Environmental Resources Management

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10 February 2006

Mr. Michael J. Hinton, P.E. Environmental Engineer 2 New York State Department of Environmental Conservation Division of Environmental Remediation - Region 9 270 Michigan Avenue Buffalo, New York 14203

RE: Monthly Progress Report – January 2006 Greif Bros. Facility – Tonawanda, New York NYSDEC VCP Number V00334-9



Key Actions This Period:

- Continued operation and maintenance (O&M) of the dense, non-aqueous phase liquid (DNAPL) recovery system in the Varnish Pit Area.
- Monitoring of DNAPL and ground water levels in recovery wells and nearby shallow wells and vapor monitoring points. A table summarizing these data is presented on Page 4.
- Collected light, non-aqueous phase liquid (LNAPL) and ground water level measurements periodically from monitoring well MW-23 and removal of LNAPL from the well. A table summarizing these data is presented on Page 5.
- Additional development of recovery well RW-5 as requested by the New York State Department of Environmental Conservation (NYSDEC).
- Transfer of aqueous waste generated during operation of the DNAPL recovery system to the 1500-gallon polyethylene container temporarily staged within the facility.
- Prepare an updated 3-D computer model and associated calculations to update the estimate of the volume of DNAPL that may be present in the subsurface in the Varnish Pit Area.
- Begin preparation of the Soil Interim Remedial Measure (IRM) Report including data reduction and laboratory analytical data validation.

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	 Installation and development of two shallow monitoring wells, MW-24 and MW-25, in the GB-10/Former Drum Storage Area (FDSA) on 9 and 10 January 2006. Repair or replacement of existing monitoring wells MW-1, MW-7, and MW-9 located near the GB-10/FDSA between 10 to 12 January 2006. MW-9 was re-developed using airlift methods and wells MW-1 and MW-7 were replaced by overdrilling, resulting in newly designated wells MW-1A and MW-7A. Collection of ground water samples from 10 monitoring wells on 30 and 31 January 2006 as described in Section 2.2.5 of the NYSDEC-approved IRM Work Plan. NYSDEC approved several minor changes to the Work Plan in an email correspondence dated 31 January 2006. Off site transport and disposal of 16 drums of hazardous waste (six drums of DNAPL product and 10 drums of decontamination water and well development/purge water on 19 January 2006. 				
Problems / Resolutions:	None.				
Analytical Data Received:	None.				
Documents Submitted:	 Monthly Progress Report for December 2005 dated 10 January 2006. E-mail correspondence dated 11 January 2006 providing NYSDEC with Soil IRM Progress Meeting Minutes for 10 November, 17 November, 1 December, 8 December and 15 December 2005. E-mail correspondence dated 17 January 2006 providing NYSDEC with meeting minutes from the Final Inspection held at the Site on 22 December 2005. E-mail correspondence dated 27 January 2006 informing NYSDEC that ground water sampling will be performed on 30 and 31 January 2006 and requesting the approval of several minor changes in laboratory analytical parameters. 				

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- Anticipated Actions -February 2006:
- Continuation of DNAPL recovery system O&M.
- Continuation of monitoring of DNAPL and ground water levels in recovery wells, nearby shallow monitoring wells, and vapor monitoring points.
- Continuation of LNAPL and ground water level measurements in monitoring well MW-23 and removal of LNAPL from the well.
- Ongoing management of wastes generated during IRM activities.
- Receipt and review of data from the 30 and 31 January 2006 ground water sampling event.
- Continue preparation of the Soil IRM Report.
- Initiate preparation of a Focused Feasibility Study for affected media beneath the building.

NYSDEC- None. Approved Field Decisions:

Prepared By:

for t. c

Jon S. Fox, P.G. Senior Project Manager

Date:

10 February 2006

Cc: Mr. Matt Forcucci (NYSDOH) Mr. Pete Gruene (Palmetto Env. Mgmt. Solutions) Mr. Gary Litwin (NYSDOH) Mr. Robert Powell, C.S.P., A.R.M. (Sonoco) Mr. Joseph Ryan, Esq. (NYSDEC) Mr. Gregory Sutton, P.E. (NYSDEC) Mr. A. Joseph White (NYSDEC) Greif Bros. Facility - Tonawanda, New York Monthly Progress Report – January 2006 NYSDEC VCP Number V00334-9 10 February 2006 Page 4

