Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS

December 30, 2025

Haala Al-Hadithy
NYSDEC Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101

Re: Amendment to Off-Site Soil Vapor Intrusion Investigation Work Plan Main Street Kew Gardens Site (BCP Site No. C241205) (the "Site")

Dear Ms. Al-Hadithy,

Please accept the below as an amendment letter to the August 2021 Off-Site Soil Vapor Intrusion Investigation Work Plan for the above referenced Site. This amendment proposes the installation and sampling of soil vapor probes SV-14 through SV-25 to determine the extent of soil vapor intrusion to offsite properties. All sampling, analytical and reporting protocols will follow the Quality Assurance Project Plan contained in Appendix G of the approved RIWP. The locations of SV-14 through SV-25 are specified in the attached Figure 2. In addition, this amendment includes updated appendices that provide a revised remedial schedule, an updated Community Air Monitoring Plan (CAMP) with associated field log templates, and the qualifications of personnel preparing Data Usability Summary Reports in connection with this investigation.

1. Preconstruction

Sampling events conducted beneath the Site have identified a Tetrachloroethene (PCE), Trichloroethylene (TCE) and cis,1-2,Dichloroethelene soil vapor plume with a hotspot under Queens Bakery. Figure 1A shows sub-slab soil vapor and indoor air Chlorinated Volatile Organic Compound (CVOC) concentrations detected from the basement of the onsite building. Soil Vapor sampling in the sidewalks around the Site have detected levels of PCE, TCE, and cis,1-2,Dichloroethelene in deep soil vapor beneath the property. Figure 1B shows concentrations of CVOCs detected in deep soil vapor exterior of the onsite building.

2. Soil Vapor Sampling

To provide long-term access for soil vapor sampling and extended pressure field monitoring, permanent soil vapor points will be installed at the approximate locations indicated in the proposed sampling diagram (Figure 2). Exterior soil vapor points SV-14 through SV-20 will be installed approximately 10 feet bgs utilizing a Geoprobe hydraulic drill rig, HDPE tubing and a permanent 6-inch woven steel screen implant. During the remedial investigation, permanent exterior soil vapor points were installed to 10 feet bgs. Accessible, functional, and proximate soil vapor points will be utilized for sampling. Any point that is not functional, will be replaced. Multi-Interval Exterior soil vapor points SV-21 through SV-25 will be installed approximately 5 feet, 10 feet, and 14 feet bgs utilizing a Geoprobe hydraulic drill rig, HDPE tubing and a permanent 6-inch woven steel screen implant. The surface of each of the vapor points will be finished with a manhole cover.

A 6-Liter stainless steel Summa® canister with a flow regulator set to a flow rate of approximately 0.025 liters per minute will be connected to the Teflon tubing exiting each soil vapor probe. Flow regulators will not exceed a flow rate of 0.025 liters per minute. One to three implant volumes will be purged prior to collecting the samples. Once the canisters are in place, the flow regulators will be opened, and a sample will be collected that will achieve minimum reporting limits and will retain at least some vacuum.

The work will be completed in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, with all updates. It is anticipated that the soil vapor sampling will occur over the course of 4 days. An updated revised schedule for completion of the investigation and remediation through issuance of the Certificate of Completion is attached as Appendix 1.

3. Quality Assurance/Quality Control

3.1 Quality Assurance/Quality Control Procedures

QA/QC procedures will be used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analysis for this investigation. Field QA/QC procedures will be used (1) to document that samples are representative of actual conditions at the Site and (2) identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses will be used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process. A summary of the field and laboratory QA/QC procedures is provided below.

3.2 Field QA/QC

Field QA/QC will include the following procedures:

- Calibration of field equipment, including PID, on a daily basis;
- Use of dedicated and/or disposable field sampling equipment;

- Proper sample handling and preservation;
- Proper sample chain of custody documentation; and
- Completion of report logs.

The above procedures will be executed as follows:

- Disposable sampling equipment, including acetate sleeves, latex gloves, and disposable bailers (or sample tubing), will be used to minimize cross-contamination between samples;
- For each of the parameters analyzed, a sufficient sample volume will be collected to adhere to the specific analytical protocol, and provide sufficient sample for reanalysis if necessary;
- Because plasticizers and other organic compounds inherent in plastic containers may contaminate samples requiring organic analysis, samples will be collected via Summa® canisters.
- Samples will be analyzed prior to the expiration of the respective holding time for each analytical parameter to ensure the integrity of the analytical results.

3.3 Report Logs

Field logs will be completed during the course of this investigation. A field log will be completed on a daily basis which will describe all field activities including:

- Project number, name, manager, and address;
- The date and time;
- The weather conditions;
- On-site personnel and associated affiliations;
- Description of field activities; and
- Pertinent sample collection information including sample identification numbers, description of samples, location of sampling points, number of samples taken, method of sample collection and any factors that may affect its quality, time of sample collection, name of collector, and field screening results.
- Sample Field Log Template has been attached as Appendix 2.

3.4 Sample Custody

Sample handling in the field will conform to appropriate sample custody procedures. Field custody procedures include proper sample identification, chain-of-custody forms, and packaging and shipping procedures. Sample labels will be attached to all sampling bottles before field activities begin to ensure proper sample identification. Each label will identify the Site and sample location. Styrofoam or bubble wrap will be used to absorb shock and prevent breakage of sample containers. Ice or ice packs will be placed in between the plastic bags for sample preservation purposes.

After each sample is collected and appropriately identified, the following information will be entered into the chain-of-custody form:

- Site name;
- Sampler(s)' name(s) and signature(s);
- Names and signatures of persons involved in the chain of possession of samples;
- Sample number;

- Number of containers;
- Sample location;
- Date and time of collection;
- Type of sample, sample matrix and analyses requested;
- Preservation used (if any); and
- Any pertinent field data collected

The sampler will sign and date the "Relinquished" blank space prior to removing one copy of the custody form and sealing the remaining copies of the form in a Ziploc plastic bag taped to the underside of the sample cooler lid. The sample cooler will be sealed with tape prior to delivery or shipment to the laboratory.

3.5 Laboratory QA/QC

An ELAP-certified laboratory will be used for all sample analyses. The laboratory will follow the following QA/QC protocols. All samples will be delivered to the laboratory within 24 hours of sample collection. Samples will be received by laboratory personnel, who will inspect the sample cooler(s) to check the integrity of the custody seals. The cooler(s) will then be opened, the samples unpackaged, and the information on the chain-of-custody form examined. If the shipped samples match those described on the chain-of-custody form, the laboratory sample custodian will sign and date the form on the next "Received" blank and assume responsibility for the samples. If problems are noted with the sample shipment, the laboratory custodian will sign the form and record problems in the "Remarks" box. The custodian will then immediately notify the Project Manager so appropriate follow-up steps can be implemented on a timely basis.

A record of the information detailing the handling of a particular sample through each stage of analysis will be maintained by the laboratory. The record will include:

- Job reference, sample matrix, sample number, and date sampled;
- Date and time received by laboratory, holding conditions, and analytical parameters;
- Extraction date, time and extractor's initials (if applicable), analysis date, time, and analyst's initials; and
- QA batch number, date reviewed, and reviewer's initials.

NYSDEC ASP Category B Data Deliverables will be submitted for all of the samples representing the final delineation of the nature and extent of contamination for a remedial investigation. Data validation packages and Data Usability Summary Reports (DUSRs) will be provided in the RIR to support the remedial investigation. The DUSRs for this project will be prepared by Jeri Rossi. Ms. Rossi's resume and qualifications for preparing the DUSR report is provided as Appendix 3.

4. Community Air Monitor Plan

All work will be performed in compliance with the site-specific CAMP attached as Appendix 4. The CAMP is designed to provide a measure of protection for the public and will be implemented during all ground intrusive activities such as the installation of soil vapor points. In order to effectively measure potential exposures and background levels, CAMP monitoring will

include both upwind and downwind monitoring of the ground-intrusive work. CAMP monitoring stations will be updated periodically and / or when wind direction changes.

CAMP data will be provided as a subsection of the daily field reports. CAMP Daily Monitoring Log template is attached as Appendix 5. If an exceedance occurs the NYSDEC and NYSDOH will be informed via email within 2 hours. This email should include a description of the exceedance, the cause of the exceedance, a description of corrective actions taken, and a summary of the effectiveness of corrective actions, if any were taken.

Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS

I, Jason Stewart certify that I am currently a Professional Engineer as defined in 6 NYCRR Part 375 and that this Off-Site Soil Vapor Intrusion Investigation Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Feel free to contact me if you have any questions or comments concerning the above.

Very truly yours,

Jason Stewart, P.E.
Signature and Date:

Jason Stewart

December 30, 2025

cc: Obligado, Adre A (DEC)

Figures

SS-8	
Compound	06/18/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<4.6
1,1-Dichloroethylene	<0.84
Carbon tetrachloride	<1.3
cis-1,2-Dichloroethylene	10
Methylene chloride	<5.9
Tetrachloroethylene	1200
Trichloroethylene	80
Vinyl Chloride	<0.54

SS-9	
Compound	06/19/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<3.5
1,1-Dichloroethylene	<0.64
Carbon tetrachloride	<1
cis-1,2-Dichloroethylene	9.9
Methylene chloride	9.6
Tetrachloroethylene	200
Trichloroethylene	21
Vinyl Chloride	<0.41

SS-10	
Compound	06/19/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.85
1,1-Dichloroethylene	<0.15
Carbon tetrachloride	0.39
cis-1,2-Dichloroethylene	3.4
Methylene chloride	3.2
Tetrachloroethylene	59
Trichloroethylene	5.9
Vinyl Chloride	<0.099

SS-12	
Compound	06/19/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<8.3
1,1-Dichloroethylene	<1.5
Carbon tetrachloride	<2.4
cis-1,2-Dichloroethylene	20
Methylene chloride	15
Tetrachloroethylene	NT
Trichloroethylene	60
Vinyl Chloride	<0.97

SS-13	
Compound	06/19/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<7.9
1,1-Dichloroethylene	<1.4
Carbon tetrachloride	<2.3
cis-1,2-Dichloroethylene	<1.4
Methylene chloride	22
Tetrachloroethylene	<2.5
Trichloroethylene	<1.9
Vinyl Chloride	<0.93

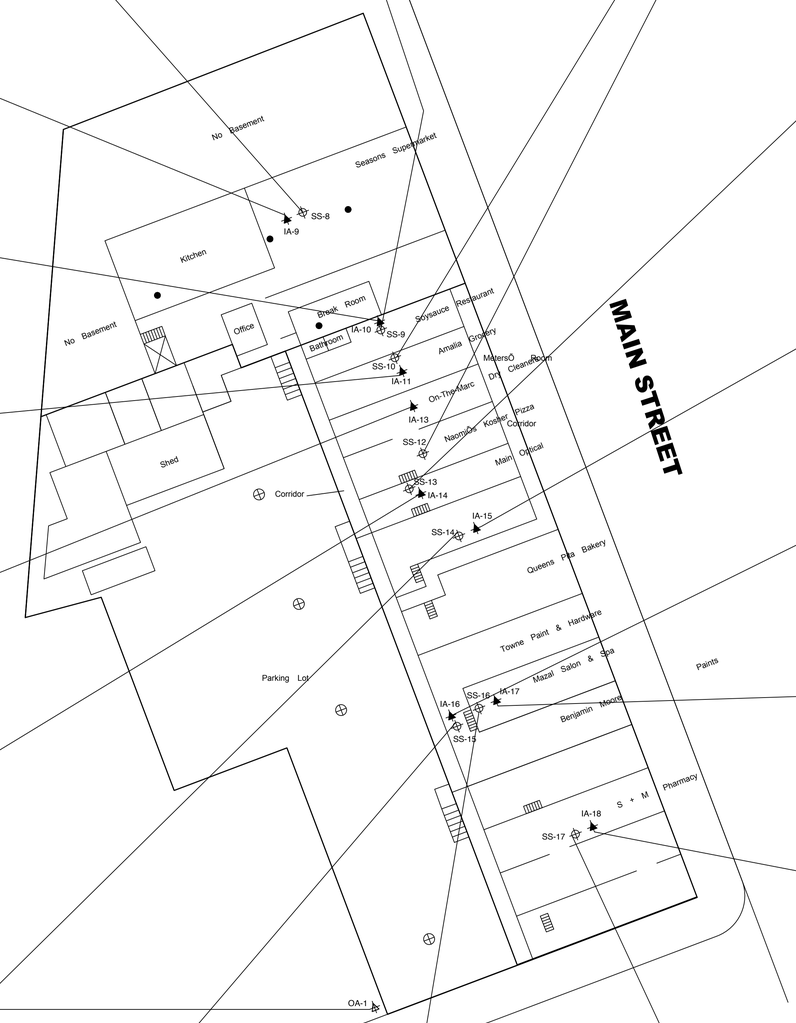
IA-9		
Compound	NYSDOH Air Guideline Values	06/18/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.49
1,1-Dichloroethylene	~	<0.089
Carbon tetrachloride	~	0.39
cis-1,2-Dichloroethylene	~	<0.089
Methylene chloride	60	12
Tetrachloroethylene	30	<0.15
Trichloroethylene	2	0.14
Vinyl Chloride	~	<0.057

IA-10		
Compound	NYSDOH Air Guideline Values	06/19/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.52
1,1-Dichloroethylene	~	<0.094
Carbon tetrachloride	~	0.48
cis-1,2-Dichloroethylene	~	<0.094
Methylene chloride	60	22
Tetrachloroethylene	30	<0.16
Trichloroethylene	2	0.15
Vinyl Chloride	~	<0.061

IA-11		
Compound	NYSDOH Air Guideline Values	06/19/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.53
1,1-Dichloroethylene	~	<0.097
Carbon tetrachloride	~	0.43
cis-1,2-Dichloroethylene	~	<0.097
Methylene chloride	60	3.1
Tetrachloroethylene	30	<0.17
Trichloroethylene	2	<0.13
Vinyl Chloride	~	<0.063

IA-13		
Compound	NYSDOH Air Guideline Values	06/19/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.47
1,1-Dichloroethylene	~	<0.085
Carbon tetrachloride	~	0.43
cis-1,2-Dichloroethylene	~	<0.085
Methylene chloride	60	22
Tetrachloroethylene	30	5.1
Trichloroethylene	2	<0.12
Vinyl Chloride	~	<0.055

IA-14		
Compound	NYSDOH Air Guideline Values	06/19/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.42
1,1-Dichloroethylene	~	<0.076
Carbon tetrachloride	~	0.44
cis-1,2-Dichloroethylene	~	<0.076
Methylene chloride	60	11
Tetrachloroethylene	30	2
Trichloroethylene	2	0.17
Vinyl Chloride	~	<0.049



IA-15		
Compound	NYSDOH Air Guideline Values	06/18/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.47
1,1-Dichloroethylene	~	<0.085
Carbon tetrachloride	~	0.54
cis-1,2-Dichloroethylene	~	0.2
Methylene chloride	60	16
Tetrachloroethylene	30	4.1
Trichloroethylene	2	0.28
Vinyl Chloride	~	<0.055

IA-16		
Compound	NYSDOH Air Guideline Values	06/18/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.45
1,1-Dichloroethylene	~	<0.081
Carbon tetrachloride	~	1.3
cis-1,2-Dichloroethylene	~	<0.081
Methylene chloride	60	290
Tetrachloroethylene	30	1.9
Trichloroethylene	2	0.13
Vinyl Chloride	~	<0.052

IA-17		
Compound	NYSDOH Air Guideline Values	06/18/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.46
1,1-Dichloroethylene	~	<0.084
Carbon tetrachloride	~	0.75
cis-1,2-Dichloroethylene	~	0.5
Methylene chloride	60	120
Tetrachloroethylene	30	1.8
Trichloroethylene	2	0.36
Vinyl Chloride	~	<0.054

IA-18		
Compound	NYSDOH Air Guideline Values	06/18/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.45
1,1-Dichloroethylene	~	<0.081
Carbon tetrachloride	~	0.83
cis-1,2-Dichloroethylene	~	<0.081
Methylene chloride	60	19
Tetrachloroethylene	30	<0.14
Trichloroethylene	2	0.18
Vinyl Chloride	~	<0.053

OA-1		
Compound	NYSDOH Air Guideline Values	06/18/2019
Volatiles (TO15) By TO15		
1,1,1-Trichloroethane	~	<0.5
1,1-Dichloroethylene	~	<0.37
Carbon tetrachloride	~	0.35
cis-1,2-Dichloroethylene	~	<0.091
Methylene chloride	60	1.8
Tetrachloroethylene	30	<0.16
Trichloroethylene	2	<0.12
Vinyl Chloride	~	<0.059

SS-14	
Compound	06/18/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<8.1
1,1-Dichloroethylene	<1.5
Carbon tetrachloride	<2.3
cis-1,2-Dichloroethylene	1900
Methylene chloride	12
Tetrachloroethylene	4800
Trichloroethylene	2000
Vinyl Chloride	<0.94

SS-15	
Compound	06/18/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	1
1,1-Dichloroethylene	0.75
Carbon tetrachloride	1.6
cis-1,2-Dichloroethylene	1.2
Methylene chloride	34
Tetrachloroethylene	7.1
Trichloroethylene	1.7
Vinyl Chloride	0.11

SS-16	
Compound	06/18/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<8.8
1,1-Dichloroethylene	<1.6
Carbon tetrachloride	<2.5
cis-1,2-Dichloroethylene	<1.6
Methylene chloride	84
Tetrachloroethylene	<2.7
Trichloroethylene	<2.2
Vinyl Chloride	<1

SS-17	
Compound	06/18/2019
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.9
1,1-Dichloroethylene	<0.16
Carbon tetrachloride	<0.73
cis-1,2-Dichloroethylene	<0.16
Methylene chloride	4.8
Tetrachloroethylene	33
Trichloroethylene	<0.22
Vinyl Chloride	<0.11

Notes

Units: ug/m^3

Yellow denotes exceedance of NYSDOH Air Guideline Value

Legend	
SS-1	Sub-Slab Vapor Sample
IA-1	Indoor Air Sample
SV-1	Exterior Soil Vapor Sample

Title

Remedial Investigation
CVOCs In Sub-Slab Soil Vapor / Indoor Air / Outdoor Air Diagram

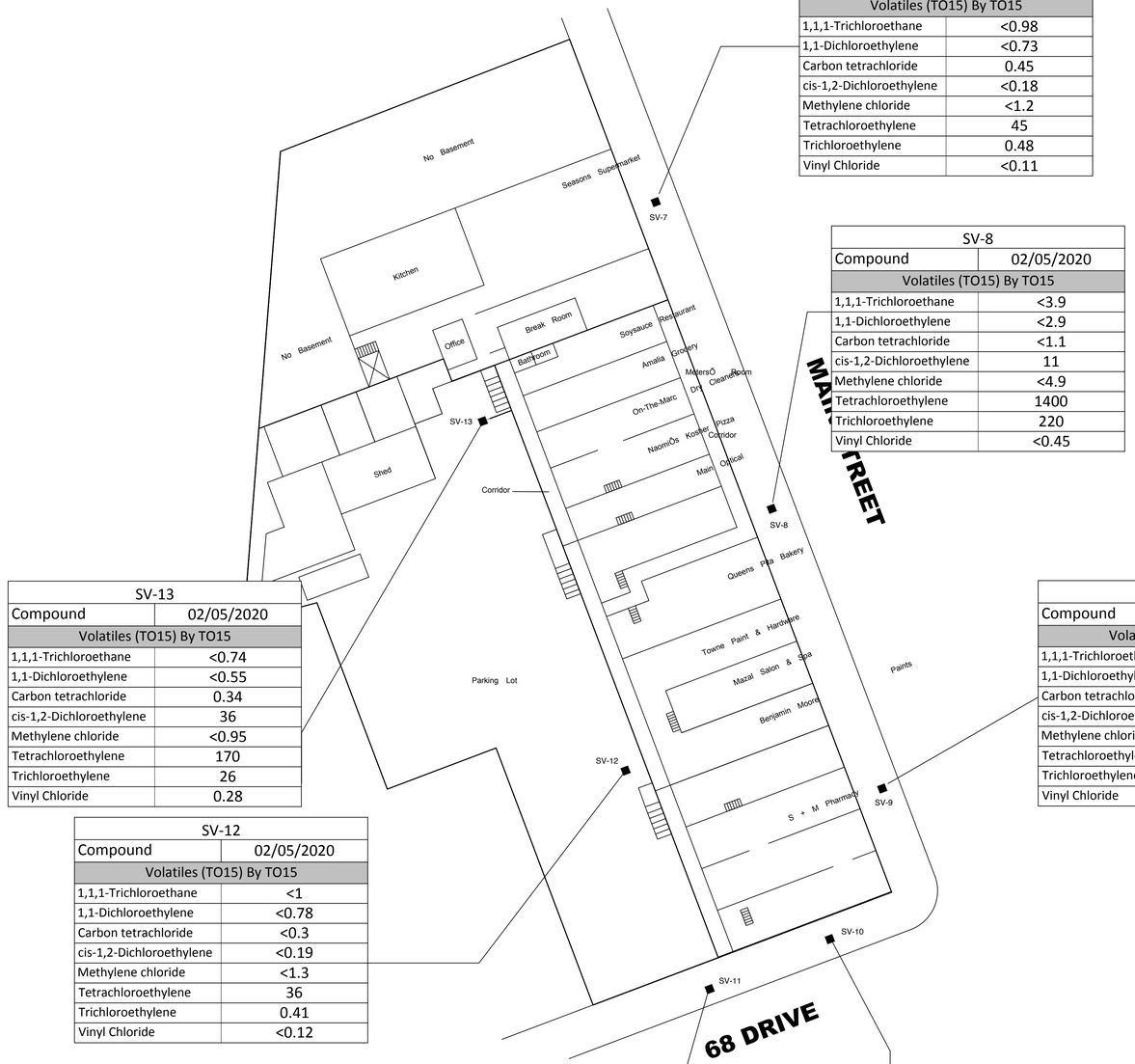
No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
228 Park Ave S PMB 34864
New York, New York 10003

