SOIL VAPOR INTRUSION INVESTIGATION WORK PLAN

For

Pierce Arrow Business Center
155-157 Chandler Street
Buffalo, New York 14203

NYSDEC Site Number: C915312

Prepared by:

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MARCH 15, 2022

TABLE OF CONTENTS

Page

FIGURES

TABLES

1.0 INTRODUCTION

1.1 Project Background

This Soil Vapor Intrusion (SVI) Work Plan (Work Plan) presents the proposed scope of work at the Pierce Arrow Business Center (PABC) facility located at 155-157 Chandler Street in the City of Buffalo, New York (Site), as shown on Figure 1, located in Appendix A. The owner of the property, R&M Leasing, LLC, (R&M Leasing) completed a Brownfield Cleanup Program (BCP) Track 2 Cleanup at the site with a Certificate of Completion (COC) issued on December 27, 2017[1].

The SVI investigation will be completed by Environmental Advantage, Inc. (EA) on behalf of R&M Leasing. The work will be completed in general accordance with New York State Department of Environmental Conservation (NYSDEC or "Department") DER-10 guidelines and New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in New York State[2]" document. The SVI investigation will be focused on indoor and sub-slab conditions beneath the area of the building currently occupied by Buffalo Cider Hall, where air monitoring completed in accordance with the Department-approved Site Management Plan (SMP)[3], has indicated trichloroethene (TCE) concentrations in the indoor air in exceedance of the NYSDOH Air Guideline Values (AGV). This SVI work plan provides details on the proposed investigation.

1.2 Site Background

The Pierce Arrow Business Center Property ("Site") is an approximately 2.35 acre property located at 155-157 Chandler Street in the City of Buffalo, Erie County, New York. Site boundaries are illustrated in Figure 2. The Site consists of an approximate 65,000-square foot building, 22,000-square foot courtyard within the central area of the building and an approximate 0.39 acre parking lot area directly east of the Site building. The Site is zoned D-C Flex Commercial, which permits Residential, Retail & Service, and Light Industrial uses. The neighborhood surrounding the Site primarily includes light industrial, commercial and residential properties.

The Site building was originally constructed in 1907 and utilized as a factory occupied by Linde Air Products until the early 1950s. Bell Aircraft Corp. occupied the Site in the early/mid 1950s, before it was purchased by Donald Rosen in 1958, who utilized the property for G & R Machinery (machine shop). The Site was purchased by Ontario Equipment Co. in 2005, and by R&M Leasing, LLC in February 2017.

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[1] New York State Department of Environmental Conservation, "Certificate of Completion for the Pierce Arrow Business Center", dated December 27, 2017

2 "Guidance for Evaluating Soil Vapor Intrusion in New York State" prepared by NYSDOH, October 2006, updated May 2017.

3 "Pierce Arrow Business Center, 155-157 Chandler, Erie County, Buffalo, New York, Site Management Plan, NYSDEC Site Number: C915312", prepared by Hazard Evaluations, Inc., and Schenne & Associates, dated December 14, 2017.

1.3 Site Remedial History

Brownfield Cleanup Agreement (BCA Index No. C915312-02-17) was executed on April 24, 2017 for the Site, identified as Site No. C915312. Hazard Evaluations Inc. (HEI), in association with Schenne & Associates (S&A), completed Remedial Investigation (RI) activities, as well as Interim Remedial Measure (IRM) activities, in accordance with an RI/IRM Work Plan, which was approved by NYSDEC on April 20, 2017. RI and IRM work was done concurrently, with additional investigation or IRM work completed, as needed. A series of IRMs were performed at the site in order to remediate the on-site concerns. RI and IRM work completed at the Site was detailed in the Site's Final Remedial Investigation-Interim Remedial Measures-Alternative Analysis Report (RI-IRM-AAR)[4] and Final Engineering Report (FER)[5]. An abridged version of the RI/IRM work completed inside the Site building which is the subject of this work plan is provided below.

Under Building Area

- The subject site was on a fast track for site development. As such, HEI worked with the site owner to investigate and evaluate specific areas under the building proposed for future water and/or sewer lines. Additionally, sub-slab soil samples were collected and if impacts were identified, the soil was excavated. Concrete samples were also collected to determine if polychlorinated biphenyls (PCBs) were present.
- During RI work, areas of impact were identified. For each area, the soil surrounding the area was excavated and sidewall and bottom samples collected, which did not exhibit further exceedances. Soil from under the building was excavated and disposed at Waste Management in Chaffee, New York.
- PCBs were identified within the concrete floor at various locations, specifically in the southwestern corner of the structure. The concrete was removed and disposed at Waste Management facility in Chaffee, New York. Confirmatory samples were collected from adjoining concrete floor, in which any PCBs levels identified were below Restricted-Residential Use Soil Cleanup Objective (RRUSCO).

SVI Assessment

During the initial SVI Assessment completed in September 2017 as part of the RI, vapor intrusion air samples were analyzed from five (5) sub-slab locations and six (6) ambient air locations throughout the building, as well as one (1) outdoor location. TCE was detected in three of the sub-slab samples at concentrations ranging from 2.2 ug/m^3 at SS-2 to 3,500 ug/m^3 at SS-4. TCE was also detected at the indoor samples at concentrations ranging from 0.27 ug/m^3 at IA-3 to 1.7 ug/m^3 at IA-4. However, all indoor air sample results for TCE were below the NYSDOH AGV of 2 ug/m^3. The decision matrices from the updated NYSDOH SVI guidance indicated "no further action" for locations SS-1/IA-1, SS-2/IA-2, SS-5/IA-5 and SS-6/IA-6. However, based on the TCE

[4] "Final Remedial Investigation-Interim Remedial Measures-Alternative Analysis Report; Brownfield Cleanup Program For Pierce Arrow Business Center; 155-157 Chandler, Buffalo, New York, 14207; BCP # C915312", prepared by Hazard Evaluations, Inc., and Schenne & Associates, December 5, 2017.

[5] "Final Engineering Report; Brownfield Cleanup Program for Pierce Arrow Business Center, 155-157 Chandler, Buffalo, New York 14207; BCP # C915312" prepared by Hazard Evaluations, Inc., and Schenne & Associates, December 2017.

concentration of 730 ug/m^3 and 3500 ug/m^3 in the sub-slab sample from SS-3 and SS-4, respectively, decision matrix A indicated these locations/areas would require mitigation. Other chlorinated volatile organic compounds (CVOCs) were detected during the initial SVI Assessment at low levels; however, only TCE is discussed in this SVI Work Plan as TCE is the only identified contaminant of concern associated with recent sampling[6]. The results of the initial SVI Assessment and SVI sampling decision matrices utilized during the RI/IRM is included as Table 1 and Table 2, respectively. Sample locations are illustrated on Figure 2 and Figure 3.

As a result of the September 2017 SVI Assessment, a sub-slab depressurization (SSD) system was installed in the southwestern portion of the site, as shown in Figure 3. The SSD system was installed in November 2017, with a system start date of November 8, 2017, in response to the recommendations of the NYSDOH decision matrices. Soil analysis did not identify CVOCs at concentrations above RRUSCO levels. The full summary (including applicable laboratory analytical reports) of the original SVI Assessment and SSD system installation are included in the Site's FER and SMP.

The SSD system was installed in the southwestern portion of the site, in proximity to SS-3/AI-3 and SS-4/AI-4 sample locations. The system objectives and performance goals include the following elements:

- Reduce and maintain indoor air concentrations of below levels of the NYSDOH Soil Vapor Guidance Document Matrix A.
- Maintain a minimum of 0.25-inches of water column in the four SSD Systems measured in the exhaust piping manometer located 5-feet above the finished floor, so as to prevent vapors from entering the indoor air of the building, while also releasing the trapped vapor beneath the slab;
- Demonstrate system effectiveness while maintaining for continuous operation of the SSDS, with no significant non-operating time.

1.4 Summary of Previous Vapor Intrusion Monitoring

Below is an abridged summary of the SVI monitoring completed at the Site since the issuance of the COC as reported in the Site's annual Periodic Review Reports (PRR's)[7] as required by the Site SMP. Full summaries (including applicable laboratory analytical reports) of the post-SSD installation sampling and annual Indoor/Outdoor Air sampling, can be found in the Department approved PRR's from 2018-2019, 2019-2020, and 2020-2021. Monitoring results for sampling locations identified as IA-1, IA-2,

6 Carbon Tetrachloride was detected at concentrations of 41 ug/m3 and 0.63 ug/m3 at the SS-3/IA-3 locations and 23 ug/m3 and 0.57 ug/m3 at the SS-4/IA-4 locations. According to Matrix A the recommended action is to "monitor". Post SSD systems operation, Carbon Tetrachloride has remained <1 ug/m3 at both SS_3/IA-3 and SS-4/IA-4 locations. Methylene Chloride was detected at concentrations of 2.6 ug/m3 and 150 ug/m3 at the at the SS-4/IA-4 location. According to Matrix B the recommended action is to "Identify Source(s) and Resample or Mitigate". Post SSD systems operation, Methylene Chloride has remained non-detect at the SS-4/IA-4 location.

