NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
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January 10, 2020

Yaro Enterprises, Inc.
Anthony Kirik
228 Rosemont Drive
Rochester, New York 14617

RE: Emerging Contaminants Groundwater
Sampling Work Plan
300 Commerce Drive Site
BCA Index#: B8-0806-09-04
Site Number: C828158
Henrietta (T), Monroe (C)

Dear Mr. Kirik:

The New York State Department of Environmental Conservation (Department) has completed its review of the October 2019 Draft Emerging Contaminant Groundwater Sampling Work Plan (Work Plan) submitted for the 300 Commerce Drive Site located at 300 Commerce Drive, Town of Henrietta, Monroe County. Based on the information provided in the Work Plan

1. The low-flow groundwater sampling methodology will be in accordance with ASTM D6771.

2. All liquids (e.g., purge water, decontamination fluids) will be managed as per DER-10 Section 3.9 and will be containerized, characterized, and disposed off-site in accordance with all local, State, and Federal regulations.

3. A groundwater sampling log will be completed for each groundwater monitoring well sampled.

4. All groundwater sampling event waste (e.g., gloves, tubing) will be managed in accordance with DER-10 and all applicable local, State, and Federal regulations.

5. The Department understands that PFAS free water will be obtained from the laboratory.

6. The Department understands that the EDD and a letter report presenting the sampling event details, an analytical summary table, the DUSR, and all supporting documentation such as but not limited to groundwater sampling logs, laboratory data package will be submitted to the Department within 30 days after receiving the validated data.

7. As per 6 NYCRR Part 375 and the Brownfield Cleanup Agreement, the Department will be given 7 days advance notice of any fieldwork activities such that appropriate Department oversight can be provided.

Within fifteen (15) days of the date of this letter and prior to any fieldwork activities associated with the Emergent Contaminants Groundwater Sampling Work Plan, the Applicant must elect in writing (electronic notification is acceptable) one of the following options:

- Option A: Accept the modified work plan;
- Option B: Invoke dispute resolution as set forth in 6 NYCRR Part 35-1.5(b)(2); or
- Option C: Terminate the Brownfield Cleanup Agreement in accordance with 6 NYCRR Part 375-3.5.

If the Applicant chooses to accept Option A then this letter becomes part of the approved the Emergent Contaminants Groundwater Sampling Work Plan. Also, if Option A is chosen then a copy of the approved Emergent Contaminants Groundwater Sampling Work Plan along with this letter attached must be placed in the document repository within 1 week of accepting Option A and prior to all fieldwork activities associated with the Emergent Contaminants Groundwater Sampling Work Plan. Please provide notification to the Department that the Emergent Contaminants Groundwater Sampling Work Plan and a copy of this letter have been placed in the document repository (electronic notification is acceptable).

The State seeks to resolve the outstanding differences in a mutually agreeable manner, which addresses the requirements of the Brownfield Cleanup Agreement and associated work plans. If you have any questions, concerns, or need further assistance with the Site, please feel free to contact me at 585-226-5354 or via e-mail at charlotte.theobald@dec.ny.gov.

Sincerely,

Charlotte B. Theobald
Assistant Engineer

ec:
Nancy van Dussen (Ravi Engineering)
Pete Morton (Ravi Engineering)
Lynn Zicari (Ravi Engineering)
Paul Sylvestri (Harter Secrest & Emery LLP)
Justin Deming (NYSDOH)
Melissa Doroski (NYSDOH)
John Frazer (MCHD)
Wade Silkworth (MCHD)
Dennis Harkawik (NYSDEC)
David Pratt (NYSDEC)
Todd Caffoe (NYSDEC)

RAVI ENGINEERING & LAND SURVEYING, P.C.

October 4, 2019

Charlotte Theobald, P.E.
NYS Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

Re: Draft Emerging Contaminants Groundwater Sampling Work Plan
300 Commerce Drive
Rochester, New York 14623
Site ID: C828158

Dear Ms. Theobald

Ravi Engineering & Land Surveying, P.C. (RE&LS) has prepared this draft Emerging Contaminants Sampling Work Plan (ECSWP) to conduct groundwater sampling for emerging contaminants at 300 Commerce Drive, New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site number C828158. The draft ECSWP identifies the methods, sample methodology and laboratory analysis to be implemented in this evaluation.

Personal Protection Equipment (PPE)

Level D PPE is anticipated to be appropriate. The sampling technician will wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFC materials will be avoided. Clothing worn by sampling personnel will have been laundered multiple times.