Project Name and Address

BCP Site No. C241205
Main Street Kew Gardens Site
68-14 to 68-50 Main Street
Kew Gardens, New York 11367

Project	Figure
C241205	1A
Date: 12/30/2025	
Scale: As Noted	



SV-7	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.98
1,1-Dichloroethylene	<0.73
Carbon tetrachloride	0.45
cis-1,2-Dichloroethylene	<0.18
Methylene chloride	<1.2
Tetrachloroethylene	45
Trichloroethylene	0.48
Vinyl Chloride	<0.11

SV-8	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<3.9
1,1-Dichloroethylene	<2.9
Carbon tetrachloride	<1.1
cis-1,2-Dichloroethylene	11
Methylene chloride	<4.9
Tetrachloroethylene	1400
Trichloroethylene	220
Vinyl Chloride	<0.45

SV-13	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.74
1,1-Dichloroethylene	<0.55
Carbon tetrachloride	0.34
cis-1,2-Dichloroethylene	36
Methylene chloride	<0.95
Tetrachloroethylene	170
Trichloroethylene	26
Vinyl Chloride	0.28

SV-9	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.93
1,1-Dichloroethylene	<0.69
Carbon tetrachloride	<0.27
cis-1,2-Dichloroethylene	<0.17
Methylene chloride	1.2
Tetrachloroethylene	24
Trichloroethylene	0.27
Vinyl Chloride	<0.22

SV-12	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<1
1,1-Dichloroethylene	<0.78
Carbon tetrachloride	<0.3
cis-1,2-Dichloroethylene	<0.19
Methylene chloride	<1.3
Tetrachloroethylene	36
Trichloroethylene	0.41
Vinyl Chloride	<0.12

SV-11	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.8
1,1-Dichloroethylene	<0.59
Carbon tetrachloride	<0.23
cis-1,2-Dichloroethylene	<0.15
Methylene chloride	<1
Tetrachloroethylene	150
Trichloroethylene	1.2
Vinyl Chloride	<0.094

SV-10	
Compound	02/05/2020
Volatiles (TO15) By TO15	
1,1,1-Trichloroethane	<0.9
1,1-Dichloroethylene	<0.67
Carbon tetrachloride	<0.26
cis-1,2-Dichloroethylene	<0.16
Methylene chloride	<1.1
Tetrachloroethylene	15
Trichloroethylene	0.35
Vinyl Chloride	<0.11

Notes

Units: ug/m^3

Legend	
SS-1	Sub-Slab Vapor Sample
IA-1	Indoor Air Sample
SV-1	Exterior Soil Vapor Sample

