

Your ref: Site #709010
Our ref: 12595756

March 18, 2024

Ms. Jasmine Stefansky
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233

RE: Responses to February 23, 2024 NYSDOH and March 8, 2024 NYSDEC Comments on the SVI Investigation Work Plan (GHD, January 24, 2024)

Dear Jasmine:

The following letter provides responses to the New York State Department of Health's (NYSDOH) and New York State Department of Environmental Conservation's (NYSDEC) comments, dated February 23, 2024 and March 12, 2024, respectively, which were related to review of the *SVI Investigation Work Plan* (GHD, January 24, 2024) prepared for the Former General Instrument Corporation Inactive Hazardous Waste Disposal Site Program (Site #709010) located on Kenyon Press Drive in Sherburne, Chenango County, New York. The SVI Investigation Work Plan has been revised in accordance with these responses and is included as Attachment 1 of this response letter for approval.

NYSDOH Comment No. 1: *Section 1, Introduction – Please provide the referenced NYSDEC correspondence that details the path and objective of this investigation.*

GHD Response No. 1: The referenced August 16, 2023 letter from NYSDEC is provided as Attachment 2 of this response. The approach outlined in the SVI Investigation Work Plan is primarily based on addressing Comment No. 8 and gathering sufficient information to allow for a better understanding of Site conditions and planning of appropriate next steps.

NYSDOH Comment No 2: *Section 2.4, Summary of Previous SVI Investigations:*

- a. *To facilitate the understanding and review of the work plan, please present figures/tables summarizing the results of previous SVI investigations completed during the 2021-2022 and 2022-2023 heating seasons.*
- b. *Section 2.4, Summary of Previous SVI Investigations – Please identify on a figure the current configuration/uses of the site building, with particular emphasis on the northern building area where elevated concentrations of trichloroethene (i.e., 8,000 µg/m³) were previously identified.*
- c. *Please remove the following excerpt from Section 2.4: "...and the NYSDOH decision matrices were oriented toward residential structures rather than industrial facilities." The referenced statement is incorrect. Since its inception, the State's Guidance for Evaluating Soil Vapor Intrusion has been and will continue to be used to evaluate potential exposures via soil vapor intrusion in all use settings (residential, commercial, and industrial).*

GHD Response No. 2a: Excerpts from previous reports that summarize sampling results have been included as Appendix B of the revised *SVI Investigation Work Plan* for reference.

GHD Response No. 2b: The building is currently utilized for warehouse operations associated with a pet supply company, with pallets of pet food and other various items stored throughout the building. Workers navigate the building with fork trucks throughout the day pulling product to load delivery trucks. The former plating building portion of the building is generally vacant and used for storage with occasional access for a short duration of time. Information was added to Section 2.1 of the revised *SVI Investigation Work Plan* to clarify historical and current uses of the building.

GHD Response No. 2c: The text has been removed as requested and the sentence revised to read “However, neither approach was recommended at the time because the sub-slab soil vapor results between the two sampling events were disparate and did not appear to represent a consistent source of the chlorinated VOCs, and the indoor air at Kenyon Press contained substantial concentrations of printer ink-related VOCs, including benzene compounds.”

NYSDOH Comment No 3: *Section 3, Approach – The work plan references the collection of soil gas samples along the eastern property line of the site to assess whether contaminated soil vapor has migrated off-site toward residential structures. Consider supplementing this data set with sampling any existing groundwater monitoring wells located in this eastern area of the site.*

GHD Response No. 3: There are no longer groundwater monitoring wells located anywhere on the Site, as groundwater conditions were shown to meet criteria and the wells were decommissioned in the past, with the approval of NYSDEC. Currently, the only groundwater monitoring wells are located off the Site to the west, in the vicinity of each end of the permeable reactive barrier. These wells will be sampled in March 2024 as part of the on-going groundwater monitoring requirements and results will be submitted under separate cover.

The following comments were provided by NYSDEC via email on March 12, 2024 and were transmitted as an Excel Spreadsheet received from EA Engineering. There is no date or letter to reference in relation to these comments.

NYSDEC Comment No. 1: *Page 4 – Table 1: Please fix units in “Anticipated Depth” Column for SS-8.*

GHD Response No. 1: The missing “s” has been added to “bbs.”

NYSDEC Comment No. 2: *Page 5 – Section 4.1: How far in advance will the pre-sampling site inspection occur?*

GHD Response No. 2: The pre-sampling site inspection will occur on the first day of field activities, concurrent with the installation and sampling of sub-slab soil locations. With the timing of field activities, this will be 2 days before collection of indoor air and sub-slab vapor samples. Text has been added to Section 4.1 to clarify schedule.

NYSDEC Comment No. 3: *Page 6 – Section 4.3: Please clarify what size summa canisters.*

GHD Response No. 3: The summa canisters will have a capacity of 6-liters.

NYSDEC Comment No. 4: Page 6 – Section 4.4: Please clarify how decontamination water will be contained and where it will be staged.


GHD Response No. 4: The sentence has been revised as follows to clarify handling of decontamination water: “Decontamination water will be containerized in a steel 55-gallon drum staged on-Site at a location acceptable to the current occupant until later characterization and off-site disposal in accordance with state and federal regulations.”

NYSDEC Comment No. 5: Page 7 – Section 4.5: Please clarify what size summa cans.

GHD Response No. 5: Soil gas samples will be collected utilizing 6-liter capacity Summa canisters.

Should there be additional questions or clarifications needed, please contact us.

Sincerely,



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Project Manager

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I. Sutton, Chenango County Health Department
L. Munoz, Vishay
T. Hooker, Askin & Hooker, LLC

Enclosures:

Attachment 1 – NYSDEC Comment Letter (NYSDEC, August 16, 2023)
Attachment 2 – Revised SVI Investigation Work Plan (GHD, March 18, 2024)

Attachments

Attachment 1

**NYSDEC Comment Letter (NYSDEC,
August 16, 2023)**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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August 16, 2023

Ian McNamara
Senior Project Manager
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Re: Soil Vapor Intrusion Investigation Report
General Instrument Corporation Site, Sherburne
Chenango County, Site No.: 709010

Dear Ian McNamara:

The New York State Department of Environmental Conservation (“Department”) and New York State Department of Health (“NYSDOH”) have reviewed the Soil Vapor Intrusion Investigation Report, submitted on July 19, 2023, and have the following comments:

1. General Comment: Include a section titled “Deviations from the Work Plan”.
2. Section 1 Introduction: Include the DEC Site Number: 709010.
3. Section 1 Introduction, second paragraph: Remove “generally” before “...following the procedures outlined...” and include deviations in the section required in comment 1.
4. Section 2 Site Description and Background: Replace “5.5-acres” with “6.5-acres”.
5. Section 2.1 Remedial Actions: Rephrase the first sentence as the phrase “(VOCs) have been remediated under the oversight of the NYSDEC and NYSDOH.” implies the site has been remediated and contamination no longer remains on-site. Apply this comment to the last sentence in paragraph one as contamination remains on-site above applicable standards.
6. Section 3.3.1 Soil Vapor Intrusion Sampling: Reference the specific NYSDOH guidelines used in the first sentence.
7. Section 3.4 Sample Analysis and Data Validation: It states: “The minimum reporting limits requested were no greater than 0.20 micrograms per cubic meter (µg/m³) for TCE and carbon tetrachloride”. Vinyl Chloride’s minimum reporting limits are also 0.2 µg/m³. This should be added to this Section.
8. Section 3.4 Sample Analysis and Data Validation: It states: “The data validation review indicates that the analytical results provided by the laboratory were generally acceptable as reported, with the addition of the following qualifiers: – Analytical results associated with sample canisters with vacuum pressures outside of the acceptable range upon arrival to the laboratory were qualified as estimated values. This qualification impacted all analytes in samples SS-11 and



Department of
Environmental
Conservation

SG-7 (canisters arrived at ambient pressures) and IA-8, IA-12, SG-5, and SG-8 (canisters arrived at pressures of less than -10 inches of mercury)". The sample SG-7 appears to have been a resampling in the area of SG-3 and SS-8 had the highest subslab concentration and could possibly have had higher corresponding indoor air concentrations. The vacuum pressures being outside the acceptable range upon arrival to the labs is a problem and calls the sampling data into question. Please resample the areas where cans had pressure readings outside the allowable range.

Please revise the report and resubmit by August 30, 2023.

If you have any questions please contact me at 518-402-9791 or email: Jenelle.gaylord@dec.ny.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jenelle Gaylord", written in dark ink.

Jenelle Gaylord
Assistant Geologist
Remedial Bureau E, Section D
Division of Environmental Remediation

ec: J. Dyber
G. Priscott – Region 7
J. Nealon – DOH

Attachment 2

**Revised SVI Investigation Work Plan
(GHD, March 18, 2024)**



SVI Investigation Work Plan


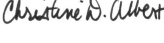


**Former General Instrument Corporation
Site (#709010), Sherburne, New York**

Askin & Hooker, LLC

January 24, 2024; Revised: March 18, 2024

➔ **The Power of Commitment**



Project name		Vishay - Former GIC - Sherburne					
Document title		SVI Investigation Work Plan Former General Instrument Corporation Site (#709010), Sherburne, New York					
Project number		12595756					
File name		12595756-RPT-SVI_Work_Plan-2024.docx					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	0	Sarah King	Ian McNamara		Christine Albertin		1-24-2024
S4	1	Sarah King	Ian McNamara		Christine Albertin		3-18-2024

GHD 337

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Scope and Limitations

This report has been prepared by GHD for Askin & Hooker, LLC and may only be used and relied on by Askin & Hooker, LLC, their client (VGSI), NYSDEC, and NYSDOH for the purposes agreed, as set out in this report.

GHD otherwise disclaims responsibility to any person other than Askin & Hooker, LLC, their client (VGSI), NYSDEC, and NYSDOH arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions, and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions, and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

The opinions, conclusions, and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the Site may be different from the Site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular Site conditions, such as the location of buildings, services, and vegetation. As a result, not all relevant Site features and conditions may have been identified in this report.

Site conditions (including the presence of hazardous substances and/or Site contamination) may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the Site conditions. GHD is also not responsible for updating this report if the Site conditions change.

GHD has prepared this report on the basis of information provided by Askin & Hooker, LLC and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

Table of Contents

1. Introduction	1
2. Background	1
2.1 Site Description and Background	1
2.2 Historical Contamination	1
2.3 Remedial Actions	1
2.4 Summary of Previous SVI Investigations	2
3. Approach	3
4. Scope of Work	5
4.1 Pre-Sampling Site Inspection	5
4.2 Utility Locating	5
4.3 Sub-Slab Vapor Sampling	6
4.4 Sub-Slab Soil Sampling	6
4.5 Soil Gas Sampling	7
4.6 Sample Analysis	7
5. Reporting	7
6. References	8
7. Acronyms and Abbreviations	8

Figure Index

Figure 1	Site Location
Figure 2	Site Layout Map

Table Index

Table 1	Proposed Sampling Locations and Rationale	4
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Appendices

Appendix A	NYSDOH's Indoor Air Quality Questionnaire and Building Form
Appendix B	Excerpts from Previous Reports

1. Introduction

On behalf of Vishay GSI, Inc. (VGSI), and at the request of our client, Askin & Hooker, LLC, GHD Consulting Services Inc. (GHD) has prepared this Work Plan to detail additional soil vapor intrusion (SVI) investigation activities to be conducted at the former General Instrument Corporation (GIC) Site in Sherburne, New York (Site No. 709010, Figure 1; Site). This Work Plan was completed to encompass the activities of an additional SVI investigation requested by the New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH) in a letter dated August 16, 2023 (NYSDEC 2023).

Activities at the Site are conducted in accordance with the Order on Consent (#A701578810), signed by GIC on August 1, 1989, and a Record of Decision (ROD), issued for the Site in December 1994 by the NYSDEC. This SVI Investigation Work Plan outlines the procedures to be followed during the execution of proposed activities.

2. Background

2.1 Site Description and Background

The former GIC facility (the Site) is located at 1 Kenyon Press Drive in Sherburne, Chenango County, New York (Figure 1). The 6.5 acres site was opened in 1947 and the facility produced small electronics until manufacturing ceased in 1983 and the facility was decommissioned. The Site was then sold in 1989 to Kenyon Press, Inc., a commercial offset printing company, who operated on the Site from 1989 until November of 2018. BrightPet Nutrition Group of Lisbon, Ohio, obtained the Site in September 2019 to use as a warehouse and distribution center for pet food and supplies. This use continues as of the date of this Work Plan.

The Site layout consists of a 75,000 square-foot main building historically used for manufacturing and currently used as a warehouse, a 4,900 square-foot former plating building currently used as storage, a 2,800 square-foot shed, and a 1,500 square-foot garage used as a maintenance shop. The Site is bounded by a bulk petroleum storage facility and Morabito Convenience Store (and gasoline station) to the north; light commercial property and residences to the east and south; the Delaware Lackawanna & Western (DL&W) Railroad to the west; and further to the west by agricultural fields.

2.2 Historical Contamination

During GIC's closure of the Facility beginning in 1983, environmental investigations were conducted and chlorinated volatile organic compounds (VOCs) were identified under the plating building. The contaminants are thought to have entered the soils through the building's floor drain system. Concentrations of contaminants located in other parts of the property are attributed to other minor spills and vapor phase migration. GIC excavated contaminated soils in 1985 and initiated a groundwater investigation that included the installation of nine monitoring wells and six piezometers. VOCs were identified in the groundwater, with the main contaminants of concern (COCs) being trichloroethylene (TCE) and cis- and trans-1,2-dichloroethene (1,2-DCE). Other COCs identified at lower concentrations included vinyl chloride and 1,1,1-trichloroethane (TCA). Total concentrations of VOCs ranged from 820 micrograms per liter (µg/L) in groundwater from monitoring well MW-19 to 50 µg/L in samples from monitoring well MW-20. The Site was classified as a Class 2 inactive hazardous waste site in 1987 and has been subject to multiple investigations, remediations, and soil vapor investigations since.

