



January 8, 2018

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Division of Environmental Remediation
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Albany, New York, 12233-7012

Renata Ockerby, Public Health Specialist II
Bureau of Environmental Exposure Investigation
New York State Department of Health
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Albany, New York, 12237

**RE: 2017/2018 HEATING SEASON VAPOR INTRUSION INVESTIGATION
WORK PLAN FOR THE FORMER VAILS GATE MANUFACTURING
FACILITY, VAILS GATE, NEW YORK**

Dear Ms. Ockerby and Mr. Miller:

Pursuant to your December 7, 2017 correspondence with Mr. Keith Keller, Project Manager for Leader Consulting Services, Inc. (“Leader”) concerning the necessity to develop a Work Plan for the 2017/2018 Heating Season Sub-Slab Vapor Intrusion (“SSVI”) Investigation at the former Vails Gate Manufacturing facility in Vails Gate, New York (“the Site”), this submission has been developed by Leader and Mr. John Kolaga, Esq. of Rupp Baase Pfalzgraf Cunningham, LLC to meet the request of the New York State Department of Health and New York State Department of Environmental Conservation (the “Agencies”) to develop the Work Plan. The Work Plan addresses the SSVI assessment of specific rental spaces at the Site, as identified in the Interim Site Management Plan (“ISMP”) and the ISMP Field Sampling Plan developed for the Site.

SUB-SLAB VAPOR INTRUSION INVESTIGATION

TASK 1: AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

Leader will complete a pre-sampling review of the rental spaces prior to the sampling event to identify and, if possible, minimize conditions that may interfere with proposed testing. The inspection will evaluate the type of structure, floor layout, air flow and physical condition of the rental space, and potential sources of indoor air contamination within each space. The inspection information will be identified on either the *New York State Department of Health Indoor Air Quality Questionnaire and Building Inventory Center for Environmental Health* form or the revised form, *Soil Vapor Intrusion – Structure Sampling Building Questionnaire*.



Leader will take the necessary steps to ensure that all functioning sub-slab depressurization systems (SSDS) within the Vails Gate Business Park Main Warehouse will be turned off for approximately one week prior to the sampling event, and that they will be turned back on immediately after sampling is completed.

TASK 2: SAMPLING AND SAMPLE METHODOLOGY

Leader will retain Centek Laboratories to sample existing sub-slab SVI monitoring points. The three (3) existing sub-slab vapor sample probes in the former Shock Studios (probe CHA-V10) rental space Unit 6 (currently Chiptech), and the former Built NY rental space Unit 3 (CHA-V22, currently 24Seven) and Unit 4 (CHA-V19, currently Solar City) will be sampled during the 2017/2018 heating season (see Figures 1 and 2 in Attachment A). The following sampling procedures will be completed in accordance with NYSDOH guidance.

Field Tracer Gas

When collecting soil vapor samples as part of a vapor intrusion evaluation, a tracer gas is introduced as a means to measure the integrity of the soil vapor probe seal. This is known as “short circuiting”. A tracer gas using helium will be employed at each sample probe prior to purging and sampling of the sub slab air. A helium detection meter will be used to assess if the helium within a contained air space covering the sample probe is entering the sub-slab space. If this condition exists, additional methods will be used to create an impermeable seal at the sample probe to eliminate ambient indoor air from entering the sub-slab vapor sample during the sampling period.

Sample Purge and Collection

After the tracer gas study is completed at each of the probes, one (1) to three (3) volumes of the sample probe and associated tubing will be purged prior to sample collection. The sub-slab sample will then be collected in a 1-liter, batch certified clean, summa canister. The regulators of each canister that will be collecting samples will be pre-calibrated for an eight-hour sample duration.

Indoor and Outdoor Air Sampling

Indoor air samples will be collected from each space where sub-slab samples will be collected. They will be collected within the spaces using summa canisters, and sampling will be initiated within the same time frame as the associated sub-slab sample. One (1) outdoor ambient air samples will be collected outside, at an upwind location of the Main Warehouse to serve as a background sample. The purpose for collection and analysis of the background sample is to determine if one or more compounds detected in the indoor air sample could be related to background levels of constituents in outdoor ambient air.

