Environmental
Engineering Services, PC
A MACTEC COMPANY

Environmental
Engineering Services, PC
5205 Militia Hill Road
Plymouth Meeting, PA 19462
Telephone: 610/941-9700
Fax: 610/941-9707
Home Page: www.mactec.com

FILE COPY

February 5, 2008

By Email and U S Mail

Mr. Shaminder Singh
Project Manager
New York State Department of Environmental Conservation (NYSDEC)
47-40 21st Street
Long Island City, New York 11101

Re: 73rd Street Shopping Center – 69-60 188th St., Queens, New York
Brownfield Site Cleanup Agreement
Index No. W2-1010-04-06
Site No. C241050

Dear Shaminder:

On behalf of MacArthur Holding B, Inc., (MHB) and in accordance with the above-referenced Brownfield Site Cleanup Agreement, enclosed please find revised Section 4.3 of the Interim Remedial Measure Work Plan ("Plan") for the soil vapor and indoor air quality sampling of the 73rd Street Shopping Center. Although several small changes have been made to the enclosed Plan, it is consistent with the plan followed to conduct soil vapor and indoor air quality sampling last year. MACTEC Engineering and Consulting, Inc. (MACTEC) proposes to conduct the sampling on February 25 and 26, 2008. Also, if appropriate please forward this plan to the current contact at the New York State Department of Health assigned to this matter. We know that such contact has changed over time. Please feel free to contact me before then if you have any comments or questions.

Sincerely,

Environmental Engineering Services, P.C.

Andrew C. Mills
Principal Engineer

David M. Side
Senior Geologist

This is an insert for the Interim Remedial Measure (IRM) Work Plan
Section 4.3
For
Soil Gas and Indoor Air Quality Sampling

4.3 SOIL VAPOR AND INDOOR AIR QUALITY SAMPLING

In conjunction with the installation and operation of the soil vapor extraction (SVE) system and assuming there will be reasonable cooperation from the current landowner and tenants, MACTEC Engineering and Consulting, Inc., on behalf of MacArthur Holdings B, Inc. will collect soil vapor samples and indoor air quality (IAQ) samples as requested by the New York State Department of Environmental Control (NYSDEC) and New York State Department of Health (NYSDOH). This sampling plan has been developed to provide a phased approach to evaluate the nature and extent of potential vapor intrusion and to minimize disruptions to area businesses and residents.

Samples will be collected from under, inside, and outside the commercial spaces adjacent to the dry cleaner to determine if there is vapor migrating into the building.

Sampling and analyses will be performed in general accordance with the February 2005 draft *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (Draft Guidance). Figure 6 provides a site map showing the proposed vapor monitoring points referenced in this plan.

4.3.1 IAQ Sampling

Three IAQ samples will be collected from the basement inside the commercial building. IAQ sampling results will assist in evaluating the potential of human exposures in addition to site-specific attenuation factors such as the ratio of indoor air concentrations to sub-slab vapor concentrations. The three IAQ samples will be collected from locations in the basement areas under CitiBank, Blockbuster Video, and Eckerd Pharmacy.

IAQ sampling will be performed during the winter heating season as suggested by the Draft Guidance. Prior to the IAQ sampling event, a pre-sampling inspection will be performed to evaluate the building's layout and physical conditions and to identify issues that may impact the proposed sampling. This inspection will attempt to identify the type of structure, floor layout, air flow between floors and rooms, and obvious physical conditions of the building. NYSDOH's Draft Guidance Indoor Air Quality Questionaire and Building Inventory form (see Figure 8) will be used to record the information. Figure 10 provides the log sheet format for recording the indoor air sampling data and field notes.

IAQ sampling will be conducted over an eight-hour period to reflect the daily conditions for a potential worker in the basement of the building. The IAQ samples will be collected using laboratory-supplied Summa canisters and fittings that will meet the sampling objectives for the project. The sampling point will be located approximately five feet above the floor to represent the normal breathing zone in the basement. The same approximate sampling locations as those

of the January 2007 sampling event will be used. The size of the initial samples is expected to be one liter, based upon previous sampling results. However, the laboratory will be contacted to verify the required sample size necessary to obtain the desired reporting limit. The IAQ samples will be submitted to a laboratory for analysis in accordance with USEPA Method TO-15.

Indoor air sampling will be scheduled to coincide with outdoor air sampling.

