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Work Plan

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REMEDIAL INVESTIGATION WORK PLAN
65 SULLIVAN STREET

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REMEDIAL INVESTIGATION WORK PLAN
65 SULLIVAN STREET [SITE NO. 828214]
ROCHESTER, NEW YORK

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1. BACKGROUND AND PROJECT OBJECTIVES

1.1 Site Setting

The 65 Sullivan Street Site (Site) is located within a mixed-use area of Rochester, NY. It occupies approximately 0.69 acres and is bordered by Sullivan Street to the north and O'Brien Street to the south. Two commercial/residential buildings located along Joseph Avenue abut the east side of the Site and a commercial property borders the west side of the Site. The Site area is currently zoned R-2, medium density residential which allows for single and two-family dwellings as well as family and group family day-care, places of worship and offices. It is expected that the future use of this property will be either multi-family residences or offices consistent with the surrounding area and compatible with the R-2 zoning designation.

1.2 Background

The Site is currently vacant but had been occupied since at least 1903 by several business entities with processes that included clothing manufacturing, metal stamping as well as manufacturing of power supplies, transformers, vacuum cleaners and printers. According to a Phase II report prepared by Day Environmental (Day, 2019), a variety of materials were reportedly used at the Site including waste oil, paints, cutting oils, solvents, and corrosives.

A single-story building with a partial basement covered most of the property up until 2016 when it was demolished by the City of Rochester. As part of the demolition, all of the foundation but the eastern foundation wall was removed, the basement floors were broken up in place and the basement area was filled in with clean structural fill.

A Phase II investigation was conducted by Day Environmental in 2019 to assess the potential for impacted soil and groundwater at the site. The investigation included evaluation of the potential presence of underground storage tanks (USTs) as well as completion of test pits, advancement of three soil borings and installation of five monitoring wells.

Soil and fill samples were analyzed for NYSDEC Spill Technology and Remediation Series (STARs) list volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, and/or PCBs. Groundwater samples were analyzed for VOCs. A single soil vapor sample was also collected and analyzed for VOCs.

1.2.1 Site Geology and Hydrogeology

The Site surface is covered with approximately 0.5 ft of topsoil which was placed following the demolition of the building. The topsoil is underlain by an average of 7 ft of heterogeneous fill consisting of reworked soil with varying amounts of brick, concrete, wood, metal, and rock. Native deposits underlying the fill is a mixture of sand and silt. Bedrock, encountered at 10 to 14 ft below grade, is dolomite of the Eramosa (Lockport) Formation. A thin layer of fractured shale was encountered at the top of dolomite bedrock in some of the drilling locations. The bedrock surface dips slightly to the southeast.

Based on the drilling logs provided, groundwater occurs at the overburden/bedrock interface at depths between 10 and 14 ft below grade and generally flows towards the east.

1.2.2 Identified Contaminants of Potential Concern

Based on the results of the analyses completed during the Phase II investigation, VOCs and SVOCs were the constituents commonly identified in the soil and fill samples above restricted-residential and, in some instances, commercial use soil cleanup objectives (SCOs) outlined in CRR-NY Part 375. Concentrations of some of the metals were also elevated at several locations. Concentrations exceeding the Unrestricted SCOs were identified at MW-01, TP-02, TB-03 and TP-07 which are located in different areas of the Site. The mercury concentration from a sample collected at TP-07 also exceeded the Restricted Residential SCO.

Groundwater analytical results identified the presence of chlorinated VOCs above Class GA groundwater standards with a total concentration as high as 4,109 µg/L. The VOCs detected were trichloroethene (TCE) and associated daughter compounds. The highest concentration was found in MW-01 which is located on the northwest side of the Site and within the footprint of the former building.

The soil vapor sample contained a number of VOCs, but the only chlorinated VOCs detected were 1,1,1-trichloroethane and several freon compounds. The concentrations were less than 10 µg/m^3. There are no screening levels for soil vapor.