7 "Periodic Review Report – April 2019; DEC Site #C911532", prepared by Hazard Evaluations, Inc., dated May 31, 2019; Periodic Review Report – April 2020; DEC Site #C911532", prepared by Hazard Evaluations, Inc., dated April 30, 2020; Periodic Review Report – April 2021 – Revised; DEC Site #C911532", prepared by Environmental Advantage, Inc., dated July 16, 2021.

IA-3, and IA-4 are not discussed in this Work Plan due to continued compliant results post-SSD system installation. Monitoring results for sampling location IA-5 are briefly discussed as this location exhibited early non-compliant results due to SSD system malfunction.

During annual system monitoring and sampling events, summa air canister samples are collected at six (6) indoor locations and one (1) outdoor location as shown on Figure 3 and Figure 4. Air samples are collected over an 8-hour period and submitted to Alpha Analytical to be analyzed for the presence of volatile organic compounds (VOCs) via USEPA method TO-15. Annual monitoring samples are collected during the 'heating season' as defined by NYSDOH (November 15th to March 31st), and have been collected on December 18, 2018, December 12, 2019, December 11, 2020, and December 2, 2021. When annual sampling exhibits a non-compliant result, follow up inspections and monitoring is completed as necessary. Follow up samples have been collected on February 13, 2019, June 21, 2019 at the IA-5 location and on February 20, 2020, February 18, 2021, March 31, 2021, and June 11, 2021 at the IA-6 location. Analytical results of all air sampling completed at the Site since SSDS installation are summarized on Table 3.

During the initial post-SSD system monitoring and sampling event in December 2018, SSDS-1, SSDS-2, and SSDS-3 were not operating. According to the property manager at the time, the three SSDS locations had been turned off during interior construction activities due to access issues. SSDS-4 was operating at the time of the inspection. Interior construction activities included a new floor, consisting of new #1 stone, vapor barrier, and six-inches of new concrete throughout the entire building. The concrete floor was finished with a sealer and was completed at the time of the inspection. Interior development was completed in some tenant spaces, but still under way in others. Exterior development work and windows were still being installed. The building was unoccupied at this time. TCE was detected at a concentration of 9.46 ug/m3 in the indoor air sample identified as IA-5. This concentration exceeds the NYSDOH AGV of 2 ug/m3. As noted above, the SSDSs were not all operational at time of sample collection.

During a follow up site inspection in February 2019, SSDS-1, SSDS-2, and SSDS-4 were operating as designed, SSDS-3 was operational, however the property manager indicated the fan would work intermittently. A follow up indoor air sample was collected at the original IA-5 sample location to assess if indoor air concentrations of TCE had been reduced with operation of the SSD systems. TCE was detected at a concentration of 4.54 ug/m3 at the IA- 5 location, which exceeds the NYSDOH AGV of 2 ug/m3. As noted above, SSDS-3 was operational; however, the property manager indicated the fan would work intermittently. An additional follow up site inspection due to the exceedance at the IA-5 location was completed in June 2019. At the time of the inspection, all four SSD systems appeared to be functioning properly, as positive pressure differential readings were recorded. A follow up indoor air sample was collected at the original IA-5 sample location assess if indoor air concentrations of TCE had been reduced with proper operation of all four SSD systems. TCE was detected at

a concentration of 0.903 ug/m^3, which is below the NYSDOH AGV of 2 ug/m^3. The property manager indicated that prior to April 26, 2019, the SSDS-3 fan had been replaced due to intermittent malfunction and the SSDS-4 fan had been replaced due to occasional malfunction as reported by the site tenant.

As per the monitoring and sampling requirements listed in the Site's SMP, a second annual Site-wide inspection and air sampling event was completed by HEI in December 2019. The four SSD systems appeared to be functioning properly at the time of the inspection, as positive pressure differential readings were recorded. TCE was detected at a concentration of 12.0 ug/m3 at the IA-6 location, which exceeds the NYSDOH AGV of 2 ug/m3. Carbon tetrachloride was also detected at the IA-6 location above its respective commercial indoor air background level[8]. As a result of this December 2019 exceedance, EA collected a follow up sample from this location in February 2020. TCE was detected at a concentration of 1.34 ug/m^3, which is below the NYSDOH AGV of 2 ug/m^3. The four SSD systems appeared to be functioning properly at the time of the February 2020 inspection.

The third annual SMP required Site-wide inspection and air sampling event was completed by EA in December 2020. The four SSD systems appeared to be functioning properly at the time of the inspection, as positive pressure differential readings were recorded. TCE was detected at a concentration of 2.96 ug/m^3 at the IA-6 location, which exceeds its respective NYSDOH AGV value of 2 ug/m^3. As a result of this December 2020 exceedance, EA collected a follow up indoor air sample from this location in February 2021. TCE was again detected at a concentration of 2.96 ug/m^3 at IA-6. The four SSD systems appeared to be functioning properly at the time of the February 2021 inspection.

Due to the NYSDOH AGV exceedances for TCE at the IA-6 location as discussed above, EA contacted the Site Owner, Mr. Rocco Termini, and recommended that the location of IA-6, which is an unoccupied pass-through hallway containing mailboxes, be better ventilated. On March 26, 2021, Mr. Termini had a ceiling exhaust fan installed within the hallway in an attempt to improve ventilation. Following the installation of the exhaust fan, EA collected an additional follow up indoor air sample from this location on March 31, 2021. TCE was detected at a concentration of 14 ug/m^3, which exceeds both its respective NYSDOH AGV and USEPA Commercial Indoor Air Background (90^{th} percentile) guideline values of 2 ug/m^3 and 4.2 ug/m^3, respectively.

In consideration of the March 2021 results, EA surmised that the more elevated results observed at the IA-6 location may be related to the ceiling fan creating a negative pressure within the hallway, even though there is no historical record of any underlying concrete slab or sub-slab TCE contamination in this area of the facility based on the pre-design sampling results collected in September 2017. For strictly test protocol purposes, EA collected an air sample at the IA- location on June 17, 2021, with

[8]USEPA 2001: Building Assessment and Survey Evaluation (BASE) Database as incorporated into the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York".

the two man-door entrances to the pass-through hallway propped open approximately one inch each to allow the infiltration of fresh outdoor air. TCE was detected at a concentration of 1.31 ug/m^3, which is below its respective NYSDOH AGV of 2 ug/m^3. Based on these results, Mr. Termini proposed to install two approximate 8-inch by 8-inch passive vents within the man-door entrances to allow the infiltration of fresh outdoor air which was proposed to the Department in the July 16, 2021 Summary Letter – June 2021 Indoor Air Sampling Results[9] letter report. The Department approved the passive door vent installation remedy and requested additional air sampling post-installation as detailed in the August 4, 2021 Periodic Review Report & June 2021 Indoor Air Sampling Results Response Letter[10]. Passive vent installation was completed in the mailroom (location of IA-6) at the end of October 2021 by building maintenance.

In early December 2021, the fourth annual SMP required Site-wide inspection and air sampling event was completed by EA. At the direction of the NYSDEC[4], post passive vent installation indoor air samples were collected as well at this time from two rooms adjacent to the mail room (location of IA-6) designated as IA-7 and IA-8. Post-vent installation yielded acceptable results at the IA-6 location as had been anticipated with TCE detected at a concentration of 1.73 ug/m^3, which is below its respective NYSDOH AGV of 2 ug/m^3. However, TCE was detected at a concentration of 17.5 ug/m^3 at the IA-7 location and 18.0 ug/m^3 at the IA-8 location, which is above both the NYSDOH AGV and USEPA Commercial Indoor Air Background (90th percentile) guideline value. IA-7 is located in the southern adjacent room (from the IA-6 location) which is currently part of Buffalo Cider Hall and is utilized for storage of kegs, dry goods, and other restaurant supplies, and IA-8 is located in the eastern adjacent room which is currently also part of Buffalo Cider Hall and is currently utilized for restaurant seating. A doorway is located between where IA-7 and IA-8 are located and the door was left open during sampling activities. The location of the additional indoor air samples collected is illustrated in Figure 4. A summary of the historical and most recent December 2021 air sampling results is included in Table 3.

The results of the December 2021 monitoring and sampling event were provided to the Department in a summary letter[11] in which EA presented the following:

> *According to the NYSDOH Soil Vapor/Indoor Air Matrix A, 2017 update[12], the appropriate action with a sub-slab concentration of less than 6 ug/m^3 with an accompanying indoor air concentration of 1 ug/m^3 and above for TCE is to "identify source(s) and resample or mitigate". Further investigation into the source of the TCE in this area of the building is warranted. The next step is to complete sub-slab air sampling accompanied by corresponding indoor air sampling to identify if there is an*

9 "Summary Letter – June 2021 Indoor Air Sampling Results" prepared by Environmental Advantage, Inc., July 2021.
10 "Site Management (SM) – Periodic Review Report (PRR) & June 2021 Indoor Air Sampling Results Response Letter" prepared by Megan Kuczka of NYSDEC, August 4, 2021.
11 "Summary Letter – Post Passive Vent Installation Indoor Air Sampling Results. Revised", prepared by Environmental Advantage, Inc., dated February 17, 2022.
12 "Guidance for Evaluating Soil Vapor Intrusion in New York State" prepared by NYSDOH, October 2006, updated May 2017.

unidentified source area that was either not previously investigated, or if building development may have created a [preferential] pathway for sub-slab vapors which was not present during [the] pre-SSDS design soil vapor intrusion (SVI) assessment.