	Volume Recovered (gallons)		RW-1 Thickness (feet)		RW-2 Thickness (feet)		RW-4 Thickness (feet)	
Date	DNAPL	Water	DNAPL	Water	DNAPL	Water	DNAPL	Water
Pilot Test	270.0	0.0	5.62	3.56	0.88	3.90	NI	NI
12-Sept-05	54.9	1.9	1.79	7.75	1.56	7.94	1.47	7.42
1-Nov-05	4.8	296.2	2.57	6.66	3.39	5.81	2.17	6.32
11-Nov-05	3.6	38.8	1.77	6.17	3.42	5.68	1.30	7.18
14-Nov-05	0.6	97.2	1.74	6.49	3.14	5.68	1.28	7.11
15-Nov-05	14.1	49.0	1.73	5.79	2.27	6.53	1.30	7.00
16-Nov-05	0.0	120.3	1.86	4.64	2.32	6.29	1.28	6.89
17-Nov-05	2.0	77.6	1.75	5.54	2.27	6.02	1.28	6.77
18-Nov-05	0.0	52.9	1.79	6.88	2.37	6.33	1.28	6.81
21-Nov-05	0.0	338.8	1.98	1.07	2.67	5.27	1.32	6.29
22-Nov-05	0.0	50.3	2.04	2.63	2.69	5.40	1.31	6.29
23-Nov-05	0.0	74.0	2.06	6.08	2.72	5.51	1.33	6.28
28-Nov-05	5.6	362.4	2.13	5.63	2.78	4.86	1.56	5.54
1-Dec-05	0.0	8.7	2.11	5.77	2.80	5.05	1.76	5.44
2-Dec-05	0.0	52.0	2.08	5.39	2.69	4.58	1.59	5.45
6-Dec-05	10.4	163.2	2.24	3.06	2.76	4.69	1.58	5.04
7-Dec-05	3.4	48.0	2.02	0.02	2.77	4.66	1.63	4.96
8-Dec-05	1.8	48.5	2.02	0.16	2.62	0.42	1.58	4.90
9-Dec-05	7.4	24.6	1.99	0.18	2.60	0.26	1.58	4.81
12-Dec-05	30.3	72.8	2.01	0.15	2.81	4.34	1.56	2.74
13-Dec-05	6.3	14.6	2.03	0.02	3.62	0.94	2.96	3.08
14-Dec-05	7.6	0.6	2.00	0.08	2.68	1.15	3.04	3.14
15-Dec-05	17.0	29.8	2.03	0.01	2.63	1.18	1.61	0.25
19-Dec-05	1.9	5.7	2.00	0.07	2.81	4.17	2.63	3.55
21-Dec-05	12.3	38.7	2.00	0.10	2.66	1.68	1.78	1.04
22-Dec-05	7.6	6.5	1.99	0.07	2.66	2.95	1.41	0.22
27-Dec-05	8.0	18.5	2.03	0.03	2.49	0.17	2.20	3.95
28-Dec-05	7.4	18.6	2.00	0.10	2.56	0.05	1.37	0.03
29-Dec-05	5.3	2.9	2.00	0.10	2.57	0.05	1.37	0.03
3-Jan-06	2.6	38.7	2.01	0.02	2.49	0.03	1.38	0.10
6-Jan-06	6.6	10.2	1.97	0.08	2.46	0.05	1.37	0.11
10-Jan-06	16.8	2.5	1.96	1.04	2.48	0.11	1.47	0.02
12-Jan-06	10.0	0.0	2.00	0.08	2.52	0.07	1.37	0.03
19-Jan-06	4.7	34.8	1.97	0.05	2.48	0.13	1.37	0.02
23-Jan-06	6.0	14.3	1.98	0.11	2.47	0.12	1.37	0.03
26-Jan-06	6.5	11.3	1.96	0.07	2.49	0.12	1.37	0.05
30-Jan-06	4.3	14.8	1.93	0.15	2.49	0.09	1.49	0.33
TOTAL	539.8	2239.7						

SUMMARY OF DNAPL RECOVERY DATA

<sup>NOTES:
Pilot test data reported at the end of the pilot test on 16 November 2004.
NI = well not installed yet.
Volume readings represent the volume recovered since the previous reading.</sup>

Date	Volume of LNAPL Recovered (gallons)	LNAPL Thickness in MW-23 (feet)	Water Thickness in MW-23 (feet)
9-Sept-05	0.00	0.40	3.38
12-Sept-05	0.00	0.41	3.23
20-Sept-05	0.00	0.52	2.98
11-Oct-05	0.00	0.56	2.67
21-Oct-05	0.00	0.57	2.78
26-Oct-05	0.00	0.60	2.78
2-Nov-05	0.00	0.68	2.67
11-Nov-05	0.04	0.27	2.53
15-Nov-05	0.10	0.61	2.10
16-Nov-05	0.04	0.25	1.55
17-Nov-05	0.03	0.18	1.22
18-Nov-05	0.00	0.08	0.97
21-Nov-05	0.02	0.15	1.09
22-Nov-05	0.04	0.27	0.68
23-Nov-05	0.04	0.26	0.49
29-Nov-05	0.04	0.23	0.54
2-Dec-05	0.00	0.20	0.42
6-Dec-05	0.03	0.20	0.51
7-Dec-05	0.00	0.16	0.36
8-Dec-05	0.03	0.16	0.40
9-Dec-05	0.00	0.07	0.35
12-Dec-05	0.00	0.07	0.41
19-Dec-05	0.00	0.17	0.39
22-Dec-05	0.03	0.17	0.54
27-Dec-05	0.00	0.14	0.45
29-Dec-05	0.03	0.17	0.48
3-Jan-06	0.02	0.15	0.37
6-Jan-06	0.00	0.12	0.30
10-Jan-06	0.00	0.08	0.42
12-Jan-06	0.00	0.13	0.35
19-Jan-06	0.02	0.12	0.48
26-Jan-06	0.03	0.18	0.50
30-Jan-06	0.00	0.18	0.57
TOTAL	0.54		

SUMMARY OF LNAPL RECOVERY DATA - WELL MW-23

NOTES:

- Data refers to light, non-aqueous phase liquid (LNAPL) measured and recovered from monitoring well MW-23 (the only well observed with LNAPL to date).

- LNAPL volumes are estimated based on the measured thickness of LNAPL in the well prior to removal and the cross-sectional volume of the well screen and are thought to be conservatively low (additional LNAPL migration into the well during bailing is not accounted for).

- Volume readings represent the volume recovered since the previous reading.

- LNAPL and ground water thickness data were collected as static level measurements prior to bailing of the well.