

438.007

November 15, 2018

 **Leader**
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Ms. Danielle Miles
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

Re: Work Plan for Groundwater Sampling
Emerging Contaminants
Former Labelon Corporation Facility
10 Chapin Street
NYSDEC BCP Site # C835016, Canandaigua, Ontario County

Dear Ms. Miles:

Leader Professional Services, Inc. ("Leader") has prepared this Sampling for Emerging Contaminants Work Plan ("Work Plan") on behalf of Canandaigua Crossroads, LLC for the above-referenced Brownfield Cleanup Program site ("BCP site"). The New York State Department of Environmental Conservation ("NYSDEC") requested that Canandaigua Crossroads, LLC provide the Work Plan in a letter dated July 6, 2018.

Scope of Work

The sampling of groundwater monitoring wells for emerging contaminants will be conducted using the following procedures: each sample will be analyzed for a group of contaminants that NYSDEC has identified as emerging including the following: Perfluoroalkyl sulfonates, Perfluoroalkyl Carboxylates, Fluorinated Telomer Sulfonates, Perfluorooctane-sulfonates, Perfluorooctane-sulfonamides, and Perfluorooctane-sulfonamido-acetic acids (collectively referred to as "PFAS") and 1,4 dioxane.

The groundwater sampling will be conducted in two existing monitoring wells at the BCP site: monitoring well MW-204S, located upgradient from the BCP site and monitoring well MW-201S located down-gradient from the BCP site, see Figure 1.

and MW-201D

Groundwater Sampling for Emerging Contaminants

The groundwater monitoring wells sampling will include a field check of the monitoring well condition including: determining if the surface casing or road box is sound and water tight; there are no obstructions in the monitoring well; and measuring the depth to groundwater. Prior to opening the monitoring well cap, if the road box is observed to be flooded, the water will be removed so it is not allowed to infiltrate the well.

The groundwater sampling will be conducted using a peristaltic pump with silicon or drinking water quality high density polyethylene tubing that is confirmed to be Teflon-free. The peristaltic

pump does not directly contact the water sample and any instrumentation used to measure the groundwater level or to measure field parameters will not contact the samples. The instrumentation used to collect field parameters will be removed from the sampling train prior to the collection of samples and at a location upstream of the instruments.

The parameters to be monitored in the field will include: turbidity, oxidation reduction potential, dissolved oxygen, pH, temperature and conductivity. The turbidity sample will be collected as the monitoring wells are purged for sampling. Turbidity measurements will be measured until a value of less than 50 Nephelometric units (“NTU”) is achieved. If development and purging of the monitoring well does not result in producing a groundwater flow with a turbidity of less than 50 NTU after several hours of pumping, the NYSDEC project manager will be consulted with to determine if sampling should occur once the 50 NTU is achieved or if the monitoring well sampling should be terminated until the monitoring well has fully recharged (i.e. several days). If sampling is terminated, development/purging will continue until a 50 NTU sample can be produced. The groundwater removed from the monitoring well will be containerized for disposal.

When the NTU value is reached the groundwater discharge will be directed to a flow-through cell for the measurement of the remaining field parameters. These values will be measured at 10-minute intervals until stabilization (i.e. measurements within 20% of the preceding three values), while the groundwater level is within approximately 0.3-feet of the static water level. Ideally, the discharge rate of the pump should equal the recharge rate of the groundwater zone into the monitoring well.

Once the field parameters have stabilized sampling for the PFAS and 1,4-dioxane will begin. The samples will be placed into containers provided by the analytical laboratory and as specified on Table 1. The shipping of PFAS and 1,4-dioxane samples will be conveyed in their own coolers or shipping containers as supplied by the laboratory.

In addition to the two samples obtained from the monitoring wells, a duplicate sample, matrix and matrix spike sample, and field blank sample will be collected for analysis. Additional sampling guidelines provided by the laboratory are attached as Appendix 1.

