

January 11, 2012

Mr. Thomas Mongelli New York/Caribbean Superfund Branch I Emergency and Remedial Response Division U.S. Environmental Protection Agency 290 Broadway, 20th Floor New York, NY 10007

Re: Long Term Monitored Natural Attenuation Sampling Program

Tri-Cities Barrel Superfund Site, Fenton, New York

Dear Mr. Mongelli:

By letter dated October 27, 2011 and electronic mail message dated December 13, 2011, the U.S. Environmental Protection Agency (EPA) provided groundwater monitoring requirements for the Tri-Cities Barrel Superfund Site located in Fenton, New York. Via discussion with the EPA on November 22, 2011, the Respondents understand the requirements proposed by the EPA represent the long term monitored natural attenuation (MNA) sampling program for the Site. Generally, this scope of work includes sampling 14 monitoring wells on a semi-annual basis with provisions to reduce the number of wells after the first two years of monitoring as data warrants. The scope of work for the long term groundwater monitoring is provided herein.

Long Term MNA Sampling Program

Based on the EPA comment letter dated October 27, 2011, the long term groundwater monitoring for the Site includes sampling the following wells on a semi-annual basis:

- MW-2 cluster (MW-2 and MW-2S)
- MW-3 cluster (MW-3 and MW-3S)
- MW-7 cluster (MW-7 and MW-7S)
- MW-16 cluster (MW-16 and MW-16S)
- MW-18 cluster (MW-18 and MW-18S)
- MW-19
- MW-20 cluster (MW-20 and MW-20S)
- PMW-1

The long term groundwater sampling will be conducted in a manner consistent with the previous MNA sampling protocol for the site; specifically, the groundwater sampling will be conducted in accordance with WSP Engineering's Standard Operating Procedures (SOPs) and the EPA Region II low-flow sampling protocol. Before initiating any sampling activities, the water level at each site monitoring well will be measured using a water level indicator. The above identified monitoring wells will then be purged at flow rates less than 500 milliliters per minute, in accordance with EPA Region II's and WSP Engineering's low-flow SOPs. During purging, field measurements of temperature, pH, conductance, dissolved oxygen, oxidation-reduction potential, and turbidity will be monitored using a water quality meter equipped with a flow-through cell to minimize atmospheric interference. The identified site monitoring wells will be sampled for volatile organic compounds

(VOCs, EPA Method 8260B, Table 1). Quality assurance/quality control samples, including equipment blanks, trip blanks, and duplicates, will be collected in accordance with the SOPs and the Quality Assurance Project Plan as appended within the Pre-Design and Remedial Design Work Plan (ESC Engineering 2001). Monitoring well locations are shown on Figure 1.

Based on the EPA electronic mail message dated December 13, 2011, MNA parameters will also be analyzed during every third sampling event beginning in June 2012. These parameters include ferrous iron, total iron, alkalinity, carbon dioxide, ethane, ethane, hydrogen, methane, chloride, nitrate, sulfate, sulfide, and total organic carbon (Table 1).

Long term groundwater sampling commenced in December 2011; the next sampling event will be scheduled for June 2012. The identified monitoring wells will be sampled twice per year (June and December). Tabulated results will be provided to the EPA after each sampling event. After two years of monitoring and as supported by the sample results, the Respondents can request that EPA remove monitoring wells from the MNA sampling program.

The long term MNA sampling program is summarized on Table 1 (attached). Aspects of the MNA sampling program, including but not limited to, the list of monitoring wells being sampled, the compounds being sampled for, and the frequency of sampling, can be modified by the EPA in the future, as site conditions warrant. The Respondents request that the EPA confirm they are in agreement with this approach. If you have any questions, please do not hesitate to contact me or Steven Roach at (614) 790-3915.

Sincerely,

Glen E. Rieger

Senior Project Director

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Enclosure

cc: Ed Hampston, New York State Department of Environmental Conservation

Figure



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Table

Table 1

Monitored Natural Attenuation (MNA) Sampling Program Tri-Cities Barrel Superfund Site Fenton, New York

Well ID	VOCs (b)	Field Parameters (c)	MNA Parameters (d)
MW-2	S	S	Every Third Event
MW-2S	S	S	Every Third Event
MW-3	S	S	Every Third Event
MW-3S	S	S	Every Third Event
MW-7	S	S	Every Third Event
MW-7S	S	S	Every Third Event
MW-16	S	S	Every Third Event
MW-16S	S	S	Every Third Event
MW-18	S	S	Every Third Event
MW-18S	S	S	Every Third Event
MW-19	S	S	Every Third Event
MW-20	S	S	Every Third Event
MW-20S	S	S	Every Third Event
PMW-1	S	S	Every Third Event

a/ S = semi-annual sampling; June and December

Temperature

pН

Specific Conductance

Dissolved Oxygen

Oxidation-Reduction Potential (ORP)

Turbidity

d/ MNA Parameters include the following:

ferrous iron

total iron

alkalinity

carbon dioxide

ethane

ethene

hydrogen

methane

chloride nitrate-N

sulfate

sulfide

total organic carbon

e/ MNA parameters will be analyzed during every third sampling event starting with June 2012; subsequent events for MNA parameters include December 2013, June 2015, etc.

b/ Volatile Organic Compounds (VOCs) EPA Method 8260B

c/ Field Parameters include the following: