BROWNFIELD CLEANUP PROGRAM

SOIL VAPOR INTRUSION WORK PLAN (SVIWP)

FOR

HNJ REALTY LLC.
FOR
FORMER SCHMUKLERS CLEANERS
358 - 364 North Avenue, New Rochelle, New York
Site No.: C360088
Index No.: A3-0542-0306

PREPARED FOR
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 BROADWAY
ALBANY, NEW YORK 12233-7016

PREPARED BY:
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April 2026

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I, Nicholas A. Andrianas, P.E. certify that I am currently a NYS registered professional engineer and that this April 2026 Soil Vapor Intrusion 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).

Nicholas A. Andrianas, P.E. Date: April 22, 2026

List of Acronyms

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines

SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

1.0 INTRODUCTION

The following document is Soil Vapor Intrusion Work Plan (SVIWP) prepared by BEI Consulting LLC and Nicholas Andrianas P.E. on behalf of HNJ Realty LLC, pursuant to the requirements of an executed Brownfield Cleanup Program Agreement (BCA) (dated February 27, 2006), between the New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation (DER) and HNJ Realty, LLC, *the Volunteer*. The Site is a commercial property located at 358 through 364 North Avenue, New Rochelle, New York (Figures 1 and 2), fully described as Section 4 - Block 1206 - Lot 19 of the tax maps of City of New Rochelle.

The purpose of the SVIWP is to evaluate the potential for soil vapor intrusion (SVI) at the site. This will include the testing of sub-slab, indoor air and outdoor ambient air/vapor throughout various locations within the subject site. Historic SVI investigation locations and results (prior to the installation of the SVE/SSDS) are included as Attachment-A

2.0 SCOPE OF WORK

The proposed scope of work includes sample collection of the sub-slab vapor, indoor air and outdoor ambient air within the subject site footprint. All sampling locations will utilize individually certified SUMMA canisters. A NYSDOH Soil Vapor Intrusion Questionnaire with inventory sheets will be completed during the sampling event and are included as Attachment-B. All samples will be collected with the use of six (6) liter summa canisters equipped with eight (8) hour regulators. Sampling rates will not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling. Samples will be submitted to an ELAP certified laboratory for testing via EPA TO-15 for Volatile Organic Compounds (VOCs).

2.1 Sub-slab Vapor

A sub-slab vapor sample will be collected from permanent vapor points PV-1, PV-2, PV-3, PV-4, PV-5 and PV-6 within the first floor and basement areas. Prior to completing this

testing, purged air will be directly injected into a tedlar bag and subsequently released outside of the building into the ambient air. Helium tracer gas will be used for the presence of high concentrations (> 10%) of the tracer. A plastic pail will serve to keep the tracer gas in contact with the probe during the testing and a portable monitoring device will be used to analyze a sample of soil vapor prior to sampling to ensure a proper seal.

2.2 Indoor Air

Two (2) co-located indoor air samples will be collected within the vicinities of the basement sub-slab permanent vapor point sample locations. One (1) indoor air sample will be collected from the first floor of the building within the former dry-cleaning equipment room and (1) duplicate sample will be collected from within the former dry-cleaning equipment room. One (1) indoor air sample will also be collected from the commercial space on the second floor of the building. The sampling locations are depicted on the attached Figure-3.

2.3 Outdoor Ambient Air

One (1) outdoor ambient air sample will also be collected from the rear courtyard. This sample will be collected simultaneously with indoor air and sub-slab vapor samples.

2.4 Permanent Vapor Point Installation

In an effort to replace PV-1 a new PV point will be installed within this former area adhering to installation protocols outlined in the section 2.7.2 (Figure-2.3 below) of the NYSDOH Guidance for Soil Vapor Intrusion (October 2006).

