-DRAFT-

PROJECT STATUS MEMORANDUM NO. 03-11

TO: Pamela Tames, USEPA

FROM: Mark M. Goldberg, P.E.
Tunde H. Komuves-Sandor

DATE: May 4, 2011

PROJECT: Rowe Industries Superfund Site
Groundwater Recovery and Treatment System
March 2011 Status Report
Sag Harbor, New York

LBG Engineering Services, P.C. (LBG) commenced operation of the Full-Scale Pump and Treat (FSP&T) groundwater remediation system at the above-referenced site on December 17, 2002. Starting in September 2008, the groundwater recovered by the Focus Pump and Treat (FP&T) system was routed to the FSP&T system for treatment. This status report presents a summary of performance, operation and maintenance for both systems and monitoring activities for the site from March 1, 2011 through March 31, 2011. The report includes a summary of system performance parameters, system operation parameters, and analytical results for groundwater, system effluent samples, and air quality results.

SUMMARY OF SYSTEM PERFORMANCE AND OPERATION

(March 1, 2011 through March 31, 2011)

1. Hours of operation during the reporting period:	368 hours (49%)
2. Alarm conditions during the reporting period:	See Table 1
3. Was the SPDES VOC discharge permit criteria achieved:	yes, (see Table 2)
4. Total volume of water pumped during the reporting period:	8,123,129 gal.*
5. Was the system effluent flow below the SPDES limit of 1,023,000 gpd:	yes, (see Graph 1)
6. Mass of VOCs recovered during the reporting period:	0.09 pounds*
7. Cumulative mass of VOCs recovered since startup on 12/17/02: (calculations can be provided upon request)	221.3 pounds
8. Effluent VOC vapor concentration for the reporting period:	0.13 mg/m^3 (see Table 3)
9. Was the effluent VOC vapor emission rate below 0.022 lbs/hr.: (calculations can be provided upon request)	yes (0.00062 lbs/hr)

*Values represent both FSP&T system recovery wells and the FP&T system recovery wells.

FULL SCALE PUMP AND TREAT SYSTEM STATUS SUMMARY

The following table summarizes select recovery well parameters for the reporting period. Table 4 presents a summary of the quality results for water samples collected from recovery wells. Graph 2 presents PCE concentrations for each recovery well. For wells with water quality that meets or is approaching remedial criteria, Graph 3 presents PCE concentrations at an expanded scale in order to compare them to the PCE aquifer restoration concentration of 5 ug/L. Laboratory analytical reports are included as Appendix I.

Well	Volume pumped (gal)	Average Flow (gpm)	Lowest Measured Flow (gpm)[1/]	Total VOC Concentration (µg/L)	VOC Recovery (lbs)
RW-2	583,395	27	13	0.9	0.004
RW-3	638,787	30	10	0	0
RW-4	488,378	23	10	0.8	0.003
RW-5	1,057,183	50	50	0	0
RW-6	317,013	15	15	2.8	0.007
RW-7	1,557,748	70	69	1.8	0.023
RW-8	1,056,220	50	41	0	0
RW-9	1,631,042	79	16	0	0

[1/] Lowest measured flows are based on the lowest average 24-hour pumping rates for each well recorded to date.

Based on the results from the 2007 groundwater model for the site, the plume is not migrating beyond the influence of the FSP&T system if the recovery well pumps operate at or above the "Lowest Measured Flows". All recovery wells were operating at or above their lowest measured flow during the month of January.

The cause of the low air flow through the air stripper was investigated on March 1 and 2. The root cause of the low air flow was determined to be originating from the carbon vessels and the associated manifold system. It was also noted that the valves for the carbon manifold system were not working. Following the well rehabilitation work, the carbon vessels will be serviced. The service will include replacing the bottom grate of the carbon vessels, replacing the carbon and disassembling the carbon manifold to clean and restore valve operation.

FOCUS PUMP AND TREAT SYSTEM STATUS SUMMARY

LBG monitors the FSP&T system for indications of any fouling that had been problematic with the FP&T system. During this reporting period, heavy iron accumulation was observed in the FRW-2 and FRW-3 flow meters. The flow meters were cleaned two times during the month.

A high level alarm in the FP&T holding tank, caused by excessive iron buildup and black material (believed to be remnants of the EHC injection material) clogging the bag filter, is occurring on a routine basis. The influent water from FRW-2 and 3 appears to be turbid. The FRWs and the associated below-grade pipes are scheduled for mechanical well development and jet washing, respectively, in May.

The following table summarizes the parameters for the FRWs for the reporting period of March 1, 2011 through March 28, 2011. Tables 5 through 8 present a summary of the quality

results for water samples collected from the FRWs. Graphs 4 through 7 present VOC concentrations for each FRW. Laboratory analytical reports are included in Appendix II.

Well	Volume Pumped (gal)	Average VOC Concentration (µg/L)	VOC Recovery (lbs)
FRW-1	51,899	68.6	0.030
FRW-2	11,164	41.9	0.004
FRW-3	20,077	39.2	0.007
FRW-4	63,311	4.5	0.002
Total	139,832[1/]	--	--

[1/] Routed to equalization tank in FSP&T system, for treatment.

OTHER O&M ACTIVITIES AND FUTURE O&M ACTIVITIES

Other O&M activities conducted in March 2011 included:

- on March 1, the off-site below-grade pipe jet-washing was started, drained water from the carbon vessels;
- on March 2, below grade-pipe cleanout was completed, assessed the cause of low airflow through the air stripper;
- on March 8, depth-to-water was measured during static conditions in all piezometers, monitor and recovery wells; and semi-annual groundwater quality sampling was started;
- on March 9, continued semi-annual groundwater quality sampling;
- on March 10, completed semi-annual groundwater quality sampling;
- on March 15, a carbon sample was collected from the carbon vessels; and
- on March 31, depth-to water was measured during pumping conditions in all piezometers, monitor and recovery wells.

Future O&M activities scheduled for the spring of 2011 include:

- normal weekly/monthly O&M activities;
- inspect the condition of the packing material in the air-stripper tower;
- conduct recovery well rehabilitation;
- replace FP&T autodialer battery;
- clean the EQ tank, transfer tank, bag filter housing (screens and butterfly valves) and the air stripper tower sump;
- clean the FSP&T and FP&T system below grade pipes;
- clean the catch basin in the rear driveway and the trench drain in front of the FSP&T building;
- replace carbon in carbon vessels, replace grate at the bottom of the carbon vessels in order to restore air flow through the vessels; disassemble carbon vessel manifold in order to clean and restore the valve operation; and
- inspect the RW-7 pump and replace the motor.

MMG:nv
Attachments
cc: Ken W. Wengert - Kraft Foods Global, Inc. - .pdf
Lisa Krogman, Environ – .pdf
Jeff Trad, NYSDEC – .pdf
Chief-Operation Maintenance and Support Section, NYSDEC – .pdf
William Spitz, RWM, R-1, NYSDEC
Town of Southampton Attorney
H:\NABIS\2011\Monthly reports\March 2011\Status0311Mar.docx