GZA GeoEnvironmental

Engineers and Scientists

June 29, 2009
File No. 21.0056475.00

Mr. Jeffery Konsella
NYSDEC Region 9
270 Michigan Ave
Buffalo, NY 14203

Re: Soil Vapor Intrusion Air Sampling
St. Gobain Offices
6600 Walmore Road
Wheatfield, New York

535 Washington Street
11th Floor
Buffalo, New York
14203
716-685-2300
FAX 716-685-3629
www.gza.com

Dear Mr. Konsella:

GZA GeoEnvironmental of New York (GZA) is pleased to submit this data transmission letter report to the New York State Department of Environmental Conservation (NYSDEC), on behalf of Patriot Equities, summarizing the analytical results of the soil vapor intrusion air sampling done in the above referenced St. Gobain offices (see Figure 1). GZA collected the indoor air, sub-slab air and outdoor ambient air samples on March 24, 2009.

BACKGROUND

A January 5, 2009 letter from the New York State Department of Environmental Conservation (NYSDEC) to Mr. Mark Raybuck (Parsons Engineering) recommended that Patriot Equities perform a vapor intrusion assessment of the office building area of the St. Gobain facility. This recommendation was made due to the contaminant discharge to soil and groundwater at the adjacent Ekonol building and the presence of trichloroethylene (TCE) within the overburden groundwater in close proximity to the St. Gobain building. The Ekonol building is located north and in an upgradient groundwater flow direction from the St. Gobain office area (see Figure 2).

SOIL VAPOR INTRUSION ACTIVITIES

The following activities were done by GZA as part of the soil vapor intrusion air sampling.

- Prepared a Work Plan dated February 16, 2009 that was submitted to NYSDEC who approved it in a letter dated March 12, 2009.
- Completed an indoor air quality questionnaire and building inventory to assess the various chemicals and products used within the sampling area. This was done on the first floor of the St. Gobain office area using a standard form published by the New York State Department of Health (NYSDOH) – the completed form is included as Appendix A.
- Discussed the historical usage of the St. Gobain office area with Mr. George Davis (St. Gobain)
- Contacted MJ Mechanical Services, Inc. to discuss the heating, ventilation and air

conditioning (HVAC) system for the office area at the suggestion of Mr. Davis.

- Collected two sub-slab soil vapor and two indoor air samples from two interior locations of the office area (see Figures 2 and 3).
- Collected three ambient outdoor air samples east of the St. Gobain offices. The wind direction on March 24, 2009 was prevailing from the east (see Figure 2).
- Submitted the seven air samples collected for chemical analysis for six compounds of concern (tetrachloroethylene (PCE), TCE, 1,2-dichloroethene (1,2 DCE), 1,1,1-trichloroethene (1,1,1 TCA), 1,1-dichloroethane (1,1 DCA) and vinyl chloride (VC)) via EPA Method TO-15.

FIELD ACTIVITIES

This section describes the field activities done as part of the soil vapor intrusion air sampling.

PRODUCT INVENTORY REVIEW

GZA visited the St. Gobain office area on February 27, 2009 and completed the NYSDOH indoor air quality questionnaire and building inventory, based on our observations. See Appendix A for the completed questionnaire. Two key findings of this product inventory review are:

1. A spray can of penetrating oil (Rubachen Systems, Inc., Loosey-Goosey Penetrating Oil) that contained TCE was identified in a janitor's closet. Mr. George Davis (St. Gobain) was made aware of the findings and reportedly removed the product from the office area on March 20th, four days prior to the air sampling. GZA did not observe the product in the sampling area during our walk through on the day of the sampling. No other products were observed during the inventory review or the day of the sampling that contained one or more of the compounds of concern.

2. A photoionization detector (PID) was used to establish the background levels for VOCs within the sampling area. The meter was calibrated and "zeroed" outside of the building prior to entering. PID reading within the office area ranged from non-detect to approximately 150 parts per billion (ppb).

HISTORIC USE OF THE ST. GOBAIN OFFICE AREA

GZA spoke with Mr. George Davis about the former use of the office area. Mr. Davis indicated that the building that houses the offices was constructed in approximately 1949 and was used as a cafeteria and/or kitchen prior to development as office space. Mr. Davis showed GZA drawings dated 1964 and 1971 which identified the kitchen/dinning area and a cafeteria, respectively, in the office area.

HVAC ASSESSMENT

GZA spoke with Mr. Davis about the HVAC system in the office area. Mr. Davis did not have knowledge or drawings for the layout of the system. He suggested that we contact Mr. Robert Flegal of MJ Mechanical regarding the HVAC system in the office area. Mr. Flegal indicated that MJ Mechanical did not have drawings but was able to provide some information regarding the existing HVAC system, based on his experience with the Site. The following is a brief summary of the existing system.

Four HVAC units are used to condition the air in the office area (see Figure 4).

- Unit 1 – 2,000 cubic feet per minute (cfm) unit that conditions air in the cafeteria of the office area. Approximately 10% of the air circulated through the system is outside air. The remaining 90% is indoor air which is re-circulated.

