SOIL VAPOR INTRUSION EVALUATION WORK PLAN

FORMER GENERAL CIRCUITS INC.
95 MT. READ BLVD.
ROCHESTER, NEW YORK

NYSDEC SITE #828085

Prepared for: 95 Mt. Read LLC.
Rochester, New York

Prepared by: Day Environmental, Inc.
1563 Lyell Ave
Rochester, New York 14606

Project No.: 3681R-05

Date: January 13, ~~2015~~ $\boxed{2016}$

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5353 I F: (585) 226-8139
www.dec.ny.gov

January 27, 2016

Mr. Thomas Maguire
770 Rock Beach Road
Rochester, New York 14617

Dear Mr. Maguire:

Subject: Former General Circuits Inc Property Site #C828085
Soil Vapor Intrusion Evaluation Work Plan; January 13, 2016
95 Mount Read Boulevard, Rochester, New York

The New York State Departments of Environmental Conservation (NYSDEC) and Health, collectively referred to as the Departments, have completed their review of the document entitled *Soil Vapor Intrusion Evaluation Work Plan* (the Work Plan) dated January 13, 2016 for the Former General Circuits Inc. Property site located in the City of Rochester. In accordance with 6 NYCRR Part 375-1.6, the Departments have determined that the Work Plan, with modifications, substantially addresses the requirements of the Brownfield Cleanup Agreement (BCA). The modifications are outlined as follows:

1. The date on the cover is corrected to January 13, 2016 (not 2015).

2. The analytical laboratory will also provide an ASP Category B format data deliverable which will be used to prepare a Data Usability Summary Report. These documents will be included electronically in the Report.

3. A work plan to design and implement actions to address actual and potential exposures related to soil vapor intrusion will be submitted within 45 days of NYSDEC's acceptance of the Report unless an alternate schedule is approved by NYSDEC.

With the understanding that the above noted modifications are agreed to, the Work Plan is hereby approved. If you choose not to accept these modifications, you are required to notify this office within 20 days after receipt of this letter. In this event, I suggest a meeting be scheduled to discuss your concerns prior to the end of this 20-day period.

Per the approved schedule in the Work Plan, field activities are scheduled to begin by March 14, 2016. Please notify me at least 7 days in advance of the start of field activities.

If you have questions or concerns on this matter, please contact me at 585-226-5357.

Sincerely,

Frank Sowers

Frank Sowers, P.E.
Environmental Engineer 2

ec:

B. Kline	B. Schilling
B. Boyd	J. Frazer
J. Mahoney	P. Sylvestri
D. Maguire	M. Cruden
W. Silkworth	J. Deming

Table of Contents

Page No.

List of Figures

List of Tables

1.0 INTRODUCTION

Day Environmental, Inc. (DAY) prepared this Corrective Measures/Pre-Design Investigation Work Plan (the Work Plan) on behalf of 95 Mt. Read LLC. The Work Plan describes activities to characterize and evaluate the existing engineering controls, current indoor air quality, current sub-slab soil vapor conditions, and the potential for intrusion of VOCs into the structure located at the Former General Circuits site located at 95 Mt. Read Blvd, Rochester, New York (Site). A Project Locus Map is included as Figure 1, and a Site Plan is presented as Figure 2.

1.1 Background

The original portion of the building was constructed in the 1920s and the Site was owned/operated by Rochester Lithograph Corporation until the early 1960s. General Circuits, Inc. owned/operated the Site from the early 1960s until 1990. General Circuits, Inc. closed the facility in 1991 due to bankruptcy. Shortly thereafter, the property was transferred to Maguire Properties, Inc. who owned the Site until 2005, at which time it was transferred to the current owner, 95 Mt. Read Blvd., LLC. The Site is currently used for commercial and light industrial purposes, and it is anticipated that the Site will remain in use for commercial and light industrial purposes for the foreseeable future.

The IRM Design Plan and a Feasibility Study (FS) were completed for the Site under an Order-On-Consent with the NYSDEC. The NYSDEC approved the revised FS dated January 2005, and subsequently issued a Record of Decision (ROD) dated March 2005. The remedial work identified in the IRM Design Plan and the ROD is being conducted under a BCA between 95 Mt. Read Blvd, LLC. and the NYSDEC.

1.2 Nature and Extent of Contaminants of Concern to Indoor Air Quality

Based upon the findings presented in the FS Report and subsequent groundwater and indoor air sample results, chlorinated VOCs were identified as contaminants of concern (COCs) within the soil vapor. The chlorinated VOCs at the Site generally consist of perchloroethene (PCE) and trichloroethene (TCE), and their breakdown products 1,2-dichloroethene (DCE) and vinyl chloride (VC). The data from previously performed groundwater and soil sampling studies, together with the air sampling results, indicated that there was the potential for soil vapor intrusion to be adversely impacting indoor air quality in selected areas of the building. Two Areas of Concern (AOCs) were delineated for additional monitoring and/or mitigation: AOC #1 consists of the first floor (ground) level indoor spaces beneath which elevated VOCs were detected; and AOC #2 consists of the unoccupied basement that is used for storage, and houses the Site's remedial groundwater treatment system. Refer to Figure 2 for delineation of the AOC #1 and AOC #2 areas.

In comparing the sub-slab and indoor air test results, indoor air concentrations of three compounds (PCE, TCE and chloroform) were identified as potentially influenced by soil vapor intrusion to levels above applicable indoor air target concentrations within AOC #1 and/or AOC #2. Concentrations of these three compounds in sub-slab vapor samples within AOC #1 ranged from 8 to 190,000 micrograms per cubic meter ($\mu g/m^3$) PCE; non-detect to 360,000 $\mu g/m^3$ TCE; and non-detect to 2,000 $\mu g/m^3$ chloroform. Results of AOC #1 indoor air sampling conducted from 2005 through 2015 indicated VOC concentrations of non-detect to 1,440 $\mu g/m^3$ PCE (the latter impacted by tenant operations); non-detect to 15 $\mu g/m^3$ TCE; and non-detect to 5.1 $\mu g/m^3$ chloroform. Refer to Table 1 for the measured concentrations of VOCs in the indoor air samples and sub-slab vapor samples collected in March 2004 and Table 2 for measured concentrations of VOCs in indoor air and background samples collected between March 2004 and December 2015.

Due to the proximity of groundwater to the basement's slab, sub-slab vapor samples have not been collected from AOC #2. Historical (1993) indoor air test results for this area referenced in the Site Risk Assessment indicate that low concentrations of VOC's were detected near the open sump, including 0.1 ppm TCE. PCE and chloroform were not reported as being detected at that time. Results of more recent AOC #2 indoor air sampling conducted from 2007 through 2015 indicated VOC concentrations of 24 $\mu g/m^3$ to 1,070 $\mu g/m^3$ PCE, 11 $\mu g/m^3$ to 166 $\mu g/m^3$ TCE, and non-detect to 1.5 $\mu g/m^3$ chloroform, although it should be noted that these results may have been impacted by ongoing operation of the remedial groundwater treatment system located in this area. Refer to Table 2 for measured concentrations of VOCs in indoor air and background samples collected between March 2004 and December 2015.

1.3 Existing Vapor Mitigation Controls

Engineering controls to mitigate potential VOC vapor intrusion at the Site include: (i) IRM engineering controls to address indoor air quality within the building (AOC #1); and (ii) installation of a vapor mitigation system in the basement (AOC #2), as required under the ROD. The existing vapor mitigation controls include a sub-slab depressurization system that became operational in January 2005, as well as supplemental controls (indoor air filtration units). Activities completed under the ROD include installation of a ventilation system for the groundwater extraction and treatment system, including the basement floor trench and sumps.

1.3.1 AOC #1

Initially, mitigation of potential soil vapor intrusion within AOC #1 was to be provided by a sub-slab depressurization system (SSDS). When it later became apparent that the soil matrix immediately beneath portions of the building's slab limited the effectiveness of the SSDS, supplemental controls were added in the form of indoor air carbon filtration units to augment the SSDS in select areas of AOC #1. Completion of the above-mentioned activities included:

- Installation of six independent SSDS points;
- Installation of four sub-slab vacuum monitoring points;
- Installation of two Electrocorp I6500A air filtration units, containing approximately 160 pounds (lbs) of activated carbon per unit;

1.3.2 AOC #2

Mitigation of the indoor air within AOC #2, which is an unoccupied space, was completed in association with the groundwater extraction and treatment system installed under the ROD, for which a ventilation system and carbon filtration units were installed to simultaneously address off-gassing of VOC's from groundwater in the treatment system as well as potential soil vapor intrusion occurring in the basement. Completion of the above-mentioned activities included:

- Installation of two AllerAir 5000D air filtration units, containing approximately 22 lbs of activated carbon per unit;
- Installation of three AllerAir 6000DX air filtration units, containing approximately 36 lbs of activated carbon per unit;
- Installation of sump, trench and groundwater treatment tank covers; and
- Installation of a ventilation system to provide suction (air removal and negative pressure relative to indoor air space) within the covered sumps, trench and appropriate groundwater treatment tanks.

1.4 Applicable Project Standards, Criteria and Guidance

Subsequent to installation of the vapor mitigation controls described in Section 1.3, the NYSDOH revised and lowered the indoor air guideline concentrations for PCE and TCE. These lower standards are now being applied to the Site, and NYSDEC/NYSDOH have requested additional site characterization (beyond the previously identified AOC's), to determine the need for additional vapor mitigation controls. The requirements, applicable standards, criteria and guidance documents that will be used for this soil vapor intrusion investigation are outlined below:

- Guidelines referenced in NYSDEC document titled "DER-10 Technical Guidance for Site Investigation and Remediation", dated May 2010 (DER-10).

- Guidelines referenced in the New York State Department of Health (NYSDOH) document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 (Guidance Document).

:

- Bureau of Toxic Substance Assessment NYSDOH Tetrachloroethene (PERC) In Indoor and Outdoor Air, September 2013 Fact Sheet

- Bureau of Toxic Substance Assessment NYSDOH Trichloroethene (TCE) In Indoor and Outdoor Air, August 2015 Fact Sheet

1.5 Purpose

The purpose of the work presented herein is to characterize the current extent and/or potential for soil vapor intrusion to be adversely impacting indoor air quality at the Site, and to identify area(s) in which corrective measures may be warranted. This will be accomplished through completion of the soil vapor intrusion investigation activities detailed herein, which will include completion of indoor air and sub-slab soil vapor sampling activities, review and PID-monitoring of site structures, and testing of sub-slab air pressures relative to indoor air pressures to characterize the radius of influence being provided by the six current SSDS suction points.