4.3.2 Outdoor Air Sampling

One outdoor air sample will be collected to characterize background outdoor air quality conditions. The outdoor air sample results will be used to evaluate impacts from outdoor sources that may be influencing indoor air quality at the subject site. The outdoor air sample result will also be used in the evaluation of soil vapor sample results to identify potential outdoor air interferences associated with the potential infiltration of outdoor air into the Summa canister while the soil vapor sample is collected.

The outdoor air sample will be collected at a location near one of the IAQ sample locations (CitiBank, Blockbuster Video, or Eckerd Pharmacy). This sample will be collected from a representative upwind location, away from wind obstructions, and at a height of five feet above the ground to represent the breathing zone, unless there is an indication of influence due to the on-going dry cleaner's operations. This sample will be collected at the same time that the IAQ samples are being collected.

Outdoor air sampling will be performed concurrently with the indoor air and sub-slab sampling as suggested by the Draft Guidance. Prior to the sampling event, a pre-sampling visual inspection will be performed to evaluate the area surrounding the building for physical conditions or issues that could impact the proposed sampling. This inspection will attempt to identify and evaluate details such as the shape and size of structure, distances to the parking areas and streets, weather conditions, and presumed influences of the ongoing business in the immediate area. Figure 11 represents the log sheet to be used for recording the outdoor air sampling observations and conditions.

The outdoor air sampling will be conducted over an eight-hour period to provide a representative background sample indicative of the normal conditions at this site. The sample will be used to assist in evaluating the extent to which outdoor air in the vicinity of the building may be influencing the IAQ. The sample will be collected using a laboratory-supplied Summa canister and fittings that will meet the sampling objectives for the project. The size of the initial sample is expected to be one liter based upon previous sampling results. However, the laboratory will be contacted to verify the required sample size necessary to obtain the desired reporting limit. The outdoor air sample will be submitted to a laboratory for USEPA Method TO-15.

Outdoor air sampling will be scheduled to coincide with sub slab and indoor air sampling.

4.3.3 Sub-Slab Soil Vapor Sampling

Sub-slab vapor samples will be collected from three locations within the on site commercial building to characterize the nature and extent of VOCs in soil vapor immediately beneath the building. The three sub-slab vapor samples will be collected from beneath the basement floors of CitiBank, Blockbuster Video, and Eckerd Pharmacy.

Sub-slab vapor sampling will be performed during the winter heating season as suggested by the Draft Guidance. Just prior to the sampling event, a pre-sampling site inspection will be conducted and the site conditions will be recorded on the NYSDOH's Draft Guidance Indoor Air Quality Questionnaire and Building Inventory form attached as Figure 8. The sub-slab sampling data and notes will be recorded on the sampling log sheet shown on Figure 9.

The sub-slab sampling points will be designated SS-1A, SS-2A, and SS-3A. The sub-slab sampling points will be installed adjacent to the locations of sub-slab sampling points SS-1, SS-2, and SS-3, which were installed and sampled in January 2007. The approximate locations for the sampling points are shown on Figure 6. The sub-slab sampling points will be temporary points constructed by drilling a 0.75-inch hole through the basement floor. A steel probe will be manually driven into the sub-slab aggregate approximately two inches and withdrawn allowing space for a short length of 0.25-inch internal diameter (ID) polyethylene or Teflon tubing to be inserted. The sub-slab sampling point will be completed by filling the borehole around the tubing with coarse sand to the bottom level of the floor slab and then sealing the tubing into the floor slab with modeling clay or beeswax.

Prior to installing the sub-slab vapor points, the building floor will be visually inspected. Cracks, floor drains, utility perforations, sumps, etc. will be noted and recorded. The borings will be located where potential ambient air infiltration via floor penetrations is presumed to be minimal.

Prior to sampling, a volume of air three times the calculated volume of the sample probe and tubing will be purged using a small hand pump or battery powered sampling pump calibrated to a flow rate of 0.2 L/min.

The volume of the initial samples is expected to be one liter, based upon previous sampling results. However, the laboratory will be contacted to verify the required sample size necessary to obtain the desired reporting limit. The vapor samples will be collected in Summa canisters and submitted to a laboratory for United States Environmental Protection Agency (USEPA) Method TO-15, which analyzes for approximately 66 VOCs, including tetrachloroethene (PCE) and trichloroethene (TCE).

