



December 15, 2020

Michele Norman, Southeast Region Team Supervisor
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212

Re: Work Scope in Response to WDNR Closure Not Recommended Letter of November 23, 2020

**One Hour Martinizing
285 E. Hampton Ave
Milwaukee, Wisconsin 53217
BRRTS#: 02-41-543260
FID#: 241176650**

Dear Ms. Norman:

EnviroForensics, LLC (EnviroForensics) has reviewed your requests for further site investigations and revisions to the case closure documentation for the above referenced One Hour Martinizing (OHM) site as presented in your Wisconsin Department of Natural Resources (Department) letter of November 23, 2020. We have prepared the following scope of work according to the requirements of Wisconsin Administrative Code NR 716.09 (1), and as requested by the Department in your letter. During a conference call between you, members of the Department closure review committee, and EnviroForensics staff, several of the investigative requests made in your letter have been modified.

In general, the scope of investigative work that we have agreed upon involves repeat vapor intrusion (VI) sampling to include paired indoor air/sub-slab sampling at the immediately adjacent Confluence Graphics building and all four (4) units of the WFB Hampton, LLC building adjacent to the west of Confluence Graphics. The specifics of this investigative work are discussed in detail in the sections provided below. The results of this sampling will be used to evaluate whether utilities are suspected vapor migration conduits and whether further assessment for vapor intrusion is needed within these utilities or within the Dairy Queen building located further to the west (see attached case closure **Figure B.4.a** for the location of these structures).

In addition to the site investigations, the Department has requested the following general case closure documentation revisions which we will provide:

- We will interview OHM personnel and evaluate past property use to help determine whether PFAS (per- and poly-fluorinated alkyl substances) may have been utilized at the property in the past and, if so, whether there is reason to suspect that subsurface impacts have occurred that could cause adverse impacts to human health or the environment.
- The Sub-slab Depressurization System (SSDS) Operation & Maintenance Plan for the subject property will be included in the revised case closure package.
- Soil data for soil borings SB-33 through SB-37 will be added to figures and provided where needed throughout the case closure documentation.

Document: 6194-1702
EnviroForensics, LLC
N16 W23390 Stone Ridge Dr, Suite G, Waukesha, WI 53188
Phone: 262-290-4001 • Fax 317-972-7875

- We will re-interpret the extents of subsurface impacts on existing drawings and eliminate references to the Confluence Graphics and Shovers Realty properties as “structural impediments”.
- We will not allude to cap maintenance requirements for the WFB Hampton property or Clark Station property.

SCOPE OF WORK

All sampling and QA/QC protocols will be performed in accordance with WDNR Standards and Guidance, specifically PUB-RR-800 pertaining to vapor intrusion in general, and PUB-RR-986 pertaining to sub-slab vapor sampling. One (1) sampling event will be performed during the winter heating months in the Confluence Graphics building and all four (4) tenant units of the WFB Hampton, LLC building.

All of these buildings/units have basements. A survey of the basements will be performed prior to sampling to evaluate suitable locations for sub-slab vapor and indoor air samples. Suitable locations include locations near floor drains, where utilities enter the building through the floor, or at other locations which could be expected to preferentially accumulate vapors or release vapors into the breathing zone. Indoor air samples will be collected prior to sub-slab vapor sampling to eliminate the possibility of sub-slab vapor entering indoor air during the drilling and abandoning of sub-slab vapor ports. One (1) sample of outdoor air will be collected from an upwind direction on each day of indoor air sampling to evaluate background conditions.

The number of samples and their locations will be selected as follows:

WFB Hampton

- One (1) or two (2) sub-slab vapor samples will be collected from each basement area of the four (4) tenant units depending on how many are needed to provide overall coverage of the floor slab and also cover areas of possible vapor accumulation due to the presence of utilities. The sample ports will be temporary and abandoned after sampling.
- One (1) indoor air sample will be placed in each basement either in the center of the basement or closer to potential preferential vapor intrusion pathways, if observed.