2.0 SCOPE OF WORK

Based on analytical laboratory sample results obtained to date, the vapor intrusion mitigation measures currently used at the Site are not consistently achieving the applicable NYSDOH air guidance values. To address this concern the following scope of work will be completed to evaluate the effectiveness of the existing vapor mitigation controls, further characterize indoor air quality and the extent of potential vapor intrusion within the building, and to provide preliminary design data for use in evaluating corrective measures, as necessary.

2.1 SSDS Vacuum Field Evaluation

DAY will conduct on-site testing to determine the influence of each existing SSDS vacuum point. Specifically, pressure (vacuum) monitoring will be completed to evaluate the apparent radius of influence of each SSDS extraction point within the building. Vacuum monitoring will be completed by drilling small holes (1/4 to 1/2 inch in diameter) through the floor (e.g., concrete slab, wood plank, etc.) at multiple locations within the building to serve as vacuum test points. Test locations will be determined in the field based on tenant operations and equipment layout, concrete integrity, proximity to suspected subgrade interferences, and ongoing evaluation of data obtained during the vacuum testing process. It is anticipated that a minimum of 4 vacuum test points will be completed in each cardinal direction for each of the six SSDS extraction points, with additional points being completed to the extent practical to delineate the vacuum field equal to, or greater than, 0.002 inches of water. A vacuum gauge will be used to measure vacuum pressure at the extraction point, and a TSI 9565 VelociCalc multi-function air velocity meter, or similar, will be used to measure air flow/velocity and differential (vacuum) pressure at the extraction point at the time of vacuum field evaluation.

The proposed vacuum monitoring activities do not require disturbance of subsurface soils, and thus exposure concerns are limited to possible adverse impacts upon indoor air quality. These potential impacts will be mitigated as follows:

- Drilling activities: Vacuum filed test point holes will be covered and sealed air-tight with duct tape immediately following drilling penetration through the concrete slab, and will remain covered and sealed except as necessary for testing purposes.

- Health and Safety Plan (HASP) and Community Air Monitoring Program (CAMP): Vacuum testing activities will utilize applicable monitoring procedures and protocols outlined in the Site's NYSDEC-approved HASP and CAMP documents, dated February 2010, as have been used for prior remedial Site characterization and testing activities.

- Closure: Once the vacuum field testing activities are completed, the test point holes will be filled and sealed. It is anticipated that the majority of these test points will not be used again following completion of the testing activities, and these holes will be permanently sealed with non-shrink mortar or grout. Select locations that may potentially be used again as a part of the final SSDS re-design activities will be temporarily sealed (air-tight) with plumbers putty or equal to facilitate future reuse of these holes.

2.2 Inspection of Existing SSDS Vapor Extraction Points

Six SSDS points (designated V-1 through V-6, see Figure 2) within AOC #1 were installed in accordance with the IRM Design Plan dated July 2004 (Revised September 2004). Each SSDS extraction point consists of a suction void, a 6-inch diameter SDR-21 PVC riser vent pipe extending through the concrete floor and tenant space past the drop ceiling (if present), terminating in a junction with the suction side of an in-line fan. At those locations in which a drop ceiling was not present, the 6-inch diameter SDR-21 vent pipe extended to the roof trusses and terminated in a junction with the suction side of an in-line fan. Each SSDS extraction point in-line fan (i.e., Fantech model FR 160) is rated at approximately 45 cubic feet per minute (CFM) at a static pressure of 2-inches of water column. The discharge side of the inline fan is connected to 6-inch diameter corrugated aluminum flexible ducting that interconnects the fan discharge to an existing, out-of-use roof penetration.

To ensure that the ducting and roof penetrations are not leaking or otherwise adversely impacting SSDS effectiveness, visual inspection and parts per billion RAE photoionization detector (ppbRAE) screening will be conducted over the entire length of the ductwork. Identified air leaks will be repaired and the leak area retested to verify that the repair was successful. Repairs may include the replacement of duct, duct fittings and seals; and/or relocation of the in-line fan.

2.3 Evaluation of Potential Vapor Intrusion Sources

Previous field screening results identified a block wall located between tenant spaces designated Room 2 and Room 3, as shown in Figure 2, as a potential source of soil vapor intrusion. Following this observation, sealing of the wall penetrations and cracks was completed to eliminate/reduce the potential for soil vapor intrusion at this location.

To further characterize this block wall, DAY will visually inspect the wall for penetrations and conduct additional screening with a ppbRAE. In addition to screening existing penetrations, if present, additional wall penetrations will be created to evaluate vertical and horizontal VOC concentration gradients within the wall. It is anticipated that up to six in-line penetrations in both the vertical and horizontal directions will be used to evaluate the void spaces within the concrete block wall. A similar evaluation will be conducted on other block walls that are identified as possible vapor intrusion sources during the building survey task (refer to Section 2.4) and/or common walls between the basement and the AOC#1 spaces.

To evaluate the potential vapor intrusion that may be occurring in AOC #1 from AOC #2, a site review will be completed to identify and evaluate existing penetrations and cracks interconnecting the basement and AOC #1 spaces, including ppbRAE screening to measure VOC concentration within the penetrations, and if warranted, smoke testing to confirm the direction of air flow between the basement and the AOC #1 space. [Note; the wastewater treatment system tanks, basement sumps and trench drain ventilation system associated with AOC #2 may be creating a net negative pressure in the basement relative to AOC #1.]

ppbRAE screening will also be conducted elsewhere throughout the building either prior to, and/or as an integral part of, the chemical inventory that will be completed prior to indoor air sampling (see Section 2.4). Floor cracks, floor-to-wall interfaces, wall penetrations, and other building features (including the elevator pit) will be screened in an attempt to identify other potential source locations(s) where soil vapor intrusion may be occurring.