2.3 Remedial Actions

Soil and groundwater at the Site, which were contaminated primarily with chlorinated VOCs, are being remediated under the oversight of the NYSDEC and NYSDOH. The NYSDEC-approved Site remedies, as detailed in the 1994 ROD, included the installation and operation of a soil vapor extraction (SVE) system to address VOCs remaining in the

unsaturated soil in the apparent release area north of the northern wall of the main building, west of the western wall of the former plating building, and beneath the former plating building, and the installation and operation of short-term pumping wells with on-Site treatment to address a limited area of free-phase petroleum product near the northwest corner of the main building and extending into the fields to the west. These remedial systems were decommissioned in the mid to late 1990s after the NYSDEC agreed that their respective cleanup targets established at the time had been achieved.

Additionally, the groundwater remedy at the Site included the installation of a permeable reactive barrier (PRB) designed to treat the chlorinated VOCs passively as they flow through the wall. The PRB was constructed in 1997 in the agricultural fields west of the facility and remains in operation. VGSI subsequently implemented two supplemental remedial actions: treatment of affected groundwater apparently bypassing the PRB at its northern and southern ends, in 2009; and addressing recalcitrant chlorinated VOCs upgradient of the barrier near monitoring well P-8 in 2014 using enhanced biological attenuation (i.e., bioremediation) technology. The combined groundwater remedies have substantially reduced the dissolved chlorinated VOCs mass, with concentrations of degradation byproducts cis-1,2-DCE and vinyl chloride in samples from groundwater monitoring wells near the southern end of the PRB being the only exceedances of the ambient water quality standards during the 2022 groundwater monitoring event.

2.4 Summary of Previous SVI Investigations

Initial vapor intrusion investigations of the main manufacturing building at the Site were performed in 2006 and 2007 (ESC 2007). The work was conducted in response to a March 13, 2006, NYSDEC letter request to perform an evaluation at the Site (then owned and operated by Kenyon Press). The preliminary evaluation was conducted in August 2006 and included the installation of three sub-slab sample locations within the Site buildings (Figure 2). The samples, designated SS-1 through SS-3, were collected from locations in and around the former plating building at the north end of the facility (i.e., near the historic chlorinated VOCs release area). The intent was to screen the soil vapor beneath the main building and determine if VOCs were present at concentrations that could potentially impact the indoor air quality. The results of the evaluation revealed 34 VOCs in the sub-slab soil vapor samples, including Site-related chlorinated compounds tetrachloroethene (PCE), TCE, and cis-1,2-DCE as well as several compounds that were attributed to the offset printer Kenyon Press, including alkanes and aromatic hydrocarbons, and are not related to historical operations at the GIC facility. Site-related chlorinated VOCs were detected in the sub-slab soil vapor samples at concentrations up to 190 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$; TCE in the sample from SS-2), which warranted additional investigation (Sheet 1: Subslab Soil Gas Sample Locations and Table 1: Sub-Slab Soil Gas Sampling Results in Appendix B).

Follow-up evaluations conducted in February and April 2007 each included concurrent, co-located indoor air (IA), sub-slab soil vapor (SSV), and ambient outdoor air (OA) samples (ESC 2007). The samples were collected from the same locations as the 2006 evaluation (i.e., SS-1 through SS-3). Two additional locations (SS-4 and SS-5) along the centerline of the southern portion of the main building were included during the February 2007 sampling event only. The results confirmed that chlorinated VOCs were present in the soil vapor beneath the northern portion of the main building and at relatively low concentrations in samples from the indoor air throughout the main building (Sheet 1: Subslab Soil Gas Indoor and Outdoor Sample Locations and Table 2: Vapor Intrusion Investigation Sampling Results in Appendix B). The findings, when compared to the NYSDOH's decision matrices presented in the 2006 SVI Guidance, indicated either additional monitoring or mitigation depending on the sample location. However, neither approach was recommended at the time because the sub-slab soil vapor results between the two sampling events were disparate and did not appear to represent a consistent source of the chlorinated VOCs, and the indoor air at Kenyon Press contained substantial concentrations of printer ink-related VOCs, including benzene compounds. The August 2007 Vapor Intrusion Investigation Report (ESC 2007) concluded that the trace levels of chlorinated compounds did not represent a significant risk to the Kenyon Press staff and that additional sampling or mitigation was not warranted. No additional vapor sampling was conducted at the Site following the April 2007 evaluation.

During a meeting on April 29, 2021, between WSP, VGSI, Askin & Hooker, NYSDEC, and NYSDOH representatives, it was noted by the NYSDOH that the 2006 and 2007 vapor intrusion investigations produced inconclusive findings. The indoor air results were obscured by relatively high concentrations of airborne VOCs related to Kenyon Press operations and the work did not include an evaluation of the soil gas beyond the footprint of the main building along

the eastern boundary of the property. The NYSDEC and NYSDOH requested that VGSI reassess the air quality within the former GIC facility and conduct a soil gas evaluation along the eastern property line.

Two rounds of SVI investigation were performed during April of the 2021-2022 heating season and February and March of the 2022-2023 heating season in accordance with the Additional Vapor Intrusion Investigation and Soil Gas Survey Work Plan (WSP 2022.1). The investigations included collection and laboratory analysis of soil gas (SG) samples, SSV samples, co-located IA samples, and an OA sample. Vapor pins installed at sub-slab vapor sample locations as part of these investigation activities were left in place for future use. Soil gas wells installed near the eastern property boundary during both investigations were decommissioned following sampling. Laboratory analytical results of the investigations detected elevated concentrations of VOCs beneath the northern portion of the building's slab (maximum concentration of 8,000 $\mu\text{g}/\text{m}^3$ for TCE) and at isolated locations along the eastern property line, although concentrations there were significantly lower than those beneath the building (maximum concentration of 26 $\mu\text{g}/\text{m}^3$ for PCE) (Figure 3 SVI Investigation Results, Table 1: 2022 and 2023 Indoor Air and Sub-Slab Vapor Sampling Analytical Results Summary, and Table 2: 2022 and 2023 Soil Gas Sampling Analytical Results Summary in Appendix B).

A third round of additional SVI investigation was requested (NYSDEC 2023) to address the discrepancies between the previous two investigations and to further delineate the extents of impacts. This Work Plan outlines the proposed activities.

3. Approach

Additional SVI investigations will be conducted to address NYSDEC and NYSDOH concerns relative to potential for air quality impacts to the main building and the nearby residences. During the investigations, additional data will be collected to determine if remediation or mitigation is the appropriate next step and what the extent of either approach might be. The proposed approach includes two separate lines of investigation as follows:

- Collection and laboratory analysis of 10 SSV, 10 co-located IA, 1 ambient (OA), and 7 sub-slab soil (SSS) samples associated with the main building as part of an overall vapor intrusion assessment; and
- Collection and laboratory analysis of 4 SG samples to confirm previous results and determine to what extent affected soil gas is present along the eastern property line of the Site.

Figure 2 contains the proposed locations for sampling, while Table 1 below includes the proposed sampling locations and rationale for collection based on previous investigations. The upwind OA sample will be located based on wind direction at the time of sampling and used to determine if ambient air conditions have the potential to affect air quality at the facility. Quality assurance/quality control (QA/QC) samples will be collected and consist of trip blanks and field duplicate samples at the frequency of 1 per 20 primary samples.

Table 1 **Proposed Sampling Locations and Rationale**

Sample Identification	Sample Type	Anticipated Depth	Rationale
SG-11	Soil Gas	5 feet bgs	Confirm results of SG-5
SG-12		5 feet bgs	Confirm results of SG-3 and SG-7
SG-13		5 feet bgs	Confirm results of SG-8
SG-14		5 feet bgs	Investigate sub-surface conditions outside of highest sub-slab reading area
SSV-13	Sub-Slab Vapor	2 inches bbs	Delineate extent of elevated sub-slab vapor concentrations
SSV-14		2 inches bbs	
SSV-15		2 inches bbs	
SSV-16		2 inches bbs	
IA-13	Indoor Air	N/A	Co-located with additional sub-slab vapor delineation points
IA-14		N/A	
IA-15		N/A	
IA-16		N/A	
SSS-13	Sub-Slab Soil	3 feet bbs	Investigate, and delineate if relevant, extent of sub-slab soil impact
SSS-14		3 feet bbs	
SSS-15		3 feet bbs	
SSS-16		3 feet bbs	
SSS-17		3 feet bbs	
SSS-18		3 feet bbs	
SSS-19		3 feet bbs	
SS-7	Sub-Slab Vapor	2 inches bbs	Confirm historical results
SS-8		2 inches bbs	
SS-9		2 inches bbs	
SS-10		2 inches bbs	
SS-11		2 inches bbs	
SS-12		2 inches bbs	
IA-7	Indoor Air	N/A	Confirm historical results
IA-8		N/A	
IA-9		N/A	
IA-10		N/A	
IA-11		N/A	
IA-12		N/A	
OA-1	Ambient Air	N/A	Determine potential impact of ambient air on sample results
Notes: 1. bgs – below ground surface 2. bbs – below bottom of slab 3. N/A – not applicable 4. All locations and depths will be adjusted based on actual Site conditions encountered			

4. Scope of Work

4.1 Pre-Sampling Site Inspection

A pre-sampling Site inspection and materials inventory will be conducted at the former GIC facility (i.e., the current BrightPet warehouse) in advance of conducting the planned vapor sampling activities (i.e., during the first day of field activities, which will be 2 days prior to indoor air and sub-slab vapor sample collection). This pre-sampling work will include an interview with the facility manager, or other knowledgeable employee, using the NYSDOH's indoor air quality questionnaire and building form included in the 2006 SVI Guidance, a copy of which is included in Appendix A. The building construction information obtained during the pre-sampling interview will be verified by conducting a physical survey of the structure (and attached buildings or workspaces) and cataloguing chemicals or other items stored in the facility that could potentially interfere with the vapor sampling. The volatile ingredients of each material stored, if available, will be recorded on the NYSDOH's building inventory form and the containers will be scanned with a photoionization detector (PID) for potential vapor emissions. If the contents of a container are not listed on the label, the product name and manufacturer's name and address (if available) will be recorded on the inventory form and an effort will be made to locate a Safety Data Sheet for that product at a later date.

Based on the findings of the inventory, BrightPet will be requested to either remove materials and equipment that are emitting VOCs, or, if possible, seal the containers or equipment in plastic bags in advance (preferably a minimum of 24 hours) of the sampling to limit ancillary VOCs that could potentially interfere with the IA samples. The presence of material or equipment that cannot be moved or otherwise neutralized with a plastic bag will be noted on the inventory form. BrightPet management will also be informed of activities that should be avoided for 24 hours prior to the start of sample collection, to the extent it is feasible without hindering their ongoing operations. Those activities include:

- opening of overhead doors and building vents;
- the operation of ventilation fans or hoods;
- painting surfaces within the structure;
- the use of auxiliary heating equipment (e.g., kerosene heaters);
- storing automobiles or other petroleum-powered equipment in the attached buildings;
- cleaning, waxing, or polishing floor surfaces;
- the use of air fresheners or odor eliminators;
- using building products such as caulk or roofing tar;
- lawn mowing, asphalt paving, or snow blowing; and
- applying pesticides.

A copy of the activities to be avoided or minimized listed in the NYSDOH guidance will be left with the BrightPet facility manager at the conclusion of the interview and building inspection process.

The location of each proposed sample point will also be reviewed with the property manager during the pre-inspection in order to gain their concurrence. If needed, the property manager will be consulted to temporarily relocate equipment or to find a mutually agreeable location for the sample point in proximity of the proposed location. It is not anticipated that proposed locations will need to be adjusted by more than 5 or 10 feet horizontally, but if a significant adjustment is needed, NYSDEC will be notified of the new proposed location prior to commencing work.

4.2 Utility Locating

A private subsurface utility locating subcontractor will scan the vicinity of each proposed new sample location to ensure they are free of subsurface conflicts. Scanning will utilize ground penetrating radar, electromagnetic, or other relevant equipment to aid in detecting subsurface features. Identified anomalies will be marked on the surface using paint or flagging and proposed boring locations will be adjusted slightly, if needed, to avoid conflicts. If a significant adjustment is needed based on the findings, the property manager and NYSDEC will be notified of the new proposed location for concurrence prior to commencing work.

4.3 Sub-Slab Vapor Sampling

A total of four additional SSV sampling points will be installed at specific locations within the northern half of the main building, where the floor slab is exposed and, if possible, in a lower traffic area, such as near a support column. The installation will occur on the same day as the building inspection and inventory occurs, the day before the planned sample collection date. The pre-sampling installation is intended to allow the soil vapor beneath the floor of the building to re-equilibrate with the surrounding formation and provide time for soil vapor released to the indoor air during the probe installation to dissipate before the co-located IA samples are collected. The sampling points will consist of Vapor Pin™ sample probes, consistent with other sampling points established previously. Each sample point will be installed using an electric hammer drill to advance a 1.5-inch diameter outer hole, drilled approximately 1 inch into the floor, followed by a 5/8-inch diameter inner hole drilled through the remainder of the concrete slab. The pins will be installed into the cored holes using the manufacturer-supplied self-sealing silicone sleeves (no grout or clay will be required for the seal) and capped with stainless-steel protective flush-mounted covers. The probes will remain sealed with the supplied cover until sampling activities are initiated and recapped after sampling is completed.

The integrity of each Vapor Pin™ sample probe, both those installed during a previous investigation completed in April 2022 and those newly installed, will be verified using a tracer gas (helium) in accordance with Section 2.7.5 of the NYSDOH's SVI Guidance before sampling. Each sample point will be covered with a dome equipped with two fittings, one that is connected by Teflon®-lined tubing to a helium detector and another to be used to charge the dome with helium. Air will be drawn through the tubing and Vapor Pin™ for a period of approximately 2 minutes using the pump on the helium detector to verify that the sample point did not short-circuit to the helium atmosphere inside the dome.

The IA, SSV, and ambient/OA samples will be collected concurrently. IA samples will be collected from approximately 3 to 5 feet above the floor/ground surface to sample air from the typical breathing zone. The co-located SSV samples will be collected using 3/8-inch outside-diameter (OD) Teflon®-lined tubing that will be clamped to the sample canister's regulator on one end and connected to the Vapor Pin™ on the other end. A pre-sample purge consisting of one to three probe volumes of air will be completed. For QA/AC purposes, 1 blind field duplicate and 1 trip blank sample will be collected and analyzed for the same VOCs.