Groundwater Sampling Methodology

The groundwater samples will be collected using a low-flow purging and sampling methodology. Clean polyethylene sheeting will be placed adjacent to the well to protect purging and sampling equipment from contamination. Organic vapors will be measured with a photoionizing detector (PID) when the well cap is removed, and the static water level in the well will be measured.

Prior to sampling, the well will be purged using a GeoTech peristaltic pump (or equivalent) and high density polyethylene (HDPE) and/or silicone tubing; new tubing will be used at each sample location. Water quality indicators (pH, temperature, turbidity, specific conductance, dissolved oxygen (DO) and oxidation-reduction potential (ORP)) will be measured in five-minute increments with a Horiba U-52 Flow Cell (or equivalent) and the measurements will be recorded in the field. Samples will be collected when three consecutive water quality parameter readings are within the limits listed below.

Parameter	Limits
Turbidity	10% for values >5NTU
Dissolved Oxygen	10% for values >0.5 mg/L
Specific Conductance	3%
Temperature	3%
pH	±0.1 unit
Oxidation/Reduction Potential	±10 mV

Sampling Procedures

An equipment blank will be collected prior to sample collection. Field quality control samples are described in the next section of this report.

According to Figure 10A of the Labella Associates, D.P.C (Labella) June 2018 Draft Remedial Investigation Report (Attachment A), the general groundwater flow direction is to the northwest. One sample will be collected from an upgradient location, and two samples will be collected from downgradient locations, with alternate locations selected in the event that the preferred monitor wells cannot be located, are damaged, or a sample cannot be obtained. The upgradient monitor well, MW-8 (alternate RI-MW-2) will be sampled first. The downgradient monitor wells, RI-MW-1 and MW-6 (alternate MW-10) samples will then be collected. Sample locations are indicated on the Labella Figure in Attachment A.

The Per- and Polyfluoroalkyl Substances (PFAS) sample jars will be filled first, followed by the 1,4-dioxane sampling jars. The samples will be placed in coolers and held on ice while the remainder of the sample is collected. The remainder of the field quality control samples will then be collected. The samples will be transported to the laboratory upon collection.

New disposable tubing will be used at each sample location to prevent cross-contamination. The sampler will wear non-powdered, disposable nitrile gloves while filling and sealing the sample bottles, and new nitrile gloves will be worn at each sample location, during equipment cleaning and decontamination, and while handling the media being sampled. Only “PFAS-free” water and Alconox will be used to decontaminate non-dedicated equipment that comes in contact with sample media.

Sample containers, caps, coolers, labels, and a chain of custody form will be provided by the laboratory. Sample containers of samples required to be fixed with a preservative will be prepared by the laboratory before each sampling event. An effort will be made to ensure that sampling equipment and sample containers will not come in contact with aluminum foil, low density polyethylene (LDPE), glass, or polytetrafluoroethylene (PTFE, Teflon ™) materials including bottle cap liners with a PTFE layer. These materials will be prohibited from the sample collection staging area. Handling of food and drink packaging materials, “plumbers thread seal tape”, waterproof field books, and permanent markers will be avoided before and during the sampling event.

Field Quality Control Samples

One equipment blank will be collected to monitor equipment cleanliness and decontamination procedures during field sampling. The equipment blank will be collected by pouring PFAS-free water over clean/decontaminated field equipment and supply tubing, and capturing the rinseate in a laboratory provided container.

One field duplicate sample will be collected to check on laboratory reproducibility, sampling technique, and sample variability. The duplicate sample will be coded so that the laboratory is not biased in performing the analyses.

One matrix spike/matrix spike duplicate (MS/MSD) sample will be collected to check on sample matrix effect and laboratory accuracy and precision.

PFAS Analysis

Samples will be analyzed for PFAS Target Analyte List (Table 1) by Modified EPA Method 537. Reporting limits for PFOA and PFOS in groundwater are not to exceed 2 nanograms per liter (ng/L). Samples will be analyzed by a laboratory holding ELAP certification for PFOA and PFOS in drinking water.