2.4 Soil Vapor Intrusion Investigation Sampling

This soil vapor intrusion investigation will be completed in accordance with applicable provisions outlined by the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (NYSDOH Guidance Document), including Section 2.7 (Sampling Protocols) and Section 2.8 (Quality Assurance/Quality Control).

This task will initially include the completion of the NYSDOH Indoor Air Quality Questionnaire and Building Inventory. The Building Inventory will be limited to those areas containing an indoor air sample and those rooms adjacent to rooms containing an indoor air sample. In addition, screening for VOCs will be conducted using a ppb RAE PID.

After the building inspection and product inventory and pressure monitoring is completed, DAY will collect sub-slab vapor, indoor and background (i.e., outdoor) air samples from 21 Site locations, designated D-1 through D-21, shown in Figure 2. In addition, one background outdoor air sample will be collected. It should be noted that the sampling locations shown in Figure 2 are approximate. Although it is not anticipated that the field locations will be significantly different than those presented in Figure 2, the final locations may vary due to factors such as the presence of underground utilities, tenant equipment, etc.

Subslab vacuum pressures relative to indoor air will be tested at each sampling location. At sample locations in which it has been shown that a SSDS-induced vacuum does not exist, a coupled indoor air and sub-slab vapor sample will be collected. Sample locations in which it has been shown that a SSDS pressure field does exist will only have an indoor air sample collected.
In accordance with the NYSDOH Guidance Document, the soil vapor intrusion samples will be collected during the heating season (i.e., November 15 through March 31).

The final sample locations will be located using a GPS unit with sub-meter accuracy, tape measurements from permanent building features (i.e., support columns, load bearing wall intersections, etc.) or by a licensed surveyor. The sample locations will be located using the coordinate system (i.e., World Geodetic System of 1984 datum (WGS84) or NAD83) and reference datum (i.e., mean sea level) required by EQuIS.

Sub-slab vapor samples will be collected from a temporary probe installed through the slab-on-grade floors and into the subsurface. Specifically, a small diameter hole (minimum 0.25-inches in diameter) will be advanced through the building slab and approximately 2-inches into the subsurface. After drilling through the slab, the slab thickness will be measured and recorded. Thereafter food grade quality tubing (minimum 1/8-inch polyethylene, Teflon, nylon, etc.), slotted at the bottom, will be placed into the hole and extended above the floor surface. The annulus around the slotted tubing will be backfilled with sand, and a bentonite seal will be installed above the sand pack extending to the floor surface. Prior to collecting the sub-slab vapor samples, a minimum of three vapor probe volumes will be purged at a rate not to exceed 0.2 liters per minute (L/min) from each sub-slab air sampling locations. Purged air will be containerized for discharge outdoors to avoid impacting indoor air quality. Reusable equipment will be decontaminated, as required, by washing with an Alconox detergent solution and rinsing with distilled water.

For each sub-slab vapor sample, a corresponding indoor air sample will be collected in proximity to the sub-slab vapor sample location approximately three to five feet above the floor surface. The indoor air samples will be collected simultaneously with the sub-slab vapor samples. If possible, the air sampling event will be scheduled following a period of sustained employee inactivity to minimize the potential impact of employee operations upon the indoor air quality results.

The background outdoor air sample will be collected approximately three to five feet above the ground surface from an upwind exterior location, as determined at the time of sample collection. The outdoor air sample will be collected simultaneously with indoor air samples and the sub-slab vapor samples to evaluate the potential influence, if any, of outdoor air on indoor air quality. To aid in the interpretation of the sampling results, pertinent information that may interfere or affect the sampling event will be documented. Such information may include but, is not limited to, wind direction, the location of potential interferences (e.g., gasoline stations, factories, small engine use, etc.), weather conditions (e.g., precipitation and outdoor temperature), odors, readings from field instrumentation (e.g., PID), and significant activities in the vicinity (e.g., operation of heavy equipment).

Sub-slab vapor, indoor and the background air samples will be collected using laboratory-certified “clean” 6-liter Summa Canisters. The Summa Canister air flow-rate will be controlled with pre-calibrated 2-hr regulators supplied by the laboratory. Vacuum gauges on the regulators will be monitored during sample collection to check for proper operation of the Summa Canister (i.e., slow changes in vacuum), and to verify that the sample collection rate does not exceed 0.2 liters per minute. The vacuum reading will be recorded at the start of the test and monitored throughout the test. Additionally, a PID will be used to screen the air space above the Summa Canisters to establish background conditions prior to sampling and during the sampling event to identify VOC fluctuations that may occur during the sampling interval.

The sub-slab vapor samples and the indoor/outdoor air samples will be submitted under chain-of-custody documentation to a NYSDOH ELAP-certified analytical laboratory for analysis of VOCs via USEPA Method TO-15 using applicable ASP protocol. At the conclusion of the sampling, the tubing associated with the sub-slab vapor probes will be removed and the resulting annulus will be backfilled and capped with concrete.