Confluence Graphics

- One (1) sub-slab vapor sample will be collected from the southeast corner of the basement and one (1) sub-slab vapor sample will be collected from the northeast corner of the basement. These locations are closest to the highest concentrations of chlorinated solvent vapors detected in soil gas samples collected outside of the building (**Figure B.4.a**). The ports will be temporary and abandoned after sampling.
- One (1) indoor air sample will be collected from the center of the basement or closer to potential preferential vapor intrusion pathways, if observed.

SITE HEALTH & SAFETY PLAN

EnviroForensics will prepare a Site Health & Safety Plan tailored to the site location and specific contaminants detected. The plan will also include protective measures to help prevent the contraction or transmittal of the COVID-19 virus.

QA/QC PLAN

Background Conditions Screening

Prior to indoor air and sub-slab vapor sampling, an inspection of the buildings/tenant units will be conducted to identify and inventory materials that could potentially contribute to indoor air conditions, unrelated to VI issues. Many common items such as commercially available cleaners and degreasers, small quantities of small engine fuel, furniture polish, cigarette smoke, etc. can affect the quality of indoor air in buildings.

A person with knowledge of building operations during the sampling process will be interviewed regarding entry and access to the spaces where sampling will take place and whether these spaces will be subject to foot traffic or any other degree of occupation. The layout of the building will be examined, and a simple sketch will be prepared in the field to assist in the selection of indoor air sampling locations. The configuration of the structure's heating ventilation and air conditioning (HVAC) system will also be assessed to gather information pertaining to air circulation and exchange conditions in the space.

A visual inspection will be conducted for cracks or other penetrations in the concrete floor (i.e. floor drains, sumps, etc.) that could be direct conduits for impacted vapors to migrate into the occupied space or that could short circuit air into the subsurface and skew sub-slab vapor sampling results. The sub-slab vapor ports will be located to avoid these areas, or the cracks and other penetrations will be sealed with non-VOC caulk or putty prior to sample collection with the property owner's consent. The results of all pre-sampling inspection activities will be recorded on Indoor Air Building Survey Forms (attached).

Indoor/Outdoor Air Sampling

The air samples will be collected from the breathing zone (3-5 feet above the floor). The breathing zone sample will be collected using a 6-Liter vacuum canister, regulated to withdraw an 8-hour time-integrated sample. Data from the nearest fixed weather station, including temperature, wind speed, wind direction, humidity, barometric pressure, and rainfall throughout the 8-hour sampling period will be accessed and recorded. Weather data and its possible affects on the sampling results will be evaluated and discussed in the report. Initial and final pressure readings will be collected from the vacuum canisters and recorded on Indoor Air Building Survey Forms, along with all other required information.

Sub-Slab Sample Point Construction and Vapor Sampling

Following the completion of indoor air sampling, EnviroForensics will immediately install temporary Vapor Pin[®] sampling ports for the purpose of collecting sub-slab vapor samples.

Sub-Slab Vapor Port Installation

A 5/8-inch hole will be drilled through the concrete slab at each sub-slab vapor sample location using an electric impact-drill. Vapor Pin sub-slab vapor sampling ports, constructed with a silicon sleeve to provide a mechanical seal between the sample port and the slab, will be installed using a dead blow hammer. The temporary Vapor Pins will be installed to collect samples and then immediately removed, and the holes will be sealed with cement. A HEPA vacuum cleaner will collect concrete dust produced by the process.

Sub-Slab Field Quality Control Methods

To ensure that the collected sub-slab vapor samples are representative of subsurface vapor conditions, leak testing will be performed at each sample port during purging. Leak testing will be performed using the water dam method. Non-VOC plumber's putty will be placed around the sampling port and a short section of 2-inch diameter polyvinyl chloride (PVC) pipe will be set into the putty. Water will be added, and the water level observed over a few minutes. If the water level remains stable (does not decrease), then the sample port will be determined sealed.

Immediately prior to sample collection, the integrity of the sample tubing and fittings will be tested by conducting a negative pressure test. The sample canister will be connected to the sampling port with its valve closed. A negative pressure of approximately 10-15 inches of mercury will be induced on the sampling train with a hand pump and held for approximately 60-seconds while the gauge is monitored visually. Drops in pressure during this procedure will indicate leakage within the sampling trains that will require correcting and then re-testing.