Sub-slab sampling will be scheduled the day after the IAQ sampling has been completed.

4.3.4 Quality Assurance / Quality Control (QA/QC)

Care shall be exercised during the sample collection procedures to minimize the possibilities of sampling errors. Personnel will avoid actions such as fueling vehicles, using permanent marking pens, or wearing perfumes that could cause sample interference.

Laboratory-supplied, pre-cleaned sample containers and fittings will be used for vapor sampling. Sample handling procedures including chain of custody, holding times and temperatures, field blanks and field duplicates will be used to verify the field sampling QA/QC.

For sub-slab sampling events, MACTEC will utilize a tracer gas as a QA/QC indicator to evaluate whether the sample has been influenced by surface air intrusion at the sampling point. MACTEC will utilize helium gas to check the integrity of the sampling methodology by covering a two foot square area around the sample point with a polyethylene bag. The sample tubing will be connected to the purge pump through the plastic bag and the tracer gas hose will also penetrate the plastic bag. The bag will be taped down to the floor and penetrations will be sealed with tape. When the sample purge is started, the flow of tracer gas will also be initiated and a portable gas analyzer will be used to monitor the purge pump exhaust for signs of the tracer gas. Tracer gas flow will be controlled to maintain nearly atmospheric pressure around the sampling connections. If signs of tracer gas appear in the purge exhaust, the procedure will be stopped and appropriate corrective actions will be taken to identify the source of the leak and remedy the situation. The tracer test procedure will then be repeated to verify that the corrective actions were successful.

Proper chain of custody procedures will be followed for sample control and the sampling conditions will be recorded on sampling log sheets as suggested in the Draft Guidance. Figure 7 provides the Sample Log Sheet to be used for this purpose. This document will identify the physical characteristics of the area and local conditions that could impact the sampling or influence interpretation of the results.

Laboratory QA/QC will be provided by the selected laboratory in accordance with their QA/QC Manual. A laboratory holding a current New York State Environmental Laboratory Approval Program (ELAP) certification will be selected to perform the vapor analyses.

Figure 7
Soil Vapor Sampling Log Sheet

Sampler must perform an inspection of the immediate area and the general vicinity of the sampling event.
Document local conditions on this form that may influence the sampling or interpretation of the sample results
If sampling near a commercial or industrial building, identify any volatile organic chemicals normally used
Provide a site plan showing neighboring facilities with estimated distances to them
Note odors and other pertinent information from field instruments observed at the time of sampling

Sampler Name _____ Sample ID _____ Date _____
Start Time _____
Sample Location _____ Stop Time _____

Weather Conditions at time of sampling: Weather conditions prior 24 to 48 hours:

Precipitation: Precipitation:

Outdoor Temperature: Outdoor Temperature:

Indoor Temperature: Indoor Temperature:

Barometric Pressure: Barometric Pressure:

Wind Speed Wind Speed

Wind Direction: Wind Direction:

Identify Sampling Methods & Devices

Well Purge Volume (show calcs)

Volume of Soil Vapor Extracted (show calcs)