2.5 Investigation Derived Wastes Management and Disposal

The soil vapor intrusion investigation activities proposed herein are not anticipated to result in disturbance of sub-slab materials, or generation of contaminated waste materials. If such materials are generated, these wastes will be managed in accordance with applicable provisions set forth of DER-10 Section 3.3(e). Liquid wastes may be treated on-site in the wastewater treatment system by introducing the wastewater to the head of the treatment system. Solid wastes will be placed in NYSDOT 55-gallon drums stored in the wastewater treatment system room within the basement (AOC#2). The solids will be characterized and disposed of off-site in accordance with the applicable rules and regulations.

2.6 Analytical Laboratory Quality Assurance/Quality Control

Eurofins Spectrum Analytical Inc. of Warwick, Rhode Island (Eurofins) will be retained to complete the analytical laboratory testing. Eurofins is a NYSDOH ELAP certified laboratory (ELAP ID LAI00329). The analytical laboratory will be requested to meet the minimum reporting limit of 0.25 $\mu g/m^3$ for TCE and vinyl chloride, and 3 $\mu g/m^3$ for PCE and the remaining TO-15 list VOCs for the indoor/outdoor air samples. The analytical laboratory will be requested to meet the standard method detection limits for the sub-slab vapor samples. The analytical laboratory data results will be submitted to EQuIS within 90 days of receipt of the analytical laboratory data. [Note: Analytical laboratory results will be submitted to the NYSDEC and NYSDOH in the Site's applicable monthly progress report upon receipt of results from the laboratory and review by DAY.]

2.7 Health and Safety

The implementation of this soil vapor intrusion evaluation work plan will follow the site-specific Health and Safety Plan (HASP) and Community Air Monitoring Program (CAMP) dated February 2010. The CAMP (as revised per the requirements outlined in Section 2.8) will be implemented during intrusive soil vapor intrusion evaluation activities (i.e., during sampling port installation, vacuum monitoring test point installation, etc.). The HASP and CAMP will be reviewed by DAY employees assigned to this project before starting work.

2.8 CAMP Monitoring Specific to the Sub-Slab vapor Point Installation

In addition to the requirements described in the February 2010 CAMP, the requirements presented in this section will also be implemented.

Establishment of CAMP Monitoring Stations

Due to the distance between sub-slab vapor sample locations, new monitoring stations will be set up around the work zone for each location. The specific locations will be determined based upon indoor activities being conducted by facility workers at the time of fieldwork. CAMP stations will be placed between the area of intrusive activities and the immediate receptors (e.g., the nearest facility worker or building tenant). As such, a minimum of one CAMP monitoring station will be placed near the work zone, and the background CAMP station located outside of the work zone will be periodically monitored to document background levels. CAMP monitoring will be conducted only during the sub-slab vapor point installations.

2.9 Report of Findings

Upon receipt of the analytical laboratory results and completion of the soil vapor intrusion investigation activities, a report describing the work completed, and presenting conclusions and recommendations will be submitted. This report will include copies of the pre-sampling building inspection and product inventory; analytical laboratory test results and executed chain-of-custody documentation; tables comparing test results to applicable guidance values and standards; an updated Site Plan; and other applicable documentation. [Note: Analytical laboratory results will be submitted to the NYSDEC and NYSDOH via monthly progress report upon receipt from the laboratory and review by DAY.]

3.0 SCHEDULE

The schedule for the studies outlined the Work Plan is as follows:

SSDS Vacuum Field Evaluation: The work will commence within 75 calendar days of receipt of approval of the Work Plan by the NYSDEC and NYSDOH. This task will be completed after the indoor air testing is completed.

Inspection of Existing SSDS Vapor Extraction Points The work will commence within 75 calendar days of receipt of approval of the Work Plan by the NYSDEC and NYSDOH. The inspection of existing SSDS vapor extraction point results will be performed in conjunction with, or prior to, the SSDS vacuum field evaluation to confirm that the SSDS is functioning properly at time of the vacuum field evaluation.