The Department responded in a letter dated February 23, 2022, requesting the submittal of this work plan[13].

1.5 Site Conditions

Development at the Site was completed in 2018. The building is currently occupied by the following tenants: Utilant, LLC, Blackbird Cidery Buffalo Cider Hall, Barrel and Brine Kombucha, ODL Orthodontic Lab, Anderson Tax Services, and four (4) high end second floor loft apartments.

2.0 PROJECT OBJECTIVES

A review of the historical remedial data associated with the areas in the vicinity of IA-6, IA-7 and IA-8, reveal no pre- or post-Interim Remedial Measure (IRM) soil or groundwater concentrations of TCE or any other NYSDOH priority CVOC. TCE was non-detect in all interior monitoring wells with the exception of SB128/MW-4 where TCE was detected at an estimated concentration of 0.23 ug/l. No other CVOCs were detected in any of the interior monitoring wells. TCE has not been detected in the only remaining monitoring well post-IRM activities, MW-3 located upgradient in the parking lot area. Interior soil samples collected during the RI exhibited trivial levels of TCE and other CVOCs with the exception of the SB 135 location (vicinity of SS-5/IA-5), which exhibited a TCE concentration of 1.3 mg/kg in exceedance of the Unrestricted Use SCO (UUSCO). The area around SB 135 was excavated and removed during IRM activities.

Confirmatory samples collected in the courtyard area post-IRM activities exhibited very low levels of TCE and other CVOCs with the exception of CY-CS-1, which exhibited a TCE concentration of 1.1 mg/kg in exceedance of the UUSCO. However, the concentration of TCE at the CY-CS-1 location was well within the Residential Use SCO (RUSCO) of 10 mg/kg. Furthermore, courtyard confirmatory sample locations related to the Fuel Oil Tank removed directly adjacent to the building foundation outside of Buffalo Cider Hall and in the immediate vicinity of CY-CS-1, exhibited TCE concentrations of 0.036 mg/kg, 0.023mg/kg, and 0.0014 mg/kg. Courtyard confirmatory sample locations around the perimeter of the historical chimney stack also located directly adjacent to the building foundation outside of Buffalo Cider Hall exhibited TCE concentrations of 0.05 mg/kg and 0.00074 mg/kg.

Pre-design air samples collected to determine the need for the SSDS systems currently in place in other areas of the building exhibited “no further action” in the area of IA-6 due to non-detect sub-slab and accompanying indoor air concentrations of 0.64 ug/m^3 for TCE. However, recent exceedances of the NYSDOH AGV of 2 ug/m3 for TCE in the rooms adjacent to the IA-6 location, identified as IA-7 and IA-8, located

[13] “Site Management (SM) – Post Passive Vent Installation Indoor Air Sampling Results Response Letter” prepared by Megan Kuczka of NYSDEC, February 23, 2022.

within the Buffalo Cider Hall warrants further investigation. EA, in cooperation with R&M Leasing, intends to further investigate the sub-slab vapors within this area of the building at the Site. Data collected during the SVI investigation will be used to identify potential health risks and to evaluate remedial alternatives. The objectives of the SVI investigation include the following:

- Define the nature and extent of on-site contamination in sub-slab vapors.
- Identify on-site source areas of contamination and/or preferential migration pathways if any.
- Collect data of sufficient quantity and quality to evaluate potential threats to the public health and environment.
- Collect data of sufficient quantity and quality to evaluate remedial alternatives.

2.1 Regulatory Criteria

NYSDEC has applicable standards, criteria and guidance (SCG) values that will be used for this project. These goals are applicable when considering remedial alternatives. For purposes of the SVI investigation the following SCG will be utilized:

- State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006.
- USEPA 2001: Building Assessment and Survey Evaluation (BASE) Database as incorporated into the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York".
- 6 NYCRR Part 375-3 Brownfield Cleanup Program dated December 14, 2006.
- NYSDEC "DER-10 Technical guidance for Investigation and Remediation", dated May 2010.

Air samples will be collected in general accordance with NYSDEC and United Sates Environmental Protection Agency (USEPA) sample collection and handling methodologies. Samples collected for laboratory analysis will be submitted to a NYSDOH Environmental Laboratory Accreditation Program (ELAP) Contract Laboratory Protocol (CLP) certified laboratory, with a Category B deliverables package. Additionally, a Field Duplicate sample will be collected and a Data Usability Summary Report (DUSR) will be prepared by a third-party data validator.

Sampling data will be used to evaluate remedial alternatives to meet the objectives identified above. Two data confidence levels will be considered, including field screening data and analytical level data. Field screening will include photoionization detector (PID). Analytical level data will be associated with vapor samples submitted for chemical analysis to an independent laboratory.

2.2 Project Organization

EA will establish a project team for successful completion of the project. The project team has not been finalized and subcontractors will be determined. Once the team has been finalized, appropriate resumes and information will be provided to NYSDEC upon request. The anticipated project team is listed below:

Company	Name	Role
R&M Leasing, LLC	Rocco Termini	Property Owner/Occupant
Environmental Advantage, Inc.	Mark Hanna, CHMM	Project Director/Environmental Health & Safety Manager
Environmental Advantage, Inc.	Mary Szustak	Project Manager/QA/QC Officer
Environmental Advantage, Inc.	Eric Betzold	Project Geologist/Site Safety Officer
Alpha Analytical	Melissa Deyo	Analytical Laboratory Subcontractor
Schenne & Associates	John Schenne, P.E., P.G.	P.E. Consultant Subcontractor
Vali-data of WNY, LLC	Jodi Zimmerman	Data Usability Subcontractor

Mark Hanna – Mark will be the Project Director for the work and will be responsible for completion of each task, including coordination and supervision of field activities, adherence to work plan, schedule and budget. Additionally, Mr. Hanna will be responsible for development of the work plan, coordination of subcontractors, field project oversight and report preparations.

3.0 INVESTIGATION SCOPE OF WORK

3.1 Introduction

The proposed SVI scope of work will include investigation for potential site contaminants in the sub-slab vapor, indoor ambient air, and outdoor ambient air at the Site. The scope of work includes three (3) sub-slab vapor, three (3) indoor air sample locations, and one (1) outdoor ambient air location. Specific sub-slab locations will be selected based on the Site inspection and accessibility. Proposed sampling locations are included on Figure 4.

3.2 Soil Vapor Intrusion Investigation

TCE was detected at two (2) indoor sample locations at concentrations ranging from 17.5 ug/m^3 at IA-7 to 18.0 ug/m^3 at IA-8. Historical sub-slab vapor samples collected in the immediate vicinity of this area exhibited non-detected concentrations of TCE, and no further action was recommended for all NYSDOH target CVOCs. Based on the recent indoor air TCE concentrations of 17.5 ug/m^3 at IA-7 and 18.0 ug/m^3 at IA-8, respectively, decision matrix A of the 2017 update of the NYSDOH SVI guidance, recommends to identify source(s) and resample or mitigate. Additional sub-slab and indoor air samples will be collected in the vicinity of the two identified locations. Specifically, at IA-7 one (1) sub-slab vapor and corresponding indoor air sample location will be completed, adjacent to IA-8 in the adjacent room one (1) sub-slab vapor and corresponding indoor air sample location will be completed in an identified below grade area identified as the “basement” area on Site design plans, and a third sub-slab vapor and corresponding indoor air sample location will be completed in the bar area of the Buffalo Cider Hall. Due to a large floor drain located in the immediate vicinity of IA-8, a sub-slab vapor and corresponding indoor air sample location is not recommended

in this area at this time in accordance with Section 2.7.2. of the NYSDOH SVI Guidance document. Proposed locations are shown on Figure 4.

3.2.1 Building Survey

An inspection of the existing on-site facility and product inventory will be conducted to assess the current conditions in proposed sampling areas and determine the likelihood of existing chemicals of concern that may be present that would influence the vapor test results. A PID will be used to monitor indoor air and scan vapors of individual containers that may be present. Any potential sources identified inside the facility will be removed prior to conducting the vapor test.

3.2.2 Site Preparation

In accordance with NYSDOH recommendations, the HVAC system should be activated.

3.3 Vapor Sampling

Three types of air samples will be collected, including sub-slab, ambient indoor air and ambient outdoor air samples, as follows:

3.3.1 Sub-Slab: EA will install three (3) temporary sub-slab sampling points at locations as shown on Figure 4. Samples will be obtained through core-drilled holes into a competent portion of the concrete floor, away from cracks or drains. Clean, dedicated ¼-inch inside diameter polyethylene tubing will be placed into the hole and will not extend further than 2-inches into the sub-slab material. The corehole annulus will be sealed at the floor surface with modeling clay. Once it is determined that the sampling system is sealed, the sample probe and tube will be purged of one to three volumes, and sampling will be initiated.