Summa Canister Vacuum at Start _____ Summa Canister Vacuum at End _____

Apparent Moisture Content of the Sampled Zone Dry Moist Saturated

Field Notes from Sampling

Figure 8- Building Inventory

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

_____

_____

_____

Figure 8- Building Inventory

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

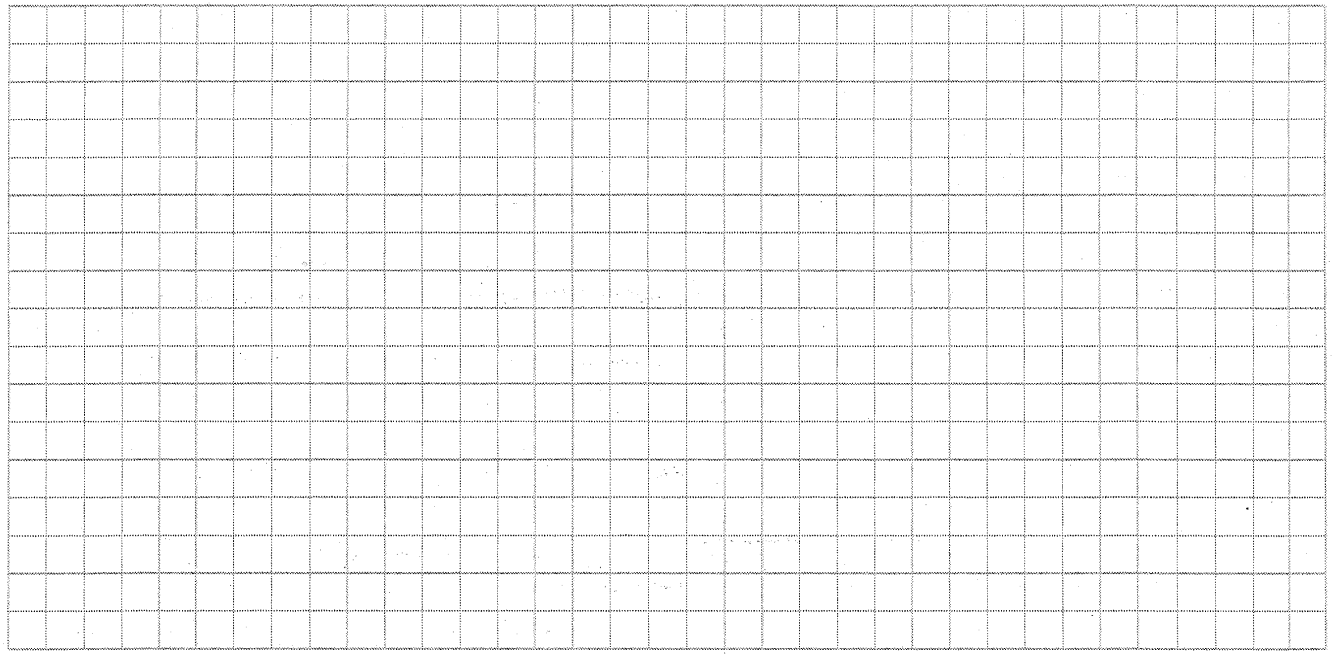
d. Relocation package provided and explained to residents? Y / N

Figure 8- Building Inventory

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:

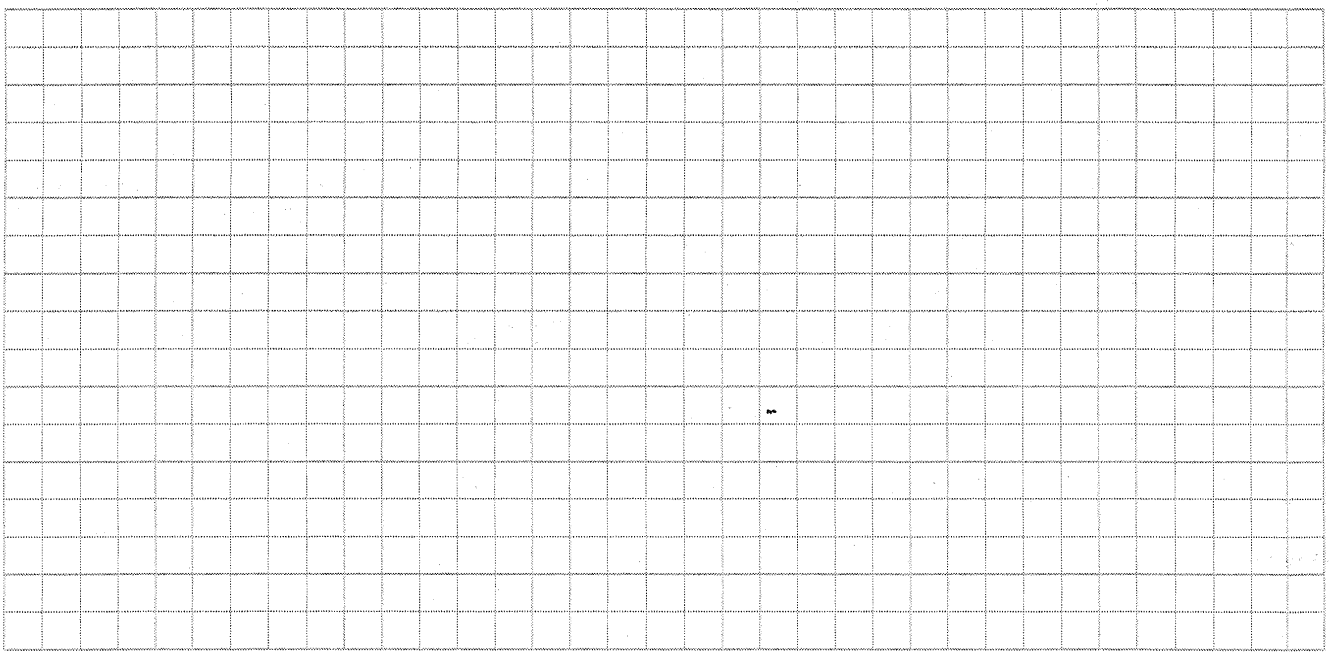


Figure 8- Building Inventory

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.