All IA, OA, and SSV samples will be collected using evacuated and laboratory individually certified-clean 6-liter Summa canisters fitted with dedicated flow controllers pre-set by the laboratory to continuously collect the samples over an eight-hour period. Initial gauge vacuum readings will be recorded in the field notebook for each canister upon commencement of sampling and periodically throughout the eight-hour period to confirm successful collection.

4.4 Sub-Slab Soil Sampling

Following completion of SSV and IA sampling activities, SSS samples will be collected from discrete locations throughout the northern portion of the building to determine the potential for remaining soils to be a source of identified sub-slab vapors. To collect the SSS samples, approximately 3-inch diameter holes will be cored through the building's concrete slab in seven locations using an electric core drilling machine. A hand auger will be lowered through the core hole and used to collect soil samples from beneath the building. Soil cores will be advanced until groundwater is encountered or to a depth of 3 feet below the bottom of the concrete slab, whichever occurs first. Soils will be screened with a PID and logged for physical characteristics. One soil sample will be collected from the most impacted interval identified at each location using a Terra Core® sampler for VOCs analysis. Care will be taken to sample native soils and not backfilled gravel material that may have been placed during building construction. For QA/QC purposes, one blind field duplicate, one matrix spike/matrix spike duplicate, and one trip blank sample will be collected and analyzed for the same VOCs.

Non-dedicated equipment used for the investigation will be decontaminated using an Alconox solution and potable water before work begins, between each location, and at the end of Site activities. Decontamination water will be containerized in a steel 55-gallon drum staged on-Site at a location acceptable to the current occupant until later characterization and off-site disposal in accordance with state and federal regulations. Excess soil will be returned to the borehole from which it came, and the building floor will be repaired by filling with concrete to pre-existing grades.

4.5 Soil Gas Sampling

The four SG borings will be installed using a direct-push drill rig to create temporary subsurface sampling points in accordance with the NYSDOH's SVI Guidance. Boreholes for each SG sample location will be advanced from the existing grade to a depth of approximately 5-feet below ground surface (bgs) using 1.25-inch diameter drilling rods fitted with an expendable point. The actual depth of installation may be adjusted in the field to avoid installing the sample probe at or below the water table, which can be as shallow as 4-feet bgs. Teflon® or Teflon®-lined tubing will be connected to a 6-inch-long stainless-steel screen implant that, once the target depth has been achieved, will be inserted through the hollow drill string and screwed into the top of the expendable point. The drilling rods will then be retracted leaving the implant with the expendable point in the bottom of the borehole and tubing leading to the surface. A clean sand filter pack will be installed in the annular space around the screened interval to a minimum depth of approximately 6-inches above the top of the screen (i.e., 1-foot deep total). The filter pack will be capped with bentonite slurry to form a seal between the implant and the surface.

The bentonite seals of the implants will be integrity tested using a tracer gas (helium) in accordance with the NYSDOH SVI Guidance before sampling. The leak testing uses the same equipment and procedures used for the Vapor Pin™ integrity tests detailed above. Samples will be collected following satisfactory seal tests. The SG samples will be collected using evacuated and laboratory individually certified-clean 6-liter Summa canisters fitted with a dedicated flow controller pre-set by the laboratory to collect the SG sample over a one-hour period. Following sample collection, the soil gas probe tubing will be removed from the subsurface and the location capped with material to match the surrounding groundcover. Both the pre- and post-sampling canister pressures will be recorded in the field notebook.

All downhole and non-dedicated equipment used for the investigation will be decontaminated using an Alconox solution and potable water before work begins, between each borehole, and at the end of Site activities. Investigation-derived waste generated during the drilling and sampling activities, including decontamination rinsate, residual soil cuttings, and other solid waste (e.g., poly sheeting, personal protective equipment, etc.) will be placed in Department of Transportation-compliant 55-gallon steel drums and managed during the investigation. The drums will be staged on-Site after the field activities have been completed for later off-Site disposal in accordance with state and federal regulations.

4.6 Sample Analysis

The canisters will be shipped under ambient conditions to a NYSDOH Environmental Laboratory Approval Program (ELAP)-approved laboratory under strict chain-of-custody procedures. The samples will be analyzed for VOCs within applicable holding times using USEPA Method TO-15. The minimum reporting limits requested will be no greater than 0.20 µg/m³ for TCE, vinyl chloride, and carbon tetrachloride, and 1 µg/m³ for all other VOCs, where applicable. Laboratory analytical results will be validated in accordance with USEPA functional guidelines for evaluating organics analyses.

The soil sample jars will be put on ice and shipped to a NYSDOH ELAP-approved laboratory under strict chain-of-custody procedures. The samples will be analyzed for VOCs within applicable holding times using USEPA Method 8260. Laboratory analytical results will be validated in accordance with USEPA functional guidelines for evaluating organics analyses.

5. Reporting

The SVI investigation will take place during the 2023-2024 heating season as per the NYSDOH's indoor air guidance, anticipated to be during the last week of February 2024. The results of the SSV, SSS, and the SG sampling will be presented in a letter-style report, which will be submitted within 90 days of receiving the final, validated data. The report will include the investigation findings, the comparison of the vapor intrusion results to the appropriate NYSDOH's decision matrices, as presented in the 2006 SVI Guidance (with the 2017 updates), and recommendations for additional on-Site work, if warranted.

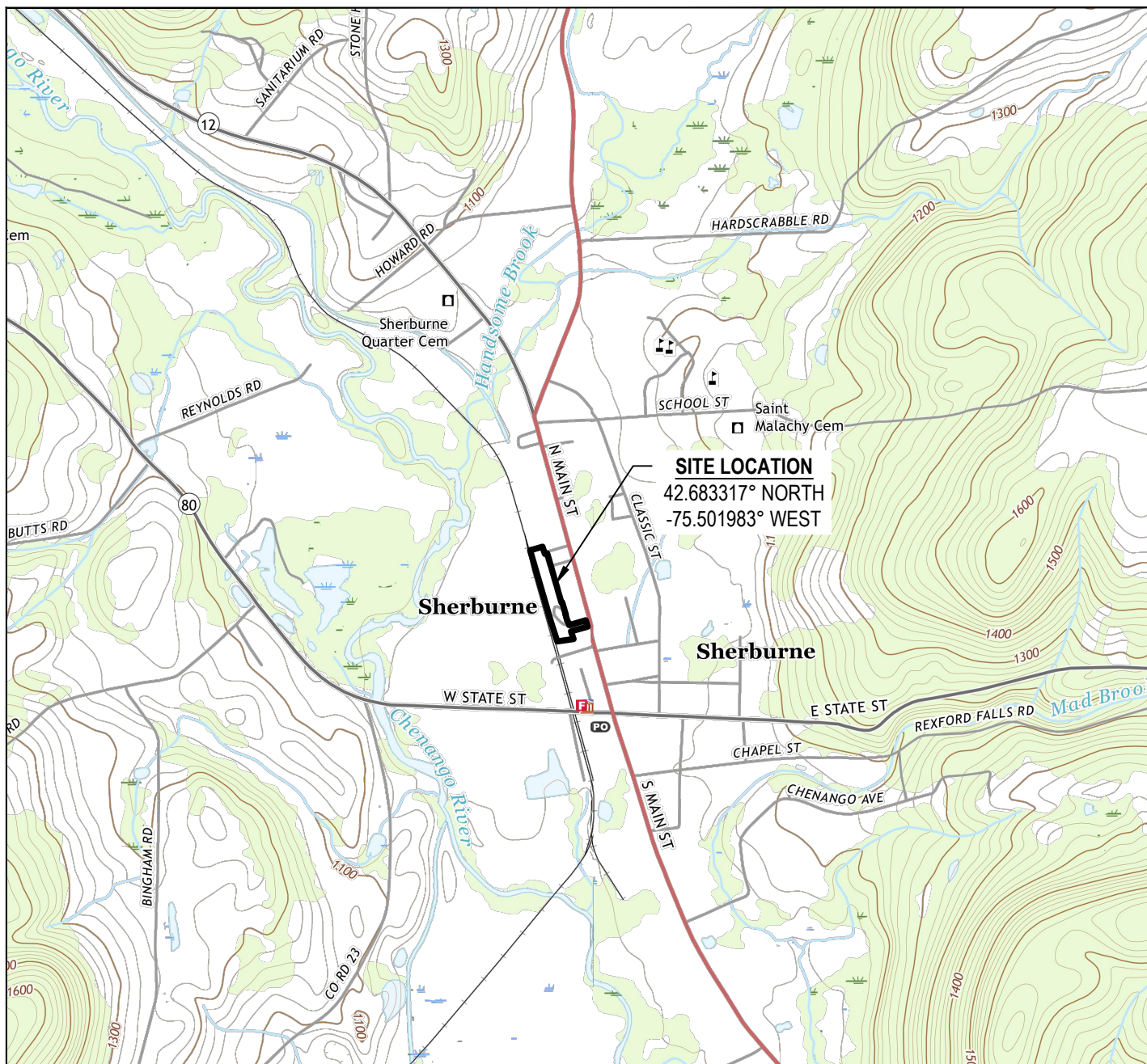
6. References

- ESC. 2007. Vapor Intrusion Investigation Report, Former General Instrument Corporation Facility, Sherburne, New York #709010. August, 31 2007.
- NYSDEC. 2023. Letter from New York State Department of Environmental Conservation titled Soil Vapor Intrusion Investigation Report, General Instrument Corporation Site, Sherburne, Chenango County, Site No.: 709010. August 16, 2023.
- NYSDOH. 2006. Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York. October.
- NYSDOH. 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

7. Acronyms and Abbreviations

µg/L	micrograms per liter
µg/m ³	micrograms per cubic meter
1,2-DCE	cis- and trans-1,2-dichloroethene
bbs	below bottom of slab
bgs	below ground surface
COCs	Contaminants of Concern
DL&W	Delaware Lackawanna & Western
GHD	GHD Consulting Services Inc.
GIC	General Instrument Corporation
IA	indoor air
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OA	ambient outdoor air
OD	outside diameter
PCE	tetrachloroethene
PRB	permeable reactive barrier
ROD	Record of Decision
SG	soil gas
SSS	sub-slab soil
SSV	sub-slab soil vapor
SVE	soil vapor extraction
SVI	soil vapor intrusion
TCA	1,1,1-trichloroethane
TCE	trichloroethylene
VGSI	Vishay GSI Inc.
VOCs	volatile organic compounds

Figures

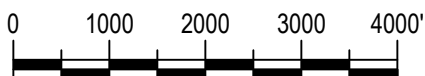
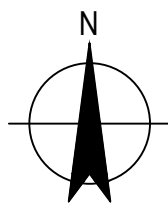


QUADRANGLE LOCATION

1	2	3
4	5	6
7	8	9

- 1 West Eaton
- 2 Hamilton
- 3 Hubbardsville
- 4 Otselic
- 5 Sherburne
- 6 East Pharsalia
- 7 Norwich
- 8 Holmesville

ADJOINING QUADRANGLES



SCALE 1"=2000' AT ORIGINAL SIZE

Contour Interval: 20 Feet

Map Taken From: USGS 7.5 Minute Series
Topographic Quadrangle;
Earlville, NY (2019) and Sherburne, NY (2019)
(U.S. Geological Survey)



ASKIN & HOOKER, LLC
FORMER GENERAL INSTRUMENT CORPORATION
SITE, SHERBURNE, NEW YORK
2024 ADDITIONAL SVI INVESTIGATION

Project No. 12595756
Date 12.2023

SITE LOCATION

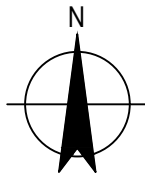
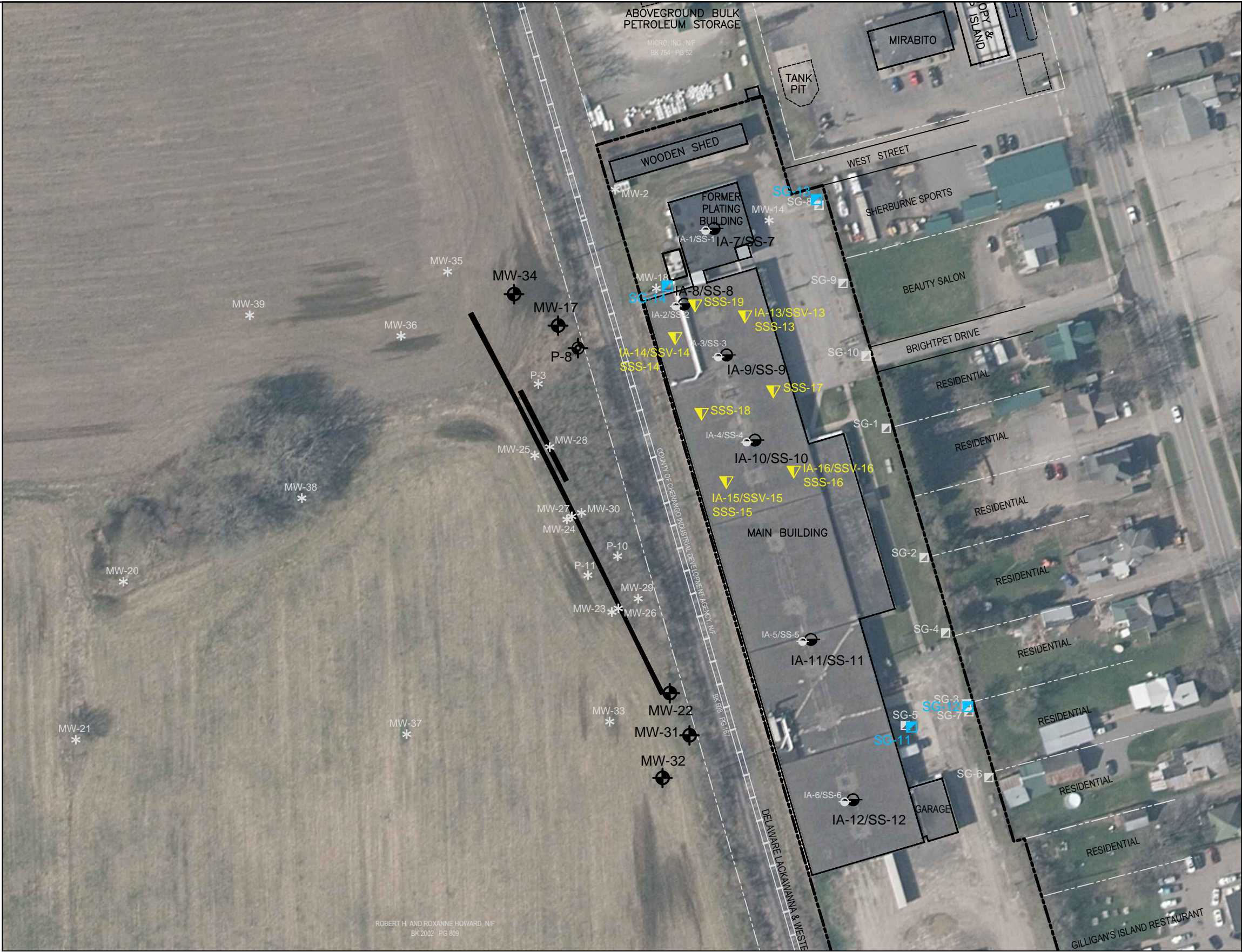
FIGURE 1