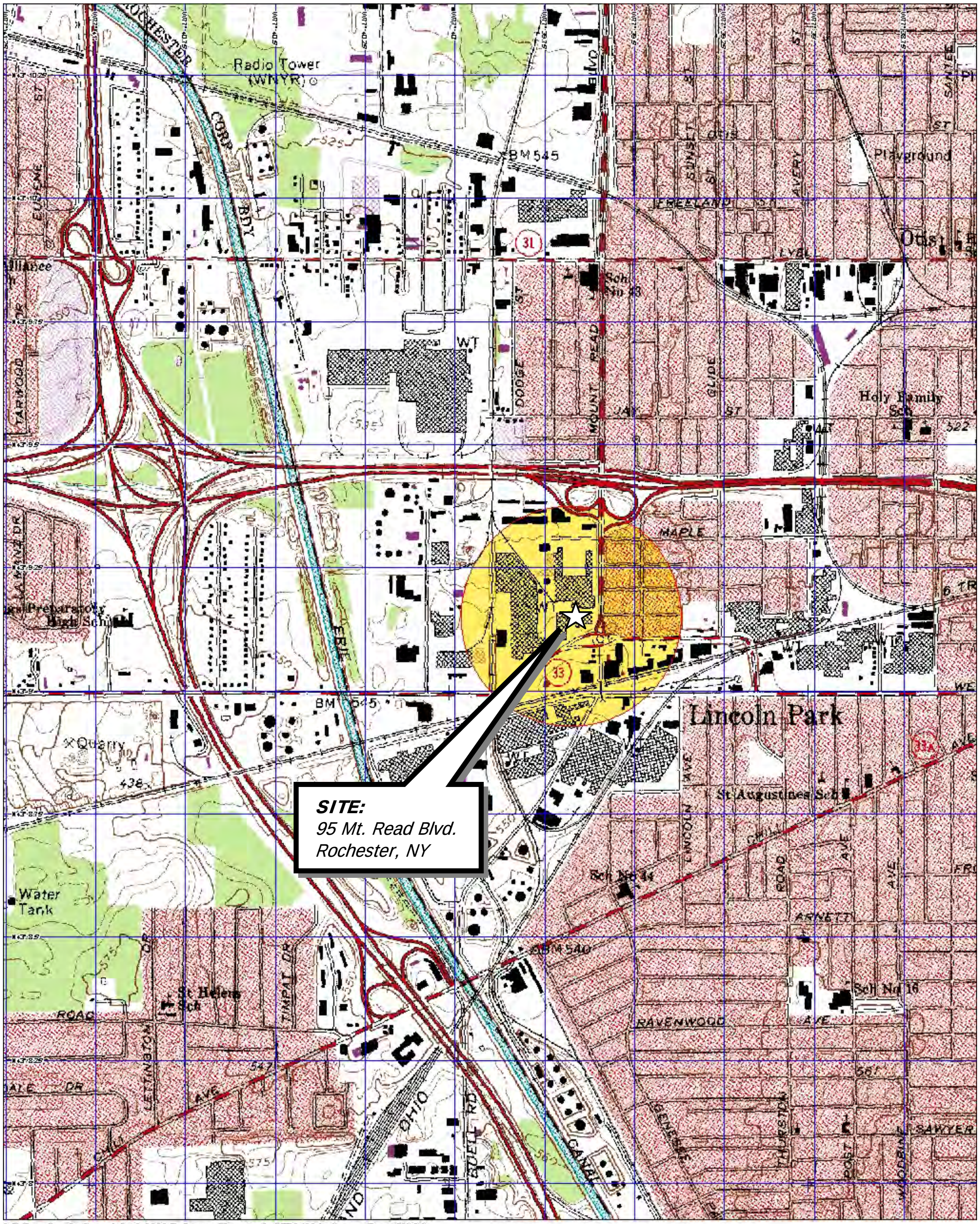
Evaluation of Alternative Vapor Intrusion Sources The work will commence within 45 calendar days of receipt of approval of the Work Plan by the NYSDEC and NYSDOH. Site evaluation of existing floor and wall cracks and penetrations will be completed prior to indoor air sampling. Block wall and other intrusive testing activities, as applicable, will be performed after the indoor air testing activities are completed.

Soil Vapor Intrusion Testing and Sampling: The work will commence within 45 calendar days of receipt of approval of the Work Plan by the NYSDEC and NYSDOH. The indoor/background air and sub-slab vapor samples will be submitted to the analytical laboratory within 14 calendar days of the sample collection.

Laboratory Testing: The laboratory test results will be provided to the NYSDEC and NYSDOH via monthly progress report upon receipt from the laboratory and review by DAY.

Report of Findings: A draft report will be submitted to the NYSDEC and NYSDOH within 5 months of receipt of approval of the Work Plan by the NYSDEC and NYSDOH.

DAY will coordinate and communicate with the NYSDEC and NYSDOH regarding implementation of the various aspects of this project. This includes, but is not limited to, notification of investigation testing dates, and presentation of field findings and analytical laboratory results, as applicable.