- Unit 2 – 1,600 cfm unit that conditions air in the offices north of the cafeteria. This unit re-circulates 100% of the indoor air.

- Unit 3 - 1,600 cfm unit that conditions air for the offices in the northern portion of the area. The air through this unit is 100% re-circulated indoor air.

- Unit 4 - 3,000 cfm unit that conditions air in the large conference room in the northwestern portion of the office area. Approximately 10% of the air circulated through the system is outside air. The remaining 90% is indoor air which is re-circulated.

The approximate locations of the air return and air supply vents observed by GZA within the office area are shown on the attached Figure 4. The approximate locations of the HVAC units identified by Mr. Flegal are also shown.

Additionally, there are two HVAC units which service the laboratory that is located on the second floor above the office area. These two HVAC systems consist of a 2,500 cfm unit (no outdoor air contribution) and a 3,000 cfm unit (10% outdoor air contribution).

INDOOR, SUB-SLAB AND AMBIENT OUTDOOR AIR SAMPLING

GZA collected three types of air samples (sub-slab, indoor air and outdoor ambient air) as part of the soil vapor intrusion air sampling. The samples were collected via methodologies identified in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (NYSDOH Guidance Document).

Two indoor air samples (identified as ID-1 and ID-2) were collected from locations within the St. Gobain office area as shown on Figures 2 and 3.

Two sub-slab air samples (identified as SS-1 and SS-2) were collected from under the slab-on-grade floor through an approximate 1/2-inch diameter hole drilled in the concrete floor.

Clean, dedicated polyethylene tubing was placed through the hole beneath the concrete slab which was approximately 4 to 6-inches thick. The tubing was sealed at the floor surface with modeling clay (see Figure 2 for approximate location). The sample tubing was approximately 18-inches in length with a ¼ - inch inner diameter.

A tracer gas (helium) was used to determine if the surface seal created by the modeling clay around the polyethylene tubing was sufficient to prevent ambient air from infiltrating down into the sub-slab during the sampling. The helium was released into an enclosure (modified 5-gallon bucket) placed over the top of the sub-slab sampling point (polyethylene tubing and clay seal) to check for indoor air infiltration. A helium detector (MGD 2002 Helium Leak Detector) equipped with an internal pump was used to monitor the air being drawn up from the sub-slab sample point to check if ambient air/helium was being drawn down into the sub-slab zone being sampled. The helium detector was operated in the continuous sample mode prior to the release of helium in to the enclosure and for approximately 3 minutes after helium was released into the enclosure. The detector probe was placed inside the tubing, with the internal pump on the detector drawing air at a rate of approximately 0.4 liters per minute. The highest reading observed on the helium detector over the 3 minute period was recorded. The volume of air drawn through the tubing was approximately 1.2 liters or 80 times the air volume of the tubing.

Prior to the release of helium in to the enclosure, the helium detector was used to measure the background level of helium from the sub-slab. No readings above 0 parts per million (ppm) were noted.

Following the release of helium in to the enclosure, measurements of the air drawn from beneath the slab-on-grade (sub-slab) were 9,000 ppm at SS-1 and 225 ppm at SS-2. The NYSDOH Guidance Document allows for up to 10% of the tracer gas to be detected within the sampling system and still be considered acceptable. These recorded values were less than 1% helium (10,000 ppm). Prior to removing the enclosure from over the sampling point, the helium detector probe was placed inside the enclosure. The highest readings measured inside the enclosure were recorded at each location which ranged from 87% (SS-1) to 79% helium (SS-2).

Three ambient outdoor air samples were collected from exterior upwind locations east of the office building. The wind direction the day of the sampling was coming out of the east. The three outdoor samples were collected along the east side of the office portion of the building (see Figure 2 for locations). Air sample Outdoor-1 was collected with the sample canister placed on a tree branch adjacent to the building. Air sample Outdoor-2 and Outdoor-3 were collected from locations near the perimeter fence line. The outdoor air samples were collected from a height of approximately 5 to 6 feet above the ground surface for the duration of the sampling.

The air samples were collected for an approximate eight-hour duration (e.g., standard shift duration in a commercial/industrial facility) in general accordance with NYSDOH Guidance Document.

ANALYTICAL TESTING

The seven air samples collected were submitted to Centek Laboratories, LLC (Centek) for chemical analysis. Each sample was tested for PCE, TCE, 1,2 DCE, 1,1,1 TCA, 1,1 DCA and VC via EPA Method TO-15.

ANALYTICAL TEST RESULTS

Findings of the laboratory testing of the seven air samples analyzed are presented on Table 1 and discussed below. The Centek laboratory report is provided as Appendix B.

Three compounds (TCE. PCE and cis 1,1 DCE) were detected at concentrations above method detection limits. TCE was detected in one indoor air sample and two sub slab samples; PCE was detected in two indoor air samples and two sub slab samples; and cis 1, 2 DCE was detected in one indoor air sample.