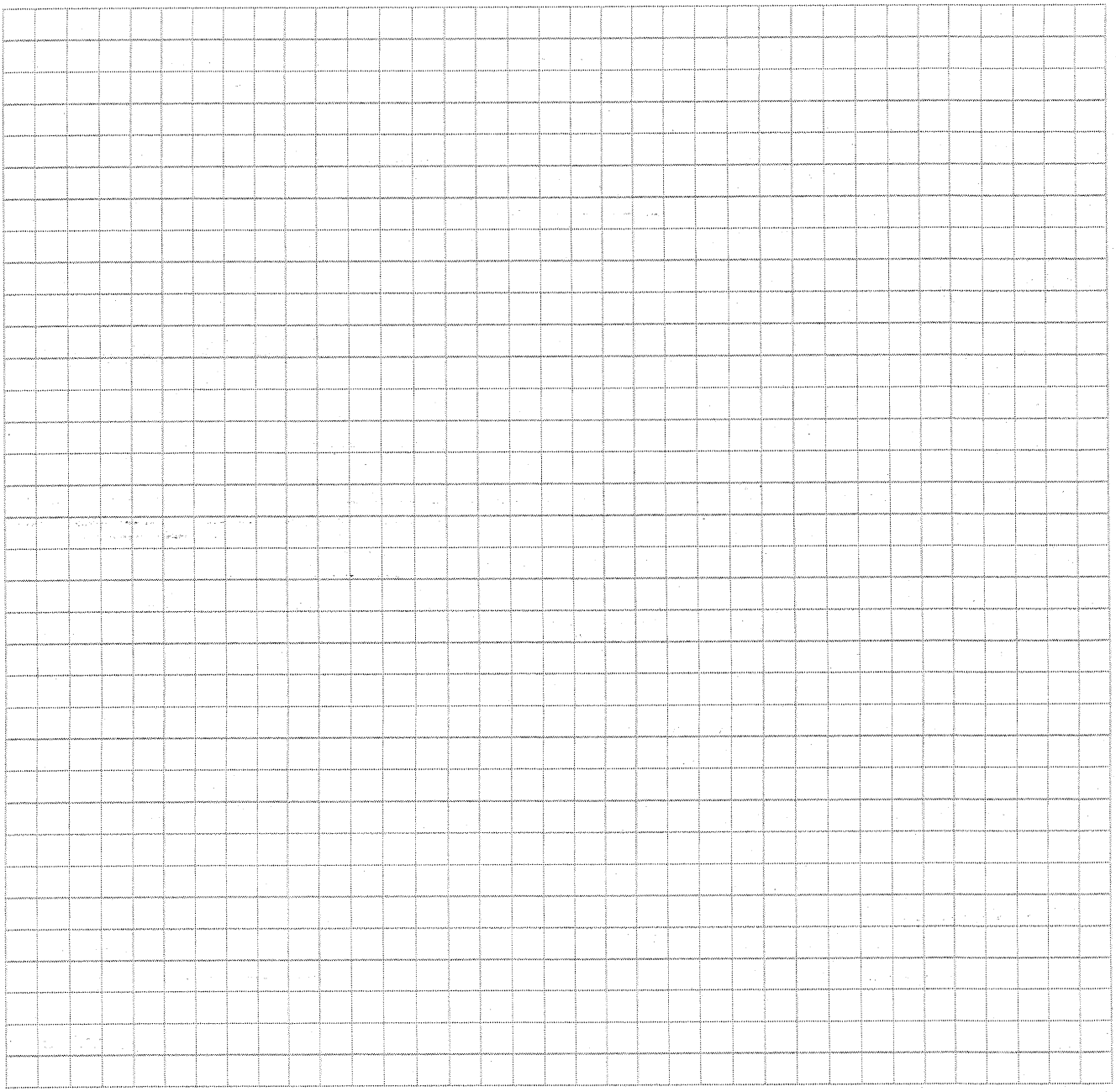


Figure 8- Building Inventory

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.

