Strong Advocates, Effective Solutions, Integrated Implementation



September 26, 2018

Mr. William Wu Assistant Engineer (environmental) NYSDEC Division of Environmental Remediation 625 Broadway, Floor 11 Albany, NY 12233-7014

Re: Emerging Contaminants Groundwater Sampling Work Plan

Batavia Former MGP, 11 Evans Street, Batavia, NY (Site)

NYSDEC Site No. 819019

Dear Mr. Wu:

On behalf of our client, R&J Enterprises of Batavia, LLC (R&J), TurnKey Environmental Restoration, LLC (TurnKey) has prepared this emerging contaminant groundwater sampling work plan for the above referenced Site. On August 2, 2018, R&J received a letter from the Department requiring the Site be sampled as part of the State-wide initiative to better understand the risk posed by 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS).

TurnKey proposes to conduct the emerging contaminant sampling at the Site in August/September 2018, with NYSDEC approval of this work plan. The emerging contaminants sampling will be completed on three (3) monitoring wells at the Site, TKMW-9 (upgradient location) and TKMW-5 (downgradient location) and TKMW-7 (downgradient location), see attached figure.

Sampling Preparation

Sampling equipment, components, and containers will be handled to avoid contact with aluminum foil, low density polyethylene (LDPE), glass, or polytetrafluoroethylene (PTFE, aka. teflon) materials including sample bottle cap liners with a Teflon layer. Clothing to be worn by sampling personnel will be laundered multiple times and will not contain PTFE material (including GORE-TEX®) or that which has been waterproofed with perfluorinated compounds (PFC) materials.

Many food and drink packaging materials contain PFCs. If consumption of food and drink occurs prior to and/or during the sampling event, sample personnel will use a standard two (2) step decontamination procedure using detergent and clean water rinse to wash hands prior to starting and/or resuming sampling.

Sampling Procedures

Prior to well purge sample collection, static water levels will be measured and recorded. The groundwater wells will be developed using a plastic submersible pump (containing nitrile seals) and PVC tubing prior to sampling the groundwater at the three (3) locations, starting with the upgradient location first (TKMW-9). The wells will be purged using low-flow sampling techniques to minimize water level draw down within the well until groundwater quality parameters (pH, temperature,

turbidity, DO, ORP, specific conductance) stabilize or at least a minimum of three (3) well volumes have been removed.

In general, stability is defined as variation between field measurements of 10 percent or less and no overall upward or downward trend in the measurements. Upon stabilization of field parameters, groundwater samples for the emergent contaminants will be collected from the submersible pump and PVC tubing. Sampling personnel will wear nitrile gloves while handling empty sample containers, filling sample containers, sealing sample containers, and placement into sample coolers. Samples will be placed on ice prior to transportation to the laboratory.

If sampling equipment and/or sampling personnel's hands come in contact with PFC materials, a standard two (2) step decontamination process using detergent and clean water rinse will be performed on the equipment prior to reuse or the sampling personnel's hands prior to continuing with the sampling. It is recommended that clean nitrile gloves be worn while handling sample containers, during the groundwater sampling, and sealing/placement of samples into the laboratory supplied cooler.

Sample Analysis

Groundwater samples will be analyzed by an Environmental Laboratory Accreditation Program (ELAP) certified laboratory which will provide a Category B deliverable package for preparation of a Data Validation Usability Summary Report (DUSR) by a third-party data validator.

Samples collected for 1,4-dioxine analysis will be collected into laboratory provided containers: two (2) 500 milliliter (ml) unpreserved amber bottles for each well location. The samples will be analyzed via EPA Method 8270 Selective Ion Monitoring (SIM) mode. The method detection limit (MDL) for the 1,4-dioxane analysis will be no higher than 0.28 micrograms per liter (µg/l), assuming there is no sample matrix interference. The samples have a holding time of 7 days till extraction and 40 days for the extract. Standard turnaround time will be used for the analysis.

Samples collected for PFAS analysis will be collected into laboratory provided containers: three (3) 250 ml plastic bottles preserved with Trizma for each well location. The samples will be analyzed via a modified EPA Method 537 to achieve reporting limits of 2 nanograms per liter (ng/l). The samples have a holding time of 14 days for analysis. Standard turnaround time will be used for the analysis.

Sample Reporting

The sample results will be tabularized and provided to NYSDEC. An electronic data deliverable (EDD) will also be provided to NYSDEC. The detection limits will be provided within the table in lieu of "non-detect" or "ND" reporting. Any matrix interferences reported for the sampling will also be noted.



Please contact us if you have any questions or require additional information.

Sincerely,

TURNKEY ENVIRONMENTAL RESTORATION, LLC

Christopher Boron, P.G.

Sr. Project Manager

Michael, A. Lesakowski

Principal

Attachment:

Figure

File: 0332-015-001

ec: Chad LaCivita (R&J Enterprises of Batavia, LLC)

Jeffery C. Stravino, Esq. (Hodgson Russ LLP)

FIGURE





R&J

DISCLAIMER:

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' IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAI SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C 625 Broadway, 11th Floor, Albany, NY 12233-7014 P: (518) 402-9662 I F: (518) 402-9679 www.dec.ny.gov

September 21, 2018

Attn: Jeffrey C. Stravino, Esq. R&J Enterprises of Batavia, LLC c/o Hodgson Russ LLP 140 Pearl Street Suite 100 Buffalo, NY 14202-4014

Dear Mr. Stravino:

Re: Batavia Former MGP

Genesee County, site no. 819019

Emerging Contaminants Groundwater Sampling Work Plan

(Benchmark & Turnkey, August 09, 2018)

The New York State Department of Environmental Conservation (the Department) and the New York State Department of Health (NYSDOH) have reviewed the referenced work plan. The work plan is hereby approved with the following modifications:

- 1) TKMW-7 shall also be sampled as a downgradient well location. Based on the figure, groundwater appears to be flowing in more than one direction. With such uncertainty, additional data are warranted.
- 2) In the section "Sampling Procedures" on page 2, "...or at least a minimum of one (1) well volume has been removed." is changed to "...or at least a minimum of three (3) well volumes have been removed."

Please indicate within 15 days whether you accept the Department's modified work plan and ensure that all copies of the final work plan include this approval letter.

Please contact me with any questions via email at william.wu@dec.ny.gov, or via phone at (518) 402-9662.

Sincerely,

William Wu

Assistant Engineer (Environmental)

Remedial Bureau C

Division of Environmental Remediation



G. Heitzman, NYSDEC ec:

H. Hood, NYSDOH

J. Deming, NYSDOH
C. Boron, Benchmark & TurnKey
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