

9 November 2005

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 - October 2005
Greif Bros. Facility - Tonawanda, New York
NYSDEC VCP Number V00334-9



***Key Actions
This Period:***

- Collection of dense, non-aqueous phase liquid (DNAPL) and ground water level measurements in shallow monitoring wells, recovery wells and vapor monitoring points near the Varnish Pit Area.
- Temporary pause in DNAPL recovery operations in the Varnish Pit Area to further evaluate options for enhancing DNAPL recovery.
- Site meeting on 20 October 2005 with NYSDEC regarding re-starting of additional DNAPL recovery operations.
- Re-start DNAPL recovery operations using a pulsed recovery approach.
- Shipment of hazardous waste drums generated during the DNAPL Recovery IRM off Site for proper transport and disposal.
- Receipt of laboratory analytical results from the analysis of LNAPL and DNAPL samples; receipt of laboratory analytical results for ground water and tap water samples collected as part of the investigation to determine the source of water in MW-23.
- Initiate implementation of the NYSDEC-approved soil IRM in the GB-10/Former Drum Storage Area.
- Test pitting to locate subsurface utilities, re-routing of subsurface storm water piping associated with facility roof drains, and backfilling of a storm sewer test pit using laboratory-tested clean excavated backfill temporarily staged on Site.

- Completion of first phase of excavation to two-feet below ground surface, including associated demolition of two concrete pads, staging of excavated soil/debris into "clean" and "affected" piles, and dewatering of work area into a frac container as necessary.
- Installation of steel sheeting as structural excavation controls to facilitate protection of the structural integrity of the building.
- Implementation of the Community Air Monitoring Program and odor suppression activities as required by NYSDEC.
- Maintenance of moisture, soil erosion, and sedimentation control measures within the work area.
- Waste characterization sampling of the staged "affected" soil waste pile.
- Procurement of a waste transport and disposal subcontractor for excavated wastes.
- Planning and coordination of off-Site transport and disposal of wastes generated during the soil excavation IRM.

***Problems/
Resolutions:***

In September 2005, DNAPL thicknesses in recovery wells near the Varnish Pit were discovered to have decreased significantly with little recovery after the cessation of pumping. Therefore, additional recovery operations were temporarily suspended while ERM reviewed possible causes and corrective actions.

ERM developed an alternate approach to operating the DNAPL recovery system, which was discussed with the NYSDEC during the Site meeting held on 20 October 2005. The approach included re-setting drop (intake) tubes to the approximate static DNAPL elevation prior to system start-up and initiating pulsed recovery of ground water (staggered pumping of recovery wells) in an attempt to induce additional DNAPL migration into recovery wells.

ERM re-started DNAPL recovery operations using the

approach described above and will continue the regulation of pumping speeds and times, in consultation with NYSDEC, to achieve optimal system performance, along with continued monitoring of DNAPL and ground water levels within Site wells and monitoring points.

In September 2005, ERM discovered approximately 0.4-foot of an unknown light, non-aqueous phase liquid (LNAPL) in monitoring well MW-23 on top of approximately three feet of ground water. ERM collected a sample of the LNAPL and submitted it for laboratory analyses, along with a sample of DNAPL recovered from the subsurface near the Varnish Pit. ERM is currently in the process of reviewing and evaluating the laboratory analytical results and will contact NYSDEC to discuss preliminary results and interpretations.

Since monitoring well MW-23 previously was dry or contained a very small amount of ground water, NYSDEC requested that ERM conduct an investigation of the possible source of the water. ERM collected ground water samples from beneath the building, Facility tap water, and shallow ground water from outside the building for fluoride analysis as requested by NYSDEC. Fluoride was detected in the water sample from MW-23 at a concentration similar to the concentration detected in the tap water sample, suggesting that the source of increased ground water in MW-23 may be potable water from the Facility.

Facility water meter measurements will also be collected to evaluate whether or not a leak may be present in piping that is located beneath the floor slab. The Town of Tonawanda (the Town) was called to provide a meter reading. However, it was discovered that the facility's main water meter was not functioning and was in need of repair. Repairs must be conducted by the Town in a confined space. Greif Bros. is currently in contact with the Town regarding scheduling of repairs of the facility's water meter so that measurements can be collected. ERM will check with Greif Bros. on the status of these

repairs and will provide NYSDEC with an update when additional information is available.

Analytical Data Received:

- Laboratory analytical report dated 13 October 2005 from STL-Buffalo (STL) with fluoride results for ground water and tap water samples collected as part of the investigation to evaluate the source of water in MW-23.
- Laboratory analytical report received on 19 October 2005 from Zymax Forensics (Zymax) with forensic high-resolution GC/FID "fingerprint" results for a LNAPL sample collected from MW-23 and a DNAPL sample collected from the subsurface near the Varnish Pit. ERM will contact NYSDEC to discuss these data after our review and interpretation of these data is complete.
- Laboratory analytical report dated 21 October 2005 from STL-Buffalo (STL) with VOC, PCB and metals results for a sample of LNAPL collected from MW-23.
- Laboratory analytical report dated 28 October 2005 from STL-Buffalo (STL) with VOC, SVOC and pH results for a sample of soil used to backfill a pit excavated during the soil IRM to re-route a 10" storm sewer line.