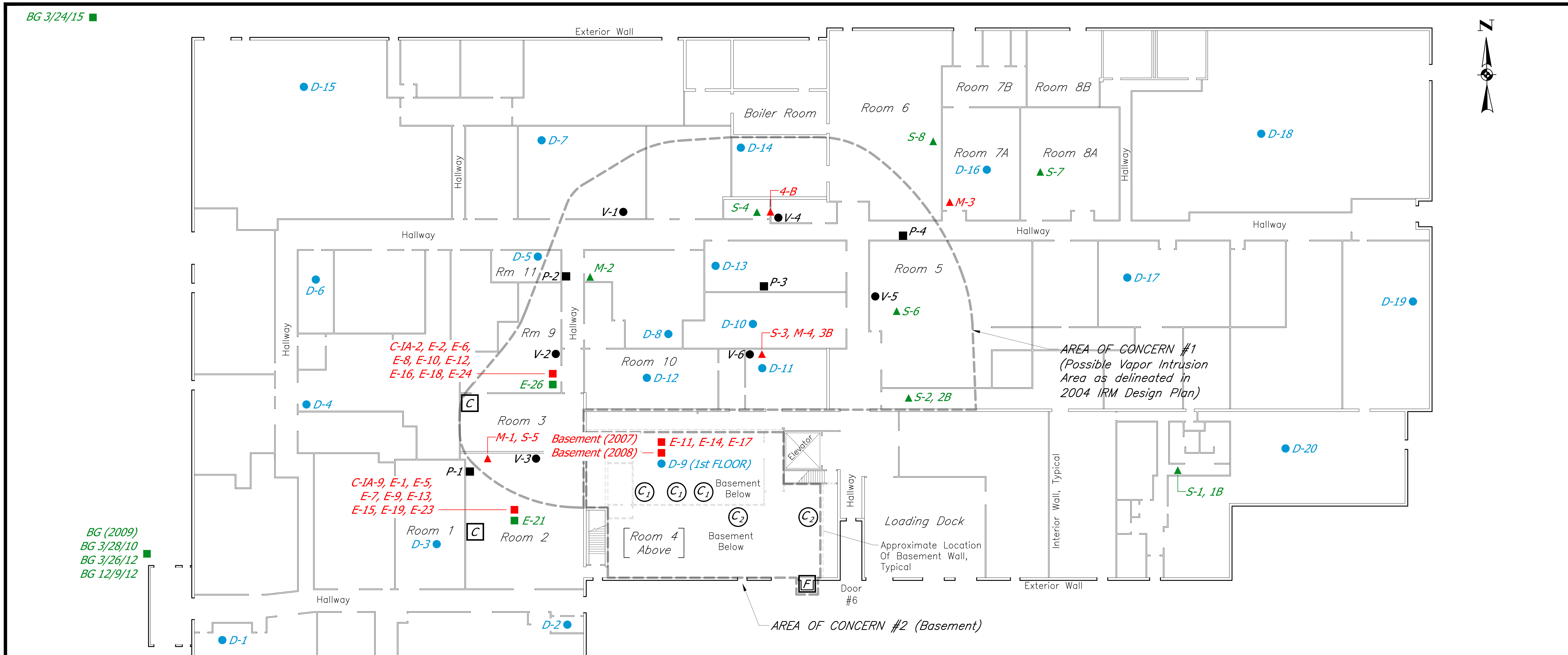


3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

544 ft Scale: 1 : 19,200 Detail: 14-0 Datum: NAD27

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad map Rochester West (NY) 1995. Site Lat/Long: N43d-09.15' – W77d-39.67'

DATE **11-11-2013** DRAWN BY **RJM** SCALE **1" = 2000'**	**day** DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14606	PROJECT TITLE **95 MT. READ BOULEVARD** **ROCHESTER, NEW YORK** **Vapor Intrusion Mitigation Work Plan** DRAWING TITLE **PROJECT LOCUS MAP**	**PROJECT NO.** **3681R-05** **FIGURE 1**



FIRST FLOOR
PLAN VIEW
1" = 20'

LEGEND:

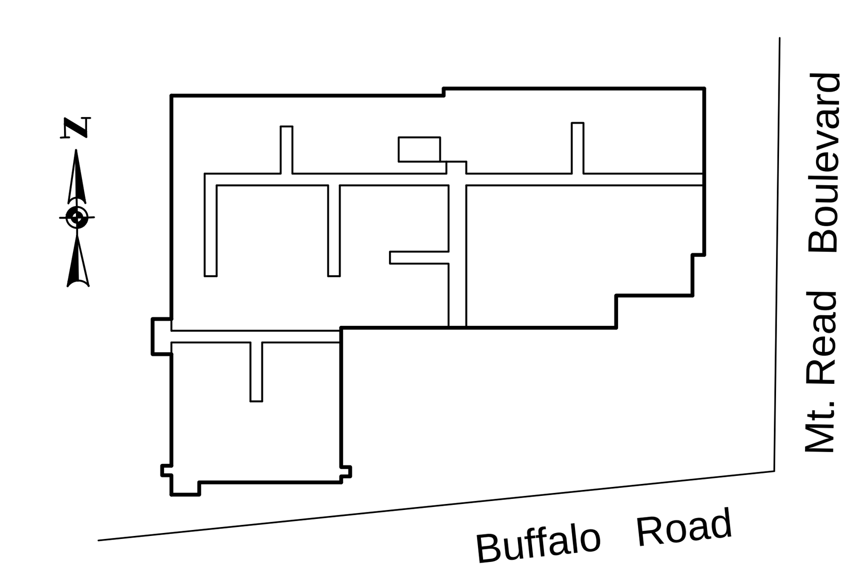
E-15 thru E-17 & BG 12/9/12 ■	Indoor Air Sample Location Collected on December 9, 2012
E-12 thru E-14 & BG 3/26/12 ■	Indoor Air Sample Location Collected on March 26, 2012
E-9 thru E-11 & BG 3/28/10 ■	Indoor Air Sample Location Collected on March 24, 2010
C-IA-2 & C-IA-9 & BG (2009) ■	Indoor Air Sample Location Collected on November 8, 2009
E-7 & E-8 & Basement (2008) ■	Indoor Air Sample Location Collected on November 24, 2008
E-5 & E-6 ■	Indoor Air Sample Location Collected on February 25, 2008
E-1, E-2 & Basement (2007) ■	Indoor Air Sample Location Collected on March 30, 2007
S-1 thru S-9 ▲	Indoor Air Sample Location Collected on February 28, 2006
M-1 thru M-5 ▲	Indoor Air Sample Location Collected On April 1, 2005
1B thru 4B ▲	Indoor Air Sample Location Collected On March 5, 2004
V-1 thru V-6 ●	"As-Built" Vertical Vent Stack/Fan Location
P-1 thru P-4 ■	"As-Built" Sub-Slab Pressure Test Location
C1	AllerAir 6000DX Carbon Air Filter
C2	AllerAir 5000D Carbon Air Filter
C	Electrocorp I6500A Carbon Air Filter
F	Fantech FR 160 In-line fan (Basement Fan)
D-5 ●	Proposed Approximate Indoor Air/Sub Slab Vapor Test Location

Samples With Green Text Do Not Contain Sub-Slab Contaminants Exceeding NYSDOH Guidance Values (Including a TCE limit of 2ug/m3 and PCE limit of 30 ug/m3)

Samples With Red Text Contain Sub-Slab Contaminants Exceeding NYSDOH Guidance Values

NOTE:

1. Drawing produced from a drawing by The ERM Group, entitled "Figure 3-1; PCB, Asbestos & Sediment/Residue Sampling Locations", dated 11/20/1990; A blueline print by Miller-Anderson Architects, entitled "1st Floor Plan Details", date issued 3-3-2000; and from notes of site visits by representatives of Day Environmental, Inc.