The sub-slab soil gas sample will be collected using a 2.7-liter capacity Summa canister fitted with a laboratory calibrated flow regulation devise to allow the collection of the soil gas sample over an 8-hour sample collection time.

3.3.2 Ambient Indoor Air: An ambient indoor air sample will be collected concurrent with every sub-slab sample locations from approximately 3 to 4 feet above the slab floor. A total of 3 samples will be obtained. Samples will be collected over an 8-hour collection period.

3.3.3 Ambient Outdoor Air: One ambient outdoor sample will be collected at an upwind location from approximately 4 to 5 feet above the ground surface. A sample will be collected over an 8-hour collection period.

All sampling and purging flow rates will not exceed 0.2 liters per minute. Since the ambient outdoor air sample is dependent on wind flow direction, that sample location will be determined the day of the test.

An independent data validation expert will complete a third-party data view of the analytical data generated during the SVI work. A Data Usability Summary Report (DUSR) will be prepared, with appropriate data qualifiers added to the results.

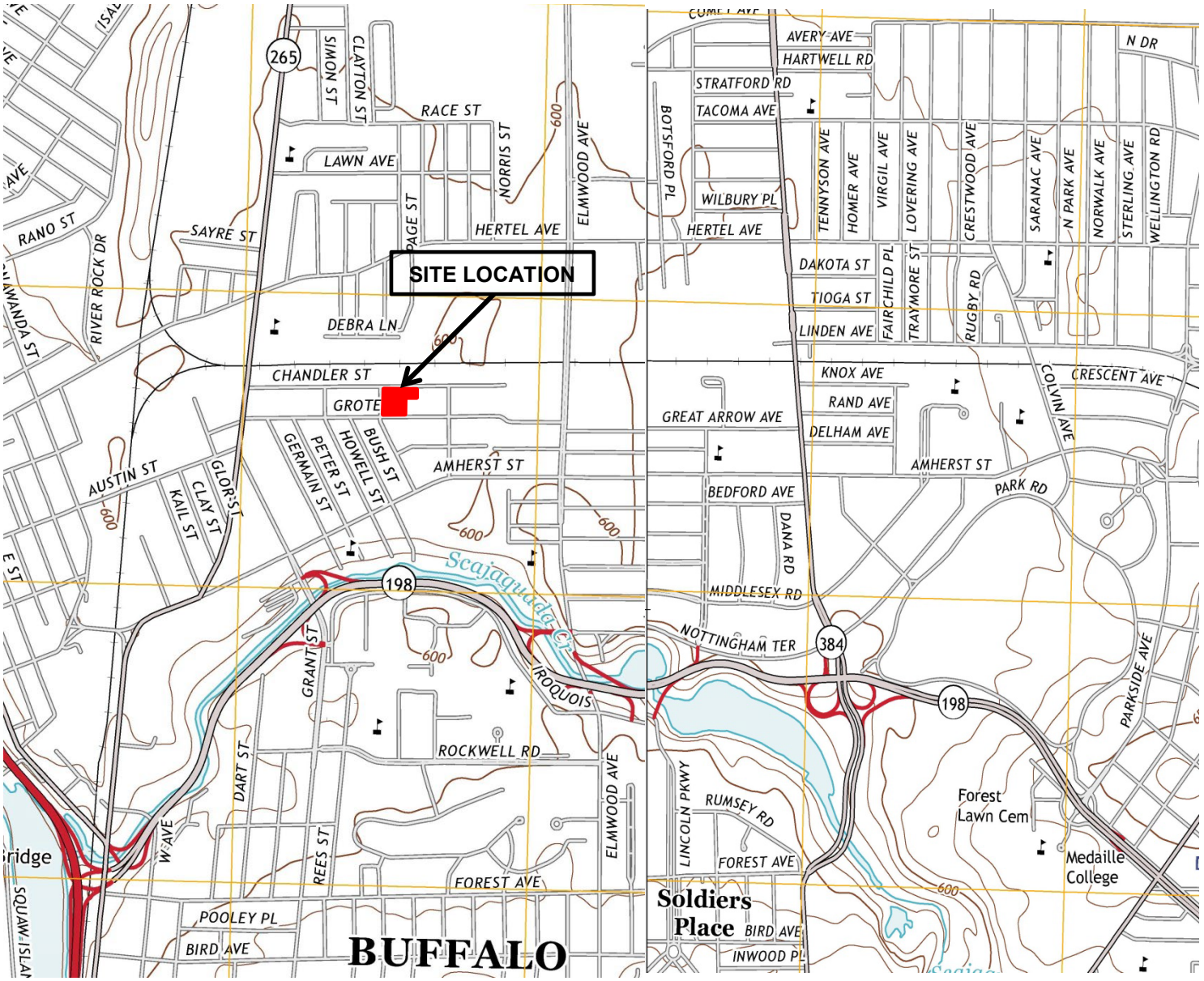
4.0 SOIL VAPOR INTRUSION INVESTIGATION REPORT

Upon completion of the SVI tasks, a SVI report will be generated in general requirements as identified in DER-10 Section 3.14 as reporting requirements are not listed in the NYSDOH SVI Guidance document. The report will include the following information.

- Background and Site information.
- Description of investigation areas.
- Identify and characterize the historical sources of contamination.
- Comparison with NYSDOH AGV and USEPA Commercial Indoor Air Background Levels as appropriate.
- Describe the amount, concentration, environmental fate and transport (if applicable), location and other significant characteristics of the contaminants present.

TABLES

FIGURES



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AND WAS ADAPTED FROM USGS, BUFFALO NE & NW, NEW YORK 2013 QUADRANGLE.

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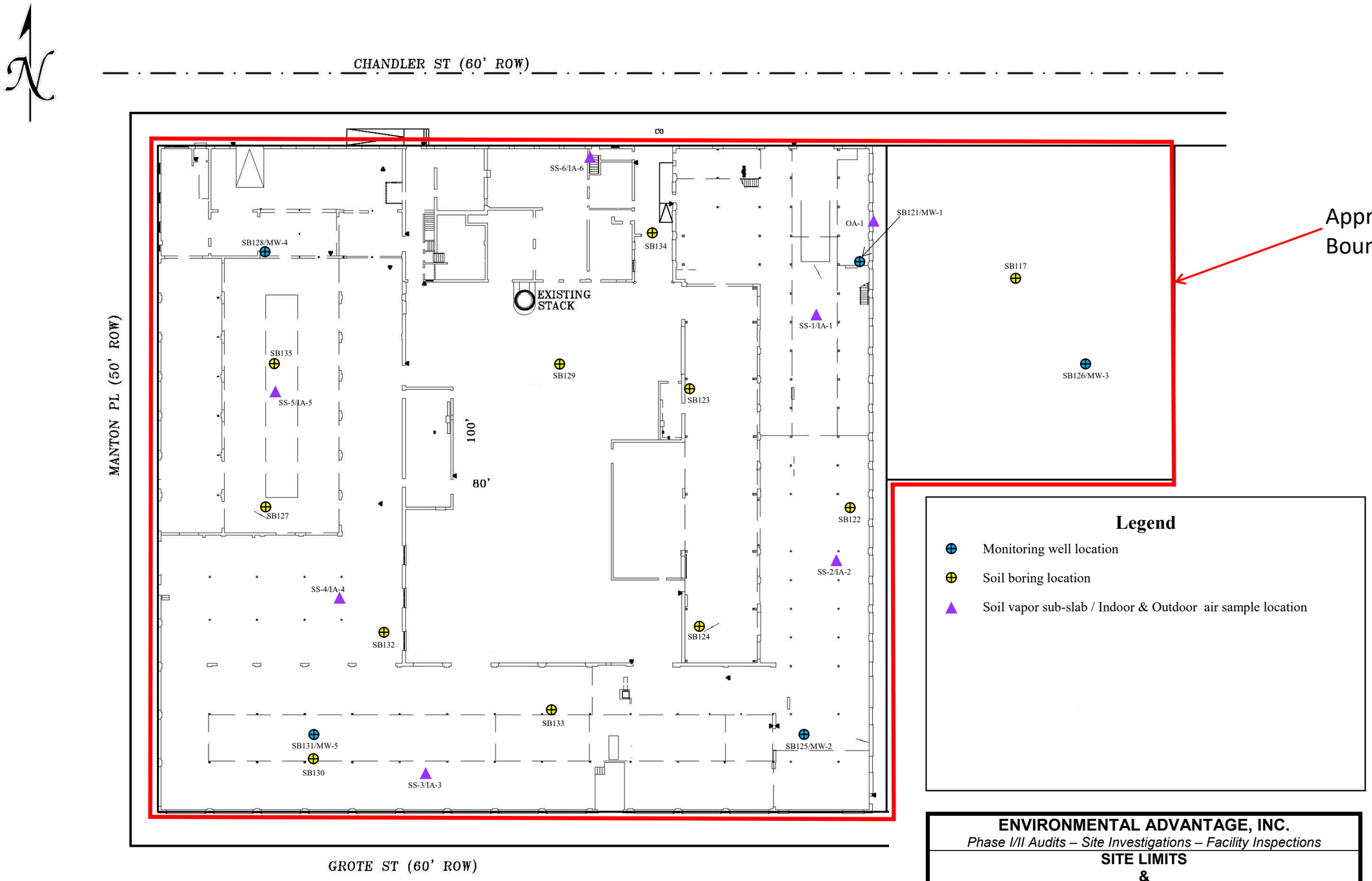
ENVIRONMENTAL ADVANTAGE, INC. *Regulatory Compliance – Site Investigations – Facility Inspections*		
LOCATION MAP 155 and 157 CHANDLER STREET BUFFALO, NEW YORK		
R & M LEASING LLC BUFFALO, NEW YORK		
DRAWN BY: JK	SCALE: NOT TO SCALE	PROJECT: 01101
CHECKED BY: MS	DATE: 03/22	FIGURE NO: 1



Legend

- Monitoring well location
- Soil boring location
- Soil vapor sub-slab / Indoor & Outdoor air sample location

ENVIRONMENTAL ADVANTAGE, INC.