TCE was detected in the sub slab samples (2.1 ug/m^3 and 2.2 ug/m^3) and in one indoor air sample (6.1 ug/m^3). TCE was detected at a higher concentration in the indoor air sample than the sub slab samples. Based on the NYSDOH decision matrix (Matrix 1) the concentrations of TCE in the indoor air samples suggest that reasonable and practical actions be taken to identify a potential source and reduce exposure. The sub-slab concentrations do not require further action.

PCE was detected at concentrations of 1.6 ug/m^3 and 3.0 ug/m^3 in the indoor air samples. PCE was detected in the sub-slab samples at concentrations of 6,300 ug/m^3 and 6,800 ug/m^3). According to the decision matrix for PCE (Matrix 2), contained within the NYSDOH Guidance Document, PCE concentrations detected within the sub-slab samples require mitigation due to the potential threat of vapor intrusion and not from concentrations detected in the indoor air samples collected.

Cis 1,2, DCE was detected in one indoor air sample (1.3 ug/m^3), but not detected in the two sub-slab samples. NYSDOH does not have a decision matrix for this compound.

No compounds of concern were detected above method detection limits in the three outdoor samples.

Should you have any questions or require additional information following your review, please do not hesitate to contact the undersigned. We look forward to discussing any further steps that may be necessary for this site.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

Christopher Boron
Senior Project Manager

Ernest R. Hanna, P.E.
Principal

Daniel Troy, P.E.
Consultant Reviewer

Attachments:

Table 1:	Air Sample Results Summary
Figure 1:	Locus Plan
Figure 2:	Site Plan with Sampling Locations
Figure 3:	Indoor Air Sampling Plan
Figure 4:	Air Supply & Vent Location Plan
Appendix A:	NYSDOH Indoor Air Quality Questionnaire and Building Inventory
Appendix B:	Laboratory Report

cc: Mr. Walter Hungarter, III (RT Environmental, electronic copy)
Mr. Mathew Forcucci (NYSDOH, electronic copy)
Mr. William Barber (Atlantic Richfield, electronic copy)

TABLE

Table 1

Air Sample Results Summary
Soil Vapor Intrusion Assessment
St. Gobain Office Area, 6600 Walmore Road
Wheatfield, New York

INDOOR & SUB-SLAB SAMPLE RESULTS

Compounds	NYSDOH Guidance Document Matrix to be used	ID-1	SS-1	ID-2	SS-2
1,1,1-Trichloroethane	Matrix 2				
1,1-Dichloroethane	NA				
1,2-Dichloroethene	NA	1.3			
Tetrachloroethylene	Matrix 2	1.6	6,300	3.0	6,800
Trichloroethene	Matrix 1	6.3	2.1		2.2
Vinyl Chloride	NA				

AMBIENT OUTDOOR SAMPLE RESULTS

Compounds	NYSDOH Guidance Document Matrix to be used	Outdoor-1	Outdoor-2	Outdoor-3
1,1,1-Trichloroethane	NA			
1,1-Dichloroethane	NA			
cis-1,2-Dichloroethene	NA			
Tetrachloroethylene	NA			
Trichloroethene	NA			
Vinyl Chloride	NA			

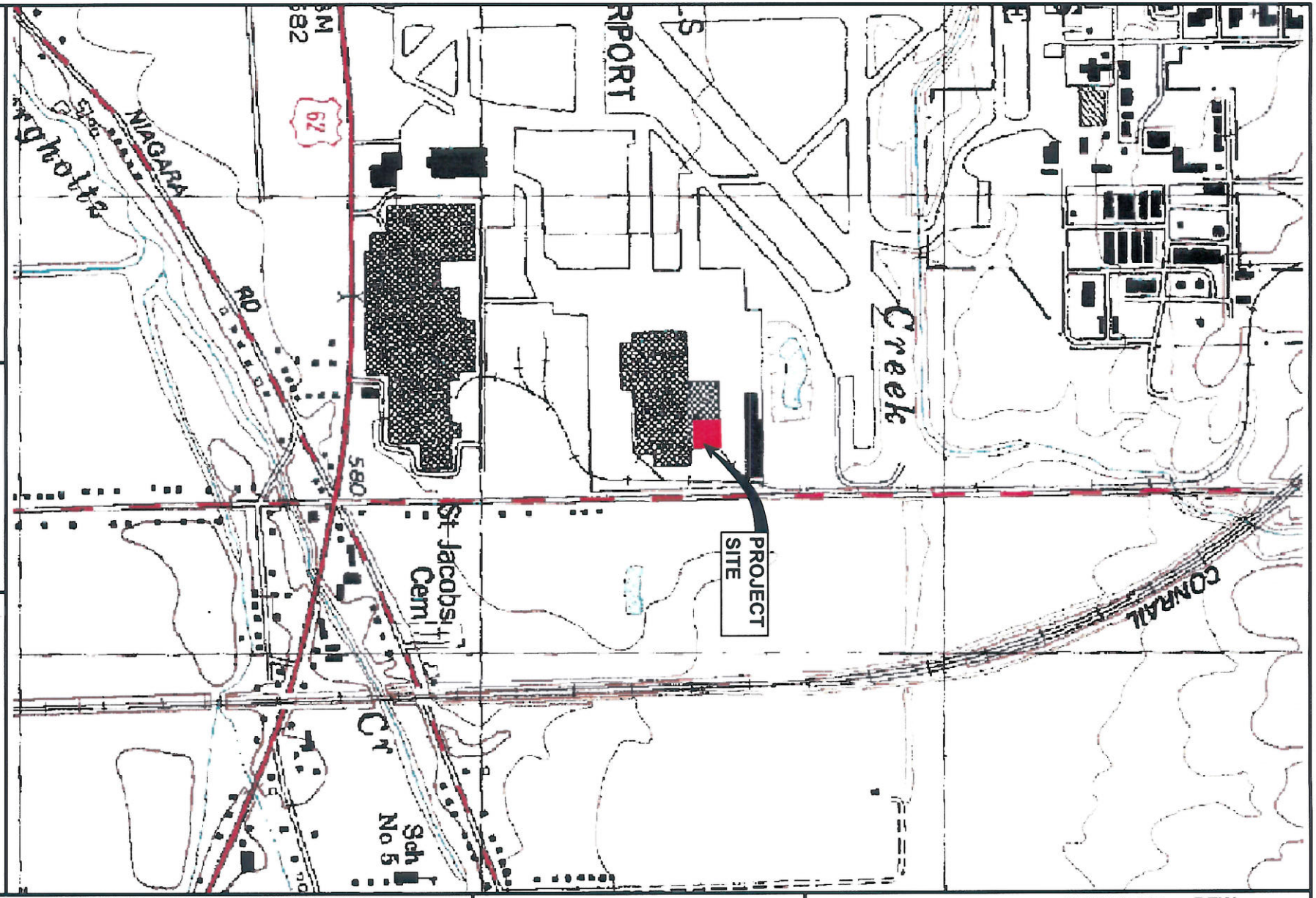
NOTES:

1) Air sample analysis was done by Centek Laboratory in Syracuse, NY.
2) Blank indicates sample results was below method detection limitis.
3) NYSDOH Guidance Document = Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006.
4) Analytical results are provided in micrograms per cubic meter (ug/m^3).
5) 1,2-Dichloroethene is result is the total of cis-1,2-dichloroethene and cis-1,2-dichloroethene results.

FIGURES

 GZA-T:\PROJECTS\56400s\56475 6600 WALMORE ROAD\FIGURE 1.dwg [Figure 1] April 08, 2009 – 1:08pm daniel.wulf

NOTE:
BASE MAP ADAPTED FROM U.S.G.S. TOPOGRAPHIC MAPS DOWNLOADED FROM TERRASERVER.MICROSOFT.COM



RT ENVIRONMENTAL SERVICES
SAINT GOBAIN PROPERTY
6600 WALMORE ROAD FACILITY
WHEATFIELD, NEW YORK

VAPOR INTRUSION ASSESSMENT

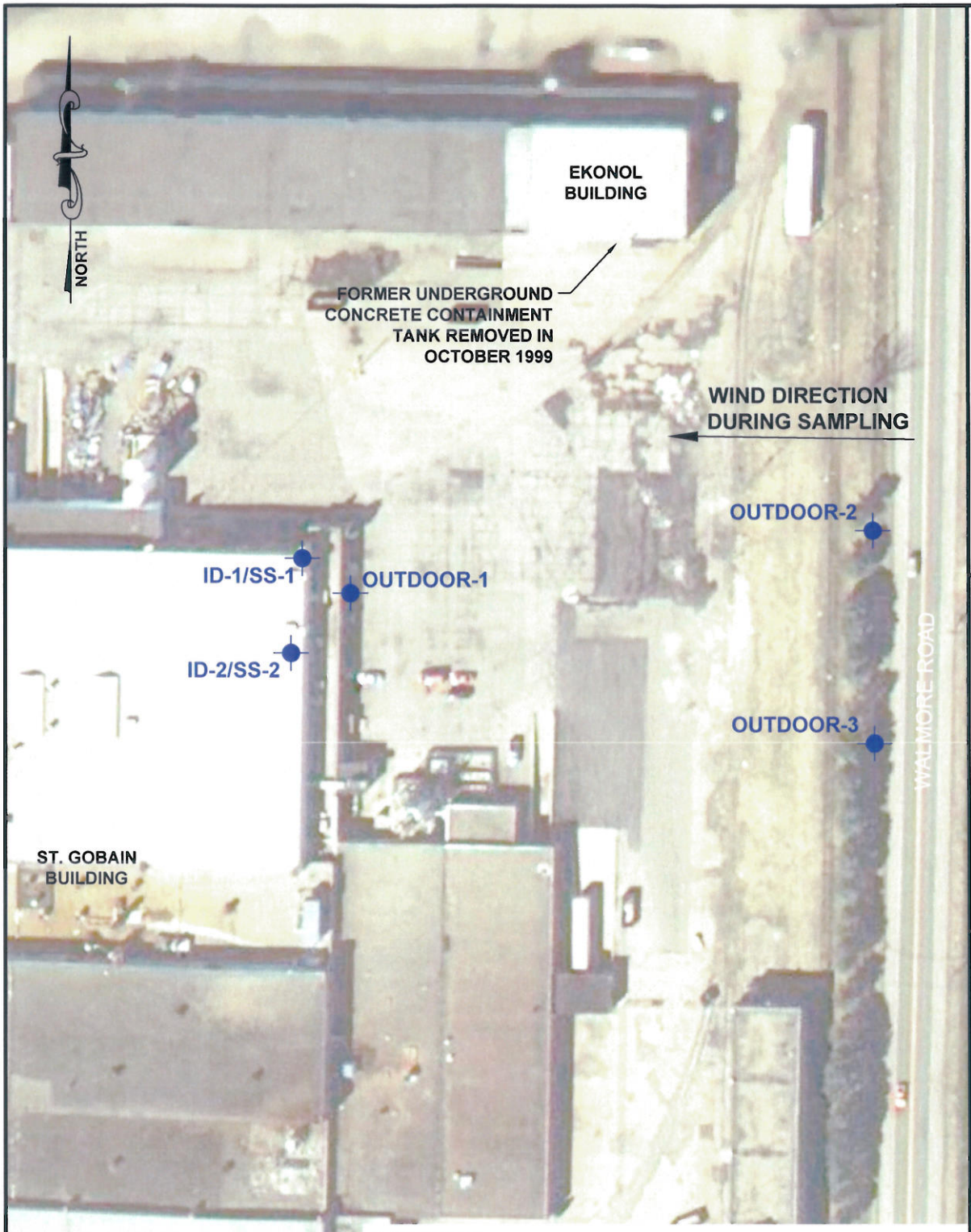
LOCUS PLAN

SCALE IN FEET
0 500 1000 2000

DRAWN BY: **DEW**
DATE: **APRIL 2009**

GZA GeoEnvironmental of New York

PROJECT No. **21.0056475.00**
FIGURE No. **1**



LEGEND:

ID-1/SS-1 — APPROXIMATE LOCATION AND DESIGNATION OF INDOOR AND OUTDOOR AIR SAMPLES

NOTES:

1. BASE MAP ADAPTED FROM A 2005 AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/interactive_main.html AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: APRIL 2009