Sub-Slab Vapor Sampling

The sub-slab vapor samples will be collected through dedicated tubing connected to the sub-slab vapor port. A 60cc syringe will be utilized to purge ambient air from the sampling train and port prior to initiating collection of the laboratory vacuum canister sample. During the purging process, a photoionization detector (PID) will be utilized to initially screen for volatile organic compounds. Sub-slab vapor will then be drawn into 1-liter vacuum canisters fitted with laboratory supplied regulators that allow a flow rate of approximately 200 ml/min.

All data related to the sub-slab sample collection process will be recorded on the Sub-slab Vapor Field Sampling Forms (attached).

REPORTING

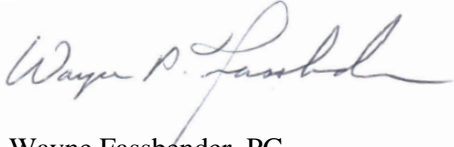
Off-site sample results notification letters will be prepared for each property and sent to the property owners and WDNR within 10 days of receiving the analytical results. The letters will include tables summarizing the indoor air and sub-slab vapor sampling results with comparisons to their applicable Vapor Action Levels and Vapor Risk Screening Levels, respectively. Past analytical will be incorporated into the tables. All results will be highlighted where concentrations exceed standards. A figure for each property will also be included, having the locations of all indoor air/outdoor air and sub-slab vapor samples referenced to a basement floor plan sketch. The letters will also document field procedures and any field observations that may be pertinent to the investigation. The sampling results will be discussed with the WDNR to determine if additional VI issues remain and warrant further investigation.

If no further investigations are needed, then EnviroForensics will update the case closure submittal and provide the new investigative data collected in Section C of the revised case closure submittal.

If you have any questions regarding this response, please feel free to contact me at (414) 982-3988 or by email at wfassbender@enviroforensics.com.

Sincerely,

EnviroForensics, LLC

A handwritten signature in black ink, appearing to read "Wayne P. Fassbender".

Wayne Fassbender, PG
Senior Project Manager

Copy: Brian Cass, OHM Holdings, Inc
Linda Michalets, WDNR

Attachments:

Figure B.4.a: Vapor Intrusion Map
Indoor Air Building Survey Form
Sub-Slab Vapor Sampling Form