Tables summarizing detected compounds, elements, or other parameters are presented on Pages 7-8.

Documents Submitted:

- Monthly Progress Report for September 2005 dated 10 October 2005.
- E-mail correspondence dated 30 October 2005 providing NYSDEC with the laboratory analytical report for a sample of soil used to backfill a storm sewer pit during soil IRM activities.

Anticipated Actions - November 2005:

- Continuation of DNAPL recovery system operation through the optimization of pumping speeds and times.
- Continuation of daily monitoring of DNAPL and ground water levels in recovery wells and weekly

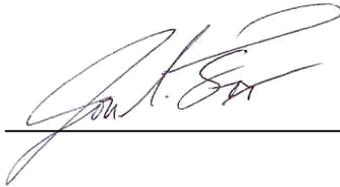
monitoring at nearby shallow wells and vapor monitoring points.

- Ongoing management of wastes generated during the DNAPL recovery IRM.
- Presentation and discussion of laboratory analytical results from the analysis of LNAPL and DNAPL product collected at the Site.
- Town repair of the facility's water meter and collection of water meter readings to evaluate a potential leak in Facility subsurface water piping.
- Presentation and discussion of analytical and other data derived from the investigation of the source of water discovered in monitoring well MW-23.
- Continuation of the NYSDEC-approved soil IRM in the GB-10/Former Drum Storage Area.
- Ongoing management of solid and liquid wastes generated during the soil IRM.
- Off-site transport and proper disposal of wastes generated during the soil excavation IRM.

***NYSDEC-
Approved Field
Decisions:***

- NYSDEC approved re-starting the DNAPL recovery system using the pulsed recovery approach presented by ERM during a Site meeting on 20 October 2005.
- NYSDEC approved the backfilling of a test pit installed in association with re-routing of the Facility's storm water piping with excavated soil after receipt of laboratory analytical data documenting that the excavated soil did not contain VOCs or SVOCs at concentrations above Site-specific Recommended Soil Cleanup Objectives (RSCOs) for unrestricted use.

Prepared By:



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Senior Project Manager

Date:

9 November 2005

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**SUMMARY OF LABORATORY ANALYTICAL DATA
 RECEIVED IN OCTOBER 2005
 GREIF BROS. FACILITY - TONAWANDA, NEW YORK
 NYSDEC VCP NUMBER V00334-9**

VOC RESULTS

Sample Designation	Sample Matrix	Sample Date	Compounds Detected	Concentration (ppb)
DNAPL IRM				
LNAPL	Product	12-Sep-05	1,1-Dichloroethane	630,000
			1,1-Dichloroethene	1,800,000
			Ethylbenzene	66,000 J
			1,1,1-Trichloroethane	18,000,000 D
			Trichloroethene	29,000,000 D
			Total Xylenes	240,000 J
			Total TICs	17,230,000 J
Soil IRM				
GREIF-EX-TP-01-SP	Soil	14-Oct-05	cis-1,2-Dichloroethene	2 J
			Trichloroethene	20
			1,2,4-Trimethylbenzene	1 J

SVOC RESULTS

Sample Designation	Sample Matrix	Sample Date	Compounds Detected	Concentration (ppb)
Soil IRM				
GREIF-EX-TP-01-SP	Soil	14-Oct-05	Benzo(a)anthracene	39 J
			Benzo(b)fluoranthene	52 J
			Benzo(a)pyrene	39 J
			Chrysene	41 J
			Fluoranthene	83 J

METALS RESULTS

Sample Designation	Sample Matrix	Sample Date	Elements Detected	Concentration (ppm)
DNAPL IRM				
LNAPL	Product	12-Sep-05	Aluminum	34.1
			Barium	1.4
			Calcium	110
			Chromium	0.75
			Iron	21.0
			Magnesium	36.1
			Manganese	0.63

**SUMMARY OF LABORATORY ANALYTICAL DATA
 RECEIVED IN OCTOBER 2005 (Continued)
 GREIF BROS. FACILITY - TONAWANDA, NEW YORK
 NYSDEC VCP NUMBER V00334-9**

OTHER RESULTS

Sample Designation	Sample Matrix	Sample Date	Parameters Detected	Concentration (see notes)
DNAPL IRM				
DUPLICATE	Water	28-Sep-05	Fluoride	0.57
FIELD BLANK	Water	28-Sep-05	None	----
GREIF-MW-16	Water	28-Sep-05	Fluoride	0.78
GREIF-MW-23	Water	28-Sep-05	Fluoride	0.61
GREIF-RW-2	Water	28-Sep-05	Fluoride	0.27
GREIF-TAP	Water	28-Sep-05	Fluoride	0.63
Soil IRM				
GREIF-EX-TP-01-SP	Soil	14-Oct-05	Leachable pH	8.03

NOTES:

- Compounds, elements, or other parameters listed are limited to those that were detected.
- All results are reported on a dry weight basis.
- J = estimated value.
- D= Indicates that the concentration was identified in an analysis at the secondary dilution factor.
- pH is reported in standard units.
- Fluoride results are reported in mg/L.
- TICs = tentatively identified compounds.