Figure 9
Sub Slab Sampling Log Sheet

Sampler must perform an inspection of the immediate area and the general vicinity of the sampling event.
Document local conditions on this form that may influence the sampling or interpretation of the sample results
If sampling within a commercial or industrial building, identify any volatile organic chemicals normally used or noted on site
Provide a floor plan showing the features and facilities with estimated distances to sample locations
Identify floor drains, vents, sumps, garages, doorways and windows, utility penetrations thru walls, etc
Note heating and air conditiong systems in use or present at time of sampling

Sampler Name _____ Sample ID _____ Date _____
Start Time _____
Sample Location _____ Stop Time _____

Weather Conditions at time of sampling: Weather conditions prior 24 to 48 hours:

Precipitation: Precipitation:

Outdoor Temperature: Outdoor Temperature:

Indoor Temperature: Indoor Temperature:

Barometric Pressure: Barometric Pressure:

Wind Speed Wind Speed

Wind Direction: Wind Direction:

Identify Sampling Methods & Devices _____

Well Purge Volume (show calcs) _____

Volume of Soil Vapor Extracted (show calcs) _____

Summa Canister Vacuum at Start _____ Summa Canister Vacuum at End _____

Apparent Moisture Content of the Sampled Zone Dry Moist Saturated

Smoke Tubes used to identify air flow patterns? yes no

Notable Observations - floor stains, instrument readings, odors, smoke tube results,etc _____

Field Notes from Sampling _____

Figure 9
Sub Slab Sampling Photo Log Sheet

Sample ID _____ Additional Page of

Photo Documentation to accompany sampling event at _____

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Figure 9
Sub Slab Sampling Map Sheet