Legend

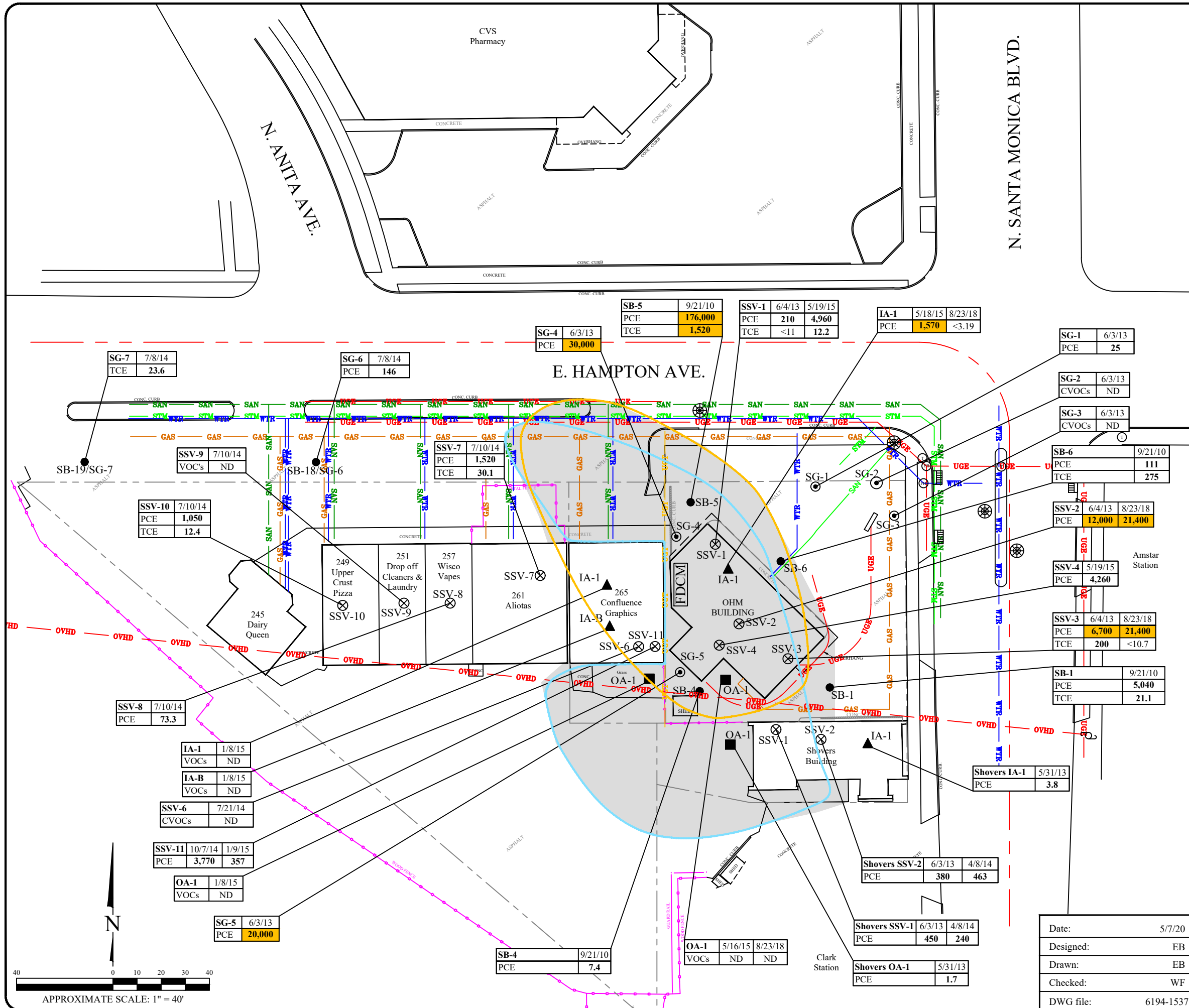
- Property boundary
- City of Milwaukee/Village Whitefish Bay boundary
- Fence line
- GAS - Underground gas utility line
- WTR - Underground water utility line
- SAN - Underground sanitary utility line
- STM - Underground storm utility line
- UGE - Underground electrical utility line
- UGT - Underground fiber optic line

- Utility Pole
- Catch Basin
- Manhole
- Fire Hydrant
- Electrical Box
- SB-1 - Soil Boring
- SG-1 - Soil Gas Sample
- SSV-1 - Sub-Slab Vapor Sample Location
- OA-1 - Outdoor Air Sample
- IA-1 - Indoor Air Sample
- FDCM - Former dry cleaning machine locations

Analyte	Sub-slab/Shallow Soil gas vapor	Indoor Air
	Small Commercial VRSL	Small Commercial VAL
PCE	6,000	180
TCE	290	8.8

- Note:
- Bold and shaded values exceed Vapor Risk Screening Levels
 - Bold values equal or exceed laboratory detection limits
 - All results reported in micrograms per cubic meter (ug/m³)
 - NE = Not established
 - PCE = Tetrachloroethene
 - TCE = Trichloroethene
 - VOCs = Volatile Range Organics
 - ND = Not detected
 - VRSL = Vapor Risk Screening Level
 - VAL = Vapor Action Level

- Area where residual contamination poses a future vapor intrusion risk
- Extent of CVOC in groundwater isocontour above Public Health ES
- Extent of CVOC concentrations exceeding the soil RCL



VAPOR INTRUSION MAP

One Hour Martinizing Facility
285 East Hampton Avenue
Milwaukee, Wisconsin

Date:	5/7/20	<p>825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com</p>	Figure
Designed:	EB		B.4.a
Drawn:	EB		Project
Checked:	WF		6194
DWG file:	6194-1537		



INDOOR AIR BUILDING SURVEY FORM

Date _____
Site # _____
Site Name _____
Address _____

Occupant Information

Owner Name _____
Occupant Name _____
Address _____

Telephone No (____) _____ Home/Work/Mobile
(____) _____ Home/Work/Mobile

Number and Age of Occupants _____

Does anyone smoke inside the building? _____

Building Characteristics

Type of building: (circle) Residential/Industrial/School/Commercial/Multi-use/Other? _____