Quality Assurance/Quality Control (“QA/QC”) Sampling

Additionally, for QA/QC purposes, one (1) duplicate sample within one of the spaces and one (1) matrix spike/matrix spike duplicate (“MS/MSD”) sample will be collected and analyzed. Also, for the means of traceability, a trip blank will accompany the samples and be analyzed.



Analytical Methodology

Each of the samples will be analyzed for the presence of volatile organic compounds (“VOCs”) via USEPA Method TO-15 by Centek Laboratories, a NYSDOH Environmental Laboratory Approval Program (“ELAP”) certified laboratory. Sample analysis will meet the NYSDOH guidance for sub-slab samples, requiring them to have a minimum detection limit of 1ug/m³ and all ambient samples (indoor and outdoor air) to have a minimum detection limit of 1ug/m³, with the exception of trichloroethene; cis 1,2,dichloroethene; 1,1,-dichloroethene; carbon tetrachloride; and vinyl chloride, which have a reporting limit of 0.20 ug/m³.

Reporting Level

Draft sub-slab vapor data and complete Building Questionnaires and Product Inventory forms will be made available to the NYSDOH Project Manager as soon as they become available. Final, validated data will be provided to the NYSDEC and the NYSDOH Project Managers and draft property owner letter/tenant letters will be provided to the NYSDEC and the NYSDOH for their review and input, prior to transmittal of the final letters. Raw data will be submitted in the form of a Category B Analytical report for the purpose of validation. Also, the laboratory will submit an EDD (Electronical Disk Deliverable) meeting the guidance of NYSDOH.

TASK 3: DATA USABILITY SUMMARY REPORT

In accordance with Section 2.8, *Quality Assurance/Quality Control* of the NYSDOH Guidance document, a third party will complete a Data Usability Summary Report (“DUSR”) to assess whether or not the data, as presented, meets the Site or project specific criteria for data quality and data use.

TASK 4: WRITTEN REPORT

To document the efforts associated with the aforementioned Tasks, Leader will prepare a report that summarizes the field work, provides the results of analyses, interprets the data and subjects it to the decision matrices in the NYSDOH Guidance Document “*Guidance for Evaluating Soil Vapor Intrusion in the State of New York*”. The report will provide recommendations concerning the need for further investigations and/or mitigation, if any, based on the analyses and data interpretation.

SCHEDULE

The dates to complete Task 1 and 2 are subject to Centek’s availability and coordination of access to the rental spaces with the tenants and with Kessler Development, Inc, owner of the Vails Gate Business Park. The SSVI sampling effort will be completed before the end of February 2018, and within the prescribed heating system. The Agencies will be informed of the project sampling date as it becomes available.

Mr. John B. Miller
Ms. Renata Ockerby
January 8, 2018
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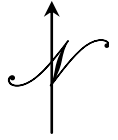
If you have any questions regarding submission of this Work Plan, please do not hesitate to contact me at (716) 565-0963.

Very truly yours,
LEADER CONSULTING SERVICES, INC.

