SITE STATUS REPORT

Busy Bee Cleaners
1818 Merrick Road
Merrick, New York
NYSDEC Site No. V00376-1

August 24, 2015

Current Status of Remedial System

Operation of SVE/AS Systems

The Soil Vapor Extraction (SVE) and Air Sparge (AS) systems have been operating properly at the site since the equipment was replaced this spring.

A monitoring event on August 17, 2015 showed that the SVE system is operating at a blower vacuum of 38" wc and induced vacuums of 7.6" wc. at SVE-1, 8.0" wc. at SVE-2, 7.5" wc. at DP-1 and 7.5" wc. at DP-2. The air compressor is operating at 11.5 psi, with pressures of 7.6 psi at AS-1S, 9.5 psi at AS-1D, 12.2 psi at AS-2S and 7.7 psi at AS-2D.

Vacuum is being maintained beneath the entire site, as indicated by vacuums of 0.007" wc. in VP-1 located along the eastern boundary of the property, 0.14" wc. in VP-2 located in the middle of property and 0.42" wc. in VP-3 (replaced vacuum point) located along the western boundary of the property.

Treatment System Operation

A summary of treatment system influent and effluent sampling is provided in Table 2.

	Influent		Effluent
Date / Analyte	4/23/15	8/14/15	4/23/15
PCE	1400	1500	5.8
TCE	250	220	ND
cis-1,2 DCE	160	74	ND

It can be seen from Table 2 that greater than 99 percent of PCE in the influent air stream and all of the TCE and cis-1,2 DCE are being removed by the two carbon absorbers operated in series.

Current Status of Groundwater Quality

On April 23, 2015, groundwater samples were collected from two on-site monitoring wells (MW-1S and MW-1D) and three off-site monitoring wells (MW-2S, MW-2D and MW-3D). Before sample collection, groundwater was purged from each sampling location utilizing a low flow peristaltic pump and dedicated polyethylene and neoprene tubing. Prior to purging, depth to water was determined using a conductivity meter.

Groundwater was obtained from the five existing monitoring wells utilizing low-flow sampling procedures, including a peristaltic pump and in-line water quality meter. Sampling was performed when indicator parameters including conductivity, temperature, pH, salinity and turbidity had stabilized. Samples were submitted to York Analytical Laboratories, Inc. (NYSDOH #10854) for VOC analysis in accordance with EPA method 8260. The current and historical laboratory analytical results are summarized in Table 1.

It can be seen from Table 1 that PCE or TCE was not detected in off-site monitoring wells during the most recent sampling event. Overall, on and offsite groundwater quality has shown significant improvement since startup of the remedial system, with deep onsite groundwater quality showing an increase in TCE concentrations in MW-1D as PCE concentrations dropped below detection limits.

Recommendations

Based upon trends in groundwater quality showing the absence of PCE and TCE contamination in off-site wells and an overall improvement of groundwater quality beneath and downgradient of the site, we recommend postponing the off-site chemical oxidizer application and continued groundwater monitoring in on and off-site wells.

The SVE/AS system, which is actively removing contamination from beneath the site, should be given more time to improve shallow and deep ground water quality.

Table 1

Volatile Organic Compounds in Groundwater (ug/l)
EPA Method 8260
1818 Merrick Road

Merrick, NY

ACT Project No.: 7538-MRNY

Sample ID	Standard [1]	MW-1S			MW-1D			MW-2S			MW-2D			MW-3D		
Sample Date		12/15/09	6/17/14	4/24/15	12/15/09	6/17/14	4/24/15	12/15/09	6/17/14	4/24/15	12/15/09	6/17/14	4/24/15	12/15/09	6/17/14	4/24/15
1,1-Dichloroethane	5	ND	ND	ND	ND	**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.7	ND	ND	ND	ND	**5.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND	ND	ND	**1.0**	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND	ND	ND	**0.24**	ND	ND	ND	ND	ND	**0.25**
Acetone	50	ND	**1.8**	**320**	ND	ND	**400**	ND	ND	**1.4**	ND	**20**	**44**	ND	<1.0	ND
cis-1,2-Dichloroethene	5	**3,300**	**41**	**790**	**5,800**	**110**	**850**	ND	ND	ND	**2,500**	**340**	**590**	**9.5**	**14**	**1.8**
Tetrachloroethene	5	**9,800**	**66**	**6,100**	**16,000**	**150**	ND	**15**	**0.63**	ND	**67**	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	**0.31**	ND	ND	**41**	ND	ND	ND	ND	**54**	**13**	**29**	ND	ND	ND
Trichloroethene	5	**1,200**	**50**	**780**	**2,700**	**560**	**3,800**	ND	**0.32**	ND	**520**	**7.7**	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.57**	ND

[1] NYS DEC TOGS 1.1.1, June, 1998

ND = Not Detected

Bolded values signify detection above method detection limit

Highlighted values signify exceedance of regulatory guidance