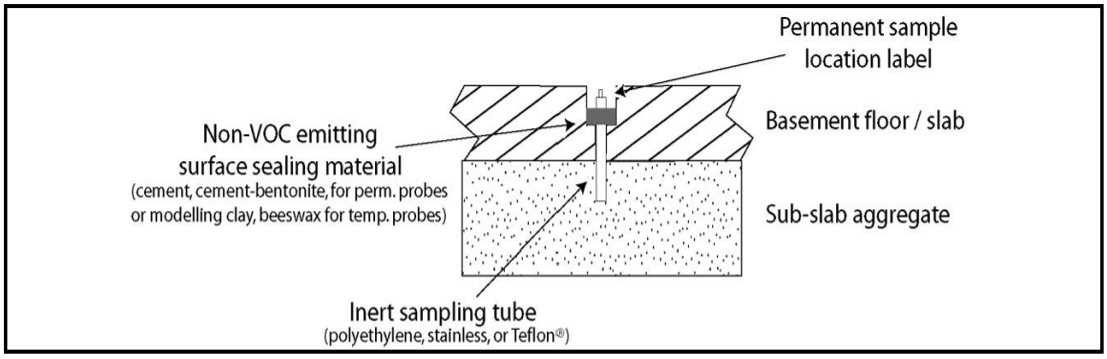


Figure 2.3

Schematic of a generic sub-slab vapor probe

[Note: Many variations exist and may be proposed in a work plan. Proposed installations should meet the sampling objectives and requirements of the analytical methods.]

3.0 SUMMARY OF FINDINGS

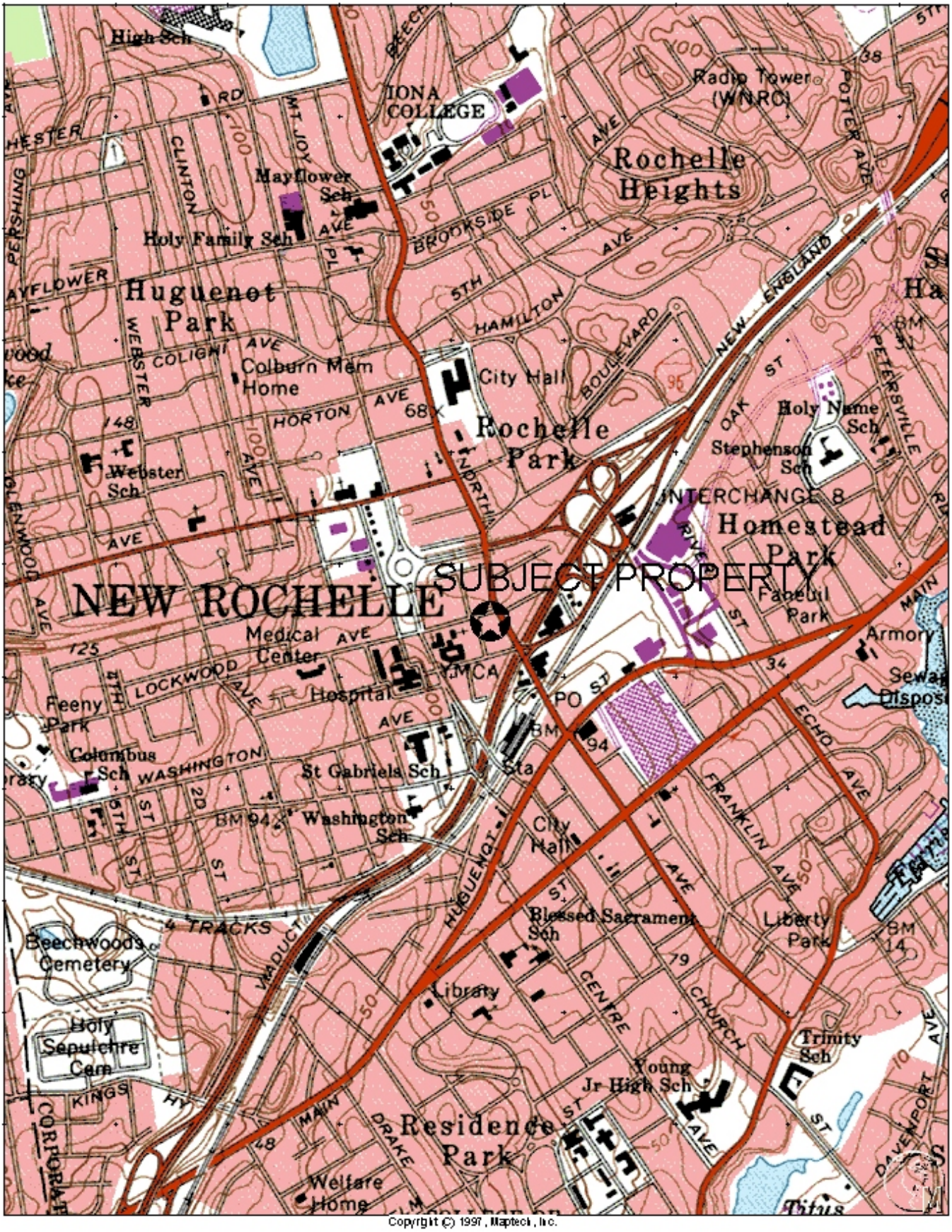
The laboratory results from the testing performed will be compared to the New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion, 2006. The most up to date decision matrices will be used for comparison of the results. Laboratory data will be sent to a qualified third-party data validator for data evaluation and generation of a Data Usability Summary Report (DUSR). Preliminary data will be provided to the Department and DOH project managers with the soil vapor intrusion questionnaire and inventory forms. Daily Reports will be provided to the Department and DOH project managers for each field day summarizing the following:

- Date and time of arrival and Departure
- Weather conditions
- Field personnel on-site
- Equipment on-site
- Samples collected
- Summary of field activities
- Summary of field delays or problems
- Summary of actions taken to address delays or problems encountered in the field

4.0 CONCLUSION

A Soil Vapor Intrusion Report (SVIR) will be issued to the Department upon completion of the sampling and receipt of the results. The results from the Repot will be utilized to determine if SVI has impacted the site building during the recent shut-down of the SVE/SSDS.

FIGURES



Remedial Investigation Report November 2007

Figure 1- Site Location	**Schmuklers Cleaners** **358 - 364 North Avenue** **New Rochelle, NY** **Site #C360088** **Index# A3-0542-0306**	BEI Consulting LLC Roc t, NY

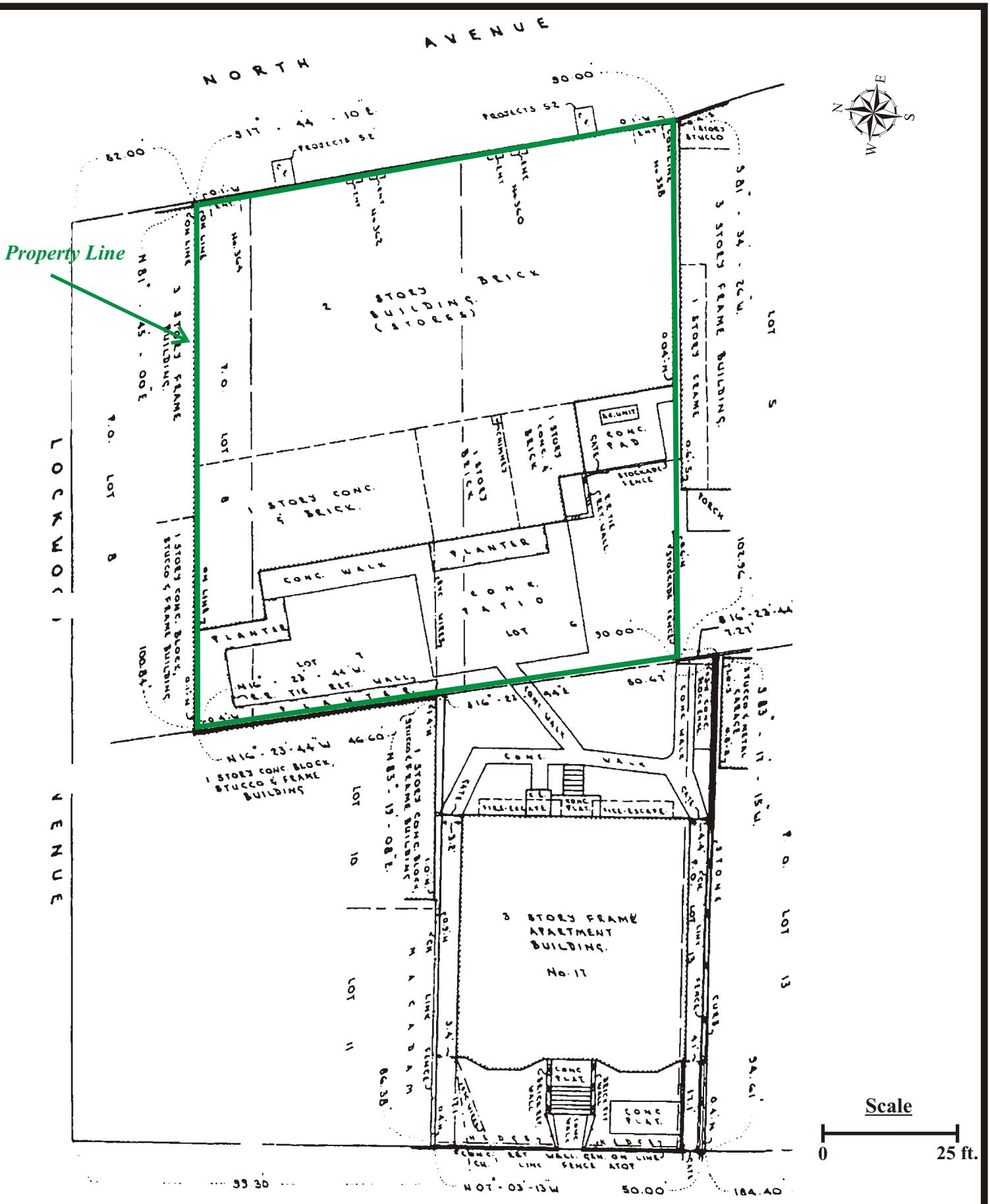
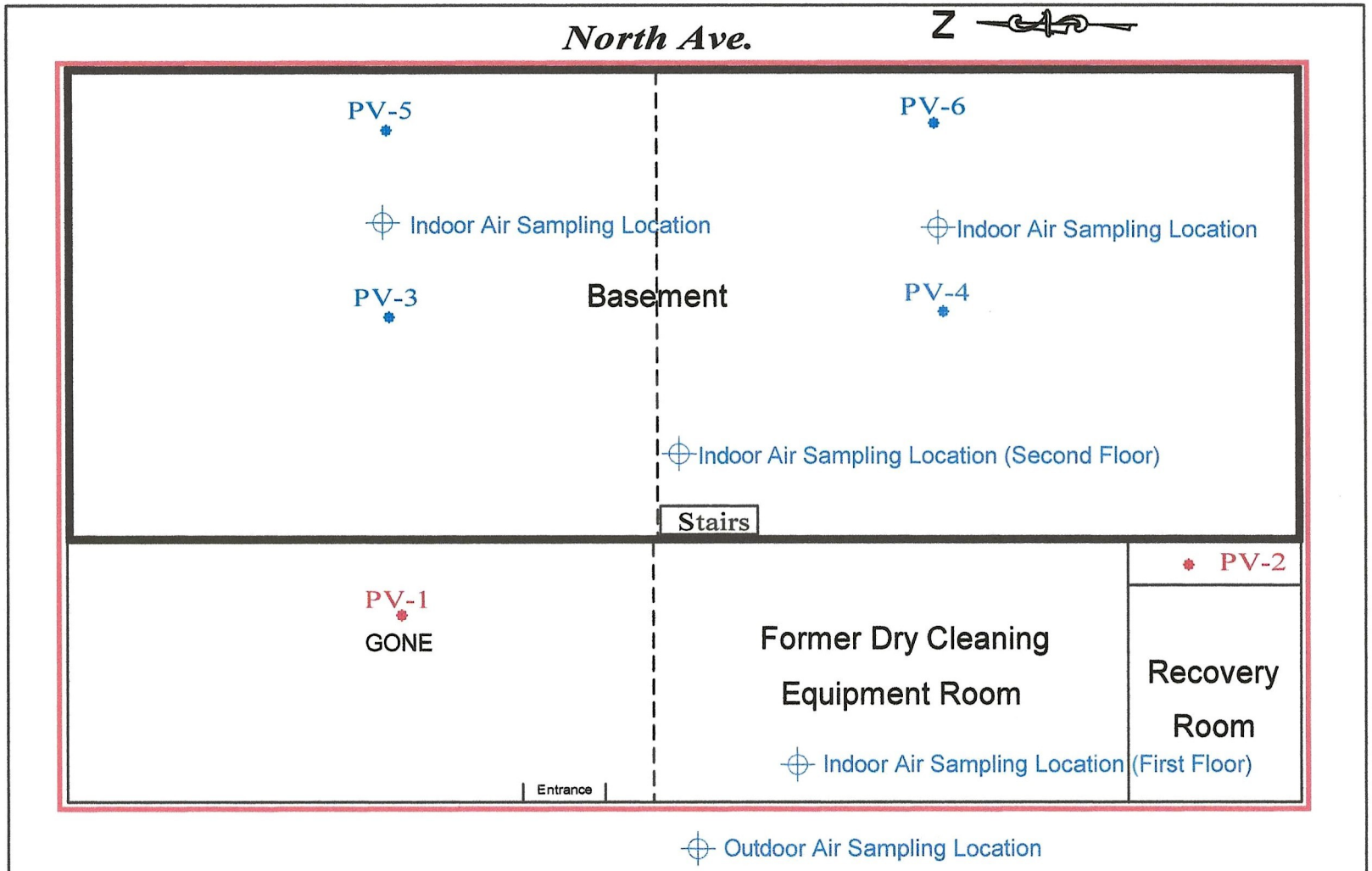