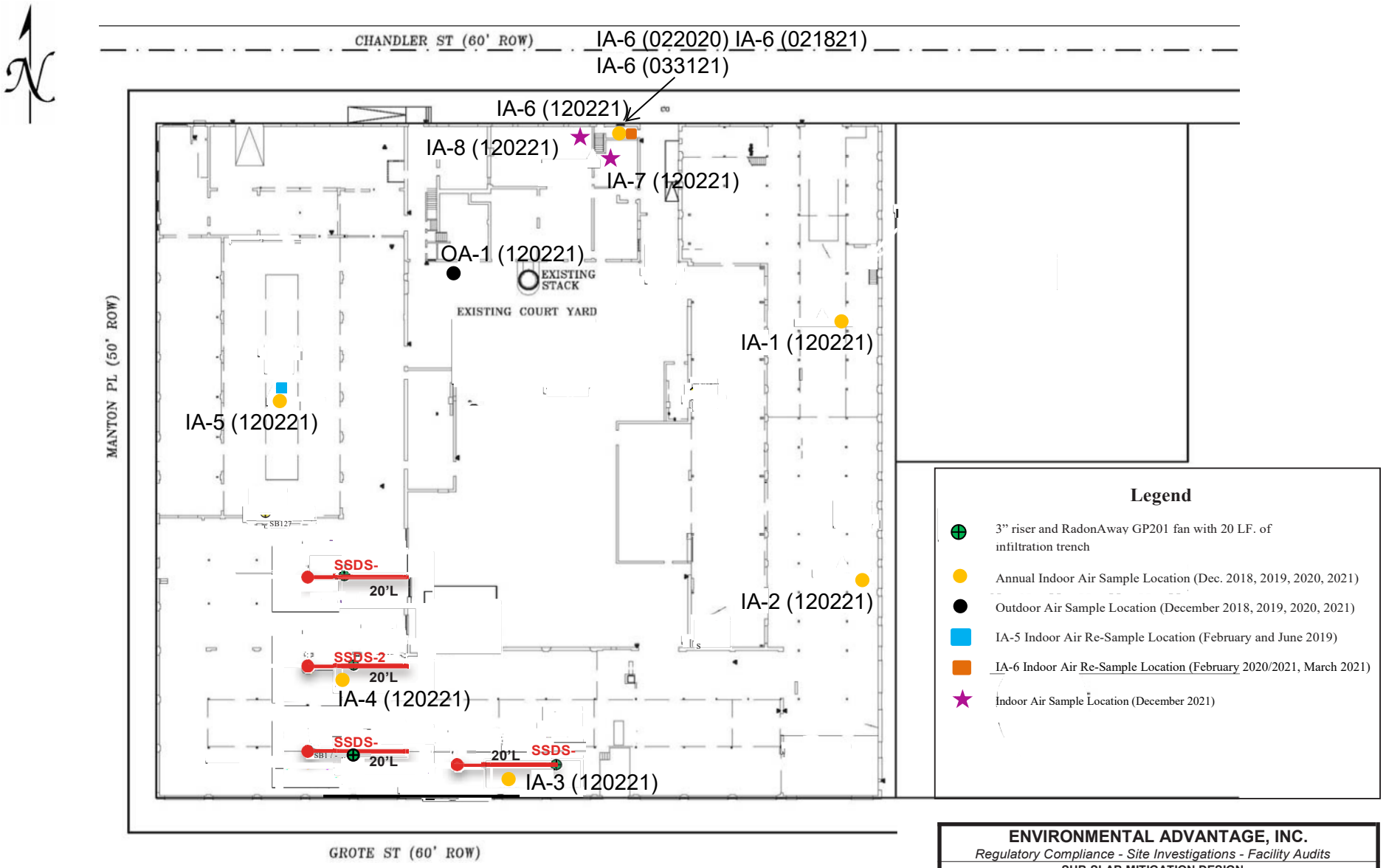
Phase I/II Audits – Site Investigations – Facility Inspections

SITE LIMITS
&
REMEDIAL INVESTIGATION LOCATIONS

155 and 157 CHANDLER STREET
BUFFALO, NEW YORK

R & M LEASING LLC
BUFFALO, NEW YORK

DRAWN BY: SS/MS	SCALE: 1" = 40'	PROJECT: 01101
CHECKED BY: MMW	DATE: 03/22	FIGURE NO: 2

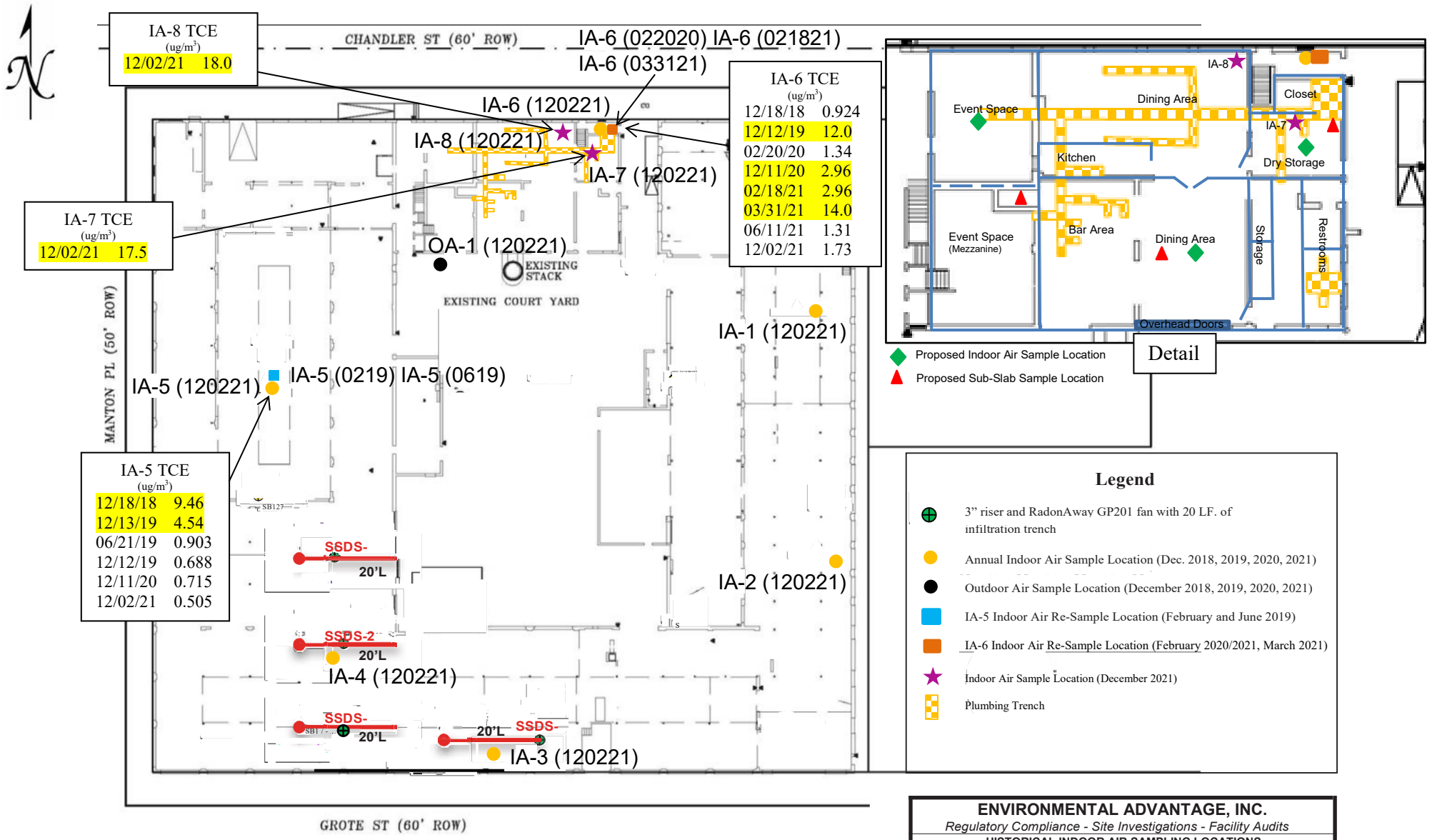


SUB-SLAB MIGRATION SYSTEM

N.T.S.