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 50 100 200

RT ENVIRONMENTAL SERVICES

SAINT GOBAIN PROPERTY
6600 WALMORE ROAD FACILITY
WHEATFIELD, NEW YORK

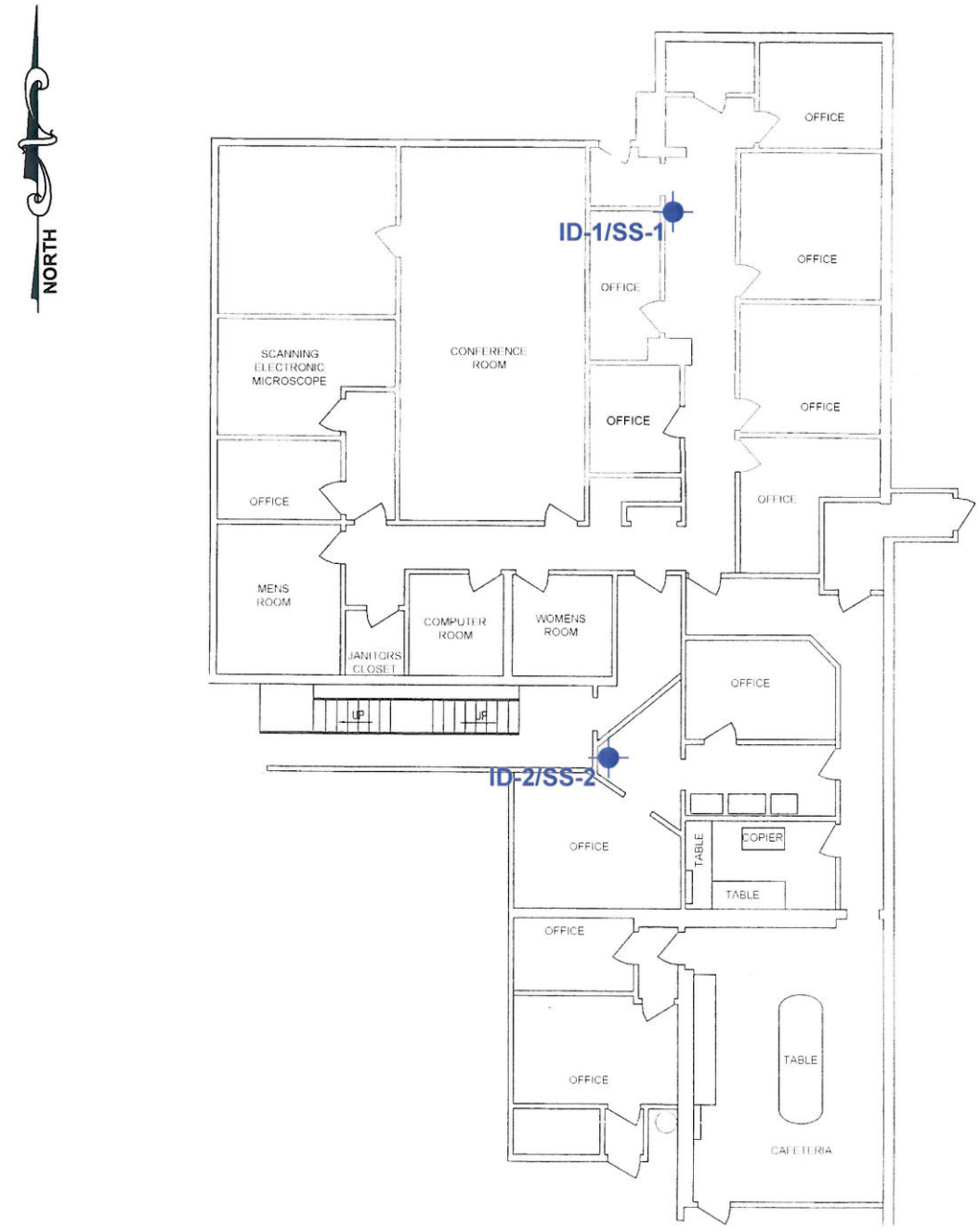
VAPOR INTRUSION ASSESSMENT

SITE PLAN AND AIR SAMPLING LOCATIONS

PROJECT No.
21.0056475.00

FIGURE No.
2

GZA-T:\PROJECTS\56400s\56475 6600 WALMORE ROAD\FIGURE 2.dwg [Figure 2] April 08, 2009 - 1:08pm daniel.wulf



LEGEND:

ID-1/SS-1 — APPROXIMATE LOCATION AND DESIGNATION OF INDOOR AND SUB-SLAB AIR SAMPLES