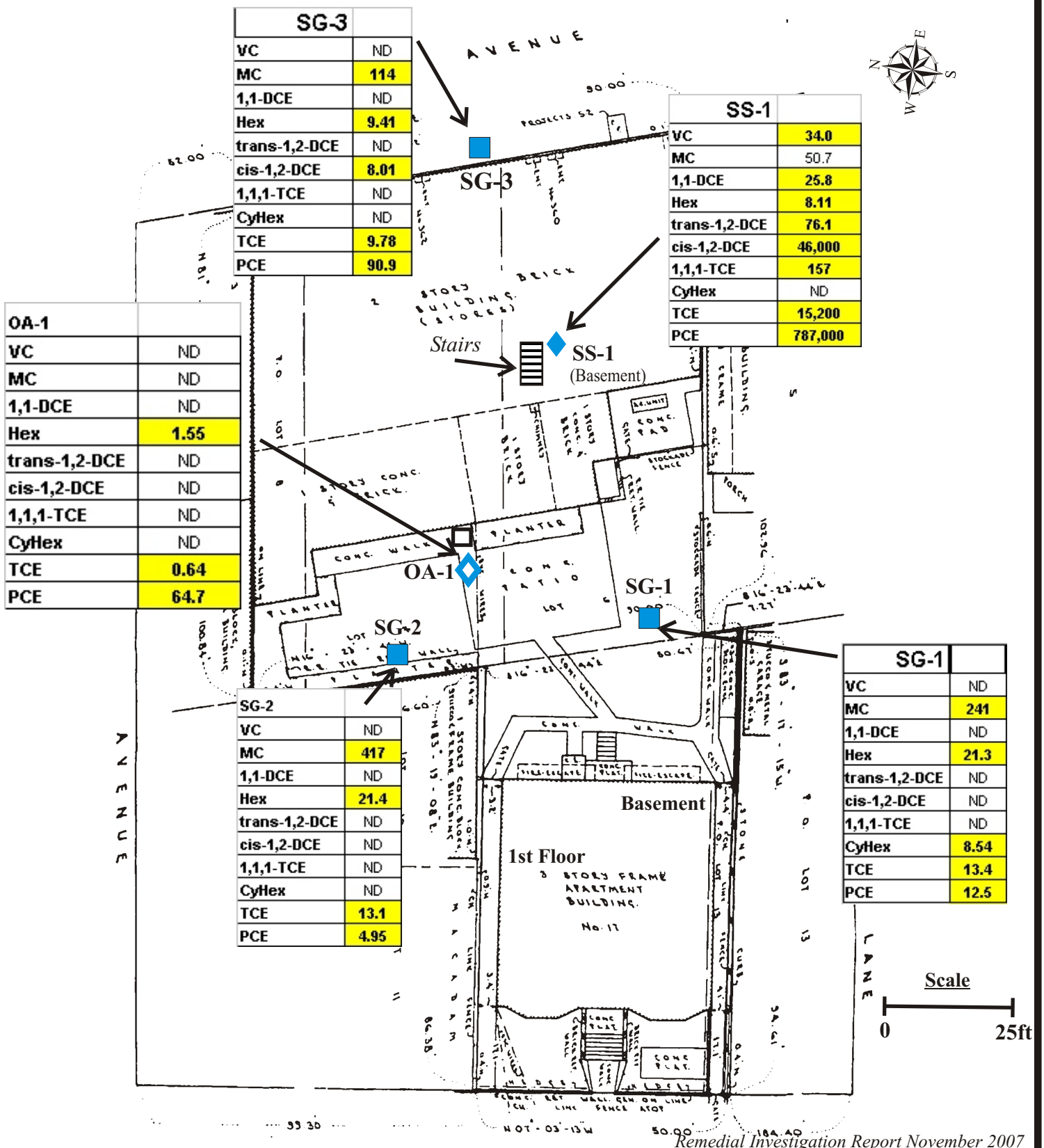
Figure 2 - Site Survey *survey performed by L.S not listed	**Schmuklers Cleaners** **358 - 364 North Avenue** **New Rochelle, NY** **Site #C360088** **Index# A3-0542-0306**	BEI Consulting LLC Roc t, NY