Sample ID _____ Additional Page _____ of _____

Mapping Page accompany sampling event at

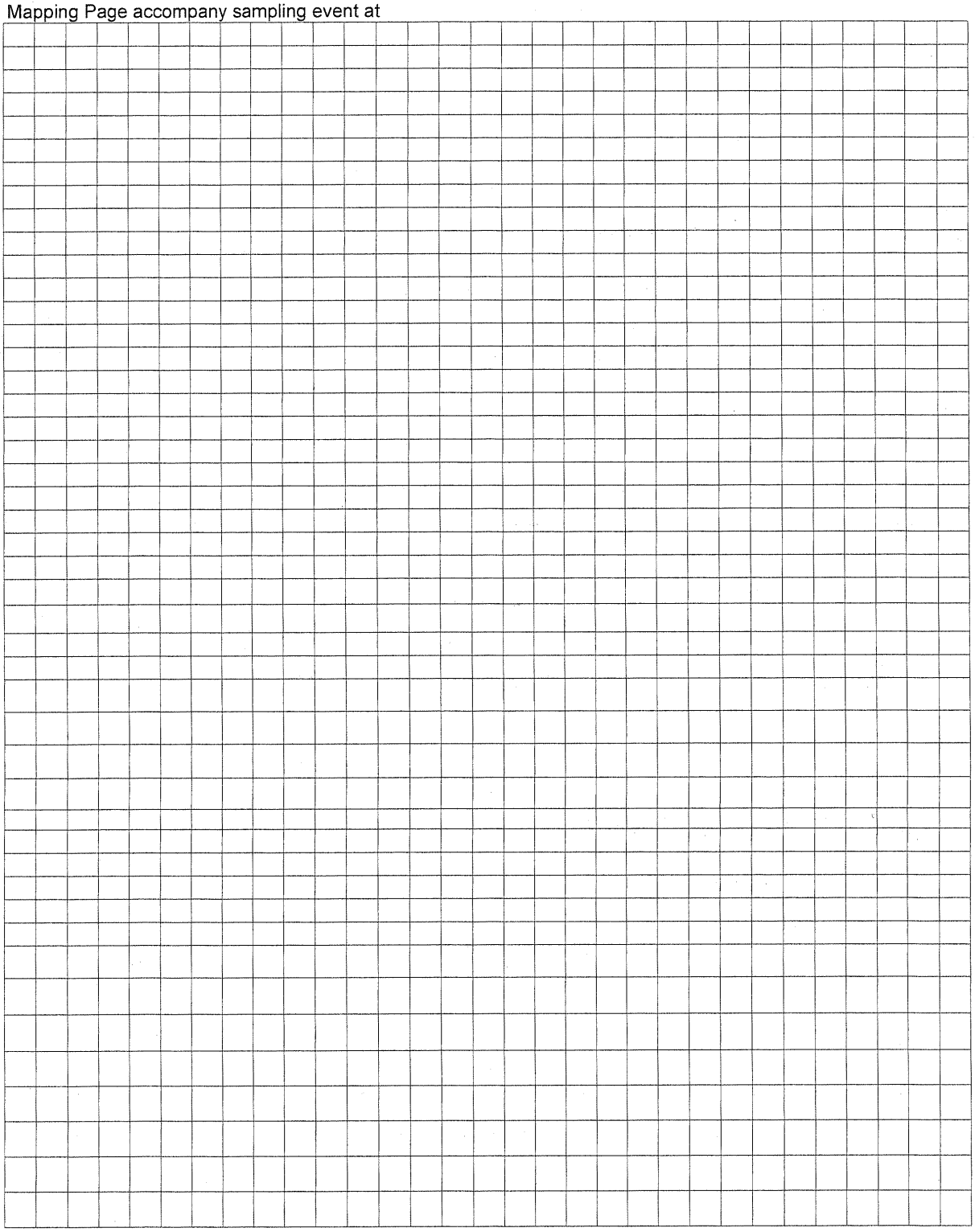


Figure 10
Indoor Air Sampling Log Sheet

Sampler must perform an inspection of the immediate area and the general vicinity of the sampling event.
Document local conditions on this form that may influence the sampling or interpretation of the sample results
If sampling within a commercial or industrial building, identify any volatile organic chemicals normally used or noted on site
Provide a floor plan showing the features and facilities with estimated distances to sample locations
Identify doorways and windows, chemical storage areas, stairways, wall penetrations,such as vents, piping and wiring, etc
Note heating and air conditiong systems in use or present at time of sampling

Sampler Name _____ Sample ID _____ Date _____
Start Time _____
Sample Location _____ Stop Time _____

Weather Conditions at time of sampling: Weather conditions prior 24 to 48 hours:

Precipitation: Precipitation:

Outdoor Temperature: Outdoor Temperature:

Indoor Temperature: Indoor Temperature:

Barometric Pressure: Barometric Pressure:

Wind Speed Wind Speed

Wind Direction: Wind Direction:

Identify Sampling Methods & Devices _____

Sampling Height

Sampling device and Volume

Summa Canister Vacuum at Start _____ Summa Canister Vacuum at End _____

Smoke Tubes used to identify air flow patterns? Yes No

Product Inventory forms completed?

Notable Observations - floor stains, instrument readings, odors, smoke tube results, etc _____

Field Notes from Sampling

Figure 10
Indoor Air Sampling Photo Log Sheet

Sample ID _____ Additional Page of

Photo Documentation to accompany sampling event at _____

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Figure 10
Indoor Air Sampling Map Sheet