LEGEND

IA-11/SS-11	APPROXIMATE INDOOR AIR AND SUB-SLAB VAPOR SAMPLE LOCATION (2022 AND 2023)
IA-15/SSV-15 SSS-15	PROPOSED ADDITIONAL SUB-SLAB SOIL, INDOOR AIR, AND/OR SUB-SLAB VAPOR SAMPLE LOCATION - 2024
SG-11	PROPOSED SOIL GAS SAMPLE LOCATION - 2024
IA-5/SS-5	APPROXIMATE INDOOR AIR AND SUB-SLAB VAPOR SAMPLE LOCATION (2007) - DECOMMISSIONED
SG-3	APPROXIMATE SOIL GAS SAMPLE LOCATION (2022 OR 2023) - DECOMMISSIONED
MW-34	MONITORING WELL
P-8	PIEZOMETER
MW-36	FORMER MONITORING WELL OR PIEZOMETER (ABANDONED FEBRUARY 2018)
	PROPERTY LINE
	RAILROAD
	PERMEABLE REACTIVE BARRIER

NOTES:

1. ALL PROPOSED LOCATIONS ARE APPROXIMATE AND TO BE FIELD VERIFIED.
2. BASEMAP AND SAMPLE LOCATION TAKEN FROM ADDITIONAL VAPOR INTRUSION INVESTIGATION AND SOIL GAS SURVEY REPORT REVISION 1, WSP, OCTOBER 31, 2022.
3. THE DESIGNATIONS FOR THE CO-LOCATED INDOOR AIR AND SUB-SLAB VAPOR SAMPLE LOCATIONS WERE ASSIGNED THE PREVIOUS SAMPLE IDENTIFICATIONS FOR CONSISTENCY BETWEEN THE SAMPLING EVENTS.
4. ALL SOIL GAS SAMPLE LOCATIONS WERE DECOMMISSIONED FOLLOWING SAMPLE COLLECTION.
5. OA SAMPLE LOCATION OUTSIDE AND UPWIND OF SITE BUILDING BASED ON OBSERVED WIND DIRECTION AT TIME OF SAMPLING. AS A RESULT, THE EXACT SAMPLE LOCATION CHANGES BETWEEN SAMPLING EVENTS AND IS NOT SHOWN ON THIS FIGURE.



0 50 100 150 200'
SCALE 1"=100' AT ORIGINAL SIZE



ASKIN & HOOKER, LLC
FORMER GENERAL INSTRUMENT CORPORATION
SITE, SHERBURNE, NEW YORK
2024 ADDITIONAL SVI INVESTIGATION

Project No. 12595756
Date 12.2023

SITE LAYOUT MAP

FIGURE 2

Appendices

Appendix A

NYSDOH's Indoor Air Quality Questionnaire and Building Form

**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
Industrial

School
Church

Commercial/Multi-use
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	<hr/>
1 st Floor	<hr/>
2 nd Floor	<hr/>
3 rd Floor	<hr/>
4 th Floor	<hr/>

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 <hr/> |
| d. Has the building ever had a fire? | Y / N When? <hr/> |
| e. Is a kerosene or unvented gas space heater present? | Y / N Where? <hr/> |
| f. Is there a workshop or hobby/craft area? | Y / N Where & Type? <hr/> |
| g. Is there smoking in the building? | Y / N How frequently? <hr/> |
| h. Have cleaning products been used recently? | Y / N When & Type? <hr/> |
| i. Have cosmetic products been used recently? | Y / N When & Type? <hr/> |

- 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

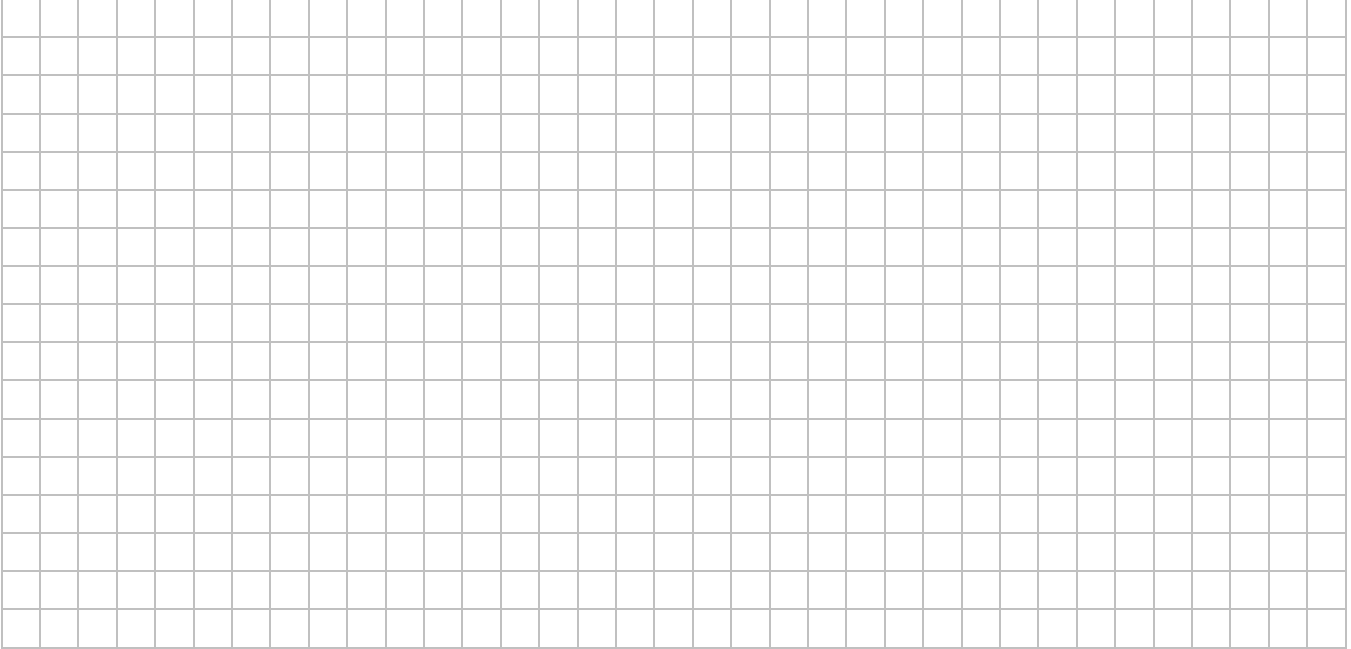
c. Responsibility for costs associated with reimbursement explained? Y / N

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

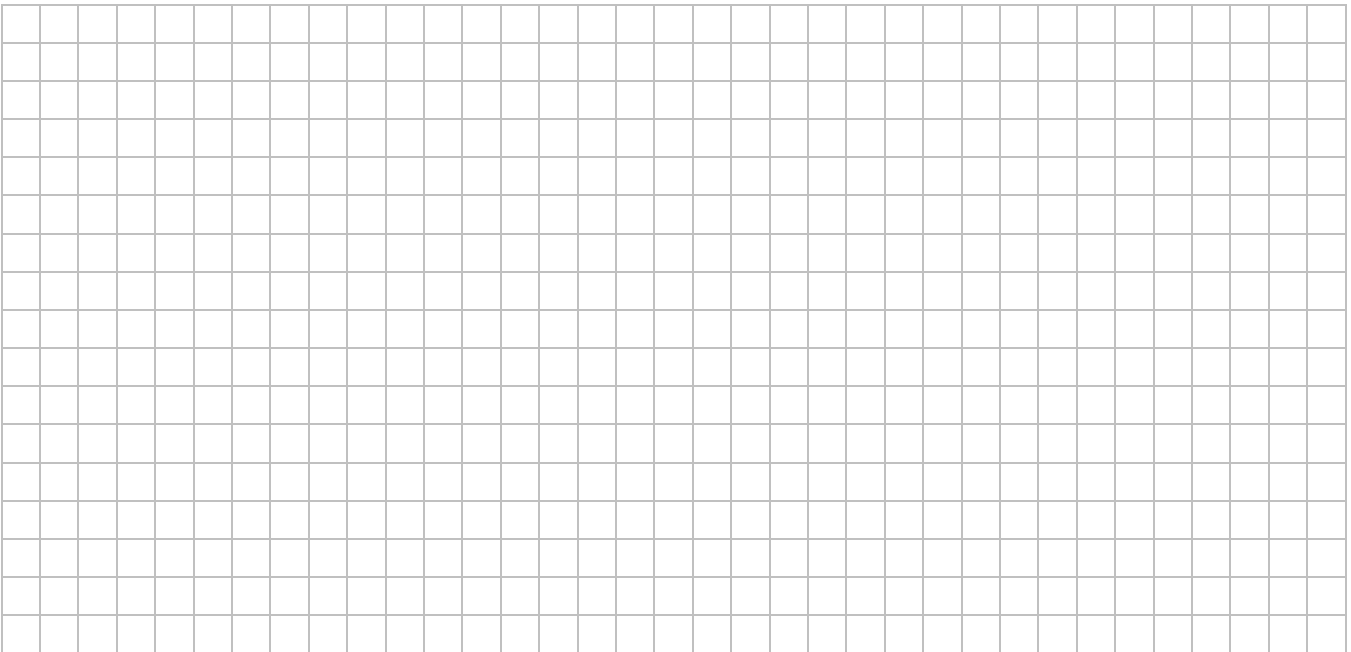
11. FLOOR PLANS

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:



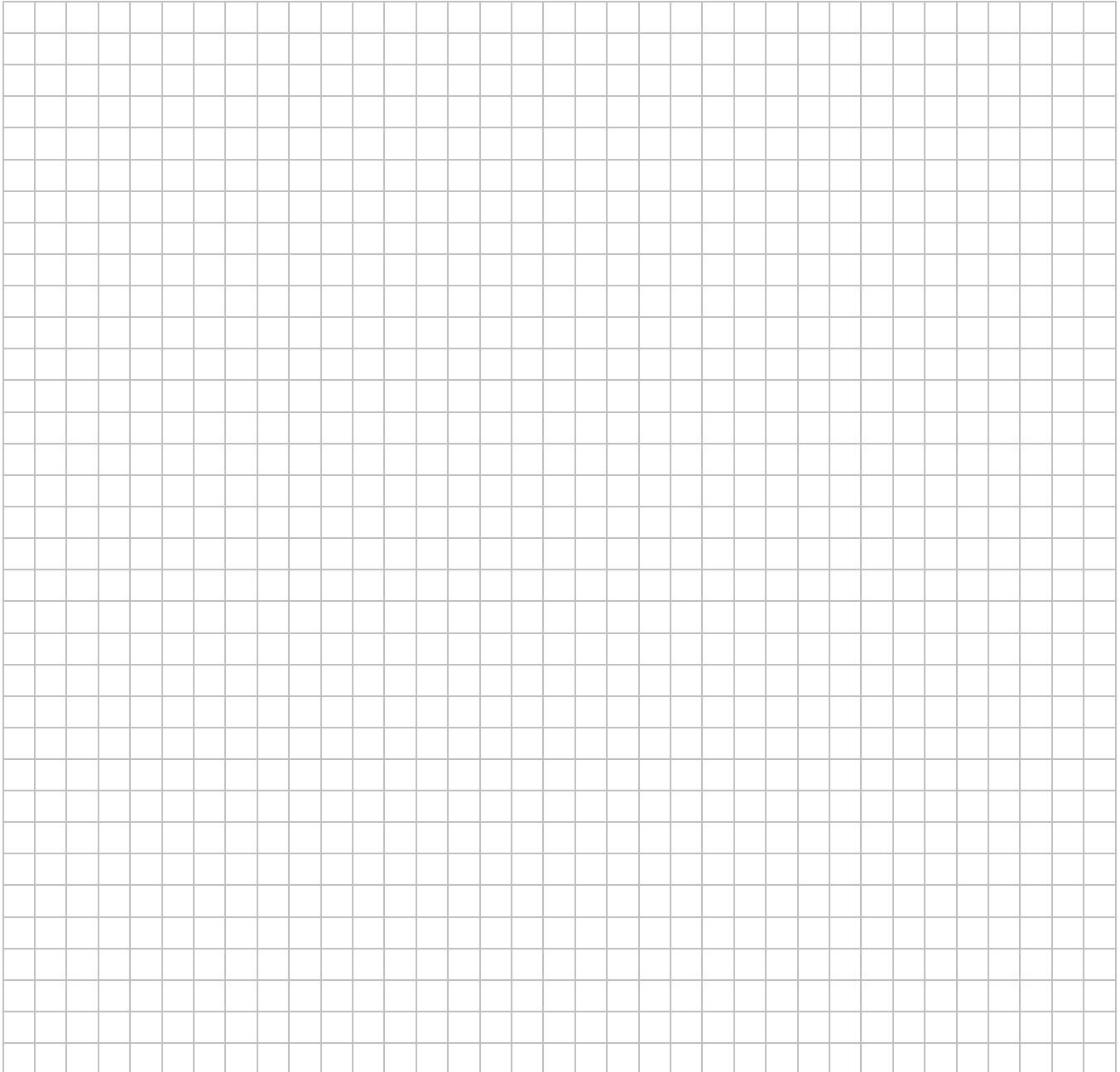
First Floor:



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.