Permanent Vapor Points Locations SVI Sampling Locations Figure-3	**Schmuklers Cleaners** **358-364 North Ave.** **New Rochelle, NY** **Site# C360088**	***Key*** Basement Area Permanent Vapor Point (red indicates gone) Proposed Sample Point Building Boundary

ATTACHMENTS

Attachment-A
Historical SVI Sampling Data and Tables



Remedial Investigation Report November 2007

VC - Vinyl Chloride; **MC** - Methylene Chloride; **1,1-DCE -** 1,2-Dichloroethene; **Hex** - Hexane; **trans-1,2-DCE** - trans 1,2-Dichloroethene; **cis-1,2-DCE** - cis-1,2-Dichloroethene; **1,1,1-TCE** - 1,1,1-Trichloroethene; **CyHex**- Cyclohexane; **TCE** - Trichloroethene; **PCE** - Tetrachloroethene

Concentrations are in micrograms per cubic meter. Highlighted and bolded values exceed applicable background concentration ranges and/or Air Guidance Values

- Indoor/Outdoor Air Sampling Location **- Subslab Soil Gas Sampling Location** **- Soil Gas Sampling Location**

Halogenated VOCs Detected in Soil Gas/Subslab Vapor and Ambient Air Sampling Locations, in micro grams per cubic meter (ug/m3)

Schmuklers Cleaners
358 - 364 North Avenue
New Rochelle, NY
Site #C360088
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Attachment-B
NYSDOH Questionnaire

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name _____ Date/Time Prepared _____

Preparer's Affiliation _____ Phone No._____

Purpose of Investigation_____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors_____ Building age_____

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

_____

_____

_____

Airflow near source

_____

_____

_____

Outdoor air infiltration

_____

_____

_____

Infiltration into air ducts

_____

_____

_____

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

_____

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	_____
1st Floor	_____
2nd Floor	_____
3rd Floor	_____
4th Floor	_____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented?_____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented?_____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type?_____