Sample ID _____ Additional Page _____ of _____

Mapping Page accompany sampling event at

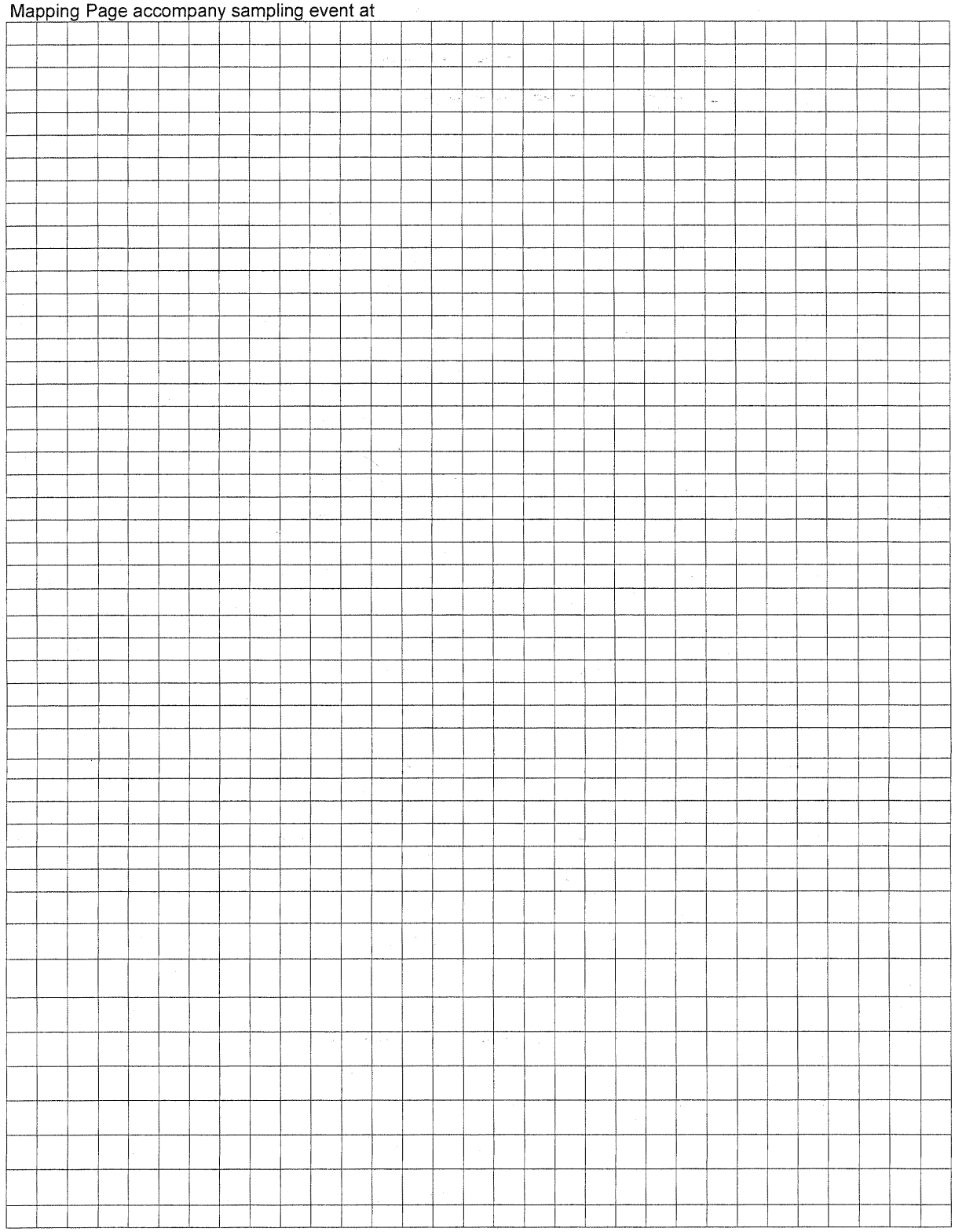


Figure 11
Outdoor Air Sampling Log Sheet

Sampler must perform an inspection of the immediate area and the general vicinity of the sampling event.
Document local conditions on this form that may influence the sampling or interpretation of the sample results
Sample concurrently with Indoor or Sub Slab Sampling events
Provide a site map showing the features and facilities with estimated distances to sample locations
Identify doorways, windows, adjacent facilities, compass orientation, building features such as foorters, foundations, stairwells, etc

Sampler Name _____ Sample ID _____ Date _____
Start Time _____
Sample Location _____ Stop Time _____

Weather Conditions at time of sampling: Weather conditions prior 24 to 48 hours:

Precipitation: Precipitation:

Outdoor Temperature: Outdoor Temperature:

Indoor Temperature: Indoor Temperature:

Barometric Pressure: Barometric Pressure:

Wind Speed Wind Speed

Wind Direction: Wind Direction:

Identify Sampling Methods & Devices

Sampling Height

Sampling device and Volume

Summa Canister Vacuum at Start _____ Summa Canister Vacuum at End _____

Smoke Tubes used to identify air flow patterns? Yes No

Product Inventory forms completed?

Notable Observations - floor stains, instrument readings, odors, smoke tube results, etc

Field Notes from Sampling

Figure 11
Outdoor Air Sampling Log Sheet

Sample ID _____ Additional Page of

Photo Documentation to accompany sampling event at _____

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Photo Identifier

Date _____ Time _____ facing what direction? _____

Topic

Figure 11
Outdoor Air Sampling Map Sheet

Sample ID _____ Additional Page of

Mapping Page accompany sampling event at