Title

Exterior Soil Vapor CVOC Diagram

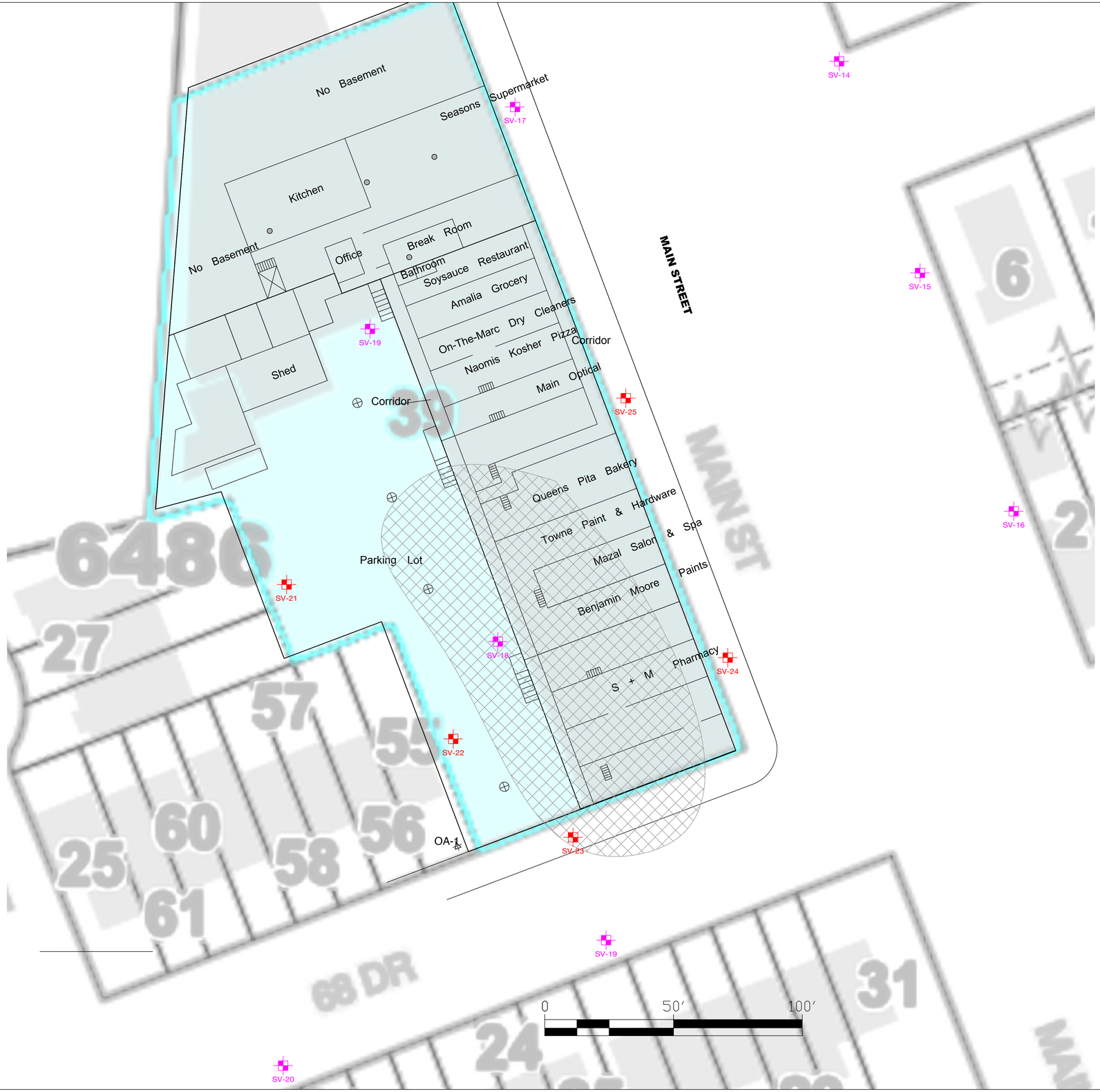
No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
228 Park Ave S PMB 34864
New York, New York 10003

Project Name and Address

BCP Site No. C241205
Main Street Kew Gardens Site
68-14 to 68-50 Main Street
Kew Gardens, New York 11367

Project	Figure
C241205	1B
Date: 12/30/2025	
Scale: As Noted	



Notes

Legend

SV-1	Proposed Soil Vapor(10 ft)
SV-1	Proposed Multi Interval Vapor (5ft, 10ft, 14ft)
	Approximate Perched Groundwater Table Boundary