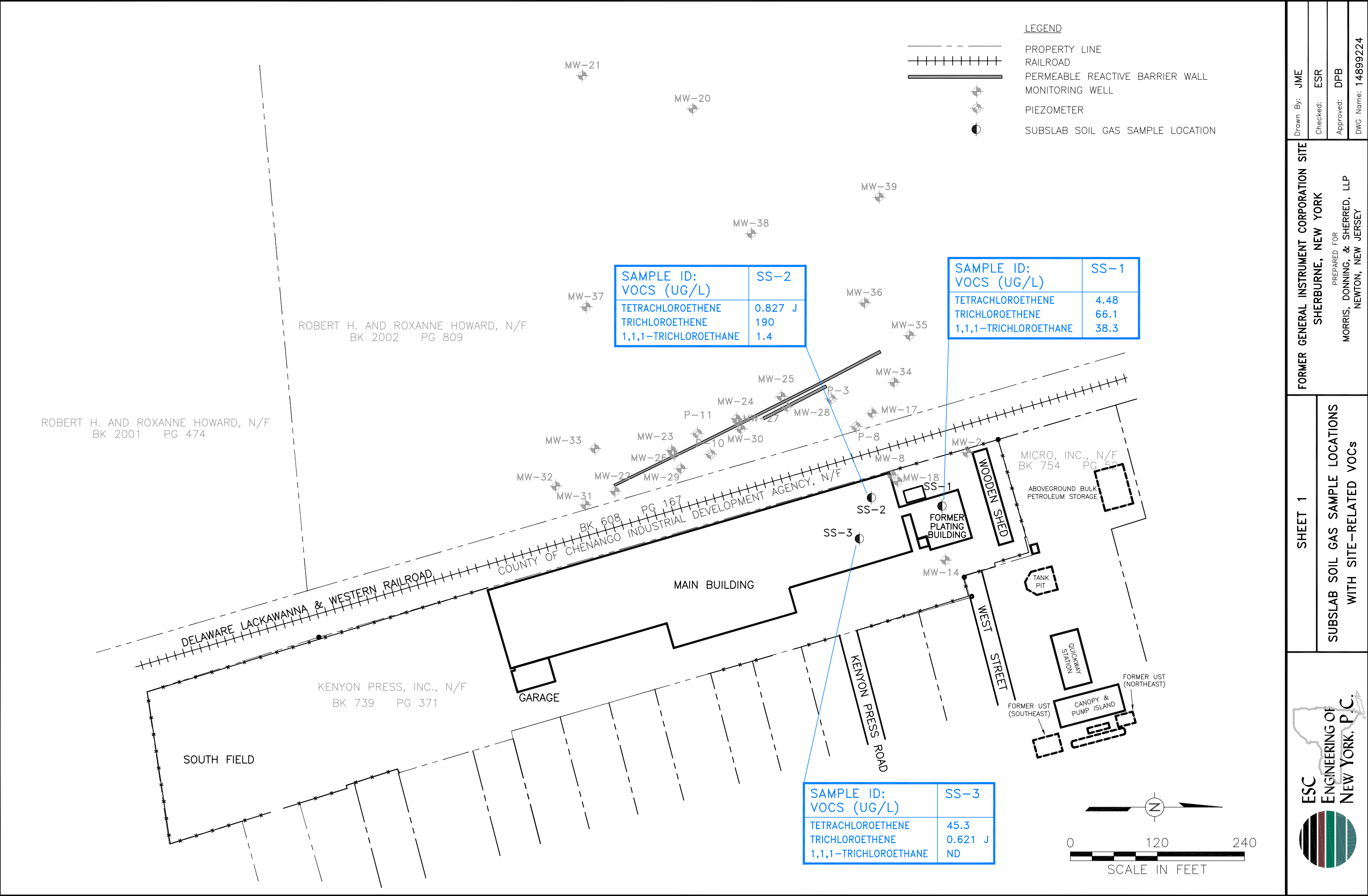
[illegible]

* 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.**

Appendix B

Excerpts from Previous Reports



Drawn By: JME

Checked: ESR

Approved: DPB

DWG Name: 14899224

FORMER GENERAL INSTRUMENT CORPORATION SITE

SHERBURNE, NEW YORK

PREPARED FOR

MORRIS, DONNING, & SHERRED, LLP

NEWTON, NEW JERSEY

SHEET 1

SUBSLAB SOIL GAS SAMPLE LOCATIONS

WITH SITE-RELATED VOCs

ESC

ENGINEERING OF

NEW YORK, P.C.

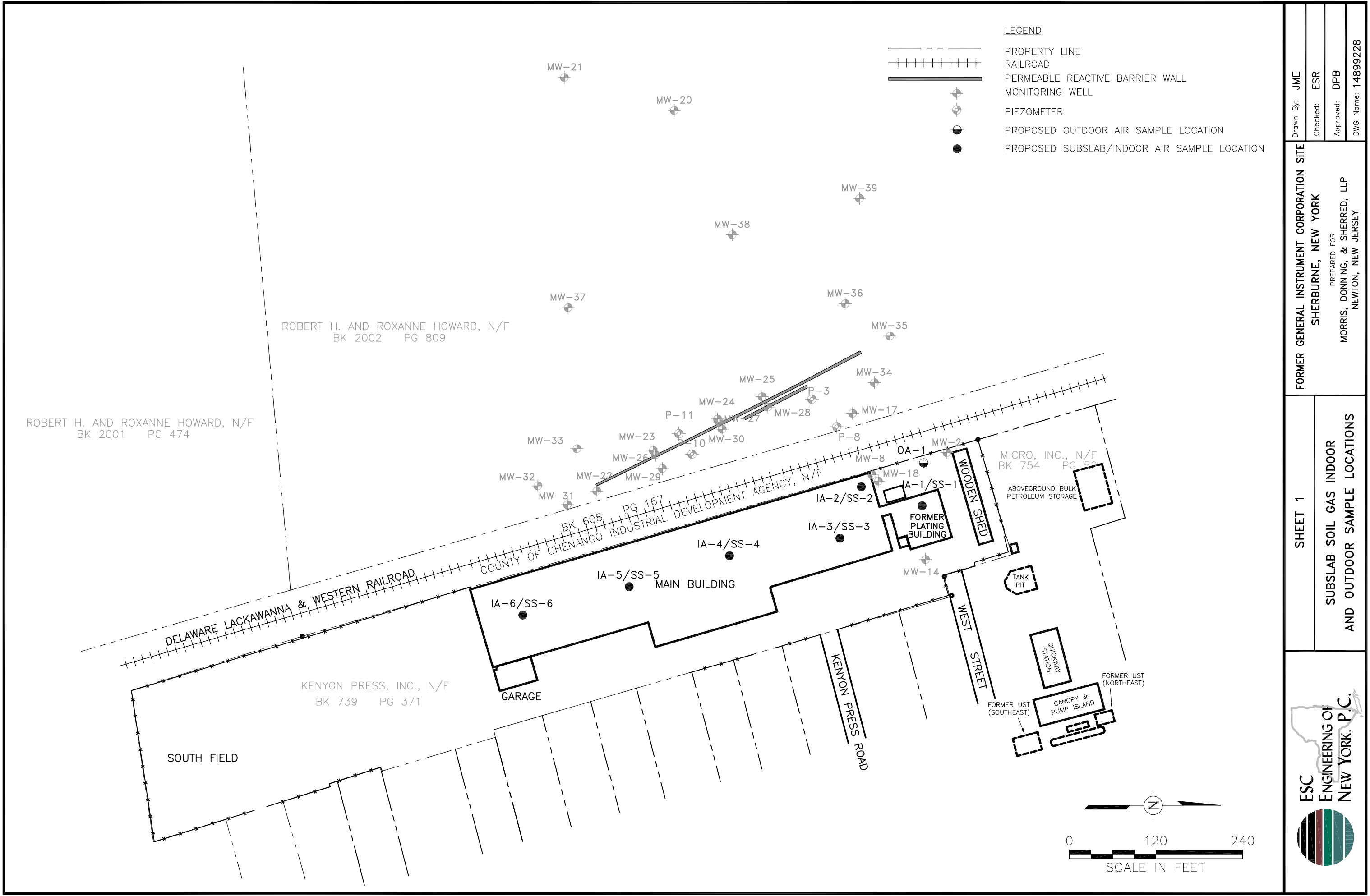
Table 1

Sub-slab Soil Gas Sampling Results
Former General Instrument Corporation Facility
Sherburne, New York (a)

Sample I.D.:	SS-1	SS-2	SS-3	SS-30 (b)
Sample Date:	08/09/06	08/09/06	08/09/06 (b)	08/09/06 (b)
Parameters				
Volatile Organic Compounds ($\mu\text{g}/\text{m}^3$)				
Acetone	57.9	1,540	95.6	44.4
Benzene	3.67	3.41	2.21	4.42
Carbon disulfide	3.92	4.24	2.98	11.1
Chloroethane	0.402 U	0.831	0.402 U	0.402 U
Chloroform	0.744 U	0.744 U	0.744 J	1.29
Chloromethane	0.315 U	1.07	0.504	0.315 U
Cyclohexane	1.68	1.26	35.7	9.1
1,1,-Dichloroethane	0.658	0.617 U	0.617 U	0.617 U
1,2-Dichloroethane	0.617 U	0.617 U	0.617 U	0.741
cis-1,2-Dichloroethene	0.604 U	2.18	0.766	2.5
1,4-Dioxane	6.19	1.1 U	1.1 U	1.1 U
Ethyl acetate	0.916 U	0.916 U	1.87	2.09
Ethylbenzene	2.6	64	6.36	6.66
Freon 11	2.28	7.71	8.68	8.45
Freon 12	1.51	1.46	1.41	1.46
Heptane	4.33	6.08	4.29	11.7
Hexane	6.34	6.23	11.5	15.8
Isopropyl alcohol	0.375 U	118	33	40.5
m&p-Xylene	10.2 J	565	29.1	31.3
Methyl butyl ketone	1.08 J	5.37	1.25 U	1.25 U
Methyl ethyl ketone	8.09 J	11.1	2.46	3.66
Methyl isobutyl ketone	1.58	14.2	2.37	5.12
Methylene chloride	0.353 J	0.53 U	0.53 U	0.671
o-Xylene	4.68	328	36.6	25.6
Styrene	1.21	0.649 U	0.649 U	0.649 U
Tetrachloroethylene	4.48	0.827 J	1.03 U	0.621 J
Tetrahydrofuran	4.62	0.45 U	0.45 U	0.45
Toluene	22.2	65.1	20.3	36
1,1,1-Trichloroethane	38.3	0.832 U	0.832 U	0.832 U
Trichloroethene	66.1	190	20.8	45.3
1,2,4-Trimethylbenzene	62.5	456	1,090	172
1,3,5-Trimethylbenzene	20	192	326	60
2,2,4-trimethylpentane	0.902	0.665 J	0.712 U	0.522 J
4-ethyltoluene	24	90.4	452	80

a/ I.D. = identification; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; U = constituent not detected at reported detection limit; J = estimated concentration below reported detection limit.

b/ Sample SS-30 is a blind duplicate of sample SS-3.




Drawn By: JME	FORMER GENERAL INSTRUMENT CORPORATION SITE	SHEET 1	SUBSLAB SOIL GAS INDOOR AND OUTDOOR SAMPLE LOCATIONS	 ESC ENGINEERING OF NEW YORK, P.C.
Checked: ESR	SHERBURNE, NEW YORK			
Approved: DPB	PREPARED FOR MORRIS, DONNING, & SHERRED, LLP NEWTON, NEW JERSEY			
DWG Name: 14899228				

Table 2

Vapor Intrusion Investigation Sampling Results
Former General Instrument Corporation Facility
Sherburne, New York
February and April 2007 (a)