1.2.3 Project Objectives

The primary objective the RI is to assess the nature and extent of Site-related contaminants and the associated potential migration and exposure pathways of constituents of concern. A Feasibility Study (FS) will then be prepared to assess an appropriate remedy.

2. REMEDIAL INVESTIGATION

2.1 General

The RI activities discussed in this Work Plan include the following:

- Collection and analysis of surface soil samples from 4 locations
- Completion of soil borings around each of 4 identified areas of concern (AOCs) to assess the extent of impacted materials in each area plus 3 additional soil borings for the purpose of collecting soil samples for analysis
- Installation of 5 shallow overburden and 3 bedrock monitoring wells to collect groundwater samples for analysis
- Collection of 2 soil vapor samples
- Conduct vapor intrusion sampling at adjacent properties where necessary and access is granted.

Related activities will include a utility survey by a private contractor, CAMP monitoring, well and boring survey, characterization and disposal of investigation derived waste (IDW), and data validation.

An RI report will be prepared that includes a qualitative human health exposure assessment (QHHEA). Following approval of the RI report, a Feasibility Study (FS) will be conducted and documented in a FS report.

The following details the activities to be completed as part of the RI.

2.1.1 Utility Clearance

Dig Safely New York (DSNY) will be contacted by the subcontractor prior to invasive work to locate utilities at the Site prior to initiating the field program. It should be noted that DSNY will only coordinate location of utilities for those companies subscribing to the service. Furthermore, the utilities will only identify the locations of subsurface lines on public property and rights-of-way. To minimize the potential for damaging of subsurface utilities, a private utility locator will be contracted to identify potential subsurface structures at each of the drilling locations.

2.1.2 Shallow Soil Sampling

Surface soil samples will be collected from 4 locations to characterize the topsoil layer previously used following demolition to cover the Site as well as the shallow fill material that makes up the two-foot cover layer of the Site. The locations will be selected during the field investigation. Samples will be collected from two intervals at each location using the drilling rig. One sample will be collected from 0 to 6 inches and the second sample will be from 6 to 24 inches. The samples will be analyzed for TCL and TAL constituents as itemized on **Table 1**. The locations of these samples are shown on **Figure 1.**

2.1.3 Soil Borings

A total of 17 soil borings will be completed to further assess the subsurface material at the Site. Fourteen of the borings will be used to further evaluate the four AOCs (A, B, C, and D) identified during the Phase II investigation. Three additional soil borings will be completed in other areas of the Site which were not evaluated during the Phase II as shown on the attached **Figure 1**. The

borings will be completed using direct push drilling methods. Each boring will be completed to bedrock which is estimated to be between 10 and 14 ft below grade. Soil samples will be collected continuously to the base of the boring using standard split barrel sampling methods.

Upon retrieval, each soil sample will be described for:

1. percent recovery;
2. soil type;
3. color;
4. moisture content;
5. texture;
6. grain size and shape;
7. consistency;
8. evidence of staining or other chemically-related impacts; and
9. any other relevant observations.

In addition, headspace screening of soil will be performed with a photoionization detector (PID) to allow evaluation of the bulk volatile organic concentration of each soil sample. Screening will be performed at approximate 2-ft intervals unless observations warrant deviation. This descriptive information will be recorded on a soil boring log form.

At each AOC, one sample per boring will be collected for analysis. One of the soil samples from each AOC will be analyzed for the TCL/TAL analyte suite. This suite of analyses includes VOCs, SVOCs, PCB and TAL metals in addition to 1,4 dioxane and per- and polyfluoroalkyl substances (PFAS). The remainder of the soil samples collected at the AOC will be analyzed for the constituents that were identified to be above soil cleanup objectives during the Phase II investigation. A soil sample from each of the three additional borings not associated with an AOC will also be collected for analysis of the TCL/TAL analyte suite. A summary of the soil analyses for each AOC is as follows:

AOC	# of Borings	Samples and Analysis
AOC A	3	1 TCL/TAL 2 VOCs, SVOCs
AOC B	4	1 TCL/TAL 3 VOCs, SVOCs, PCBs
AOC C	4	1 TCL/TAL 3 VOCs, METALS
AOC D	3	1 TCL/TAL 2 VOCs, SVOCs
General Area	3	3 TCL/TAL

TCL/TAL = VOCs, SVOCs, PCBs, Pesticides, TAL metals, ECs

Upon completion, the boring will be filled to grade using a bentonite and cement grout mixture. A stake labeled with the boring ID will be placed at the location to mark it for the surveyor.