AS-BUILT

ENVIRONMENTAL ADVANTAGE, INC.		
Regulatory Compliance - Site Investigations - Facility Audits		
SUB-SLAB MITIGATION DESIGN **INDOOR AIR SAMPLING LOCATIONS** 155 and 157 CHANDLER STREET BUFFALO, NEW YORK		
R & M LEASING LLC BUFFALO, NEW YORK		
DRAWN BY: JK CHECKED BY: MS	SCALE: NOT TO SCALE DATE: 03/22	FIGURE 3



SUB-SLAB MIGRATION SYSTEM

N.T.S.

AS-BUILT

ENVIRONMENTAL ADVANTAGE, INC.		
Regulatory Compliance - Site Investigations - Facility Audits		
HISTORICAL INDOOR AIR SAMPLING LOCATIONS & PROPOSED SAMPLING LOCATIONS 155 and 157 CHANDLER STREET BUFFALO, NEW YORK		
R & M LEASING LLC BUFFALO, NEW YORK		
DRAWN BY: MS CHECKED BY: EB	SCALE: NOT TO SCALE DATE: 01/22	FIGURE 4

TABLES

Table 1
Soil Vapor Intrusion Analytical Testing Results
155 Chandler Street, Buffalo, NY
September 2017

	Guidance Values- Indoor Air															
Parameter	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	SS-1 Sub-Slab	IA-1 Indoor Air	SS-2 Sub-Slab	IA-2 Indoor Air	SS-3 Sub-Slab	IA-3 Indoor Air	SS-4 Sub-Slab	IA-4 Indoor Air	SS-5 Sub-Slab	IA-5 Indoor Air	SS-6 Sub-Slab	IA-6 Indoor Air	OA001 Outdoor Air	Table C2 Outdoor Air Guidance Values
1,1,1-Trichloroethane	20.6		ND	ND	ND	ND	ND	ND	62	ND	Sample destroyed due to construction activity	ND	ND	ND	ND	2.6
1,1-Dichloroethene	<1.4		ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	<1.4
1,2,4-Trichlorobenzene	<6.8		ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	0.98	<6.4
1,2,4-Trimethylbenzene	9.5		8.4 J	0.88	5.8 J	0.98	47	1.5	7.1	5.9		4.7	5.6 J	75	ND	5.8
1,3,5-Trimethylbenzene	3.7		1.9 J	ND	3.0 J	ND	12	0.54 J	3.2 J	1.9		1.2	1.7 J	31	ND	2.7
2,2,4-trimethylpentane	NV		ND	ND	ND	ND	ND	ND	ND	ND		3.1	ND	ND	0.98	NV
4-ethyltoluene	3.6		2.1 J	ND	3.2 J	ND	13	ND	2.9 J	1.4		1	1.9 J	34	ND	3.0
Acetone	98.9		52	28	230	33	380	49	180	150		40	390	290	30	43.7
Benzene	9.4		4.9	1.1	18	0.89	23	2.9	80	6.3		9.3	110	6.1	1.1	6.6
Bromomethane	<1.7		ND	ND	ND	ND	ND	ND	ND	ND		ND	1.2 J	ND	ND	<1.6
Carbon disulfide	4.2		0.81	ND	4.9	ND	9.0	ND	6.7	ND		ND	25	ND	ND	3.7
Carbon tetrachloride	<1.3		2.0	0.63	ND	0.69	41	0.63	23	0.57		ND	1.4 J	0.63	0.63	0.7
Chloroethane	<1.1		ND	ND	ND	ND	ND	ND	ND	ND		ND	1.1 J	ND	ND	<1.2
Chloroform	1.1		2.5	ND	0.78	ND	35	ND	28	ND		ND	3.5 J	ND	ND	0.6
Chloromethane	3.7		ND	1.3	0.33	1.3	ND	1.4	ND	1.8		1.3	5.9	1.9	1.7	3.7
cis-1,2-Dichloroethene	<1.9		ND	ND	ND	ND	ND	ND	3.3 J	ND		ND	ND	ND	ND	<1.8
Cyclohexane	NV		5.9	ND	39	ND	48	0.52	210	1.4		1.9	610	1.9	0.55	NV
Ethylbenzene	5.7		5.0 J	1.3	7.7 J	2.8	34	2	9.8	2.8		2.3	8.9 J	2.3	1.3	3.5
Freon 11	NV		1.2	1.8	1.6	1.6	1.7	1.5	2.0 J	1.6		1.5	1.5 J	1.5	1.6	NV
Freon 113	NV		ND	ND	ND	ND	ND	ND	0.84 J	ND		ND	ND	ND	ND	NV
Freon 12	NV		2.5	3	2.7	2.9	2.7	2.7	3.0 J	2.6		2.7	2.5 J	2.6	2.7	NV
Heptane	NV		6.8	1.2	78	ND	75	1	410	2.9		3.7	690	3.9	0.98	NV
Hexane	NV		17	2.9	79	14	60	36	560	31		7.4	680	220	6.8	6.4
Isopropyl alcohol	NV		3.9	7.4	4.1	2.2	19	1.1	ND	13		1.9	ND	17	4.9	NV
m&p-Xylene	22.2		18.0 J	4.9	17	3.6	140	7.5	27	12		9.6	27	11	4.7	12.8
Methyl Ethyl Ketone	12		3	2.2	11	4.7	51	23	8.5	47		2.4	18	2	2.2	11.3
Methyl Isobutyl Ketone	NV		ND	0.53 J	ND	0.57 J	ND	ND	ND	ND		ND	ND	ND	ND	NV
Methylene chloride	10	60	2	3	2.9	2.2	2.4	1.6	2.6 J	150		2.5	2.4 J	3.9	1.8	6.1
o-Xylene	7.9		7.1 J	2	6.3	3.6	48	3	8.6	3.9		3.3	9.1 J	6.1	2	4.6
Styrene	1.9		0.51 J	ND	ND	ND	0.47 J	ND	0.77 J	0.81		0.89	ND	0.77	ND	1.3
Tetrachloroethylene	15.9	30	1.3 J	0.75	0.95 J	1	9.7 J	1.2	340	0.95		0.68	ND	0.81	ND	6.5
Tetrahydrofuran	NV		0.53	1.3	0.94	4.7	3.7	40	0.8 J	91		0.85	ND	0.71	1.1	NV
Toluene	43		35	6.2	31	6.3	170	12	110	15		22	110	31	3.9	33.7
trans-1,2-Dichloroethene	NV		ND	ND	ND	ND	ND	ND	2.6 J	ND		ND	ND	ND	ND	NV
Trichloroethene	4.2	2	ND	ND	2.2 J	0.38	730	0.27	3,500	1.7		ND	ND	0.64	ND	1.3
Vinyl chloride	<1.9		ND	ND	ND	ND	ND	ND	ND	ND		ND	0.66 J	ND	ND	<1.8

Notes:

1. Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report in Attachment C of the Final Engineering Report.
2. Analytical testing for VOCs via TO-15 completed by Centek Laboratories in Syracuse, New York.
3. Results present in ug/m^3 or microgram per cubic meter.
4. Samples were collected during a 24-hour sample duration.
5. 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
6. Air Guidance Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by New York State Department of Health.
7. NYSDOH does not currently have standards, criteria or guidance values for concentrations in sub-slab vapor. The detection of VOCs in sub-slab vapor samples does not necessarily indicate soil vapor intrusion is occurring or action should be taken to address exposures.
8. Grey shaded values represent exceedance of table C2 guidance values for Indoor Air; green shaded values represent exceedance of table C2 guidance values for Outdoor Air ; yellow shaded values represent exceedance of NYSDOH Air Guidance Values
9. Qualifiers: J = result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
10. ND = Non Detect; NV = No Value