NOTES:

1. BASE MAP ADAPTED FROM A SITE PLAN PROVIDED BY THE CLIENT AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: APRIL 2009

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 10 20 40

RT ENVIRONMENTAL SERVICES

SAINT GOBAIN PROPERTY

6600 WALMORE ROAD FACILITY

WHEATFIELD, NEW YORK

VAPOR INTRUSION ASSESSMENT

INDOOR AIR SAMPLING PLAN

PROJECT No.

21.0056475.00

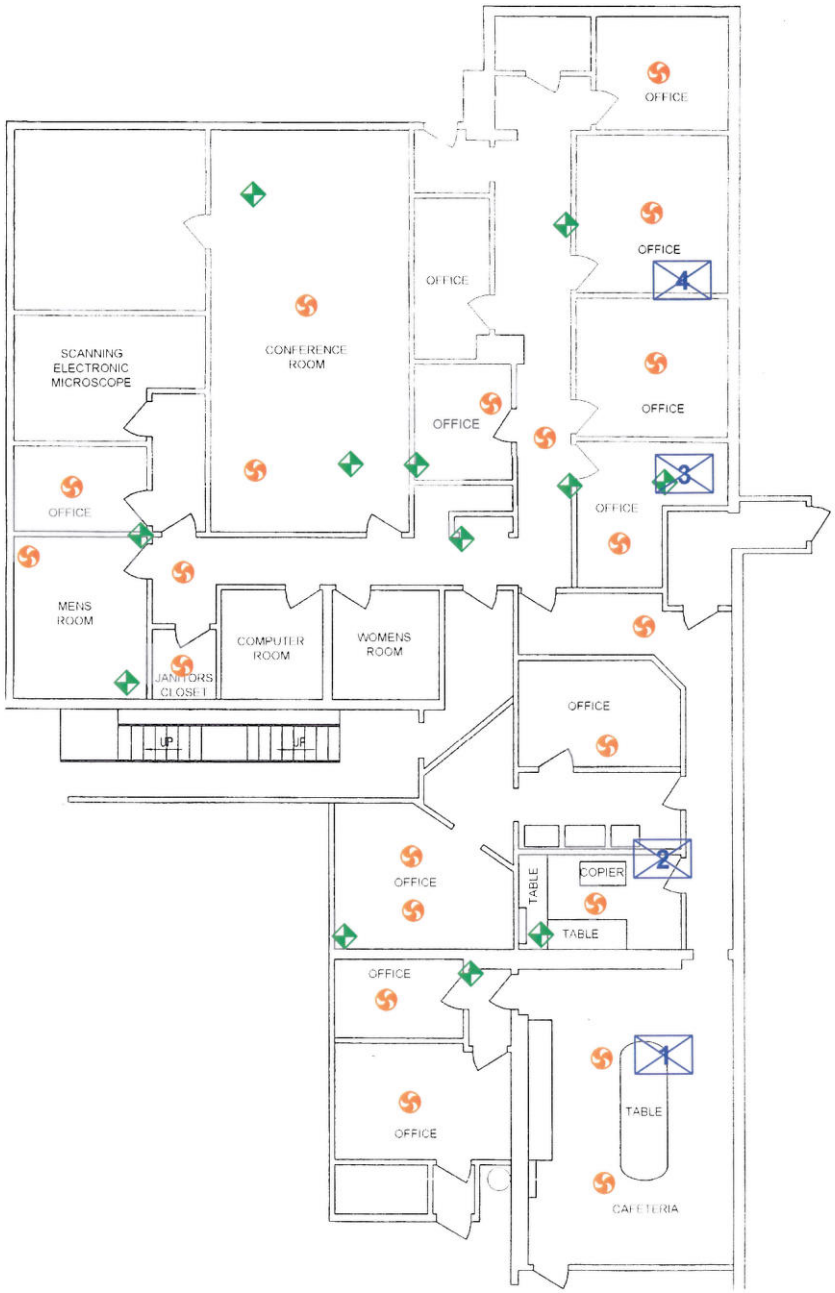
FIGURE No.