2.1.4 Soil Vapor

Soil vapor (SV) samples will be collected from 1 on-site and 1 off-site location. The on-site samples will be collected from approximately 8 ft below grade using temporary sample probes. A drilling subcontractor will advance borings to 10 ft below grade using direct-push methods. The

SV points will be constructed with a 6-inch long, stainless steel, braided screen implant probe attached to ¼-inch outside diameter tubing. The annular space around the probe will be filled with 60-100 mesh glass beads or clean sand to approximately 2 feet above the implant probe. A hydrated granular bentonite seal will be placed above the glass beads to surface grade to prevent ambient air infiltration.

The SV samples will be collected from each location using batch-certified canisters. Helium tracer gas will also be used to verify that there is no leakage through the surface seal. The samples will be collected in batch-certified SUMMA canisters at a rate of 0.2 L/min maximum for a period of up to 2 hours. For QA/QC purposes 1 ambient air sample and 1 duplicate sample will be collected for analysis. The samples will be analyzed using TO-15.

Following sample collection, the tubing will be pulled out or cut off to approximately 8 inches below grade and the surface will be sealed with bentonite and/or concrete depending on the type of surface present.

2.1.5 Monitoring Wells

Five shallow and three deep groundwater monitoring wells will be installed to augment the monitoring well network that was installed during the Phase II Investigation. The approximate locations are shown on **Figure 2**. Two of the shallow wells and each of the deep wells will be installed on the Site. Three shallow wells will be installed off-site along the sides of Joseph Avenue and Sullivan Street to evaluate the extent of the groundwater plume. The shallow wells will be constructed to screen the interface between the overburden and bedrock similar to the existing wells. The deep wells will be completed to 20 ft below the top of bedrock.

At each off-site drilling location, the upper 5 ft of the boring will be advanced using hand clearing methods for the purpose of avoiding damage to potential utilities that were not identified by the utility clearance evaluation. Borings for the wells will then be completed to bedrock using conventional hollow stem auger drilling methods. Soil samples will be collected continuously. The boring will be advanced into bedrock using an HQ core barrel. The borings for the shallow wells will be advanced to approximately 5 ft below the top of rock and the deep wells will be advanced to 20 ft below the top of rock.

The wells will be constructed with 2-inch diameter, 0.010-inch slotted PVC well screen, flush-threaded to appropriate lengths of 2-inch diameter PVC riser casing necessary to bring the top of the well to grade. Wells screens for the shallow wells will be 10 ft in length and screens for the deep well will be 5 to 10 feet in length depending on the fracture patterns identified. The well heads will be completed with flush-mounted, roadbox covers within a concrete pad.

2.1.6 Monitoring Well Development

Each newly installed monitoring well will be developed no earlier than 24 hours following installation. Development will be performed by surging and purging the well using a bailer or pump, as appropriate, to remove the fine-grained material which may have settled within the well and to provide hydraulic communication with the surrounding formation. Three to five well volumes will be removed as part of this process. Groundwater parameters will be measured and recorded prior to development, after removal of each well volume during development, and at

the conclusion of development. Parameters will include turbidity, pH, temperature, and specific conductance. Water levels will be measured prior to and at the conclusion of development. The well will be considered developed when the parameters stabilize, or when 5 well volumes of water has been removed, whichever occurs first. If the well goes dry during development, it will be allowed to partially recover and then bailed to dryness one more time to complete the development. Well development information will be recorded on a well development log.