Analytical Methods

The groundwater samples will be analyzed by Alpha Laboratories (“Alpha”), a New York State Department of Health Environmental Laboratory Analytical Program (“ELAP”) certified laboratory for both PFAS and 1,4-dioxane.

The samples will be analyzed for PFAS using methods with reporting limits of 2.0 nanograms per liter (“ng/L”). In addition to the PFAS, the samples will be analyzed for 1,4-dioxane using methods to achieve the lower method detection limit of 0.28 micrograms per liter (“µg/L”).

The PFAS analysis will be conducted using USEPA Method 537. The 1,4-dioxane analysis will be completed using USEPA Method 8270D-SIM. These methods meet the NYSDEC’s reporting and method detection limits of 2.0 ng/L for PFAS and 0.28 µg/L for 1,4-dioxane.

Reporting

Alpha will provide Leader with the sample analysis report and Leader will prepare a summary report including the analysis results for the project. Alpha will provide a full Category B deliverable package laboratory report at a later date. The laboratory report will be reviewed by a third-party data validator who will prepare a Data Usability Summary Review ("DUSR") for the project. Once the DUSR is submitted, Leader will prepare a final letter report for the sampling event which will include a summary of the groundwater sampling activities, any problems occurring during the sampling and their resolution, and a presentation of the sample results in a table format.

EQUIS

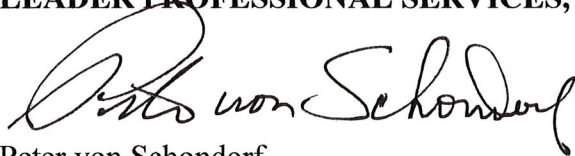
Schedule

Leader will conduct the sampling within two weeks of receiving NYSDEC's approval of the Work Plan. The preliminary sample analysis results from the laboratory will be available in approximately 20 days. Alpha will provide a complete data package within 15 to 20 days after submitting the samples for analysis. Following receipt of the complete laboratory data package, Leader will submit the DUSR and the summary report of the results within 10 days.

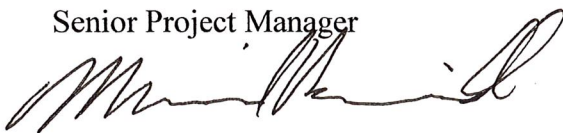
If you have any questions regarding our proposed Work Plan, please contact us 585-248-2413 or by email: pvonschondorf@leaderlink.com.

Very truly yours,

LEADER PROFESSIONAL SERVICES, INC.