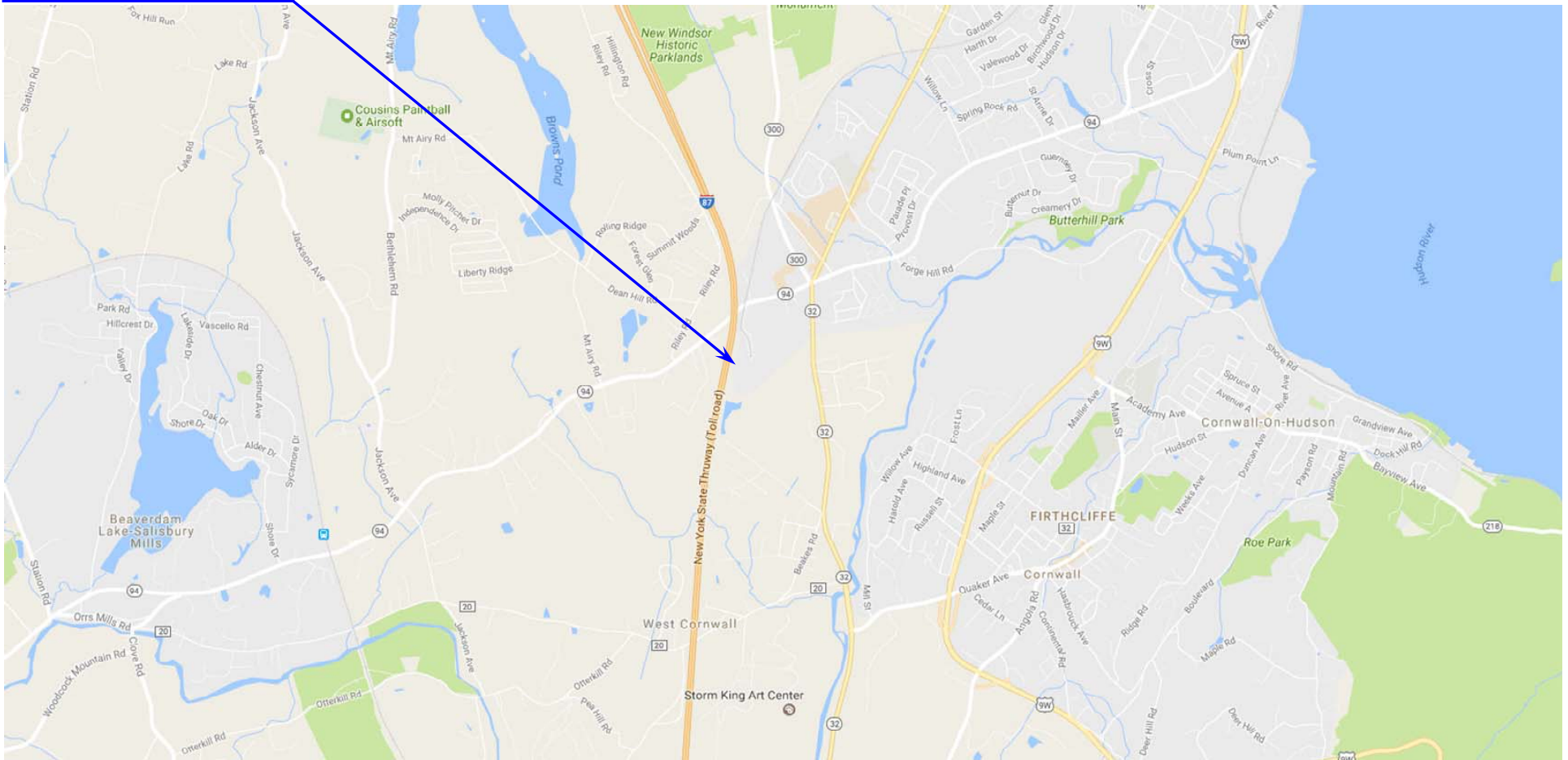
A handwritten signature in black ink that reads "Jeffrey A. Wittlinger".

Jeffrey A. Wittlinger, P.E., BCEE
Principal

Attachment A
Figures



Approximate Site Location



SOURCE: Google Earth.

Title:

SITE LOCATION MAP
1073 Route 94, Vails Gate, New York

Interim Site Management Plan



Leader Consulting Services, Inc.
2813 Wehrle Drive, Suite #1
Williamsville, New York
(716) 565-0963
(716) 565-0964 (fax)

Project:

737.004

Date:

1/2017

Scale:

N.T.S.