2.1.7 Groundwater Sampling

One set of groundwater samples will be collected from the eight newly installed monitoring wells and the existing five monitoring wells.

Prior to the collection of groundwater samples, groundwater levels will be measured to the nearest 0.01 foot from the well to be sampled using an electronic water level probe. The water level measurements will be recorded from a reference point to be marked on each well casing.

Groundwater samples will be collected using low-flow methods. The wells will be purged at flow rate not to exceed 500 milliliters per minute (ml/min) and water quality parameters will be monitored. The samples will be collected once the water quality measurements have stabilized as outlined below:

- Temperature ± 3% of measurement
- pH ± 0.1 pH units
- Specific conductance ± 3% of measurement
- Redox ±10 mV
- DO ±10% of measurement
- Turbidity ± 10% of measurement

If a stable groundwater level cannot be maintained at a yield of at least 100 ml/min, the well will be dewatered to the intake of the pump and water will be allowed to recover and the groundwater sample will be collected.

Collected samples from three of the on-site wells will be analyzed for TCL VOCs, TCL SVOCs, Pesticides, PCBs, 1,4 dioxane, PFAS, TAL metals and cyanide. Samples collected from the remaining wells will only be analyzed for VOCs. **Table 1** provides a summary of analytical parameters and associated methods, and number of samples.

Analysis	On-site wells (3)	Remaining wells (10)
VOCs	X	X
SVOCs	X	
Pesticides	X	
PCBs	X	
1,4 dioxane	X	
PFAS	X	
TAL Metals	X	
Cyanide	X	

Samples for PFAS analysis will be collected consistent with the NYSDEC PFAS Guidance (NYSDEC, 2020). PFAS samples will be collected before any other sample(s) at each location.

2.1.8 Vapor Intrusion Sampling

Vapor intrusion sampling will be completed at adjacent properties where current or future data warrants soil vapor intrusion investigation. For the commercial/residential properties, it is assumed that up to four vapor intrusion samples will be completed (2 per building), however the actual number may vary based on the findings of a pre-sampling inspection of the structures and the associated HVAC information. Samples will be collected in 6-liter SUMMA® canisters and performed consistent with *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH, 2006). Samples will have 24-hour integrated sample periods. Samples will be submitted for analysis of standard list VOCs by USEPA Method TO-15.

The sub-slab vapor sample will be collected by installing a temporary sampling point through the floor of the lowest level of the building. The sub-slab soil vapor will be collected utilizing a certified-clean, 6-liter, pre-evacuated canister. The required sampling rate will be maintained by a laboratory-calibrated, constant-differential low volume flow controller.

An indoor air sample will be collected from the same general location inside the building as the sub-slab sample. The canister inlet will be positioned at approximately four to five feet above the slab to approximate the breathing zone. The indoor air sample will be collected over the same time period as the sub-slab sample utilizing a certified-clean, 6-liter, pre-evacuated canister.

A building survey and chemical inventory will be conducted during the sampling and documented on a building inspection form.

In addition to and simultaneously with the sub-slab and indoor air samples, one ambient air sample will be collected into a certified clean, pre-evacuated, 6-liter canister positioned on the property upwind of the on-site building during the same 24-hour period as the sub-slab and indoor air samples.

QA/QC for the vapor intrusion sampling will consist of one duplicate sample for the series of structures and one ambient air sample will be collected during the same period. The duplicate will be collected at one of the structures using a separate canister connected to the sub-slab sample with a T-fitting. The sub-slab and indoor air samples will be analyzed for VOC using TO-15.

