23, 2006	NP	0.00	8.41	583.12	NA	NA	NA	NA	8.36	0.19	8.55	583.13
September 26, 2006	NP	0.00	8.32	583.21	NA	NA	NA	NA	8.21	0.23	8.44	583.28
October 30, 2006	NP	0.00	8.13	583.40	NA	NA	NA	NA	8.07	0.15	8.22	583.43
November 27, 2006	NP	0.00	8.40	583.13	NA	NA	NA	NA	8.29	0.16	8.45	583.21
December 27, 2006	NP	0.00	8.34	583.19	NA	NA	NA	NA	NA	NA	NA	NA
January 25, 2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 6, 2007	NP	0.00	8.59	582.94	NA	NA	NA	NA	8.44	0.29	8.73	583.05
March 23, 2007	NP	0.00	8.53	583.00	NA	NA	NA	NA	8.41	0.33	8.74	583.07
April 30, 2007	NP	0.00	8.46	583.07	NA	NA	NA	NA	8.34	0.36	8.70	583.14
May 17, 2007	NP	0.00	8.44	583.09	NA	NA	NA	NA	8.32	0.19	8.51	583.17
June 12, 2007	NP	0.00	8.50	583.03	NA	NA	NA	NA	8.33	0.38	8.71	583.15
July 18, 2007	NP	0.00	8.54	582.99	NP	0.00	8.31	583.51	NA	NA	NA	NA
August 28, 2007	NP	0.00	8.46	583.07	NA	NA	NA	NA	NA	NA	NA	NA
September 19, 2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
October 25, 2007	NP	0.00	8.61	583.92	NA	NA	NA	NA	NP	0.00	8.42	583.09
November 27, 2007	NP	0.00	7.61	583.92	NA	NA	NA	NA	7.50	0.02	7.52	584.01
January 7, 2008	NP	0.00	6.31	585.22	NA	NA	NA	NA	NP	0.00	6.16	585.35
February 22, 2008	NA	NA	NA	NA	NA	NA	NA	NA	NP	0.00	NA	NA
March 17, 2008	5.82	0.03	5.85	585.71	NA	NA	NA	NA	NP	0.00	5.73	585.78
April 7, 2008	5.96	0.06	6.02	585.57	NA	NA	NA	NA	NP	0.00	5.88	585.63
May 5, 2008	6.89	0.03	7.13	584.43	NA	NA	NA	NA	NP	0.00	6.85	584.66
June 2, 2008	6.80	0.23	7.03	584.71	NP	0.00	7.10	584.72	NP	0.00	6.75	584.76
July 7, 2007	6.08	0.21	6.29	585.43	NP	0.00	6.56	585.26	NP	0.00	5.99	585.52
August 13, 2008	6.31	0.21	6.52	585.20	NP	0.00	6.78	585.04	NP	0.00	NA	NA
September 8, 2008	6.54	0.12	6.66	584.98	NP	0.00	7.03	585.49	NP	0.00	NA	NA
October 9, 2008	6.11	0.09	6.20	585.41	NP	0.00	6.72	585.10	6.00	0.02	6.02	585.51
November 20, 2008	6.66	0.23	6.89	584.85	NP	0.00	7.13	584.69	6.57	0.15	6.72	584.93
December 15, 2008	NP	0.00	6.30	585.23	NP	0.00	7.09	584.73	NA	NA	NA	NA
January 6, 2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
February 10, 2009	6.08	0.07	6.15	585.44	NP	0.00	6.64	585.18	NA	NA	NA	NA