Table 2
Soil Vapor Intrusion Decision Matrices
155 Chandler Street, Buffalo, NY

Sample ID	Parameter	Sub-slab Vapor Concentrations (ug/m^3)	Indoor Air Concentration (ug/m^3)	Recommended Action
Matrix A Trichloroethene (TCE); cis-1,2-dichloroethene (cis-DCE); 1,1-dichloroethene (1,1-DCE); Carbon Tetrachloride				
SS-1/IA-1	TCE	ND	ND	No further action
	cis-DCE	ND	ND	No further action
	1,1-DCE	ND	ND	No further action
	Carbon Tetrachloride	2	0.63	No further action
SS-2/IA-2	TCE	2.2 J	0.38	No further action
	cis-DCE	ND	ND	No further action
	1,1-DCE	ND	ND	No further action
	Carbon Tetrachloride	ND	0.69	No further action
SS-3/IA-3	TCE	730	0.27	Mitigate
	cis-DCE	ND	ND	No further action
	1,1-DCE	ND	ND	No further action
	Carbon Tetrachloride	41	0.63	Monitor
SS-4/IA-4	TCE	3500	1.7	Mitigate
	cis-DCE	3.3 J	ND	No further action
	1,1-DCE	ND	ND	No further action
	Carbon Tetrachloride	23	0.57	Monitor
SS-5/IA-5	TCE	Sample destroyed	ND	No further action
	cis-DCE		ND	No further action
	1,1-DCE		ND	No further action
	Carbon Tetrachloride		ND	No further action
SS-6/IA-6	TCE	ND	0.64	No further action
	cis-DCE	ND	ND	No further action
	1,1-DCE	ND	ND	No further action
	Carbon Tetrachloride	1.4 J	0.63	No further action
Matrix B Methylene Chloride (MC); 1,1,1- Trichloroethane (1,1,1-TCA); Tetrachloroethylene (PCE)				
SS-1/IA-1	MC	2	3	No further action
	1,1,1-TCA	ND	ND	No further action
	PCE	1.3	0.75	No further action
SS-2/IA-2	MC	2.9	2.2	No further action
	1,1,1-TCA	ND	ND	No further action
	PCE	0.95	1.0	No further action
SS-3/IA-3	MC	2.4	1.6	No further action
	1,1,1-TCA	ND	ND	No further action
	PCE	9.7	1.2	No further action
SS-4/IA-4	MC	2.6 J	150	Identify source(s) and Resample or Mitigate
	1,1,1-TCA	62	ND	No further action
	PCE	340	0.95	No further action
SS-5/IA-5	MC	Sample destroyed	2.5	No further action
	1,1,1-TCA		ND	No further action
	PCE		0.68	No further action
SS-6/IA-6	MC	2.4 J	3.9	No further action
	1,1,1-TCA	ND	ND	No further action
	PCE	ND	0.81	No further action
Matrix C Vinyl Chloride (VC)				
SS-1/IA-1	VC	ND	ND	No further action
SS-2/IA-2	VC	ND	ND	No further action
SS-3/IA-3	VC	ND	ND	No further action
SS-4/IA-4	VC	ND	ND	No further action
SS-5/IA-5	VC	Sample destroyed	ND	No further action
SS-6/IA-6	VC	0.66J	ND	No further action

Table 3
Indoor Air Analytical Testing Results
155 & 157 Chandler Street, Buffalo, NY
December 2018 through December 2021

	Guidance Values - Indoor Air		IA-1					IA-2				IA-3					IA-4					
LOCATION	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-1 Indoor Air	IA-1 (121219) Indoor Air	IA-1 (121219) Duplicate Indoor Air	IA-1 (121120) Indoor Air	IA-1 (120221) Indoor Air	IA-2 Indoor Air	IA-2 (121219) Indoor Air	IA-2 (121120) Indoor Air	IA-2 (120221) Indoor Air	IA-3 Indoor Air	IA-3 (121219) Indoor Air	IA-3 (121120) Indoor Air	IA-3 (121120) Duplicate Indoor Air	IA-3 (120221) Indoor Air	IA-4 Indoor Air	IA-4 Duplicate Indoor Air	IA-4 (121219) Indoor Air	IA-4 (121120) Indoor Air	IA-4 (120221) Indoor Air	IA-4 (120221) Duplicate Indoor Air
SAMPLING DATE			12/18/2018	12/12/2019	12/12/2019	12/11/2020	12/2/2021	12/18/2018	12/12/2019	12/11/2020	12/2/2021	12/18/2018	12/12/2019	12/11/2020	12/11/2020	12/2/2021	12/18/2018	12/18/2018	12/12/2019	12/11/2020	12/2/2021	12/2/2021
LAB SAMPLE ID			L1852191-06	L1959919-06	L1959919-07	L2055692-06	L2166417-09	L1852191-07	L1959919-08	L2055692-07	L2166417-10	L1852191-02	L1959919-04	L2055692-03	L2055692-04	L2166417-04	L1852191-03	L1852191-04	L1959919-03	L2055692-02	L2166417-02	L2166417-03
Volatile Organics in Air (ug/m³)																						
1,1,1-Trichloroethane*	20.6	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene*	<1.4	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	<6.8	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	9.5	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	<0.9	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-trimethylpentane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	98.9	NV	14.4	11.9	11.8 J	8.46 J	15.7	14.6	12.4	7.98 J	17.6	21.1	13.3	8.29 J	11.7 J	113	24.7	24	8.20	9.93 J	195	194
Benzene	9.4	NV	ND	0.744	0.824 J	0.684	ND	ND	0.764	0.687	ND	ND	0.652	ND	0.642	0.85	ND	ND	0.684	ND	ND	ND
Carbon disulfide	4.2	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.24	1.35	1.36	1.94	1.42	ND	ND	ND	ND	ND	ND
Carbon tetrachloride*	<1.3	NV	0.591	0.579	0.572 J	0.522	0.579	0.566	0.598	0.516	0.554	0.541	0.491	0.428	0.453	0.434	0.711	0.723	0.516	0.384	0.472	0.491
Chloroform	1.1	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.66
Chloromethane	3.7	NV	1.25	1.19	1.16 J	1.07	1.16	1.14	1.22	1.07	1.14	2.24	1.18	1.02	1.06	1.13	2.95	1.13	1.11	1.04	1.14	1.21
cis-1,2-Dichloroethene*	<1.9	NV	ND	ND	ND	ND	ND	ND	ND	0.186	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	16.5	NV	1.63	2.59	2.59 J	2.20	2.78	1.68	2.70	2.12	2.82	2.4	2.58	2.02	2.06	2.51	1.78	1.66	2.57	2.04	2.61	2.73
Ethanol	210	NV	155	298	352 J	230	176	207	224	215	198	307	931	590	803	5310 R1	148	144	392	1,330	100	96.3
Ethyl acetate	5.4	NV	ND	6.85	7.03 J	6.45	ND	ND	9.30	7.24	ND	26.5	231	186	284	140	3.29	3.33	60.5	12.4	ND	ND
Ethylbenzene	5.7	NV	2.49	0.869	0.873 J	1.02	ND	2.32	0.877	1.33	ND	2.76	ND	ND	ND	ND	2.79	2.82	ND	ND	ND	ND
Heptane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	2.49	2.7
Hexane (n-Hexane)	NV	NV	ND	0.888	0.962 J	1.34	ND	ND	1.01	1.32	ND	0.811	ND	ND	ND	0.754	1.26	1.32	ND	0.839	0.934	0.906
Isopropanol	NV	NV	11.9	3.52	3.39 J	6.02	20.5	11.3	3.17	5.60	32	32.4	2.65	6.83	9.88	578 R1	99.6	97.8	2.48	7.18	1720 R1	1730 R1
m&p-Xylene	22.2	NV	9.56	3.36	3.33 J	4.34	ND	9.38	3.32	4.18	2.21	10.6	1.74	2.30	2.82	2.45	10.6	10.3	ND	2.39	ND	ND
Methyl Ethyl Ketone (2-Butanone)	12	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.28	ND	1.58	ND	ND	ND	1.64	ND	ND	ND
Methyl Isobutyl Ketone (4-Methyl-2-	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	10	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	7.9	NV	3.12	1.22	1.29 J	1.83	ND	3.09	1.22	1.47	0.943	2.86	ND	ND	0.947	0.951	3.14	3.24	ND	ND	ND	ND
Styrene	1.9	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	15.9	30	0.753	0.651	0.387 J	0.427	ND	0.685	0.346	1.00	ND	0.332	0.488	ND	ND	ND	0.922	0.882	ND	0.156	ND	ND
Tetrahydrofuran	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	3.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	43	NV	4.07	1.53	1.76 J	1.49	ND	1.21	1.57	1.43	1.07	1.16	1.38	1.41	1.58	0.946	4.26	5.8	1.30	1.15	1.23	1.21
trans-1,2-Dichloroethene	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.932	ND	ND
Trichloroethene*	4.2	2	0.849	0.833	0.844 J	0.801	0.973	0.736	0.742	0.790	0.865	0.489	ND	ND	0.145	0.118	1.34	1.37	ND	0.478	0.161	0.161
Trichlorofluoromethane	18.1	NV	1.33	1.25	1.29 J	1.19	1.33	1.3	1.29	1.15	1.33	1.12	1.27	1.15	ND	1.33	1.28	1.25	1.25	ND	1.24	1.28
Vinyl chloride*	<1.9	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