2.1.9 Air Monitoring

Consistent with the Community Air Monitoring Plan (CAMP) provided in Appendix 1A of NYSDEC's Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) (NYSDEC 2010), air monitoring will be conducted during advancement of soil borings and monitoring wells. Accordingly, one upwind and one downwind station equipped with PID and particulate monitoring equipment will be housed in enclosures and mounted on tripods. The specific locations of the equipment will be based on wind direction and the location of the potential exposure populations at the time the field activities are completed. CAMP data will be downloaded from the instruments and provided to NYSDOH on a weekly basis. Any identified exceedances of action levels will be reported to NYSDEC and NYSDOH the same day or next business day if after hours along with information documenting the reason for exceedance,

correction measures implemented, if needed, and a statement pertaining to the effectiveness of the corrective measure, if implemented. A copy of the CAMP monitoring guidance is included as Attachment 1.

2.2 Sample Analysis and Validation

Table 2 provides a summary of the environmental media to be sampled, analytical parameters and associated methods, number of samples and associated QA/QC samples.

QA/QC samples for soil and groundwater will consist of a field duplicate, a matrix spike, and matrix spike duplicate sample collected at a frequency of one per 20 samples. An equipment blank will also be collected and analyzed for PFAS and a trip blank will accompany coolers containing samples to be analyzed for VOCs.

The collected samples will be shipped to an ELAP-certified laboratory designated by NYSDEC for this project. The laboratory will provide an analytical data package that is consistent with the requirements of NYS ASP Category B. In addition, the laboratory will submit analytical data as an Electronic Data Deliverable (EDD) consistent with NYSDEC format.

Laboratory generated analytical data, except for waste characterization sample results, will be validated in accordance with the QAPP and a data usability summary report (DUSR) conforming to Appendix 2B of DER-10 will be prepared.

2.2.1 Decontamination

Decontamination will take place on-site. Water generated will be contained for off-site disposal. A temporary decontamination pad will be used for decontamination of augers and drill rods by use of steam cleaner. Decontamination (other than augers and drill rods) will be completed using non-phosphate detergent (*e.g.* alconox®, liquinox®, simple green®) bucket wash and potable water rinse.

2.2.2 Survey

A location and elevation survey will be completed following completion of the field activities and will include horizontal locations of shallow soil samples, horizontal location and grade elevation at soil borings, horizontal location and vertical elevation of new and existing monitoring wells (grade and top of PVC).

The survey will be completed by a New York State-licensed surveyor. Horizontal datum will be referenced to North American Datum (NAD) 83 (2007) New York State Plane Eastern Zone and vertical datum to North American Vertical Datum (NAVD) 88. Elevation will be surveyed to 0.01-foot accuracy.

2.2.3 Investigation Derived Waste (IDW) Management

IDW, including PPE, tubing, sampler liners, excess soil and rock samples, decontamination fluids and well development and purge water will be placed in DOT-approved 55-gallon drums and staged on the Site pending offsite disposal. Materials will be segregated by media for characterization and disposal. The soil and water will be transported to a regulated facility for disposal based on the waste characterization results. PPE and other material used will be disposed as solid waste.

3. REMEDIAL INVESTIGATION REPORT

A Remedial Investigation Report (RIR) will be prepared following receipt of the analytical results and the DUSR. This report will discuss the investigation activities and the results. Conclusions based on this data will be provided and may include the following components based on the information generated:

- ***Site Description:*** This will include a discussion of current use of the Site.
- ***Site investigation Summary:*** This section will describe the activities completed as part of the SC investigation and include deviations or modifications to the work scope defined in Schedule 1 (this document).
- ***Site Hydrogeology:*** A brief description of the subsurface soil characteristics and occurrence of groundwater will be provided. A groundwater flow map will be included.
- ***Nature and Extent of Contamination:*** This section will include a discussion of the presence of constituents detected and those that are detected at concentrations above regulatory criteria. The latter will be identified as constituents of potential concern (COPC).
  - ***Soil:*** Detected constituents in soil samples will be compared to 6 NYCRR Part 375 Restricted Commercial Use Soil Cleanup Objectives (SCOs) and to Protection of Groundwater for compounds detected in groundwater. Detected PFAS will be compared to the guidance values as presented in *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* (NYSDEC, 2020) or the most recent document.
  - ***Groundwater:*** The detected constituents in groundwater will be compared to Class GA water quality standards and guidance values as compiled in *Technical and Operational Guidance Series 1.1.1* (NYSDEC, 1998) and associated addenda. Detected PFAS will be compared to the screening levels as presented in *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* (NYSDEC, 2021) or the most recent document.
  - ***Vapor Intrusion:*** The concentrations of constituents detected in the sub-slab and indoor air will be compared to the matrices that are presented in the NYSDOH document, *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 and associated updates (NYSDOH, 2006).
- ***Conceptual Site Mode (CSM)I*** – A CSM will be based on the findings of the investigation and include a discussion of the nature of the source(s) and migration pathways based on the site history and data collected.
- ***Qualitative Human Health Exposure Assessment (QHHEA)*** – A QHHEA will be prepared to discuss the potential for current and future exposures to humans based on activities that may be completed at the Site.
- ***Summary and Conclusions:*** This section will present a summary of the COPCs identified and their respective concentrations. Data gaps will be presented if identified.

4. FEASIBILITY STUDY

4.1 General

A Feasibility Study (FS) will be conducted to develop, screen and evaluate applicable remedial alternatives for the Site in order to present sufficient information for decision makers to compare alternatives and select a remedy. The completion of the FS will be in accordance with DER-10 (NYSDEC, 2010).

The FS will be developed in two steps:

- Development of remedial alternatives
- Detailed analysis of remedial alternatives

The FS will be documented in the FS Report. The following describes the steps to be completed for the FS.

4.1.1 Development of Remedial Alternatives

The first step in the FS is the development, of a range of remedial alternatives that are reflective of appropriate waste management options and which are protective of public health and the environment. The development of alternatives will be completed in accordance with DER-10 (NYSDEC, 2010) and includes the following steps:

- Development of remedial action objectives (RAOs)
- Development of general response actions (GRAs)
- Identification of volumes or areas of media to be addressed
- Identification and screening of remedial technologies and process options
- Evaluation of process options
- Assembly of remedial alternatives

As requested by NYSDEC, it is assumed that a total of up to five alternatives will be developed. It is also assumed that the screening of remedial technologies will be presented in tabular format alone. Consistent with DER-10 (NYSDEC, 2010), one alternative will be the no further action alternative, and one alternative will represent restoration of the Site to pre-disposal conditions. The remaining three alternatives will be developed based on the anticipated future use of the Site and media that are found to be impacted. Media of concern to be addressed in this FS are assumed to focus on VOCs in overburden groundwater, soil, and soil vapor. It is assumed that ecological concerns will not need to be addressed given the location of the Site. A description of each alternative will be prepared as part of the assembly of remedial alternatives.

4.1.2 Detailed Analysis of Alternatives

The objective of this step is to evaluate the remedial alternatives and present sufficient information for selection of a remedy.

The alternatives will be evaluated based on specific regulatory requirements, technical, cost, and institutional considerations. The detailed analysis will consist of an assessment of each alternative against the evaluation criteria described below. The detailed analysis will also include

a comparative evaluation identifying the relative performance of each alternative against the criteria. In accordance with DER-10 Section 4.2, the following criteria will be used to evaluate the alternatives in detail:

- Overall protection of human health and the environment
- Compliance with Standards, Criteria and Guidance (SCGs)s
- Long-term effectiveness and permanence
- Reduction of toxicity, mobility, or volume of contamination through treatment
- Short term impact and effectiveness
- Implementability
- Cost effectiveness
- Land Use
- Green Remediation Criteria

One alternative will be identified which is preferred over the others. In accordance with DER-10, the preferred alternatives must be protective of human health and the environment and must address promulgated standards and criteria that are directly applicable or are relevant and appropriate. The recommended alternative will be documented in the FS Report.