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-175WT reference elevation not available				MW-178WT reference elevation = 590.35				MW-179WT reference elevation not available			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	NP	0.00	7.01	NA	0.65	8.20	582.75	--	--	--	--	--
February 7, 2005	7.11	0.01	7.12	NA	0.39	7.56	583.15	--	--	--	--	--
March 17, 2005	NP	0.00	7.22	NA	0.65	8.28	582.67	NP	0.00	7.13	NA	NA
April 13, 2005	NP	0.00	7.12	NA	0.69	8.15	582.83	NP	0.00	6.91	NA	NA
May 31, 2005	NP	0.00	6.98	NA	0.83	8.39	582.72	NP	0.00	6.96	NA	NA
June 28, 2005	6.67	0.01	6.68	NA	0.56	7.95	582.92	NP	0.00	6.82	NA	NA
July 29, 2005	NP	0.00	6.73	NA	0.44	8.26	582.84	NP	0.00	6.73	NA	NA
August 18, 2005	NP	0.00	6.83	NA	0.75	8.77	582.74	NP	0.00	6.78	NA	NA
September 28, 2005	NP	0.00	7.04	NA	0.32	7.81	582.83	NP	0.00	6.95	NA	NA
October 18, 2005	NP	0.00	7.26	NA	0.32	7.89	582.75	NP	0.00	7.14	NA	NA
November 30, 2005	NP	0.00	7.16	NA	0.51	8.05	582.77	7.03	0.01	7.04	NA	NA
December 26, 2005	NP	0.00	7.19	NA	1.24	8.78	582.71	NP	0.00	7.14	NA	NA
January 31, 2006	NP	0.00	6.79	NA	0.16	7.61	582.89	NP	0.00	7.63	NA	NA
February 24, 2006	NP	0.00	6.99	NA	0.60	8.16	582.74	NP	0.00	7.82	NA	NA
March 22, 2006	NP	0.00	6.75	NA	0.14	7.56	582.92	NP	0.00	6.68	NA	NA
April 27, 2006	NP	0.00	6.84	NA	0.26	7.69	582.90	6.79	0.01	6.90	NA	NA
May 25, 2006	NP	0.00	6.62	NA	0.36	7.75	582.93	NP	0.00	6.74	NA	NA
June 27, 2006	NP	0.00	6.79	NA	0.37	7.80	582.89	NP	0.00	6.84	NA	NA
July 11, 2006	NP	0.00	6.79	NA	0.34	7.80	582.86	NP	0.00	6.83	NA	NA
August 23, 2006	NP	0.00	6.81	NA	0.47	7.86	582.92	NP	0.00	6.61	NA	NA
September 26, 2006	NP	0.00	6.70	NA	0.29	7.70	582.92	NA	NA	NA	NA	NA
October 30, 2006	NP	0.00	6.56	NA	0.38	7.73	582.97	NA	NA	NA	NA	NA
November 27, 2006	NP	0.00	6.79	NA	0.34	7.71	582.95	NA	NA	NA	NA	NA
December 27, 2006	NP	0.00	6.83	NA	0.33	7.69	582.96	NA	NA	NA	NA	NA
January 25, 2007	NP	0.00	6.83	NA	0.38	7.79	582.91	NA	NA	NA	NA	NA
March 6, 2007	NP	0.00	7.13	NA	0.51	8.02	582.80	NP	0.00	7.13	NA	NA
March 23, 2007	NP	0.00	7.13	NA	0.46	7.97	582.80	NP	0.00	6.90	NA	NA
April 30, 2007	NP	0.00	6.89	NA	0.25	7.73	582.85	NP	0.00	6.56	NA	NA
May 17, 2007	NP	0.00	6.86	NA	0.33	7.46	583.19	NA	NA	NA	NA	NA
June 12, 2007	NP	0.00	6.91	NA	0.28	7.75	582.86	NP	0.00	6.57	NA	NA
July 18, 2007	NP	0.00	7.02	NA	0.32	7.78	582.86	NP	0.00	6.75	NA	NA
August 28, 2007	NP	0.00	6.96	NA	0.29	7.75	582.87	NP	0.00	6.82	NA	NA
September 19, 2007	NP	0.00	6.66	NA	0.11	6.98	583.47	NP	0.00	6.65	NA	NA
October 25, 2007	NP	0.00	7.08	NA	0.25	7.84	582.74	NP	0.00	6.98	NA	NA
November 27, 2007	NP	0.00	6.53	NA	0.14	6.66	583.82	NA	NA	NA	NA	NA
January 7, 2008	NP	0.00	6.53	NA	0.05	5.49	584.91	NA	NA	NA	NA	NA
February 22, 2008	NP	0.00	6.53	NA	0.05	5.49	584.91	NA	NA	NA	NA	NA
March 17, 2008	NP	0.00	6.53	NA	0.02	5.32	585.05	NP	0.00	6.46	NA	NA
April 7, 2008	NP	0.00	6.31	NA	0.02	6.27	584.10	NP	0.00	6.55	NA	NA
May 5, 2008	NP	0.00	6.39	NA	0.01	5.94	584.42	NP	0.00	6.55	NA	NA
June 2, 2008	NP	0.00	6.39	NA	0.01	5.94	584.42	NP	0.00	6.55	NA	NA
July 7, 2007	NP	0.00	5.96	NA	0.02	5.34	585.03	NP	0.00	6.75	NA	NA
August 13, 2008	NP	0.00	6.14	NA	0.00	5.81	584.54	NP	0.00	6.78	NA	NA
September 8, 2008	NP	0.00	6.36	NA	0.01	5.87	584.49	NP	0.00	6.78	NA	NA
October 9, 2008	NP	0.00	6.13	NA	0.01	5.68	584.67	NP	0.00	6.78	NA	NA
November 20, 2008	NP	0.00	6.58	NA	0.00	6.18	584.17	NP	0.00	6.78	NA	NA
December 15, 2008	NP	0.00	6.44	NA	0.00	5.56	584.79	NP	0.00	6.78	NA	NA
January 6, 2009	NP	0.00	6.15	NA	0.00	5.42	584.93	NP	0.00	6.78	NA	NA
February 10, 2009	NP	0.00	6.15	NA	0.00	5.57	584.78	NP	0.00	6.78	NA	NA