Title

Soil Vapor Sampling Diagram

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants

228 Park Ave S PMB 34864
New York, New York 10003

Project Name and Address

Main Street Kew Gardens Site
BCP Site No C241205
Kew Gardens Hills, NY
11367

Project: C241205	Figure: 2
Date: 11/12/2025	
Scale: As Noted	

APPENDIX 1

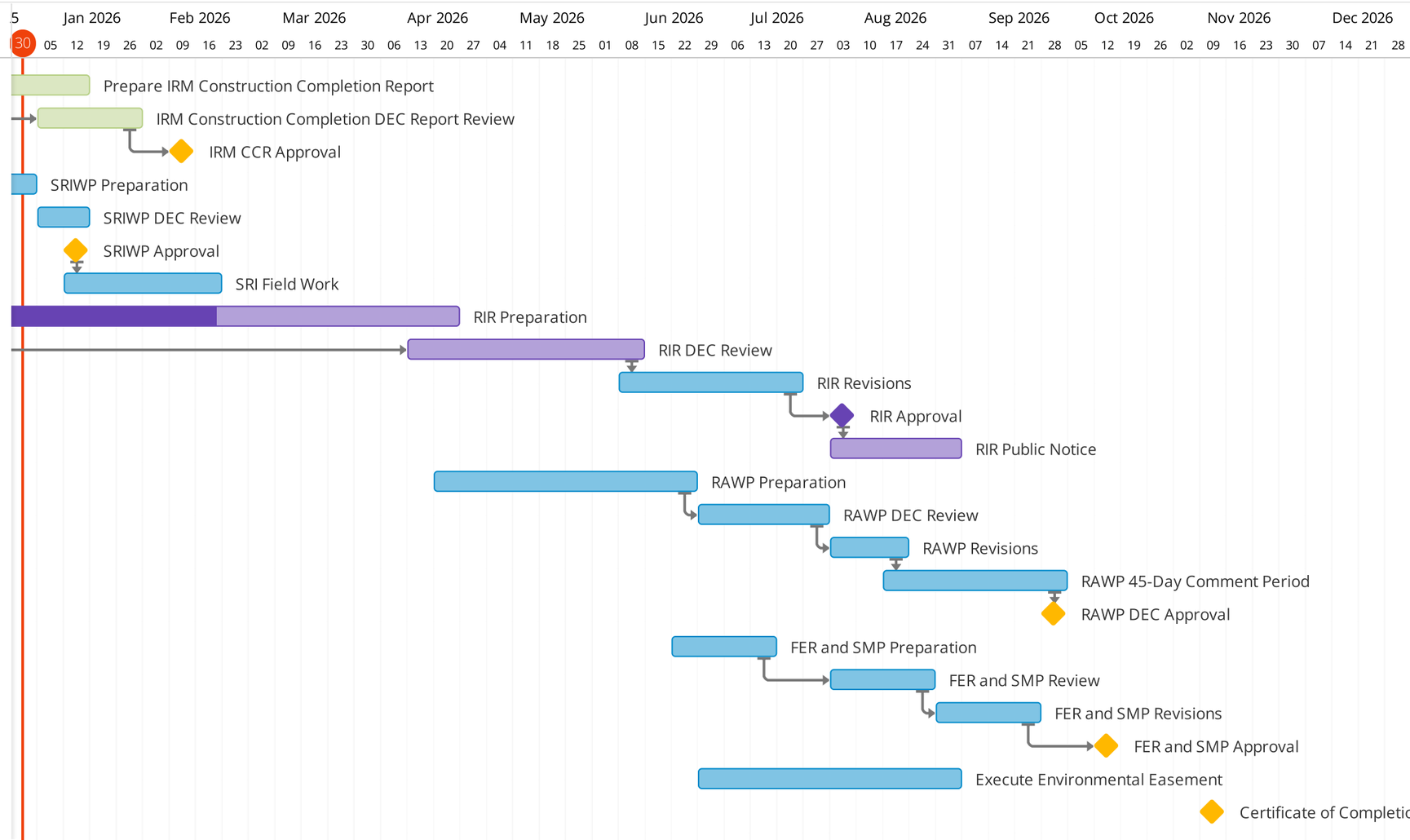
Schedule

9233-KGNY 68 - 16 to 68 - 48 Main Street, Ke...

Read-only view, generated on 30 Dec 2025

Instagantt

	ACTIVITIES	ASSIGNEE	EH	START	DUE	%
0	Prepare IRM Construction C...	Unassigned	-	15/Dec	13/Jan	0%
1	IRM Construction Completio...	Unassigned	-	07/Jan	27/Jan	0%
2	IRM CCR Approval	Unassigned	-	09/Feb	09/Feb	0%
3	SRIWP Preparation	Jason Stewart	-	24/Dec	02/Jan	0%
4	SRIWP DEC Review	Unassigned	-	07/Jan	14/Jan	0%
5	SRIWP Approval	Unassigned	-	14/Jan	14/Jan	0%
6	SRI Field Work	Unassigned	-	14/Jan	20/Feb	0%
7	RIR Preparation	Jason Stewart	-	23/Jun	21/Apr	97%
8	RIR DEC Review	Unassigned	-	13/Apr	10/Jun	0%
9	RIR Revisions	Unassigned	-	10/Jun	22/Jul	0%
10	RIR Approval	Unassigned	-	03/Aug	03/Aug	0%
11	RIR Public Notice	Unassigned	-	03/Aug	01/Sep	0%
12	RAWP Preparation	Unassigned	-	20/Apr	22/Jun	0%
13	RAWP DEC Review	Unassigned	-	30/Jun	28/Jul	0%
14	RAWP Revisions	Unassigned	-	05/Aug	18/Aug	0%
15	RAWP 45-Day Comment Per...	Unassigned	-	18/Aug	29/Sep	0%
16	RAWP DEC Approval	Unassigned	-	30/Sep	30/Sep	0%
17	FER and SMP Preparation	Unassigned	-	22/Jun	15/Jul	0%
18	FER and SMP Review	Unassigned	-	04/Aug	27/Aug	0%
19	FER and SMP Revisions	Unassigned	-	31/Aug	23/Sep	0%
20	FER and SMP Approval	Unassigned	-	15/Oct	15/Oct	0%
21	Execute Environmental Eas...	Unassigned	-	03/Jul	02/Sep	0%
22	Certificate of Completion	Unassigned	-	10/Nov	10/Nov	0%



APPENDIX 2

Sample Field Log

Template

Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS
228 Park Ave S PMB 34864
New York, New York 10003

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____ Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____ Time: _____

SAMPLE TYPE:

GROUNDWATER: _____ SEDIMENT: _____

SURFACE WATER: _____ SOIL: _____

AIR (specify): _____(soil Vapor, Indoor air, Outdoor air) OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____ Measurement Method: _____

Depth of well or Sampling Point: _____ Measurement Method: _____

Volume of Groundwater Purged: _____ Purge Method: _____

FIELD TEST RESULTS:

Color: _____ pH^-: _____ Odor: _____

Temperature (°**F**/°**C**):_____ Specific Conductance (µmhos/cm):_____

Other: PID: _____ ppm Helium Detector: _____ ppm

Canister #: _____ Initial Pressure: _____ Start Time: _____

Flow Regulator #:_____ Final Pressure: _____ End Time: _____

SAMPLE ANALYSIS:

_____ _____ _____ _____

_____ _____ _____ _____

REMARKS:

APPENDIX 3

Third-Party

Validator

Qualifications

Jeri Rossi, CEAC

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Cranford, NJ 07016
(908) 370-3431
richjerirossi513@gmail.com

Certified Environmental Analytical Chemist (CEAC) through the National Registry of Certified Chemists. Background includes sample analysis on various media (groundwater, soil, surface water, biota such as plant and fish tissue, air, sampling media such as filters) using CLP, SW846 and other EPA methods. Served as laboratory organics department manager, laboratory Quality Assurance Director and chemistry consultant. As a chemistry consultant, provides data validation of analytical data generated from various media for RCRA and CERCLA investigations. Develops project specific QAPPs and other planning documents. Provide technical support to address various analytical questions and interpretations.