4.1.3 Feasibility Study Report

An FS report will be prepared to document the FS process. Consistent with DER-10, the following the FS report will be formatted as follows:

1. Introduction
2. Site Description and History
3. Summary of Remedial Investigation and Exposure Assessment
4. Development of Remedial Alternatives
    - Development of RAOs
    - Development of GRAs
    - Identification, screening and evaluation of remedial technologies and process options
    - Assembly of remedial alternatives
5. Detailed Analysis of Remedial Alternatives
6. Recommended Alternative

5. REFERENCES

Day, 2019. *Phase II Environmental Site Assessment Report, 65 Sullivan Street, Rochester, NY*. Day Environmental, Inc. October 2019.

NYSDEC, 1998. Division of Water Technical and Operational Guidance Series (TOGS) – *Ambient Water Quality Standards and Guidance Values and Ground Water Effluent Guidelines* (TOGS 1.1.1). June 1998.

NYSDEC, 2010. *Technical Guidance for Site Investigation and Remediation (DER-10)*. Division of Environmental Remediation. May 3, 2010.

NYSDEC, 2020. *Sampling, Analysis, And Assessment of Per- And Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs*. January 2021.

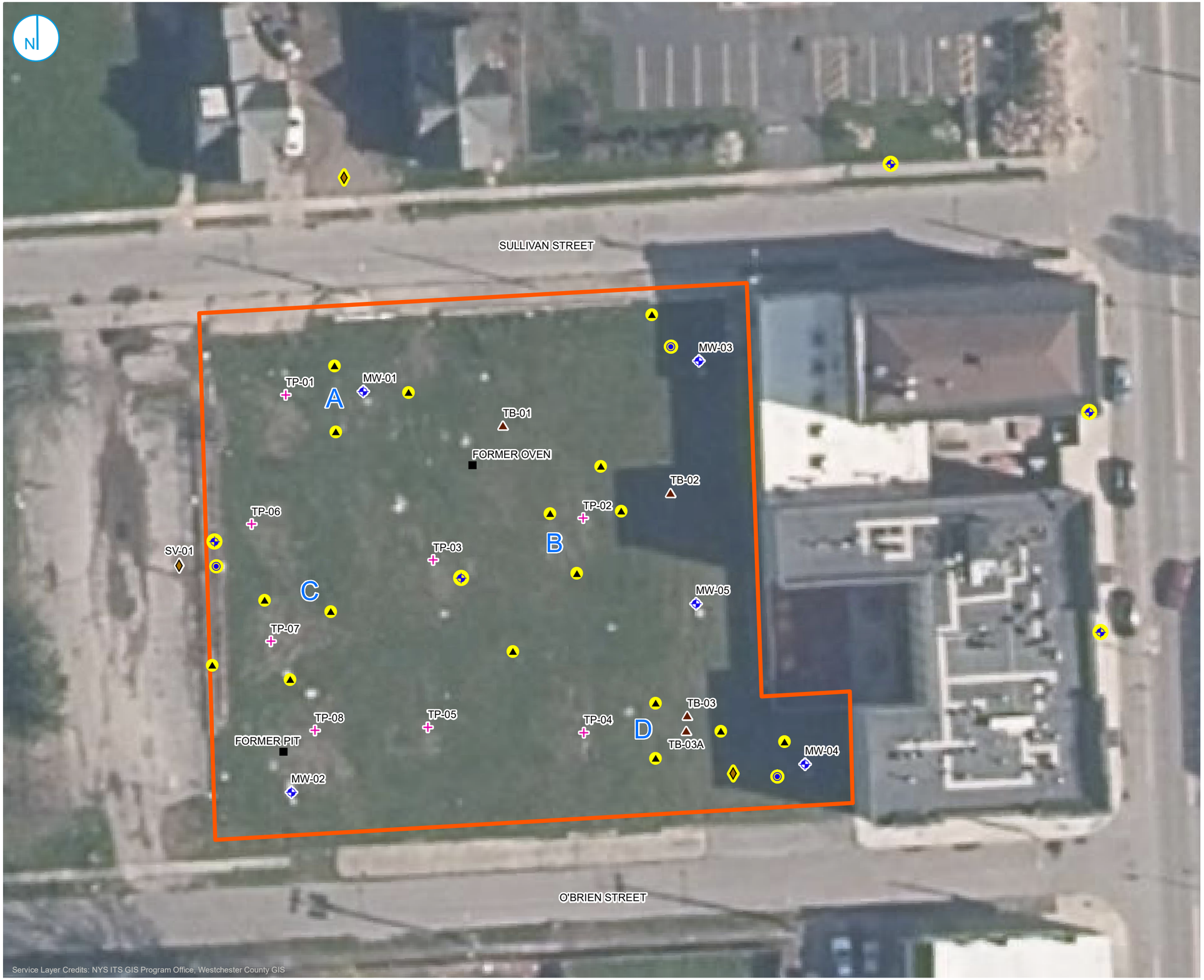
TABLES

Table 1
Sample Analysis and QA/QC Summary
65 Sullivan St. Site
Rochester, NY

Sample Type	Matrix	Analyses	Method	Number of Samples	Trip Blank	Equipment Blank	Field Duplicate	MS	MSD	Estimated Total Number of Samples	Deliverable	Validated (Y/N)
Surface and Subsurface Soil	**Soil**	TCL Volatiles + 10	USEPA Method 8260C	23	10		1	1	1	36	Category B	Y
		TCL Semivolatiles + 20 and 1,4 Dioxane	USEPA Method 8270	20			1	1	1	23		
		TCL PCBs	USEPA Method 8082	16			1	1	1	19		