Sample I.D.:	SS-1		IA-1		SS-2		IA-2		SS-3		SS-3 DUPE (b)
Sample Date:	02/18/07	04/06/07	02/18/07	4/6/2007	02/18/07	04/06/07	2/18/2007	4/6/2007	2/18/2007	4/6/2007	4/6/2007
Parameters											
Volatile Organic Compounds (µg/m ³)											
1,1,1-Trichloroethane	1.16 J	0.67 J	11.1 J	4.88	8.32 UJ	0.83 U	8.32 UJ	0.832 U	8.32 UJ	0.83 U	0.83 U
1,1-Dichloroethane	0.617 U	0.62 U	6.17 U	0.617 U	6.17 U	0.62 U	6.17 U	0.617 U	6.17 U	0.62 U	0.62 U
1,2,4-Trimethylbenzene	73.4	52	192	1400 D	1700 D	300	4300 D	5700 D	1,200 D	82	2700 D
1,2-Dichloroethane	0.617 U	0.62 U	6.17 U	0.617 U	6.17 U	0.62 U	6.17 U	0.617 U	6.17 U	0.74	0.62 U
1,3,5-Trimethylbenzene	17.5	13	50	320 D	530 D	62	282.0	1900 D	286	47	1100 D
1,4-Dioxane	1.10 U	1.1 U	11.0 U	1.1 U	11.0 U	1.1 U	11.0 U	1.1 U	11.0 U	1.1 U	1.1 U
2,2,4-trimethylpentane	0.712 U	0.71 U	10.4	5.6	7.12 U	0.71 U	7.12 U	0.712	7.12 U	2	0.95
4-ethyltoluene	29.5	26	81.9	460 D	660 D	120	1700 D	2800 D	416	87	1800
Acetone	25.6	50	2,100 D	6700 D	156	48	120	740 D	189	920 D	940
Benzene	0.487	1.4	15.3	5.42	5.84	1.3	15.3	19.5	3.25	20	9.7
Carbon disulfide	3.92	0.47 U	4.75 U	0.475 U	4.75 U	0.47 U	6.33	0.886	15.2	14	1.4
Chloroethane	0.475 U	0.4 U	4.02 U	0.402 U	4.02 U	0.4 U	4.02 U	0.402 U	4.02 U	0.4 U	0.4 U
Chloroform	0.744 U	0.74 U	7.44 U	0.744 U	7.44 U	0.74 U	7.44 U	0.744 U	10.9	0.65 J	0.74 U
Chloromethane	0.315 U	0.31 U	3.15 U	0.315 U	3.15 U	0.31 U	3.15 U	0.315 U	3.15 U	0.31 U	0.31 U
cis-1,2-Dichloroethene	0.604 U	0.6 U	6.04 U	0.443 J	6.04 U	0.6 U	6.04 U	0.604 U	7.66	2.8	0.6 U
Cyclohexane	0.490 J	0.63	12.9	22.4	4.55 J	0.66	10.1	75 D	5.25 U	51	71
Ethyl acetate	0.916 U	0.92 U	9.16 U	0.916 U	9.16 U	0.92 U	9.16 U	0.916 U	9.16 U	0.92 U	0.92 U
Ethylbenzene	1.28	0.97	28.7	60	19.0	2	48.1	100 D	8.83	12	76
Freon 11	1.83	0.74 J	5.71 J	1.31	12.6	0.91	36.0	9.08	13.7	8.5	10.0
Freon 113	3.43	1.2 U	11.7 U	1.17 U	11.7 U	1.2 U	11.7 U	1.17 U	11.7 U	1.2 U	1.2 U
Freon 12	0.754 U	1.8	7.54 U	1.36	7.54 U	1.9	7.54 U	0.754 U	7.54 U	0.85	0.75 U
Heptane	0.583 J	0.71	10.8	25	4.58 J	0.83	8.75	20	6.25 U	28	15
Hexane	1.36	1.8	40.5	43	6.09	0.79	13.3	22.9	4.66 J	58	15
Isopropyl alcohol	0.375 U	0.37 U	22.2	0.375 U	148	0.37 U	53.0	2300 D	3.75 U	760 D	2700 D
m&p-Xylene	4.55	3.5	105	235	76.8	16	24.7 J	400 D	35.8	34	270
Methyl butyl ketone	1.25 U	1.2 UJ	12.5 U	1.25 UJ	12.5 U	1.2 UJ	12.5 U	1.25 UJ	12.5 U	1.2 U	1.2 U
Methyl ethyl ketone	0.899 U	0.9 U	8.99 U	0.899 U	8.99 U	0.9 U	8.99 U	0.899 U	8.99 U	53	0.9 U
Methyl isobutyl ketone	1.25 U	1.2 U	12.5 U	1.25 U	12.5 U	1.2 U	12.5 U	1.25 U	12.5 U	1.2 U	1.2 U
Methylene chloride	0.565	1.2	10.90	7.77	5.30 U	2.3	5.30 U	2.19	5.30 U	9.2	6.1
o-Xylene	3.71	3.6	79.4	83 D	93.6	12	37.1	430 D	30.0	16	260
Styrene	0.649 U	0.65 U	6.49 U	0.649 U	6.49 U	0.65 U	6.49 U	0.649 U	6.49 U	0.65 U	0.65 U
Tetrachloroethylene	2.28	1.4	15.9	5.79	10.3 U	1 U	7.58 J	5.86	10.3 U	1.2	3.9
Tetrahydrofuran	0.450 U	0.45 U	106	0.45 U	4.5 U	0.45 U	4.5 U	0.45 U	4.5 U	0.45 U	0.45 U
Toluene	5.06	6.4	23	57 D	43.7	5.4	18.4 J	140 D	29.9	61	110
Trichloroethene	7.1	9.7	4.92	3.11	10.9	0.82	2.18 U	0.601	740 D	21	1.4

Table 2

Vapor Intrusion Investigation Sampling Results
Former General Instrument Corporation Facility
Sherburne, New York
February and April 2007 (a)

Sample I.D.:	IA-3		SS-4	IA-4	IA-4 DUPE (b)	SS-5	IA-5	SS-6	IA-6	0A-1	
Sample Date:	2/18/2007	4/6/2007	2/18/2007	2/18/2007	2/18/2007	2/18/2007	2/18/2007	2/18/2007	2/18/2007	2/18/2007	4/6/2007
Parameters											
Volatile Organic Compounds (µg/m ³)											
1,1,1-Trichloroethane	8.32 U	0.832 U	8.32 U	8.32 U ^J	8.32 U	8.32 U	8.32 U ^J	8.32 U ^J	8.32 U ^J	0.832 U	0.832 U
1,1-Dichloroethane	6.17 U	0.617 U	6.17 U	6.17 U	6.17 U	6.17 U	6.17 U	6.17 U	6.17 U	0.617 U	0.617 U
1,2,4-Trimethylbenzene	4400 D	11000 D	2700 D	6600 D	4500 D	444	3800 D	3100 D	3300 D	324	32
1,2-Dichloroethane	6.17 U	0.617 U	6.17 U	6.17 U	6.17 U	6.17 U	6.17 U	6.17 U	6.17 U	0.617 U	0.617 U
1,3,5-Trimethylbenzene	1400.0 D	3700 D	800 D	2000 D	1400.0 D	76.0	1200.0 D	940 D	1000.0 D	41.5	7.4
1,4-Dioxane	11.0 U	1.1 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	1.1 U	1.1 U
2,2,4-trimethylpentane	7.12 U	0.855	7.12 U	7.12 U	7.12 U	7.12 U	7.12 U	7.12 U	7.12 U	0.712 U	0.712 U
4-ethyltoluene	1700 D	5300 D	1000 D	2500 D	1700 D	180	1400 D	1200 D	1200 D	68.0	12.0
Acetone	151	1400 D	113	97.5	96.6	177	149	142	139	19.6	11.8
Benzene	18.8	10.4	8.12	21.1	16.6	4.87 U	12.3	9.09	10.4	0.714	0.487 U
Carbon disulfide	8.55	1.3	4.75 U	4.43 J	3.48 J	4.75 U	3.17 J	4.75 U	4.75 U	0.475 U	0.475 U
Chloroethane	4.02 U	0.402 U	4.02 U	4.02 U	4.02 U	4.02 U	4.02 U	4.02 U	4.02 U	0.402 U	0.402 U
Chloroform	7.44 U	0.744 U	7.44 U	7.44 U	7.44 U	7.44 U	7.44 U	7.44 U	7.44 U	0.744 U	0.744 U
Chloromethane	3.15 U	4.62 J	3.15 U	3.15 U	3.15 U	3.15 U	3.15 U	3.15 U	3.15 U	0.861	0.315 U
cis-1,2-Dichloroethene	6.04 U	0.604 U	6.04 U	6.04 U	6.04 U	6.04 U	6.04 U	6.04 U	6.04 U	0.604 U	0.604 U
Cyclohexane	12.6	92.4	7.70	20.60	15.0	5.25 U	21.7	16.8	18.5	0.525 U	0.525 U
Ethyl acetate	9.16 U	31.5	9.16 U	9.16 U	9.16 U	9.16 U	9.16 U	9.16 U	9.16 U	0.916 U	0.916 U
Ethylbenzene	62.7	141	22.1	60.5	45.9	5.74 J	49.4	34.0	38.8	1.24	0.662 U
Freon 11	45.1	22.2	28.0	50.8	33.1	8.57 U	34.3	32.6	30.3	2.0	0.6 J
Freon 113	11.7 U	1.17 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	1.17 U	1.17 U
Freon 12	7.54 U	1.11	7.54 U	7.54 U	7.54 U	7.54 U	7.54 U	7.54 U	7.54 U	2.61	1.56
Heptane	10.4	12.5	5.42 J	13.3	12.5	4.17 J	15.8	11.7	13.3	0.625 U	0.625 U
Hexane	16.8	12.2	10.0	26.5	19.0	7.16	30.4	25.8	26.5	0.681	0.394 J
Isopropyl alcohol	310 D	4000 D	180	176	198	48.2	160 D	120 D	140 D	0.375 U	0.375 U
m&p-Xylene	182	560 D	90.5	138	194	18.5	217	222	230	4.55	0.706 J
Methyl butyl ketone	12.5 U	1.25 U ^J	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	1.25 U	1.25 U ^J
Methyl ethyl ketone	8.99 U	21	8.99 U	8.99 U	8.99 U	8.99 U	8.99 U	8.99 U	8.99 U	0.899 U	0.899 U
Methyl isobutyl ketone	12.5 U	1.25 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	1.25 U	1.25 U
Methylene chloride	5.30 U	2.97	5.30 U	5.30 U	5.30 U	5.30 U	5.30 U	5.30 U	5.30 U	0.706	1.13
o-Xylene	251	740 D	154	196	194	16.3	282	282	290	5.43	0.839
Styrene	6.49 U	0.649 U	6.49 U	6.49 U	6.49 U	6.49 U	6.49 U	6.49 U	6.49 U	0.649 U	0.649 U
Tetrachloroethylene	10.3	4.9	10.3 U	10.3 U	10.3 U	10.3 U	10.3 U	10.3 U	10.3 U	1.03 U	1.03 U
Tetrahydrofuran	4.5 U	0.45 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	0.45 U	0.45 U
Toluene	88.9	175	52.9	78.1	85.8	21.8	126.0	133	138.0	2.49	0.58 U
Trichloroethene	2.18 U	0.819	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	0.218 U	0.218 U

a/ I.D. = identification; µg/m3 = micrograms per cubic meter; SS = sub-slab; IA = indoor air; OA = outdoor air; U = constituent not detected at reported detection limit; J = estimated concentration below reported detection limit; D = value is result of secondary dilution.

b/ Sample SS-3 DUPE was designated SS-30 in the field and is a blind duplicate of SS-3; IA-4 DUPE is a duplicate of sample IA-4.

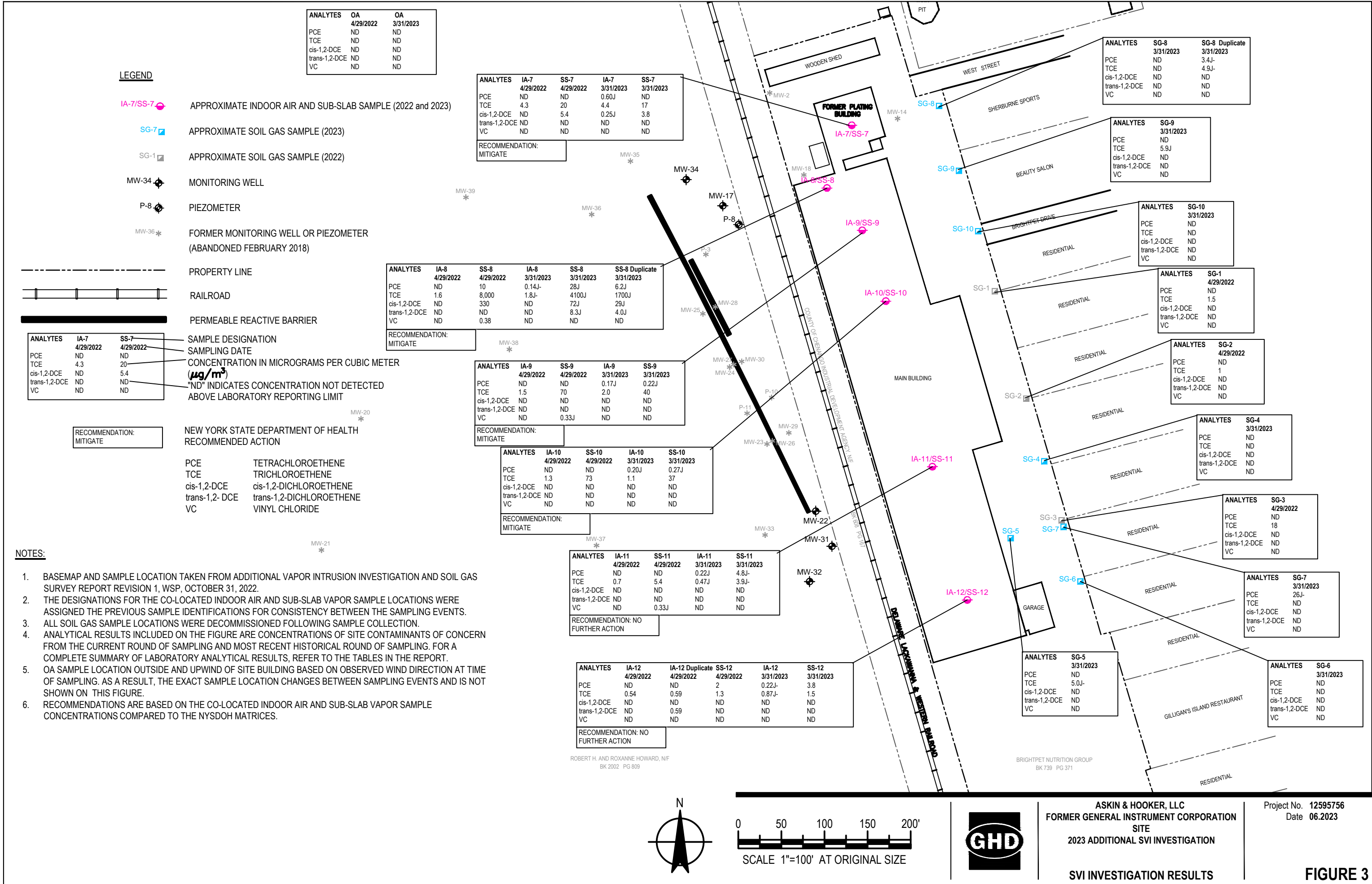




Table 1
2022 and 2023 Indoor Air and Sub-Slab Vapor Sampling Analytical Results Summary
Former General Instrument Corporation Site
Sherburne, New York