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-180WT reference elevation = 580.87				RW-1 reference elevation = 592.18				RW-2 reference elevation = 592.07			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	--	--	--	--	8.43	1.29	9.72	583.65	NP	0.00	8.69	583.38
February 7, 2005	--	--	--	--	8.59	0.70	9.29	583.53	NP	0.00	8.73	583.34
March 17, 2005	7.15	0.02	7.17	583.52	NA	NA	NA	NA	NP	0.00	8.92	583.15
April 13, 2005	NP	0.00	6.87	583.80	8.60	0.28	8.88	583.56	NP	0.00	8.94	583.13
May 31, 2005	NP	0.00	7.01	583.66	8.58	0.21	8.79	583.58	NP	0.00	8.93	583.14
June 28, 2005	6.84	0.01	6.85	583.83	8.13	0.21	8.34	584.03	NP	0.00	8.71	583.36
July 29, 2005	NP	0.00	6.73	583.94	8.05	0.17	8.22	584.12	NP	0.00	8.69	583.38
August 18, 2005	NP	0.00	6.78	583.89	8.18	0.79	8.97	583.94	NP	0.00	8.67	583.40
September 28, 2005	6.99	0.01	7.00	583.68	8.81	0.59	9.40	583.32	NP	0.00	9.01	583.06
October 18, 2005	7.20	0.01	7.21	583.47	8.83	0.91	9.74	583.28	NP	0.00	8.99	583.08
November 30, 2005	NP	0.00	7.11	583.56	8.54	0.68	9.22	583.59	NP	0.00	8.93	583.14
December 26, 2005	NP	0.00	7.20	583.47	NA	NA	NA	NA	NP	0.00	8.99	583.08
January 31, 2006	NP	0.00	6.81	583.86	NA	NA	NA	NA	NP	0.00	8.72	583.35
February 24, 2006	NP	0.00	6.81	583.86	8.49	0.33	8.82	583.66	NP	0.00	8.87	583.20
March 22, 2006	NP	0.00	6.69	583.98	8.35	0.52	8.87	583.79	NA	NA	NA	NA
April 27, 2006	NP	0.00	6.82	583.85	8.72	0.67	9.39	583.41	NA	NA	NA	NA
May 25, 2006	NP	0.00	6.76	583.91	8.45	0.56	9.01	583.69	NA	NA	NA	NA
June 27, 2006	NP	0.00	6.85	583.82	8.71	0.71	9.42	583.41	NA	NA	NA	NA
July 11, 2006	NP	0.00	6.90	583.77	8.49	0.86	9.35	583.62	NA	NA	NA	NA
August 23, 2006	NP	0.00	6.85	584.02	8.51	0.97	9.48	583.59	NA	NA	NA	NA
September 26, 2006	NP	0.00	6.76	583.91	8.31	0.48	8.79	583.83	NP	0.00	8.90	583.17
October 30, 2006	NP	0.00	6.49	584.18	NA	NA	NA	NA	NP	0.00	8.75	583.32
November 27, 2006	NP	0.00	6.59	584.08	8.43	0.61	9.04	583.70	NP	0.00	8.94	583.13
