

9 May 2025

Mr. Michael Belveg Division of Environmental Remediation New York State Department of Environmental Conservation 5786 Widewaters Parkway Syracuse, New York 13214

RE: Supplemental Soil Sampling Letter Work Plan - FINAL Contract/Work Assignment No: D009806-32 Zip Zip Mini Market, Syracuse, New York Site No. B00075

Dear Mr. Belveg:

This Letter Work Plan provides detail for additional soil samples to be collected at the Zip Zip Mini Market Site (Number [No.] B00075) (Site) in the city of Syracuse, Onondaga County, New York (**Figure 1**). The objective of the additional sampling is to refine the nature and extent of surface soil contamination to support the cover system element of the selected remedy. The data collected through the supplemental soil sampling will provide the basis for the design of the cover system at the Site. The sampling will include drilling and sampling soil at 5 locations in the western corner of the site from zero to two feet below ground surface (bgs). The proposed soil sampling locations are shown in **Figure 2**.

Field activities will be completed in accordance with this Letter Work Plan, EA's Generic Field Activities Plan (FAP), EA's Site-Specific Health and Safety Plan, EA's Generic Health and Safety Plan, and EA's Generic Quality Assurance Project Plan. These plans have been submitted to the Division of Environmental Remediation and are available upon request. Additional specific tasks and any deviations are described in the following sections.

BRIEF SITE DESCRIPTION AND BACKGROUND

The Site is 1.14 acres, identified as Tax Parcel 031.-08-02.0, and is owned by the City of Syracuse (**Figure 1**). The property, located at 1410 Erie Boulevard East, is zoned for commercial use and is currently used as a parking area. Topography at the Site is relatively flat, and the ground surface is hard, compact soil, and gravel with some areas paved in asphalt. Based on the first phase of the PDI field activities conducted in Fall 2023, perched groundwater was encountered within non-native fill, and shallow groundwater was encountered at a depth of approximately 6.5 to 15.65 feet bgs. The groundwater flow direction at the Site was determined to generally flow to the north-northwest under an approximate average hydraulic gradient of 0.0585 feet per foot (ft/ft).

Until 1997, the Site was used as a retail gasoline business prior to a fire that destroyed the service building. Contamination at the Site is believed to be the result of improperly closed underground storage tanks remaining at the Site following closure of the service station. Further description of



site geology and background are included in the original field activities PDI Letter Work Plan dated 23 June 2023.¹

PROPOSED SURFACE SOIL SAMPLING

Up to 5 soil borings will be advanced at the Site by the drilling subcontractor under the full-time supervision of an EA geologist (**Figure 2**). Borings will be advanced to approximately 2 feet bgs in order to collect surface soil samples. The soil borings will be advanced using a Geoprobe and utilizing direct push methods with macrocore sleeves for sampling. Locations of the soil borings may be adjusted in the field if interferences from utilities or other structures are encountered.

The EA field geologist will complete soil logging and classification following ASTM D2488. At a minimum, the following information will be recorded on boring logs:

- Date/times drilling occurred, drill rig behavior
- Subsurface interval and recovery
- Headspace PID readings
- Lithology description in accordance with the Unified Soil Classification System (USCS) ASTM Method D2487 (including USCS code, soil type, color, grain size and shape, texture, moisture content, density, consistency, etc.)
- Any unusual characteristics (e.g., odor, sheens, staining, etc.)

Soil samples for chemical analysis will be collected via the following protocols:

- One surface soil sample will be collected from 0 to 2 inches bgs at each location and analyzed for semi-volatile organic compounds (SVOCs), Target Analyte List (TAL) metals and mercury, herbicides, pesticides, and polychlorinated biphenyls (PCBs).
- A sample will be collected from 2 to 12 in. bgs and 12 to 24 in. bgs from each location. Both sample intervals will be analyzed for volatile organic compounds (VOCs), SVOCs, metals including mercury, PCBs, herbicides, and pesticides.

Surface soil samples will be collected in laboratory provided sample containers for analysis of VOCs (Environmental Protection Agency [EPA] Method Terracore SW846, 5035), SVOCs (EPA Method 8270), TAL metals (EPA Method 6010B), mercury (EPA Method 7471), herbicides (EPA Method 8151A), pesticides (EPA Method 8081B), and PCBs (EPA Method 8082A). **Table 1** presents the sampling scheme and analytical methodology for the analysis. Sample collection information (sample identification, collection date/time, sample depth interval, sample analyses) will be recorded. Soil samples will be analyzed by NYSDEC Call-out Laboratory, Con-Test.

¹ EA Engineering, P.C. and Its Affiliate EA Science and Technology. 2023. *Pre-Design Investigation Letter Work Plan*. June.



DECONTAMINATION PROCEDURES AND INVESTIGATION-DERIVED WASTE

Non-dedicated drilling equipment and tools will be decontaminated prior to, between each drilling location, and prior to departure from site using steam cleaning methods. A temporary decontamination pad will be constructed on-site (e.g., plastic sheeting and hay bales). IDW including personal protective equipment, solids, and liquids generated during the sampling activities, will be stored, handled, and disposed of in accordance with the FAP. The drilling subcontractor will also be required to contain and manage any liquids used for drilling to the extent practicable to prevent off-site runoff of IDW. Drums will be staged at the Site at a location to be determined by EA and EA will ensure drums are labeled and secured.

A composite sample from the soil drums will be submitted for the analysis of Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP SVOCs, TCLP Resource Conservation and Recovery Act metals, TCLP herbicides, TCLP pesticides, TCLP PCBs, reactive sulfide, reactive cyanide, total organic halides, corrosivity, reactivity, paint filter test, and flash point. A composite sample of decontamination water/fluids will be submitted for the analysis of TCL VOCs, TCL SVOCs, Resource Conservation and Recovery Act metals, PCBs, reactive cyanide, reactive sulfide, total organic halides, corrosivity, reactivity, and flash point. The IDW contractor will complete the waste profile for disposal at the appropriate destination facility. It is anticipated that solid and liquid IDW will be non-hazardous.

PROPOSED SCHEDULE

The work outlined above is anticipated to begin in June/July 2025 and be completed in conjunction with the pilot study being conducted at the site.

Please feel free to contact me if you have any questions or concerns at 315-565-6553.

Sincerely yours, EA ENGINEERING AND GEOLOGY, P.C.

Emily Cummings

Emily Cummings Project Manager

Tables

Table 1. Surface Soil Sample Summary

	Sample Location ID	SB-1			SB-2			SB-3			SB-4			SB-5				QA/QC Samples				
	Sample Depth (in. bgs)	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12	12-24	Total Parent Samples	FD	MS/MSD	ТВ	EB/FB	Total Samples
Analyte	Method																					
VOCs	Terracore SW846, 5035		1	1		1	1		1	1		1	1		1	1	10	1	2	1	1	15
SVOCs	8270	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1	2		1	19
TAL Metals, Hg	6010B, 7471	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1	2		1	19
Herbicides, Pesticides, and PCBs	8151A, 8081B, and 8082A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1	2		1	19

Notes:

-- = No Sample

bgs = Below ground surface

EB = Equipment blank

FB = Field blank

FD = Field duplicate

ID = Identification

in. = Inches

MS/MSD = Matrix spike/matrix spike duplicate

PCB = Polychlorinated biphenyl

QA = Quality assurance

QC = Quality control

SVOC = Semivolatile organic compounds

TB = Trip blank

VOC = Volatile organic compounds

Figures