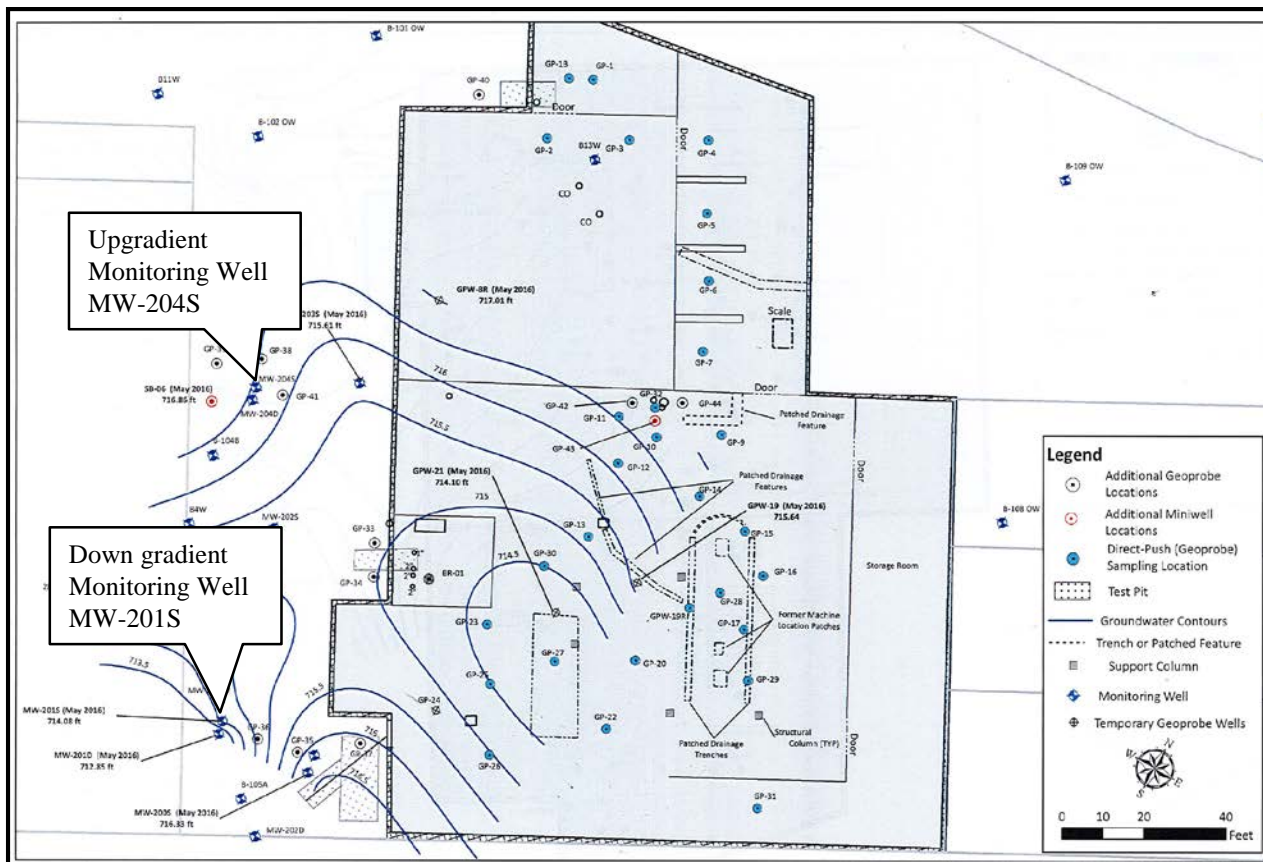
Peter von Schondorf
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Michael P. Rumrill
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Attachments

cc: Alan Knauf, Esq.-Knauf Shaw
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Thomas Masachi – Canandaigua Crossroads
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Melissa Valle – Knauf Shaw
Peter Morton - Ravi



Original figure drawn by MacDonald Engineering, entitled "Figure 3b. Groundwater Contour Map 2016, Soil and Groundwater Remedial Investigation – Former Labelon RI."

Title Proposed Sampling Locations
Former Labelon Corp. Facility
Canandaigua, New York

Prepared For Canandaigua Crossroads, LLC
2604 Elmwood Avenue
Rochester, New York 14618

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Project 438.007
Date 11/14/18
Scale As shown

Drawn PVS
Checked MPR
File Name Well Map

Figure

1

TABLE 1
Sample Analytical Methods and Number of Samples to be Collected
Former Labelon Facility
Canandaigua, New York

Sample Types	1,4-Dioxane SW-846 8270-SIM	PFAS SW-846 Mod. Method 537
Groundwater		
Monitoring well	2	2
Total Number of Samples, including QA/QC samples	6	6

APPENDIX 1

SAMPLING GUIDELINES



EPA 537 (PFAS) Field Sampling Guidelines

PLEASE READ INSTRUCTIONS ENTIRELY PRIOR TO SAMPLING EVENT

Sampling for PFAS via EPA 537 can be challenging due to the prevalence of these compounds in consumer products. The following guidelines are strongly recommended when conducting sampling.