Sample Location:				IA-7	SS-7	IA-7	SS-7	IA-8	SS-8	IA-8	SS-8	SS-8	IA-9	SS-9	IA-9	SS-9
Sample ID:	NYSDOH Guidance Value (a)	NYSDOH Immediate Action Level (b)	NYSDOH Matrix Concentrations (c)	IA-7	SS-7	IA7-12595756-033123-BP-001	SS7-12595756-033123-BP-007	IA-8	SS-8	IA8-12595756-033123-BP-002	SS8-12595756-033123-BP-008	SS8-12595756-033123-BP-020	IA-9	SS-9	IA9-12595756-033123-BP-003	SS9-12595756-033123-BP-009
Sample Date:				04/29/22	04/29/22	03/31/23	03/31/23	04/29/22	04/29/22	03/31/23	03/31/23	03/31/23	04/29/22	04/29/22	03/31/23	03/31/23
Sample Type:												Duplicate				
Matrix Code:				IA	SVSS	IA	SVSS	IA	SVSS	IA	SVSS	SVSS	IA	SVSS	IA	SVSS
Volatile Organic Compounds (ug/m ³)																
1,1,1-Trichloroethane	--	--	10 (E)	--	--	6.0	1.4	--	--	2.9 J-	11 U	5.8 U	--	--	3.0	5.6
1,1-Dichloroethane	--	--	1 (D)	--	--	0.81 U	3.2 ^c	--	--	0.81 UJ	8.1 U	4.3 U	--	--	0.81 U	0.81 U
1,1-Dichloroethene	--	--	--	--	--	0.30 J	0.79 U	--	--	0.79 UJ	7.9 U	4.2 U	--	--	0.36 J	0.79 U
1,2,4-Trimethylbenzene	--	--	--	--	--	1.6	8.2	--	--	2.4 J-	6.0 J	6.9	--	--	4.8	13
1,2-Dichlorobenzene	--	--	--	--	--	1.2 U	1.2 U	--	--	1.2 UJ	12 U	6.4 U	--	--	1.2 U	1.2 U
1,2-Dichloroethene (total)	--	--	--	--	--	0.25 J	3.8	--	--	1.6 UJ	80 J	33 J	--	--	1.6 U	1.6 U
1,3,5-Trimethylbenzene	--	--	--	--	--	0.67 J	1.9	--	--	0.86 J-	9.8 U	2.0 J	--	--	1.5	3.4
1,4-Dichlorobenzene	--	--	--	--	--	1.2 U	1.2 U	--	--	1.2 UJ	12 U	6.4 U	--	--	1.2 U	0.83 J
2,2,4-Trimethylpentane	--	--	--	--	--	0.93 U	0.93 U	--	--	0.93 UJ	9.3 U	3.9 J	--	--	0.93 U	1.2 U
2-Butanone (MEK)	--	--	--	--	--	5.5	1.5	--	--	5.1 J-	15 U	7.8 U	--	--	6.1	6.1
2-Chlorotoluene	--	--	--	--	--	1.0 U	1.0 U	--	--	1.0 UJ	10 U	5.5 U	--	--	1.0 U	1.0 U
2-Hexanone	--	--	--	--	--	2.0 U	2.0 U	--	--	2.0 UJ	20 U	11 U	--	--	2.0 U	2.0 U
4-Ethyl toluene	--	--	--	--	--	0.61 J	2.0	--	--	0.66 J-	9.8 U	1.8 J	--	--	1.1	3.1
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	2.0 U	2.0 U	--	--	2.0 UJ	20 U	11 U	--	--	2.0 U	2.0 U
Acetone	--	--	--	--	--	28	12	--	--	16 J-	120 U	23 J	--	--	25	26
Benzene	--	--	--	--	--	0.64 U	0.68 U	--	--	0.64 UJ	2.2 J	2.3 J	--	--	0.64 U	3.5
Butane	--	--	--	--	--	10	1.2 U	--	--	6.4 J-	12 U	16	--	--	10	2.4 U
Carbon disulfide	--	--	1 (D)	--	--	1.6 U	0.62 J	--	--	1.6 UJ	16 U	8.3 U	--	--	1.2 J ^c	1.2 J ^c
Carbon tetrachloride	--	--	--	--	--	0.30 J	0.24 J	--	--	0.32 J-	13 U	6.7 U	--	--	0.41 J	0.18 J
Chlorobenzene	--	--	--	--	--	0.92 U	0.92 U	--	--	0.92 UJ	9.2 U	4.9 U	--	--	0.92 U	0.52 J
Chlorodifluoromethane	--	--	--	--	--	1.8 U	1.8 U	--	--	1.8 UJ	18 U	9.4 U	--	--	1.8 U	1.8 U
Chloroform (Trichloromethane)	--	--	--	--	--	0.98 U	0.98 U	--	--	0.98 UJ	3.5 J	1.6 J	--	--	0.98 U	0.31 J
Chloromethane (Methyl chloride)	--	--	1 (D)	--	--	2.4 ^c	1.0 U	--	--	2.0 J- ^c	10 U	2.4 J ^c	--	--	2.8 ^c	1.0 U
cis-1,2-Dichloroethene	--	--	--	0.16 U	5.4	0.25 J	3.8	0.16 U	330	0.79 UJ	72 J	29 J	0.16 U	0.59 U	0.79 U	0.79 U
Cyclohexane	--	--	--	--	--	0.60 J	0.69 U	--	--	0.49 J-	6.9 U	3.6 U	--	--	0.56 J	0.44 J
Cymene (p-Isopropyltoluene)	--	--	--	--	--	0.42 J	1.1 U	--	--	0.60 J-	11 U	5.8 U	--	--	0.94 J	0.50 J
Dichlorodifluoromethane (CFC-12)	--	--	--	--	--	2.2 J	1.8 J	--	--	1.9 J-	25 U	13 U	--	--	2.2 J	1.9 J
Ethylbenzene	--	--	--	--	--	0.87 U	2.5	--	--	0.87 UJ	4.5 J	4.4 J	--	--	1.0 U	12
Hexane	--	--	--	--	--	1.8 U	1.8 U	--	--	2.1 UJ	18 U	9.3 U	--	--	1.8 U	2.2 U
Isopropyl alcohol	--	--	--	--	--	32	12 U	--	--	19 J-	120 U	65 U	--	--	45	24
Isopropyl benzene	--	--	--	--	--	0.98 U	0.98 U	--	--	0.98 UJ	9.8 U	5.2 U	--	--	0.98 U	0.98 U
m&p-Xylenes	--	--	--	--	--	2.6	12	--	--	2.7 J-	9.6 J	12	--	--	4.0	40
Methylene chloride	60	--	10 (E)	--	--	1.7 U	1.7 U	--	--	1.7 UJ	11 J ^c	9.2 U	--	--	1.7 U	6.0
Naphthalene	--	--	--	--	--	2.6 U	2.6 U	--	--	2.6 UJ	26 U	14 U	--	--	2.6 U	2.6 U
N-Heptane	--	--	--	--	--	1.2	1.2	--	--	0.82 UJ	8.2 U	3.1 J	--	--	0.87 U	3.8
N-Propylbenzene	--	--	--	--	--	0.98 U	1.1	--	--	0.98 UJ	9.8 U	1.3 J	--	--	0.66 J	2.1
o-Xylene	--	--	--	--	--	1.3 U	3.5	--	--	1.3 UJ	5.2 J	5.4	--	--	2.1	8.9
Styrene	--	--	--	--	--	0.85 U	0.85 U	--	--	0.85 UJ	8.5 U	4.5 U	--	--	0.85 U	0.80 J
Tetrachloroethene	30	300	10 (E)	1 U	1 U	0.60 J	1.4 U	1 U	10	0.14 J-	28 J ^c	6.2 J	1 U	1 U	0.17 J	0.22 J
Toluene	--	--	--	--	--	4.2	7.4	--	--	4.1 J-	9.8	14	--	--	4.5	22
trans-1,2-Dichloroethene	--	--	--	0.59 U	0.59 U	0.79 U	0.79 U	0.59 U	0.59 U	0.79 UJ	8.3 J	4.0 J	0.59 U	0.59 U	0.79 U	0.79 U
Trichloroethene	2	20	1 (D)	4.3 ^{ac}	20 ^c	4.4 ^{ac}	17 ^c	1.6 ^c	8000 ^c	1.8 J- ^c	4100 J ^c	1700 J ^c	1.5 ^c	70 ^c	2.0 ^c	40 ^c
Trichlorofluoromethane (CFC-11)	--	--	--	--	--	45	1.8	--	--	31 J-	12 J	20 J	--	--	52	41
Vinyl chloride	--	--	0.2 (F)	0.1 U	0.38 U	0.51 U	0.51 U	0.1 U	0.38 ^c	0.51 UJ	5.1 U	2.7 U	0.1 U	0.33 J ^c	0.51 U	0.51 U
Xylenes (total)	--	--	--	--	--	3.9	16	--	--	4.0 J-	15 J	17	--	--	6.1	49

Footnotes:
ug/m³ = micrograms per cubic meter; U = Not detected at the associated reporting limit; J = Estimated concentration; UJ = Not detected; associated reporting limit is estimated; J- = Estimated concentration; result may be biased low
Only compounds detected above the reporting limit or estimated results are shown on this table for clarity. See original laboratory analytical reports for complete analytical results.
MIBK - Methyl Isobutyl Ketone; MEK - Methyl Ethyl Ketone
Exceedances^{abc} - Exceeded NYSDOH Criteria.
(a) NYSDOH Guidance Values taken from the NYSDOH Soil Vapor Intrusion Guidance, October 2006 and subsequent addenda.
(b) NYSDOH Immediate Action Levels taken from the NYSDOH Soil Vapor Intrusion Guidance, October 2006 and subsequent addenda.
(c) NYSDOH Matrix Concentrations taken from the NYSDOH Soil Vapor Intrusion Guidance, October 2006 and subsequent addenda.
(D) NYSDOH Soil Vapor/Indoor Air Matrix A
If indoor air concentration 1 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)
(E) NYSDOH Soil Vapor/Indoor Air Matrix B
If indoor air concentration 10 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)
(F) NYSDOH Soil Vapor/Indoor Air Matrix C
If indoor air concentration 0.2 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)



Table 1
2022 and 2023 Indoor Air and Sub-Slab Vapor Sampling Analytical Results Summary
Former General Instrument Corporation Site
Sherburne, New York