December 27, 2006	NP	0.00	6.84	584.03	NA	NA	NA	NA	NP	0.00	8.76	583.31
January 25, 2007	NP	0.00	6.76	583.91	NA	NA	NA	NA	NP	0.00	8.76	583.31
March 6, 2007	NP	0.00	7.16	583.51	8.53	0.27	8.80	583.63	NP	0.00	9.14	582.93
March 23, 2007	NP	0.00	6.93	583.74	8.31	0.27	8.58	583.85	NP	0.00	8.64	583.43
April 30, 2007	NP	0.00	6.58	584.09	8.52	0.09	8.61	583.65	NP	0.00	8.98	583.09
May 17, 2007	NP	0.00	6.52	584.15	8.38	0.14	8.52	583.79	NP	0.00	8.99	583.08
June 12, 2007	NP	0.00	6.58	584.09	8.39	0.07	8.46	583.78	NP	0.00	9.03	583.04
July 18, 2007	NP	0.00	6.78	583.89	8.46	0.83	9.09	583.67	NP	0.00	9.07	583.00
August 28, 2007	NP	0.00	6.85	583.82	8.23	0.11	8.34	583.94	NP	0.00	9.00	583.07
September 19, 2007	NP	0.00	6.69	583.98	7.93	0.11	8.04	584.24	NP	0.00	8.44	583.63
October 25, 2007	NP	0.00	7.02	583.65	8.80	0.45	9.25	583.34	NP	0.00	8.93	583.14
November 27, 2007	NP	0.00	7.07	583.60	8.03	0.15	8.18	584.14	NP	0.00	8.04	584.03
January 7, 2008	NP	0.00	7.01	583.66	6.76	0.04	6.80	585.42	NA	NA	NA	NA
February 22, 2008	NA	NA	NA	NA	6.06	0.03	6.09	586.12	NP	0.00	6.56	585.51
March 17, 2008	NA	NA	NA	NA	5.95	0.02	5.97	586.23	NP	0.00	6.36	585.71
April 7, 2008	NP	0.00	6.45	584.22	6.24	0.06	6.30	585.94	NP	0.00	6.51	585.56
May 5, 2008	NP	0.00	6.52	584.15	7.17	0.02	7.19	585.01	NP	0.00	6.18	585.89
June 2, 2008	NP	0.00	6.56	584.11	7.16	0.03	7.19	585.02	NP	0.00	7.33	584.74
July 7, 2007	NP	0.00	6.14	584.53	6.24	0.01	6.25	585.94	NA	NA	NA	NA
August 13, 2008	NP	0.00	6.25	584.42	NP	0.00	6.49	585.69	NA	NA	NA	NA
September 8, 2008	NP	0.00	6.45	584.22	NP	0.00	6.60	585.58	NA	NA	NA	NA
October 9, 2008	NP	0.00	6.31	584.36	NP	0.00	6.34	585.84	NP	0.00	6.69	585.38
November 20, 2008	NP	0.00	6.56	584.11	NP	0.00	6.99	585.19	NP	0.00	7.19	584.88
December 15, 2008	NP	0.00	6.64	584.03	NA	NA	NA	NA	NP	0.00	NA	NA
January 6, 2009	NP	0.00	6.25	584.42	NA	NA	NA	NA	NP	0.00	NA	NA
February 10, 2009	NP	0.00	6.58	584.09	NP	0.00	6.06	586.12	NP	0.00	6.53	585.54