3

GZA–T:\PROJECTS\56400s\56475 6600 WALMORE ROAD\FIGURE 3–4.dwg [Figure 3] April 08, 2009 – 1:08pm daniel.wulf

 GZA-T:\PROJECTS\56400s\56475 6600 WALMORE ROAD\FIGURE 3-4.dwg [Figure 4] April 08, 2009 - 1:07pm daniel.wulf

NORTH



LEGEND:

- APPROXIMATE LOCATION COLD AIR RETURN VENT
- APPROXIMATE LOCATION AIR SUPPLY VENT
- APPROXIMATE LOCATION HVAC UNIT MOUNTED ON ROOF

NOTES:

1. BASE MAP ADAPTED FROM A SITE PLAN PROVIDED BY THE CLIENT AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: APRIL 2009

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 10 20 40

RT ENVIRONMENTAL SERVICES

SAINT GOBAIN PROPERTY

6600 WALMORE ROAD FACILITY

WHEATFIELD, NEW YORK

VAPOR INTRUSION ASSESSMENT

AIR SUPPLY & VENT LOCATION PLAN

PROJECT No.

21.0056475.00

FIGURE No.

4

APPENDIX A

NYSDOH INDOOR AIR QUALITY QUESTIONNAIRE AND 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 Chris Baron Date/Time Prepared 2-27-09 / 1100 am

Preparer's Affiliation GZA GeoEnvironmental Phone No. 716-685-2300

Purpose of Investigation Vapor intrusion assessment of office space at NYSDEC recommendation

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Davis First Name: George

Address: 6600 Walmore Road

County: Niagara

Home Phone: _____ Office Phone: 716-731-8204

Number of Occupants/persons at this location 13 Age of Occupants 25 to 45

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): Office Space of industrial facility

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) Office space of

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

Other characteristics:

Number of floors 2 Building age 1949

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

Basement/Lowest level depth below grade: 0 (feet)

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

Floors appear in good condition. Drains in utility closet and bathrooms may be potential vapor intrusion entry points

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: Natural Gas

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other No boiler
Air conditioning:	(Central Air)	Window units	Open Windows	None

Are there air distribution ducts present? (Y) / N Not visible

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.

SEE ATTACHED FIGURE

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	NA
1st Floor	Offices, Cafeteria, Bathrooms, Janitors Closet
2nd Floor	Laboratory
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? Manufacturing facility to the south and east

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

h. Have cleaning products been used recently? (Y) / N When & Type? Once per month, general office cleaning

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? Hallways, July 2008

k. Is there new carpet, drapes or other textiles? (Y) / N Where & When? February 2009, offices

l. Have air fresheners been used recently? (Y) / N When & Type? Bathrooms, weekly

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? To bldg

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? Parts cleaners, Acetone in laboratory

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: No Basement

First Floor: See Attached Drawing

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.

SEE ATTACHED AERIAL PHOTOGRAPH

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRAE ppbRAE

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

Background in St. Gobain office ranged from Non-detect to 150 ppb.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units) ppb	Photo ** Y / N
JC	Rubachem Sys. Inc Loosey-Goosey Penetrating Oil	20 oz	U	Deodorizing Kerosene, Carbon Dioxide TCE, Oxygenated Hydrocarbon	100	N
	Soft Scrub	26 oz.	U	1800-227-1860	2	N
	Ant Spray	24 oz	U	not listed	0	N
	Lysol Disinfectant	19 oz	UO	1800-228-4722	15	N
	Glass + Window Cleaner	1 gal	U	Sodium Metasilicate, Nonylphenol phlyethoxyethanol	10	N
	Liquid Plumber	8 oz	UO	1800-227-1860	0	N
	Ace Drain Opener	32 oz	U	Sodium Hypochlorite Sodium Hydroxide	32	N
	Non Acid Bowl Cleaner	1qt	U	N-alkyl dimethyl benzyl ammonium chloride, other ingredients	21	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.