Reference-NHDES <https://www.des.nh.gov/organization/divisions/waste/hwrb/documents/pfc-stakeholder-notification-20161122.pdf>

FIELD CLOTHING and PPE

- No clothing or boots containing Gore-Tex®
- All safety boots made from polyurethane and PVC
- No materials containing Tyvek®
- Do not use fabric softener on clothing to be worn in field
- Do not use cosmetics, moisturizers, hand cream, or other related products the morning of sampling
- Do not use unauthorized sunscreen or insect repellent (see reference above for acceptable products)

FOOD CONSIDERATIONS

No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

OTHER RECOMMENDATIONS

Sample for PFAS first! Other containers for other methods may have PFAS present on their sampling containers

SAMPLE CONTAINERS

- All sample containers made of HDPE or polypropylene
- Caps are unlined and made of HDPE or polypropylene (no Teflon®-lined caps)

WET WEATHER (AS APPLICABLE)

Wet weather gear made of polyurethane and PVC only

EQUIPMENT DECONTAMINATION

- "PFAS-free" water on-site for decontamination of sample equipment. No other water sources to be used
- Only Alconox and Liquinox can be used as decontamination materials

FIELD EQUIPMENT

- Must not contain Teflon® (aka PTFE) or LDPE materials
- All sampling materials must be made from stainless steel, HDPE, acetate, silicon, or polypropylene
- No waterproof field books can be used
- No plastic clipboards, binders, or spiral hard cover notebooks can be used
- No adhesives (i.e. Post-It® Notes) can be used
- Sharpies and permanent markers not allowed; regular ball point pens are acceptable
- Aluminum foil must not be used
- Keep PFC samples in separate cooler, away from sampling containers that may contain PFAS
- Coolers filled with regular ice only - Do not use chemical (blue) ice packs



EPA 537 (PFAS) Field Sampling Guidelines

PLEASE READ INSTRUCTIONS ENTIRELY PRIOR TO SAMPLING EVENT

Sampler must wash hands before wearing nitrile gloves in order to limit contamination during sampling. Each sample set requires a set of containers to comply with the method as indicated below. **Sample set is composed of samples collected from the same sample site and at the same time.*

Container Count	Container Type	Preservative
3 Sampling Containers - Empty	250 mL container	Pre preserved with 1.25 g Trizma
1 Reagent Water for Field Blank use	250 mL container	Pre preserved with 1.25 g Trizma
P1 Field Blank (FRB) - Empty	250 mL container	Unpreserved

Sampling container must be filled to the neck. For instructional purposes a black line has been drawn to illustrate the required fill level for each of the 3 Sample containers

Field blanks are recommended and the containers have been provided, please follow the instructions below.

Field Blank Instructions:

1. Locate the Reagent Water container from the bottle order. The Reagent Water container will be pre-filled with PFAS-free water and is preserved with Trizma.
2. Locate the empty container labeled "Field Blank".
3. Open both containers and proceed to transfer contents of the "Reagent Water" container into the "Field Blank" container.
4. If field blanks are to be analyzed, they need to be noted on COC, and will be billed accordingly as a sample.



Both the empty Reagent Water container and the filled Field Blank container must be returned to the lab along with the samples taken.

Sampling Instructions:

1. Each sampling event requires 3 containers to be filled to the neck of the provided containers for each sampling location.
2. Before sampling, remove faucet aerator, run water for 5 min, slow water to flow of pencil to avoid splashing and fill sample containers to neck of container (as previously illustrated) and invert 5 times.
3. Do not overfill or rinse the container.
4. Close containers securely. Place containers in sealed ZipLoc® bags, and in a separate cooler (no other container types).
5. Ensure Chain-of-Custody and all labels on containers contain required information. Place sample, Field Blank and empty Reagent Blank containers in ice filled cooler (do not use blue ice) and return to the laboratory. Samples should be kept at 4°C ±2. Samples must not exceed 10°C during first 48 hours after collection. Hold time is 14 days.

Please contact your Alpha Analytical project manager with additional questions or concerns.