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	RW-3 reference elevation = 592.32				TP-2			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	NP	0.00	6.92	585.40	8.33	1.09	9.42	NA
February 7, 2005	NP	0.00	7.57	584.75	8.44	1.05	9.49	NA
March 17, 2005	NP	0.00	7.82	584.50	8.61	1.30	9.91	NA
April 13, 2005	NP	0.00	7.83	584.49	8.49	1.13	9.62	NA
May 31, 2005	NP	0.00	7.88	584.44	8.54	0.83	8.87	NA
June 28, 2005	NP	0.00	7.04	585.28	8.01	0.48	8.49	NA
July 29, 2005	NP	0.00	6.77	585.55	7.97	0.25	8.22	NA
August 18, 2005	NP	0.00	7.72	584.60	8.28	0.75	9.03	NA
September 28, 2005	NP	0.00	8.41	583.91	8.69	0.82	9.51	NA
October 18, 2005	NP	0.00	8.41	583.91	--	--	--	NA
November 30, 2005	NP	0.00	8.02	584.30	--	--	--	NA
December 26, 2005	NP	0.00	7.98	584.34	8.43	0.87	9.30	NA
January 31, 2006	NP	0.00	5.50	586.82	7.82	0.72	8.54	NA
February 24, 2006	NP	0.00	6.78	585.54	8.36	1.04	9.40	NA
March 22, 2006	NP	0.00	6.29	586.03	8.22	0.81	9.03	NA
April 27, 2006	NP	0.00	7.66	584.66	8.57	0.99	9.56	NA
May 25, 2006	NP	0.00	7.25	585.07	8.31	0.96	9.27	NA
June 27, 2006	NP	0.00	7.91	584.41	NA	NA	NA	NA
July 11, 2006	NP	0.00	7.34	584.98	8.03	1.70	9.73	NA
August 23, 2006	NP	0.00	7.69	584.43	NA	NA	NA	NA
September 26, 2006	NP	0.00	7.08	585.24	NA	NA	NA	NA
October 30, 2006	NP	0.00	7.05	585.27	NA	NA	NA	NA
November 27, 2006	NP	0.00	7.50	584.82	NA	NA	NA	NA
December 27, 2006	NP	0.00	7.33	584.99	NA	NA	NA	NA
January 25, 2007	NP	0.00	7.90	584.42	NA	NA	NA	NA
March 6, 2007	NP	0.00	8.18	584.14	8.54	0.92	9.46	NA
March 23, 2007	NP	NA	NA	NA	8.28	0.89	9.17	NA
April 30, 2007	NP	0.00	8.03	584.29	8.37	0.79	9.16	NA
May 17, 2007	NP	0.00	7.98	584.34	8.34	0.77	9.11	NA
June 12, 2007	NP	0.00	8.21	584.11	8.29	0.76	9.05	NA
July 18, 2007	NP	0.00	8.27	584.05	8.44	0.01	8.45	NA
August 28, 2007	NP	0.00	7.57	584.75	8.12	0.46	8.57	NA
September 19, 2007	NP	0.00	7.03	585.29	7.82	0.11	7.93	NA
October 25, 2007	NP	0.00	8.32	584.00	8.69	0.39	9.08	NA
November 27, 2007	NP	0.00	8.22	584.10	7.95	0.22	8.17	NA
January 7, 2008	NP	0.00	7.30	585.02	6.66	0.04	6.70	NA
February 22, 2008	NP	0.00	5.19	587.13	NA	NA	NA	NA
March 17, 2008	NP	0.00	4.45	587.87	5.79	0.02	5.81	NA
April 7, 2008	NP	0.00	5.03	587.29	6.15	0.02	6.17	NA
May 5, 2008	NP	0.00	6.79	585.53	7.18	0.01	7.19	NA
June 2, 2008	NP	0.00	7.51	584.81	7.09	0.02	7.11	NA
July 7, 2007	NP	0.00	6.78	585.54	6.13	0.03	6.16	NA
August 13, 2008	NP	0.00	6.95	585.37	6.38	0.04	6.42	NA
September 8, 2008	NP	0.00	7.31	585.01	6.60	0.02	6.62	NA
October 9, 2008	NP	0.00	6.83	585.49	NP	0.00	6.25	NA
November 20, 2008	NP	0.00	7.56	584.76	6.89	0.02	6.91	NA
December 15, 2008	NP	0.00	7.39	584.93	6.37	0.01	6.38	NA
January 6, 2009	NP	NA	NA	NA	NP	0.00	5.68	NA
February 10, 2009	NP	0.00	5.83	586.49	NP	0.00	5.99	NA

See Notes on Page 6.

**Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan**

Notes:

The reference elevation for each of the recovery wells (RW-1, RW-2, RW-3, and RW-4) is the ground surface elevation; approximately equal to the elevation of the edge of the vault.

NA = not available; monitoring well inaccessible (e.g., covered by pallet, gravel, roll-off, vehicle, or snowpile).  
-- = Not measured.

NP = LNAPL was not present in well.

An LNAPL density of 0.92 was used to correct the water level elevations for the presence of LNAPL.  
LNAPL is periodically removed by bailing from monitoring well MW-178WT.