Sample Location:				IA-10	SS-10	IA-10	SS-10	IA-11	SS-11	IA-11	SS-11	IA-12	IA-12	SS-12	IA-12	SS-12
Sample ID:	NYSDOH Guidance Value (a)	NYSDOH Immediate Action Level (b)	NYSDOH Matrix Concentrations (c)	IA-10	SS-10	IA10-12595756- 033123-BP-004	SS10-12595756- 033123-BP-010	IA-11	SS-11	IA11-12595756- 033123-BP-005	SS11-12595756- 033123-BP-011	IA-100	IA-12	SS-12	IA12-12595756- 033123-BP-006	SS12-12595756- 033123-BP-012
Sample Date:				04/29/22	04/29/22	03/31/23	03/31/23	04/29/22	04/29/22	03/31/23	03/31/23	04/29/22 Duplicate	04/29/22	04/29/22	03/31/23	03/31/23
Matrix Code:				IA	SVSS	IA	SVSS	IA	SVSS	IA	SVSS	IA	IA	SVSS	IA	SVSS
Volatile Organic Compounds (ug/m ³)																
1,1,1-Trichloroethane	--	--	10 (E)	--	--	1.6	1.1 U	--	--	1.1	0.57 J-	--	--	--	1.5 J-	2.0
1,1-Dichloroethane	--	--	1 (D)	--	--	0.81 U	0.81 U	--	--	0.81 U	0.81 UJ	--	--	--	0.81 UJ	0.81 U
1,1-Dichloroethene	--	--	--	--	--	0.29 J	0.79 U	--	--	0.29 J	0.79 UJ	--	--	--	0.32 J-	0.79 U
1,2,4-Trimethylbenzene	--	--	--	--	--	5.3	6.6	--	--	1.4	14 J-	--	--	--	1.7 J-	7.1
1,2-Dichlorobenzene	--	--	--	--	--	1.2 U	1.2 U	--	--	1.2 U	1.2 UJ	--	--	--	0.54 J-	1.2 U
1,2-Dichloroethene (total)	--	--	--	--	--	1.6 U	1.6 U	--	--	1.6 U	1.6 UJ	--	--	--	1.6 UJ	1.6 U
1,3,5-Trimethylbenzene	--	--	--	--	--	1.5	2.0	--	--	0.49 J	2.9 J-	--	--	--	0.81 J-	1.3
1,4-Dichlorobenzene	--	--	--	--	--	1.2 U	1.2 U	--	--	1.2 U	1.2 UJ	--	--	--	1.2 UJ	1.2 U
2,2,4-Trimethylpentane	--	--	--	--	--	1.7	0.93 U	--	--	0.93 U	0.98 UJ	--	--	--	0.93 UJ	0.93 U
2-Butanone (MEK)	--	--	--	--	--	6.8	3.8	--	--	6.1	3.9 J-	--	--	--	8.3 J-	3.9
2-Chlorotoluene	--	--	--	--	--	1.0 U	1.0 U	--	--	1.0 U	1.1 J-	--	--	--	1.0 UJ	1.0 U
2-Hexanone	--	--	--	--	--	2.0 U	2.0 U	--	--	2.0 U	2.0 UJ	--	--	--	1.6 J-	2.0 U
4-Ethyl toluene	--	--	--	--	--	1.1	1.8	--	--	0.40 J	3.2 J-	--	--	--	0.68 J-	1.4
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	2.0 U	2.0 U	--	--	2.0 U	2.0 UJ	--	--	--	0.65 J-	2.0 U
Acetone	--	--	--	--	--	23	19	--	--	27	17 J-	--	--	--	36 J-	14
Benzene	--	--	--	--	--	0.79	0.86	--	--	1.3	0.99 J-	--	--	--	0.92 J-	0.64 U
Butane	--	--	--	--	--	11	1.2 U	--	--	9.2	5.0 J-	--	--	--	9.6 J-	1.2 U
Carbon disulfide	--	--	1 (D)	--	--	1.6 U	7.1 ^c	--	--	1.8 ^c	2.5 J- ^c	--	--	--	1.6 UJ	1.6 U
Carbon tetrachloride	--	--	--	--	--	0.35 J	1.3 U	--	--	0.34 J	0.33 J-	--	--	--	1.3 UJ	0.15 J
Chlorobenzene	--	--	--	--	--	0.92 U	0.92 U	--	--	0.92 U	0.92 UJ	--	--	--	0.92 UJ	0.92 U
Chlorodifluoromethane	--	--	--	--	--	1.8 U	1.8 U	--	--	1.8 U	1.8 UJ	--	--	--	1.8 UJ	1.8 U
Chloroform (Trichloromethane)	--	--	--	--	--	0.98 U	0.23 J	--	--	0.38 J	0.25 J-	--	--	--	0.98 UJ	0.98 U
Chloromethane (Methyl chloride)	--	--	1 (D)	--	--	2.7 ^c	1.0 U	--	--	2.5 ^c	1.0 UJ	--	--	--	2.7 J- ^c	1.0 U
cis-1,2-Dichloroethene	--	--	--	0.16 U	0.59 U	0.79 U	0.79 U	0.16 U	0.59 U	0.79 U	0.79 UJ	0.16 U	0.16 U	0.59 U	0.79 UJ	0.79 U
Cyclohexane	--	--	--	--	--	0.70	0.22 J	--	--	0.59 J	0.69 UJ	--	--	--	0.54 J-	0.69 U
Cymene (p-Isopropyltoluene)	--	--	--	--	--	0.62 J	1.1 U	--	--	1.1 U	0.77 J-	--	--	--	0.55 J-	1.1 U
Dichlorodifluoromethane (CFC-12)	--	--	--	--	--	2.0 J	1.8 J	--	--	1.9 J	2.0 J-	--	--	--	2.3 J-	2.1 J
Ethylbenzene	--	--	--	--	--	1.2	3.0	--	--	2.8	3.7 J-	--	--	--	14 J-	2.0
Hexane	--	--	--	--	--	1.8 U	1.8 U	--	--	1.8 U	1.8 UJ	--	--	--	1.8 UJ	7.7 U
Isopropyl alcohol	--	--	--	--	--	52	12 U	--	--	67	11 J-	--	--	--	160 J-	5.8 J
Isopropyl benzene	--	--	--	--	--	0.98 U	0.98 U	--	--	0.98 U	1.4 J-	--	--	--	0.98 UJ	0.98 U
m&p-Xylenes	--	--	--	--	--	4.6	13	--	--	9.0	18 J-	--	--	--	55 J-	9.0
Methylene chloride	60	--	10 (E)	--	--	1.7 U	1.7 U	--	--	3.8 U	1.7 UJ	--	--	--	1.7 UJ	2.6 U
Naphthalene	--	--	--	--	--	2.7	2.6 U	--	--	2.6 U	2.2 J-	--	--	--	2.5 J-	2.6 U
N-Heptane	--	--	--	--	--	1.9	2.2	--	--	1.7	2.2 J-	--	--	--	1.3 J-	1.1
N-Propylbenzene	--	--	--	--	--	0.61 J	1.0	--	--	0.35 J	1.7 J-	--	--	--	0.59 J-	0.77 J
o-Xylene	--	--	--	--	--	2.2	4.5	--	--	3.0	5.7 J-	--	--	--	12 J-	3.1
Styrene	--	--	--	--	--	0.26 J	0.85 U	--	--	0.85 U	0.85 UJ	--	--	--	0.85 UJ	0.29 J
Tetrachloroethene	30	300	10 (E)	1 U	1 U	0.20 J	0.27 J	1 U	1 U	0.22 J	4.8 J-	1 U	1 U	2	0.22 J-	3.8
Toluene	--	--	--	--	--	6.3	9.8	--	--	14	12 J-	--	--	--	5.2 J-	5.8
trans-1,2-Dichloroethene	--	--	--	0.59 U	0.59 U	0.79 U	0.79 U	0.59 U	0.59 U	0.79 U	0.79 UJ	0.59 U	0.59 U	0.59 U	0.79 UJ	0.79 U
Trichloroethene	2	20	1 (D)	1.3 ^c	73 ^c	1.1 ^c	37 ^c	0.7	5.4 ^c	0.47 J	3.9 J- ^c	0.59	0.54	1.3 ^c	0.87 J-	1.5 ^c
Trichlorofluoromethane (CFC-11)	--	--	--	--	--	46	8.1	--	--	43	16 J-	--	--	--	45 J-	43
Vinyl chloride	--	--	0.2 (F)	0.1 U	0.38 U	0.51 U	0.51 U	0.1 U	0.33 J ^c	0.51 U	0.51 UJ	0.1 U	0.1 U	0.38 U	0.51 UJ	0.51 U
Xylenes (total)	--	--	--	--	--	6.8	18	--	--	12	24 J-	--	--	--	67 J-	12

Footnotes:
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MIBK - Methyl Isobutyl Ketone; MEK - Methyl Ethyl Ketone

Exceedances^{abc} - Exceeded NYSDOH Criteria.
(a) NYSDOH Guidance Values taken from the NYSDOH Soil Vapor Intrusion Guidance, October 2006 and subsequent addenda.
(b) NYSDOH Immediate Action Levels taken from the NYSDOH Soil Vapor Intrusion Guidance, October 2006 and subsequent addenda.
(c) NYSDOH Matrix Concentrations taken from the NYSDOH Soil Vapor Intrusion Guidance, October 2006 and subsequent addenda.
(D) NYSDOH Soil Vapor/Indoor Air Matrix A
If indoor air concentration 1 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)
(E) NYSDOH Soil Vapor/Indoor Air Matrix B
If indoor air concentration 10 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)
(F) NYSDOH Soil Vapor/Indoor Air Matrix C
If indoor air concentration 0.2 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)



Table 1
2022 and 2023 Indoor Air and Sub-Slab Vapor Sampling Analytical Results Summary
Former General Instrument Corporation Site
Sherburne, New York

Sample Location:				OA	OA	Trip Blank	Trip Blank
Sample ID:	NYSDOH Guidance Value (a)	NYSDOH Immediate Action Level (b)	NYSDOH Matrix Concentrations (c)	OA-2	OA-12595756- 033123-BP-021	TB-12595756- 033123-BP-022	TB-12595756- 033123-BP-023
Sample Date:				04/29/22	03/31/23	03/31/23	03/31/23
Sample Type:						(other)	(other)
Matrix Code:				AA	AA	GSQ	GSQ
Volatile Organic Compounds (ug/m ³)							
1,1,1-Trichloroethane	--	--	10 (E)	--	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	--	--	1 (D)	--	0.81 U	0.81 U	0.81 U
1,1-Dichloroethene	--	--	--	--	0.79 U	0.79 U	0.79 U
1,2,4-Trimethylbenzene	--	--	--	--	0.52 J	0.98 U	0.98 U
1,2-Dichlorobenzene	--	--	--	--	1.2 U	1.2 U	1.2 U
1,2-Dichloroethene (total)	--	--	--	--	1.6 U	1.6 U	1.6 U
1,3,5-Trimethylbenzene	--	--	--	--	0.98 U	0.98 U	0.98 U
1,4-Dichlorobenzene	--	--	--	--	1.2 U	1.2 U	1.2 U
2,2,4-Trimethylpentane	--	--	--	--	0.93 U	0.93 U	0.72 J
2-Butanone (MEK)	--	--	--	--	1.4 J	1.5 U	1.5 U
2-Chlorotoluene	--	--	--	--	1.0 U	1.0 U	1.0 U
2-Hexanone	--	--	--	--	2.0 U	2.0 U	2.0 U
4-Ethyl toluene	--	--	--	--	0.98 U	0.98 U	0.98 U
4-Methyl-2-pentanone (MIBK)	--	--	--	--	2.0 U	2.0 U	2.0 U
Acetone	--	--	--	--	7.2 J	12 U	12 U
Benzene	--	--	--	--	0.64 U	0.64 U	0.37 J
Butane	--	--	--	--	3.9	1.2 U	3.1
Carbon disulfide	--	--	1 (D)	--	1.6 U	1.6 U	1.6 U
Carbon tetrachloride	--	--	--	--	1.3 U	1.3 U	1.3 U
Chlorobenzene	--	--	--	--	0.92 U	0.92 U	0.92 U
Chlorodifluoromethane	--	--	--	--	1.8 U	1.8 U	2.5
Chloroform (Trichloromethane)	--	--	--	--	0.98 U	0.98 U	0.98 U
Chloromethane (Methyl chloride)	--	--	1 (D)	--	1.0 U	1.0 U	0.35 J
cis-1,2-Dichloroethene	--	--	--	0.16 U	0.79 U	0.79 U	0.79 U
Cyclohexane	--	--	--	--	0.69 U	0.69 U	0.69 U
Cymene (p-Isopropyltoluene)	--	--	--	--	1.1 U	1.1 U	1.1 U
Dichlorodifluoromethane (CFC-12)	--	--	--	--	1.7 J	2.5 U	0.69 J
Ethylbenzene	--	--	--	--	0.87 U	0.87 U	0.56 J
Hexane	--	--	--	--	1.8 U	1.8 U	13
Isopropyl alcohol	--	--	--	--	12 U	12 U	12 U
Isopropyl benzene	--	--	--	--	0.98 U	0.98 U	0.98 U
m&p-Xylenes	--	--	--	--	2.2 U	2.2 U	1.2 J
Methylene chloride	60	--	10 (E)	--	1.7 U	1.7 U	4.6
Naphthalene	--	--	--	--	2.6 U	2.6 U	2.6 U
N-Heptane	--	--	--	--	0.82 U	0.82 U	0.50 J
N-Propylbenzene	--	--	--	--	0.98 U	0.98 U	0.98 U
o-Xylene	--	--	--	--	0.87 U	0.87 U	0.67 J
Styrene	--	--	--	--	0.85 U	0.85 U	0.85 U
Tetrachloroethene	30	300	10 (E)	1 U	1.4 U	1.4 U	1.4 U
Toluene	--	--	--	--	1.8 U	0.75 U	1.5
trans-1,2-Dichloroethene	--	--	--	0.59 U	0.79 U	0.79 U	0.79 U
Trichloroethene	2	20	1 (D)	0.16 U	1.1 U	1.1 U	1.1 U
Trichlorofluoromethane (CFC-11)	--	--	--	--	0.92 J	1.1 U	0.30 J
Vinyl chloride	--	--	0.2 (F)	0.1 U	0.51 U	0.51 U	0.51 U
Xylenes (total)	--	--	--	--	3.0 U	3.0 U	1.9 J

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(F) NYSDOH Soil Vapor/Indoor Air Matrix C
If indoor air concentration 0.2 ug/m3 or above, identify source and resample or mitigate (dependent on sub-slab vapor concentrations for full evaluation)



Table 2
2022 and 2023 Soil Gas Sampling Analytical Results Summary
Former General Instruments Corporation Site
Sherburne, New York

Sample Location:	SG1	SG2	SG3	SG4	SG5	SG6	SG7	SG8	SG8	SG9	SG10
Sample ID:	SG-1	SG-2	SG-3	SG4-12595756-033123-BP-016	SG5-12595756-033123-BP-017	SG6-12595756-033123-BP-018	SG7-12595756-033123-BP-019	SG8-12595756-033123-BP-013	SG8-12595756-033123-BP-024	SG9-12595756-033123-BP-014	SG10-12595756-033123-BP-015
Sample Date:	04/29/22	04/29/22	04/29/22	03/31/23	03/31/23	03/31/23	03/31/23	03/31/23	03/31/23	03/31/23	03/31/23
Sample Type:									Duplicate		
Matrix Code:	GS	GS	GS	GS	GS	GS	GS	GS	GS	GS	GS
Volatile Organic Compounds (ug/m ³)											
1,2,4-Trimethylbenzene	--	--	--	9.8 U	9.8 UJ	9.8 U	9.8 UJ	8.7 J	9.8 UJ	9.8 U	9.8 U
1,3,5-Trimethylbenzene	--	--	--	9.8 U	9.8 UJ	9.8 U	9.8 UJ	4.1 J	9.8 UJ	9.8 U	9.8 U
2,2,4-Trimethylpentane	--	--	--	9.3 U	2.3 J-	9.3 U	9.3 UJ	2.3 J	9.3 UJ	9.3 U	9.3 U
2-Butanone (MEK)	--	--	--	47	280 J-	15 U	51 J-	15 U	15 UJ	15 U	15 U
Acetone	--	--	--	78 J	380 J-	120 U	80 J-	120 U	120 UJ	120 U	120 U
Benzene	--	--	--	6.4 U	6.4 UJ	6.4 U	6.4 UJ	6.4 U	1.5 J-	6.4 U	6.4 U
Butane	--	--	--	12	80 J-	12 U	12 J-	12 U	12 UJ	5.8 J	12 U
Chlorodifluoromethane	--	--	--	18 U	4.5 J-	18 U	18 UJ	18 U	18 UJ	18 U	18 U
Ethylbenzene	--	--	--	8.7 U	8.7 UJ	2.3 J	8.7 UJ	9.7 J	2.7 J-	8.7 U	8.7 U
Hexane	--	--	--	18 U	19 J-	18 U	18 UJ	18 U	18 UJ	18 U	18 U
m&p-Xylenes	--	--	--	22 U	22 UJ	22 U	22 UJ	26	22 UJ	22 U	5.7 J
Methylene chloride	--	--	--	17 U	11 J-	17 U	17 UJ	17 U	17 UJ	17 U	17 U
N-Heptane	--	--	--	8.2 U	3.5 J-	8.2 U	8.2 UJ	8.2 U	8.2 UJ	4.2 J	8.2 U
o-Xylene	--	--	--	8.7 U	8.7 UJ	8.7 U	8.7 UJ	2.6 J	8.7 UJ	8.7 U	3.0 J
Tetrachloroethene	1 U	1 U	1 U	14 U	14 UJ	14 U	26 J-	14 U	3.4 J-	14 U	14 U
Toluene	--	--	--	4.2 J	8.3 J-	5.4 J	3.3 J-	5.1 J	5.3 J-	7.5	5.0 J
Trichloroethene	1.5	1	18	11 U	5.0 J-	11 U	11 UJ	11 U	4.9 J-	5.9 J	11 U
Xylenes (total)	--	--	--	30 U	30 UJ	30 U	30 UJ	29 J	30 UJ	30 U	8.7 J

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