If residential, what type (circle) Single family/Condo/Multi-family/Other? _____

If the property is commercial, indicate the business ? _____

How many floors does the building have? _____

Does the building have a (circle) Basement/Crawl space/Slab-on-grade/Other? _____

Is the basement used as a living/work space area? _____

What type of foundation does the building have (circle) Field stone/Poured concrete/Concrete block Other? _____

Is there an attached garage? _____ Is there a fuel tank? _____

Is there a wood stove? _____ Is there a fireplace? _____



Describe the heating system: (circle) Forced air furnace/ Boiler/ Window air conditioner/Other? _____

If forced air heating, answer the following questions:

Is there a fresh air exchange? If so, details: _____

Are air ducts located within the crawl space of the property? _____

Are there additional vents within the property? (Non-powered vent/ bathroom vent/etc.) _____

Table 1: Potential vapor migration entry point information

Potential Vapor Entry Points	Present (Yes/No)	Field Screening Results (ppm)	Picture	Comments
Foundation penetrations in floor or walls				
Cracks in foundation floor or walls				
Sump				
Floor drain				
Other				
Other				

Sampling Information

Sample Date _____

Sampler Type Sorbent SUMMA Passive (Please circle one)

Analysis Method Mass APH TO-15Standard TO-15LL TO-15-SIM TO-17 Other: (Please circle one)

Contact Person (Project Manager) _____

Telephone No (____) _____

Laboratory _____

Telephone No (____) _____

Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection _____

Sampling Inspection Product Inventory

<u>Potential Source/ Trade Name</u>	<u>Location (Floor/Room)</u>	<u>Active/Main Ingredient</u>	<u>Picture</u>	<u>Removed (Y/N)</u>



Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On-site Pressure*	Final On-Site Pressure*

*Indicate pressure in units of inches of mercury.

Please provide a sketch of building and sample locations on the following page.

Was the building ventilated prior to sample collection? _____

How long was the ventilation process? _____

Were vapor control methods in effect while the samples were being collected?

Windows open? Yes / No Ventilation fans? Yes / No Vapor barriers? Yes / No

Vapor phase carbon treatment system? Yes / No SSDS? Yes/No Other site control measures _____

Weather Conditions during Sampling

Outside temperature (°F) High: _____ Low: _____ Inside temperature (°F) _____

Prevailing wind speed and direction _____

Describe the general weather conditions (e.g. sunny, cloudy, rain) _____

Significant precipitation (1 inches or more) within 72 hours of the sampling event? _____



General Comments and Sketch Area

Is there any information you feel is important related to this site and the samples collected which would facilitate an accurate interpretation of the indoor air quality? Sketch floor plan, sample locations, location of background sources.

Comments: _____

Sketch:



Sub-Slab Vapor Field Sampling Form

825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: _____
 Project Number: _____
 Project Address: _____
 Client/Contact: _____

Property Address: _____

 Sampler(s): _____

Sample ID	Canister ID	Flow Controller ID	Date mm/dd/yy	Time Start hh:mm	Time End hh:mm	Vacuum Reading		Initial PID Readings in ppm	Negative Pressure Test		Water Dam Test	
						Initial in. Hg	Final in. Hg		Induced -15 in Hg on sample train and pressure held? (yes/no)		Water Dam Test passed? (air bubbles not observed or water level did not drop) (yes/no)	
_____	_____	_____	_____	_____	_____	_____	_____	_____	yes	no	yes	no
_____	_____	_____	_____	_____	_____	_____	_____	_____	yes	no	yes	no
_____	_____	_____	_____	_____	_____	_____	_____	_____	yes	no	yes	no
_____	_____	_____	_____	_____	_____	_____	_____	_____	yes	no	yes	no
_____	_____	_____	_____	_____	_____	_____	_____	_____	yes	no	yes	no
_____	_____	_____	_____	_____	_____	_____	_____	_____	yes	no	yes	no

Sketch

Wind Direction	Wind Speed mph	Temperature ° F	Relative Humidity %	Barometric Pressure in. of Hg
_____	_____	_____	_____	_____

Notes: _____