		TCL pesticides	USEPA Method 8081B	13			1	1	1	16		
		TAL Inorganics	USEPA Method 6010B	16			1	1	1	19		
		Cyanide	USEPA Method 9010B	16			1	1	1	19		
		Mercury	USEPA Method 7471A	16			1	1	1	19		
		PFAS	USEPA Method 537.1	13		5	1	1	1	21		
		1,4 Dioxane	USEPA Method 8270 **SIM**	13			1	1	1	16		
Groundwater Samples	**Water**	TCL Volatiles + 10	USEPA Method 8260C	13	5		1	1	1	21	Category B	Y
		TCL Semivolatiles + 20	USEPA Method 8270D	3			1	1	1	6		
		TCL PCBs	USEPA Method 8082	3			1	1	1	6		
		TCL pesticides	USEPA Method 8081B	3			1	1	1	6		
		TAL Inorganics	USEPA Method 6010B	3			1	1	1	6		
		Cyanide	USEPA Method 9010B	3			1	1	1	6		
		Mercury	USEPA Method 7471A	3			1	1	1	6		
		1,4 Dioxane	USEPA Method 8270 **SIM**	3			1	1	1	6		
		PFAS	USEPA Method 537.1	3		3	1	1	1	9		
Vapor Intrusion	**Air**	Sub slab (batch certified canister)	TO-15	6			1			7	Category B	Y
		Indoor Air (indiviually certified canister)	TO-15	6						6		
		Ambient Air (indiviually certified canister	TO-15	6						6		
		SV Ambient Air (indiviually certified cani	TO-15	1						1		
		Soil Vapor	TO-15	2			1			3		

Notes:
- SIM = Selective Ion Monitoring

FIGURES



SITE BOUNDARY

LOCATION TYPE

- MONITORING WELL
- OTHER
- SOIL VAPOR
- TEST BORING
- TEST PIT

PROPOSED LOCATIONS

- PROPOSED BEDROCK WELL
- PROPOSED GROUNDWATER MONITORING WELL
- PROPOSED SOIL BORING
- PROPOSED SOIL VAPOR OR SVI

0 15 30 Feet

SITE PLAN

65 SULLIVAN STREET
ROCHESTER, NEW YORK

FIGURE 01

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

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PROJECT: 1940100395 | DATED: 8/23/2021 | DESIGNER: STANTOSA

ATTACHMENT 1
NYSDEC CAMP

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

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