PROFESSIONAL EXPERIENCE

ICF, 2021 – 2025

Senior Chemist

Data validation of environmental analytical data in support of Superfund site assessment and remediation and other EPA projects. Technical review of Quality Assurance Project Plans (QAPPs), Sampling and Analysis Plans (SAPs) and Data Management Plans (DMPs) as well as other QA and planning documents.

de maximis Data Management Solutions, 2012 – 2021

Senior Chemist

Senior Chemist supporting Project Coordinator overseeing the RI/FS, NTCRA and RD/RA phases of a research and metal manufacturing facility that was licensed to possess and process low-level radioactive substances. Operations at the facility included the investigation and development of materials for missiles, airframes, and other components. The facility developed a large-scale depleted uranium manufacturing operation, manufactured metal powders, beryllium and beryllium alloy parts and specialty titanium parts.

As a Senior Chemist, implemented the QAPPs for all phases of the project. Provided review of Sampling and Analysis Plans (SAPs) to ensure sampling analytical methods supported project objectives. Prepared analytical sections of the QAPP for the RD/RA phase of project which involved multiple laboratories, full suite TCL/TAL analyses, radiochemistry analyses and waste characterization. Assisted with RFQ process and selection of laboratories to support the project. Performed laboratory audits, laboratory oversight, resolution of analytical issues and ensuring analyses were conducted according to the project QAPP. Performed data validation for all phases of the project.

Regulatory Consultant

Assisted a drinking water laboratory to attain national laboratory accreditation through the TNI (The NELAC Institute) organization. Provided training to laboratory personnel and management on the requirements of the TNI Standards as well as design and implement a formal QA/QC system. Once

the laboratory achieved TNI accreditation, provided on-going support to ensure compliance with TNI Standards. The laboratory became one of five laboratories in a network of drinking waters laboratories in the Northeast. Performed data integrity and ethics training, annual internal audits, SOP review and regulatory support for the entire laboratory network.

ETC Corporation / Envirotech Research / Hampton-Clarke / IAL, 1984-2012

Analyst, Organic Section Lead, QA Director

Over 25 years of laboratory experience. Performed analysis on various media for VOCs, SVOCs, pesticides, PCBs, total petroleum hydrocarbons (TPHs) and petroleum fingerprinting using EPA methods. As the Organics Manager, interviewed, trained, and supervised chemists in the VOC and semi-volatile organic compound (SVOC) departments. Managed the day-to-day operations of these departments and ensured analyses were method compliant and were performed in accordance with project-specific requirements. Developed and implemented laboratory-specific SOPs and trained laboratory personnel in the procedures focusing on good laboratory practices. As a project manager, served as the technical liaison between the client and laboratory and played a central role in communicating project specifications and laboratory capability.

Served as QA Director for two commercial laboratories. Implemented and maintained Quality System for entire laboratory, with a strong emphasis on meeting state regulations as well as complying with TNI/NELAC standards. Performed internal audits on each department to confirm compliance with method requirements and laboratory quality standards. Reviewed and updated SOPs on an annual basis. Developed and implemented ethics training programs. Ensured laboratory compliance with current state and federal regulations, reviewed, and approved all client QAPPs, and performed technical review of final reports prior to release to client.

Education

BS, Environmental Science, Rutgers University, 1993

Certifications and Trainings

CEAC (Certified Environmental Analytical Chemist)- National Registry of Certified Chemists

Professional Publications/Presentations:

“Data Interpretation;” NJ Site Remediation Conference, January 2018.

“Final Data Interpretation/Usability: What's the Next Step?;’ NJ LSRPA Fall 2017 Seminar.

“Uncertainty Associated with Field and Laboratory Activities;” CIANJ EBC Spring Conference presentation, May 2015.

Continuing Education/Specialized Training:

‘New Jersey DEP/Stroud Center Macroinvertebrate Fall Stream School, Rutgers University, October 2016.

“Advanced Petroleum Forensics,” Rutgers University, October 2013.

“Interpretation of Mass Spectra," conducted by Environmental Analytical Consulting, Inc., Edison, New Jersey, March 1990.

APPENDIX 4

Community Air

Monitoring

Plan(CAMP)

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.

December 2009

Additional Community Air Monitoring Plan Requirements

- When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.
- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.
- If an exceedance occurs the NYSDEC and NYSDOH will be informed via email within 2 hours. This email should include a description of the exceedance, the cause of the exceedance, a description of corrective actions taken, and a summary of the effectiveness of corrective actions, if any were taken.

APPENDIX 5

CAMP Log Template

Advanced Cleanup Technologies, Inc.

CAMP Field Data Sheet

Address: ACT Job #:

Monitoring Personnel: Date: Weather:

Upwind Baseline PID: Upwind Baseline Dust:

Manufacturer/Model of PID:

Manufacturer/Model of Dust Monitor:

Time	PID Response (ppm)	Dust Monitor (μg/m3)	Comments

VOC Permissible Level: 5 ppm (Instantaneous readings)

Dust Permissible Level: 100 μg/m3 (15-minute average)

VOC Mitigation Range: 5ppm-25 ppm (Instantaneous readings)

Dust Mitigation Range: 100 μg/m3-150 μg/m3 (15-minute average)

VOC Halt Work: >25 ppm (Instantaneous readings)

Dust Halt Work: >150 μg/m3 (15-minute average)