Drawn:

HDK

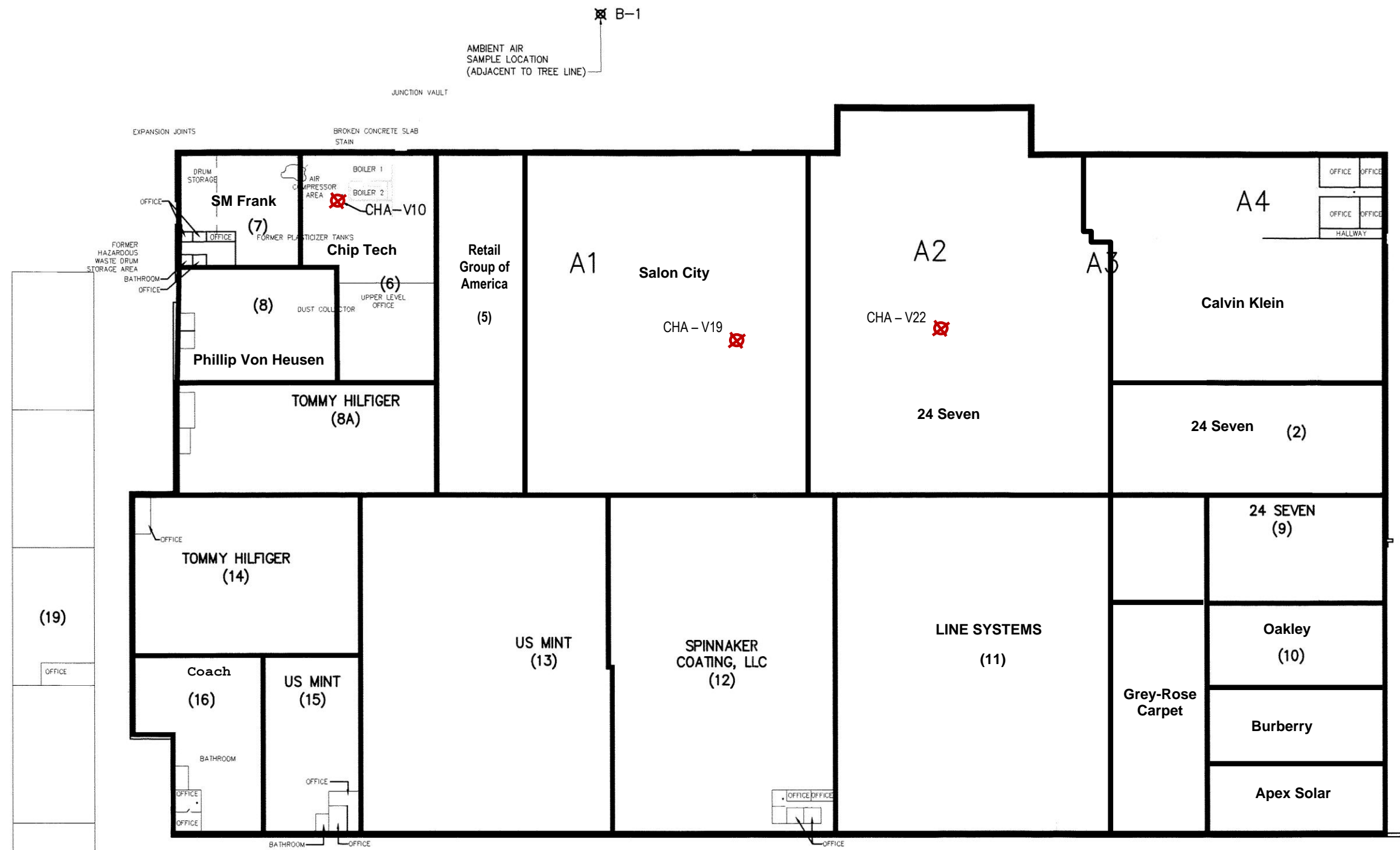
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File Name:

Figure:

1



Legend:

(1) - Rental Space

☒ - 2017/2018 Heating Season Sample Location

Figure Supplied by CHA

Titl **INTERIM SITE MANAGEMENT PLAN**
1073 Route 94, Vails Gate, New York

Sub Slab Vapor Intrusion Sample Locations

Leader Consulting Services, Inc.
2813 Wehrle Drive, Suite #1
Williamsville, New York
(716) 565-0963
(716) 565-0964 (fax)

Project: 737.004
Date: 12/2017
Scale: N.T.S.

Drawn: HDK
Checked: JAW
File Name:

Figure: 2