			IA-5								IA-6											IA-7	IA-8	OA-1				
LOCATION	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-5 Indoor Air	IA-5 (0219) Indoor Air	IA-5 (0219) Duplicate Indoor Air	IA-5 (0619) Indoor Air	IA-5 (0619) Duplicate Indoor Air	IA-5 (121219) Indoor Air	IA-5 (121120) Indoor Air	IA-5 (120221) Indoor Air	IA-6 Indoor Air	IA-6 (121219) Indoor Air	IA-6 (022020) Indoor Air	IA-6 (022020) Duplicate Indoor Air	IA-6 (121120) Indoor Air	IA-6 (021821) Indoor Air	IA-6 (021821) Duplicate Indoor Air	IA-6 (033121) Indoor Air	IA-6 (033121) Duplicate Indoor Air	IA-6 (061121) Indoor Air	IA-6 (120221) Indoor Air	IA-7 (120221) Indoor Air	IA-8 (120221) Indoor Air	OA-1 Outdoor Air	OA-1 (121219) Outdoor Air	OA-1 (121120) Outdoor Air	OA-1 (120221) Outdoor Air	Table C2 Outdoor Air Guidance Values
SAMPLING DATE			12/18/2018	2/13/2019	2/13/2019	6/21/2019	6/21/2019	12/12/2019	12/11/2020	12/2/2021	12/18/2018	12/12/2019	2/20/2020	2/20/2020	12/11/2020	2/18/2021	2/18/2021	3/31/2021	3/31/2021	6/11/2021	12/2/2021	12/2/2021	12/2/2021	12/18/2018	12/12/2019	12/11/2020	12/2/2021	
LAB SAMPLE ID			L1852191-01	L1905849-01	L1905849-02	L1927357-01	L1927357-02	L1959919-02	L2055692-01	L2166417-01	L1852191-05	L1959919-05	L2007739-01	L2007739-02	L2055692-05	L2108109-01	L2108109-02	L2108109-01	L2108109-01	L2132969-01	L2166417-08	L2166417-06	L2166417-07	L1852191-08	L1959919-01	L2055692-08	L2166417-05	
Volatile Organics in Air (ug/m³)																												
1,1,1-Trichloroethane*	20.6	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6
1,1-Dichloroethene*	<1.4	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.4
1,2,4-Trichlorobenzene	<6.8	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.98	ND	ND	ND	<6.4
1,2,4-Trimethylbenzene	9.5	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	1.24	ND	ND	1.20	ND	ND	ND	ND	1.07	ND	ND	ND	ND	ND	5.8
1,2-Dichloroethane	<0.9	NV	0.163	0.127	0.139	ND	ND	ND	ND	ND	0.103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.8
2,2,4-trimethylpentane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.943	1.36	1.29	ND	ND	1.44	1.47	ND	ND	ND	ND	NV
Acetone	98.9	NV	46.3	33.5 J	36.3 J	38 J	40.4 J	9.45	6.29 J	316	5.3	8.69	165	187	7.63 J	3.99 J	2.85 J	21.3 J	20.3 J	11.3	20.1	152	123	4.39	3.44	4.16 J	7.79	43.7
Benzene	9.4	NV	ND	ND	ND	ND	0.866	0.741	ND	0.872	ND	0.655	ND	ND	ND	1.12	1.13	1.30	1.25	ND	ND	1.34	1.41	ND	ND	ND	ND	6.6
Carbon disulfide	4.2	NV	ND	ND	ND	0.673	0.704	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7
Carbon tetrachloride*	<1.3	NV	2.31	1.09	1.05	0.591	0.598	0.547	0.415	0.591	0.598	2.26	0.434	0.453	0.528	0.434	0.465	0.528	0.535	0.711	0.484	1.01	0.9	0.459	0.484	0.403	0.528	0.7
Chloroform	1.1	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Chloromethane	3.7	NV	1.13	0.96	1.01	1.43	1.40	1.23	1.01	1.18	1.06	1.09	0.956	0.921	1.01	0.898	0.944	1.08	1.08	1.20	1.12	1.32	1.24	1.13	1.11	0.952	1.14	3.7
cis-1,2-Dichloroethene*	<1.9	NV	0.163	0.127	0.139	ND	ND	ND	ND	0.266	0.103	0.270	0.095	0.119	0.079	ND	ND	0.095	0.091	ND	ND	0.412	0.369	ND	ND	ND	ND	<1.8
Cyclohexane	NV	NV	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.688	1.16	1.13	ND	ND	1.48	1.57	ND	ND	ND	ND	NV
Dichlorodifluoromethane	16.5	NV	1.61	2.44	2.49	2.69	2.53	2.63	1.93	2.49	2.49	2.66	1.86	1.93	2.08	1.99	2.02	2.12	2.16	2.47	2.53	2.64	2.71	1.39	2.55	1.89	2.68	8.1
Ethanol	210	NV	910	298	315	675	667	63.3	3,050	143	40.1	194	111	129	228	105	104	194	220	41.6	117	874	820	ND	ND	ND	13.8	57
Ethyl acetate	5.4	NV	15.9	3.2	3.28	5.19	6.45	ND	12.8	ND	ND	2.01	ND	ND	ND	2.79	2.56	ND	ND	ND	ND	3.03	2.63	ND	ND	ND	ND	1.5
Ethylbenzene	5.7	NV	4.73	2	2.03	8.38	8.69	0.986	ND	ND	ND	ND	5.52	5.86	ND	1.62	1.73	1.15	1.09	ND	ND	1.26	1.15	ND	ND	ND	ND	3.5
Heptane	NV	NV	ND	ND	ND	0.906	1.22	ND	ND	2.11	ND	ND	ND	ND	ND	0.971	1.08	2.45	2.28	ND	ND	5	2.73	ND	ND	ND	ND	NV
Hexane (n-Hexane)	NV	NV	6.87	2.55	2.81	2.49	4.79	0.807	ND	1.66	ND	ND	ND	ND	0.733	3.30	3.41	5.08	4.79	ND	0.959	5.64	5.85	ND	ND	0.705	1.54	6.4
Isopropanol	NV	NV	873	215	228	1230	1170	4.77	4.42	2370 R1	ND	9.24	5.21	5.19	2.11	1.83 J	1.93 J	79.2	79.2	28.8	80.1	902 R1	733 R1	ND	ND	ND	6.64	NV
m&p-Xylene	22.2	NV	19	8.17	8.17	36.7	36.2	3.82	1.82	1.89	ND	ND	18.0	19.3	ND	6.91	7.60	4.39	4.26	ND	ND	5.04	4.6	ND	ND	ND	ND	12.8
Methyl Ethyl Ketone (2-Butanone)	12	NV	4.63	5.66	6.16	2.56	2.70	ND	ND	1.68	ND	1.62	ND	ND	ND	1.87	1.67	1.67	1.58	ND	ND	ND	ND	ND	ND	ND	ND	11.3
Methyl Isobutyl Ketone (4-Methyl-2-	NV	NV	19.8	4.51	4.39	5.12	5.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Methylene chloride	10	60	ND	ND	ND	ND	2.01	ND	ND	2.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.72	ND	ND	ND	ND	4.24	6.1
o-Xylene	7.9	NV	5.56	2.4	2.44	12.2	12.2	1.20	ND	ND	ND	ND	5.21	5.60	ND	2.08	2.30	1.49	1.45	ND	ND	1.73	1.6	ND	ND	ND	ND	4.6
Styrene	1.9	NV	0.932	ND	ND	2.18	2.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3
Tetrachloroethene	15.9	30	1.3	0.353	0.319	0.203	0.292	0.271	0.183	ND	0.529	0.448	0.305	0.292	0.285	0.170	0.210	0.353	0.319	ND	ND	ND	ND	ND	ND	ND	ND	6.5
Tetrahydrofuran	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.86	1.55	ND	ND	ND	ND	ND	ND	ND	ND	NV
Toluene	43	NV	7.65	5.35	5.39	5.39	8.63	2.58	1.01	2.46	ND	1.82	1.17	1.06	1.25	3.72	4.07	6.93	6.59	1.01	1.26	10.8	7.5	ND	0.855	0.806	1.46	33.7
trans-1,2-Dichloroethene	NV	NV	1.44	2.36	2.5	6.15	5.95	1.10	1.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Trichloroethene*	4.2	2	9.46	4.54	4.58	0.903	0.833	0.688	0.715	0.505	0.924	12.0	1.34	1.43	2.96	2.96	2.93	14.0	13.6	1.31	1.73	17.5	18	ND	ND	ND	0.124	1.3
Trichlorofluoromethane	18.1	NV	1.25	ND	ND	1.41	1.49	1.32	ND	1.35	1.26	1.31	ND	ND	1.14	ND	ND	1.15	ND	1.31	1.28	1.44	1.37	1.16	1.24	ND	1.34	4.3
Vinyl chloride*	<1.9	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV

Notes:

1. Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report. All NYSDOH Matrix analytes included in this table.
2. Analytical testing for VOCs via TO-15 completed by Alpha Laboratories. * = samples analyzed for volatile organics in air by SIM.
3. Results present in ug/m³ or microgram per cubic meter.
4. Samples were collected during a 8-hour sample duration.
5. 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
6. Air Guideline Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by NYSDOH. Updated September 2013 and August 2015.
7. No shading represents the samples most previously collected during the 2018-2020 PRR Reporting Periods.
8. Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represent exceedance of NYSDOH Air Guideline Values.
9. ND = Non Detect; NV = No Value; R1 = Analytical results are from sample re-analysis.
10. **Bolded** = NYSDOH Matrix analytes.

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