JC - Janitors Closet

LEGEND:

ID-1/SS-1 — APPROXIMATE LOCATION AND DESIGNATION OF INDOOR AND OUTDOOR AIR SAMPLES

NOTES:

1. BASE MAP ADAPTED FROM A 2005 AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/interactive_main.html AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

APPROXIMATE SCALE IN FEET

0 50 100 200

DRAWN BY: DEW

DATE: MARCH 2009

GZA GeoEnvironmental of New York

RT ENVIRONMENTAL SERVICES

SAINT GOBAIN PROPERTY

6600 WALMORE ROAD FACILITY

WHEATFIELD, NEW YORK

VAPOR INTRUSION ASSESSMENT WORK PLAN

PROPOSED AIR SAMPLING LOCATIONS

PROJECT No. 21.0056475.00

FIGURE No. 2

GZA-T:\PROJECTS\56400s\56475 6600 WALMORE ROAD\FIGURE 2.dwg [Figure 2] April 06, 2009 - 3:55pm daniel.wulf

LEGEND:

- APPROXIMATE LOCATION COLD AIR RETURN VENT
- APPROXIMATE LOCATION AIR SUPPLY VENT

NOTES:

1. BASE MAP ADAPTED FROM A SITE PLAN PROVIDED BY THE CLIENT AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: MARCH 2009

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 10 20 40

RT ENVIRONMENTAL SERVICES

SAINT GOBAIN PROPERTY

6600 WALMORE ROAD FACILITY

WHEATFIELD, NEW YORK

VAPOR INTRUSION ASSESSMENT WORK PLAN

AIR SUPPLY & VENT LOCATION PLAN

PROJECT No.

21.0056475.00

FIGURE No.

4

 GZA-T:\PROJECTS\56400s\56475 6600 WALMORE ROAD\FIGURE 3-4.dwg [Figure 4] March 26, 2009 - 12:41pm daniel.wulf

APPENDIX B

LABORATORY REPORT

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	ID-1
Lab Order:	C0903049	**Tag Number:**	349, 298
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 11:02:00 AM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 11:02:00 AM
cis-1,2-Dichloroethene	1.3	0.60		ug/m3	1	3/28/2009 11:02:00 AM
Tetrachloroethylene	1.6	1.0		ug/m3	1	3/28/2009 11:02:00 AM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 11:02:00 AM
Trichloroethene	6.3	0.22		ug/m3	1	3/28/2009 11:02:00 AM
Vinyl chloride	ND	0.10		ug/m3	1	3/28/2009 11:02:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	SS-1
Lab Order:	C0903049	**Tag Number:**	248, 186
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 2:03:00 PM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 2:03:00 PM
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 2:03:00 PM
Tetrachloroethylene	6300	660		ug/m3	640	3/31/2009 10:29:00 PM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 2:03:00 PM
Trichloroethene	2.1	0.82		ug/m3	1	3/28/2009 2:03:00 PM
Vinyl chloride	ND	0.39		ug/m3	1	3/28/2009 2:03:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	ID-2
Lab Order:	C0903049	**Tag Number:**	485, 184
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 12:12:00 PM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 12:12:00 PM
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 12:12:00 PM
Tetrachloroethylene	3.0	1.0		ug/m3	1	3/28/2009 12:12:00 PM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 12:12:00 PM
Trichloroethene	ND	0.22		ug/m3	1	3/28/2009 12:12:00 PM
Vinyl chloride	ND	0.10		ug/m3	1	3/28/2009 12:12:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	SS-2
Lab Order:	C0903049	**Tag Number:**	359, 276
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 3:12:00 PM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 3:12:00 PM
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 3:12:00 PM
Tetrachloroethylene	6800	1300		ug/m3	1280	3/31/2009 11:02:00 PM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 3:12:00 PM
Trichloroethene	2.2	0.82		ug/m3	1	3/28/2009 3:12:00 PM
Vinyl chloride	ND	0.39		ug/m3	1	3/28/2009 3:12:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	Outdoor-1
Lab Order:	C0903049	**Tag Number:**	547, 111
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 9:17:00 AM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 9:17:00 AM
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 9:17:00 AM
Tetrachloroethylene	ND	1.0		ug/m3	1	3/28/2009 9:17:00 AM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 9:17:00 AM
Trichloroethene	ND	0.22		ug/m3	1	3/28/2009 9:17:00 AM
Vinyl chloride	ND	0.10		ug/m3	1	3/28/2009 9:17:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	Outdoor-2
Lab Order:	C0903049	**Tag Number:**	204, 441
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-006A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 9:52:00 AM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 9:52:00 AM
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 9:52:00 AM
Tetrachloroethylene	ND	1.0		ug/m3	1	3/28/2009 9:52:00 AM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 9:52:00 AM
Trichloroethene	ND	0.22		ug/m3	1	3/28/2009 9:52:00 AM
Vinyl chloride	ND	0.10		ug/m3	1	3/28/2009 9:52:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *02-Apr-09*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	Outdoor-3
Lab Order:	C0903049	**Tag Number:**	367, 127
Project:	St. Gobain 21.0056475.0	**Collection Date:**	3/24/2009
Lab ID:	C0903049-007A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	3/28/2009 10:27:00 AM
1,1-Dichloroethane	ND	0.62		ug/m3	1	3/28/2009 10:27:00 AM
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 10:27:00 AM
Tetrachloroethylene	ND	1.0		ug/m3	1	3/28/2009 10:27:00 AM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	3/28/2009 10:27:00 AM
Trichloroethene	ND	0.22		ug/m3	1	3/28/2009 10:27:00 AM
Vinyl chloride	ND	0.10		ug/m3	1	3/28/2009 10:27:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		