Table 1: PFAS Target Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	**Perfluorobutanesulfonic acid** **Perfluorohexanesulfonic acid** Perfluoroheptanesulfonic acid **Perfluorooctanessulfonic acid** Perfluorodecanesulfonic acid	PFBS PFHx PFHpS PFOS PFDS	375-73-5 S 355-46-4 375-92-8 1763-23-1 335-77
Perfluoroalkyl carboxylates	Perfluorobutanoic acid Perfluoropentanoic acid Perfluorohexanoic acid **Perfluoroheptanoic acid** **Perfluorooctanoic acid** **Perfluorononanoic acid** Perfluorodecanoic acid Perfluoroundecanoic acid Perfluorododecanoic acid Perfluorotridecanoic acid Perfluorotetradecanoic acid	PFBA PFPeA PFHxA PFHpA PFOA PFNA PFDA PFUA/PFUdA PFDoA PFTriA/PFTrDA PFTA/PFTeDA	375-22-4\ 2706-90-3 307-24-4 375-85-9 335-67-1 375-95-1 335-76-2 2058-94-8 307-55-1 72629-94-8 376-06-7
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate 8:2 Fluorotelomer sulfonate	6:2 FTS 8:2 FTS	27619-97-2 39108-34-4
Perfluorooctane sulfonamides	Perfluroroctanesulfonamide	FOSA	754-91-6
Perfluorooctane sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid N-ethyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA N-EtFOSAA	2355-31-9 2991-50-6

1,4-Dioxane Analysis

Samples will be analyzed for 1,4-dioxane by EPA Method 8270 SIM. Reporting limits for 1,4-dioxane are not to exceed 0.35 µg/L.

Reporting

The laboratory will generate NYSDEC Analytical Services Protocol (ASP) Category B data deliverable packages. The data will be validated by an independent data validator. A Data Usability Summary Report (DUSR) will be generated to confirm that the data meet the project specific criteria for data quality and data use. An electronic data deliverable (EDD) will be submitted electronically to the NYSDEC via the Environmental Information Management System (EIMS).

Schedule

The PFAS sampling event will be scheduled within one month of NYSDEC approval.

Sincerely,

Lynn Zicari
Environmental Scientist

Peter S. Morton, P.G., C.P.G.
Project Manager

Attachment A: Groundwater Flow Direction and PFAS Sample Locations, (Figure 10A, Remedial Investigation Report, Labella Associates, D.P.C., June 2018)

Attachment A

Groundwater Flow Direction and PFAS Sample Locations
(Figure 10A, Remedial Investigation Report, Labella Associates, D.P.C., June 2018)

Legend

- RI Well
- Phase II ESA Monitoring Well
- Groundwater Flow Contours
- Site Boundary
- Ground Flow Direction
- Catch Basin
- Sump
- Sump - Underground Piping (Approx.)
- Sump - Interior Overhead Piping
- Approximate Location of Outfall Pipe
- Stormwater Vault

NOTES:
1) Property boundaries obtained from Monroe County GIS and are considered approximate.
2) Site features based on image obtained from Pictometry International, Inc. and may not represent current conditions.
3) Investigation locations measured from existing Site features or GPSed.
4) Groundwater flow modeling completed using Golden Software Surfer 14.0, Kriging model. Static water levels collected October 2017.
5) Contour interval is 0.5-ft.

RE&LS PFAS Groundwater Sample Locations indicated in RED

Sample RI-MW-1-YYYYMMDD

Sample MW-6-YYYYMMDD

Downgradient alternate sample location MW-10-YYYYMMDD

Sample MW-8-YYYYMMDD

Upgradient alternate sample location RI-MW-2-YYYYMMDD

RI-SB/MW-1
GP-11-5/MW-7
GP-11-1/MW-6
GP-12-17/MW-12
GP-09-13
SB-4/MW-4
SB-8/MW-5
GP-12-16/MW-11
SB-1/MW-1
GP-11-11/MW-10
SB-2/MW-2
GP-11-8/MW-8
RI-SB/MW-2
GP-11-9/MW-9
SB-3/MW-3

508' 509' 510' 511' 512' 513' 514' 515' 516' 517'

N W E S

0 5 10 20 30 Feet

1 inch = 30 feet

INTENDED TO PRINT AS: 11" x 17"

LaBella
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CLIENT:

BROWNFIELD CLEANUP PROGRAM #C828158

PROJECT:

REMEDIAL INVESTIGATION 300 COMMERCE DRIVE HENRIETTA, NEW YORK

DRAWING NAME:

GROUNDWATER FLOW: OCTOBER 2017

PROJECT/DRAWING NUMBER:

208723

FIGURE 10A

J:\Yaro Enterprise Inc\208723 BCP 300 Commerce\Drawings\RI Report\FIGURE 10A GW Flow Model.mxd