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

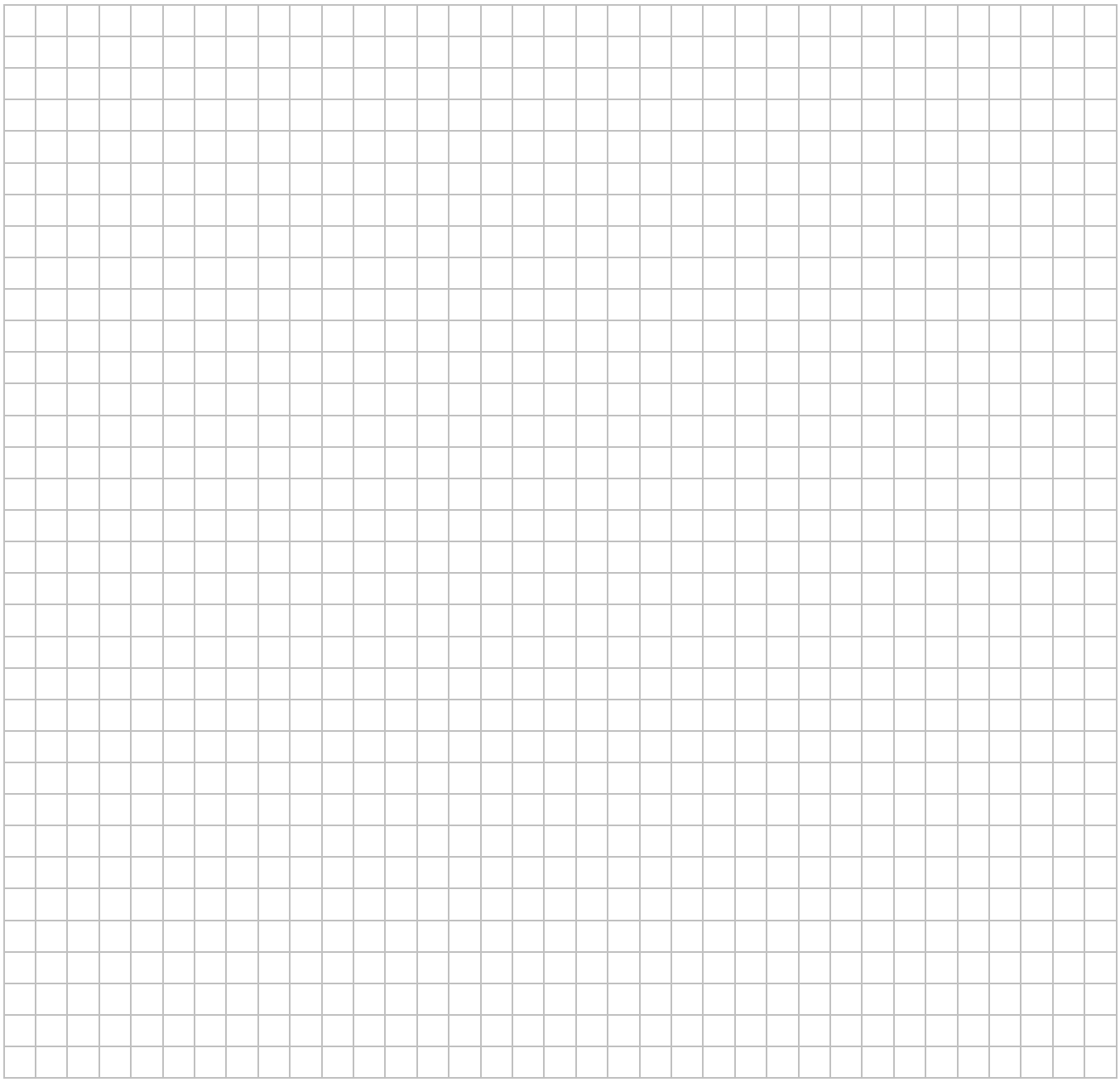
Basement:

First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.