LOCATION PLAN
Not To Scale

PROJECT MANAGER NES | DATE 12-2015
DRAWN BY RJM | DATE DRAWN 12-14-2015
CHECKED BY NES | DATE 1-13-2016
APPROVED BY BFK | DATE 1-13-2016
SCALE As Noted | DATE ISSUED 1-13-2016

REVISIONS

DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14606
NEW YORK, NEW YORK 10170

95 MT. READ BOULEVARD
ROCHESTER, NEW YORK

VAPOR INTRUSION MITIGATION WORKPLAN

Sample Location Plan

PROJECT NO. 3681R-05

FIGURE 2

TABLE 1

95 MT READ BOULEVARD
ROCHESTER, NEW YORK

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUND (VOC)
INDOOR AIR AND SUB-SLAB TEST RESULTS IN MICROGRAMS PER CUBIC METER (ug/m3)

MARCH 5, 2004

DETECTED VOCs	SAMPLE LOCATION AND DESIGNATION									USEPA 2001: BASE database (UG/M3) [1]	NYSDOH VOC REFERENCE DATA (UG/M3) [2]
	Sub-Slab 1A	Indoor Air 1B	Sub-Slab 2A	Indoor Air 2B	Sub-Slab 3A	Indoor Air 3B	Sub-Slab 4A	Indoor Air 4B	Roof Background		
COMPOUNDS THAT EXCEED TARGET INDOOR AIR CONCENTRATIONS THAT ARE ATTRIBUTEDTO MIGRATION OF SUB-SLAB CONCENTRATIONS											
Chloroform	-	-	**23**	-	**2,000**	**1.6**	**1,500**	-	-	1.1	1.2
Trichloroethene	-	-	**6.4**	-	**160,000**	**5.9**	**360,000**	**3.6**	-	2 [3]	2 [3]
Tetrachloroethene	8.0	-	**73**	3.56	**47,000**	**9.8**	**190,000**	**7.1**	-	30 [4]	30 [4]
COMPOUNDS THAT EXCEED TARGET INDOOR AIR CONCENTRATIONS THAT ARE ATTRIBUTED TO BACKGROUND CONCENTRATIONS RESULTING FROM BUILDING OPERATIONS											
Acetone	48	**380**	15	**240**	-	110	-	**140**	11	98.9	115
Methylene Chloride	-	3.8	4.7	15	-	**90**	-	**62**	-	60 [5]	60 [5]
Benzene	-	-	1.8	1.9	-	1.8	-	-	-	9.4	13
Toluene	11	24	16	**93**	-	**270**	-	**430**	4.4	43	57
Ethylbenzene	**11**	-	12	**13**	-	**31**	-	**35**	-	5.7	6.4
Trichlorofluoromethane	**21**	9.2	3.6	5.8	-	4.9	-	3.4	-	18.1	12
trans-1,2-Dichloroethene	-	-	-	-	7,200	-	4,900	-	-	NA	NA
Vinyl Acetate	-	-	2.6	-	-	-	-	-	-	NA	NA
2-Butanone (MEK)	5.7	-	4.9	-	-	6.0	-	4.3	1.5	12	NA
cis-1,2-Dichloroethene	-	-	-	**2.8**	**18,000**	**4.2**	**11,000**	-	-	<1.9	0.4
1,1,1-Trichloroethane	**18**	-	**110**	-	-	-	-	-	-	20.6	2.5
cis-1,2-Dichloropropane	-	-	**2**	-	-	-	-	-	-	<1.6	0.4
Bromodichloromethane	-	-	2.5	-	-	-	-	-	-	NA	NA
4-Methyl-2-pentanone	-	-	-	-	-	1.8	-	-	-	6.0	NA
Chlorobenzene	-	-	-	-	-	**1.3**	-	-	-	<0.9	0.4
m,p-Xylenes	**40**	6.3	**42**	**36**	-	**85**	-	**98**	1.6	22.2	11
Styrene	-	-	**2.3**	-	-	-	-	-	-	1.9	1.4
o-Xylene	**13**	-	**14**	**8.5**	-	**20**	-	**23**	-	7.9	7.1
1,4-Dichlorobenzene	-	-	-	**1.9**	-	**3.4**	-	**5.4**	-	5.5	1.2

Notes:

(1) The 90th percentile values from EPA Building Assessment and Survey Evaluation (BASE), and as per NYSDOH Final Soil Vapor Intrusion Guidance Table C-2, are typically used to establish initial benchmarks for indoor air in commercial buildings.

(2) The Upper Fence values from the NYSDOH Fuel Oil Study are typically used to establish initial benchmarks when evaluating residential indoor air.

(3) Air guidelines value referenced in Bureau of Toxic Substance Assessment NYSDOH Trichloroethene (TCE) In Indoor and Outdoor Air, August 2015 Fact Sheet.

(4) Air guidelines value referenced in Bureau of Toxic Substance Assessment NYSDOH Tetrachloroethene (PERC) In Indoor and Outdoor Air, September 2013 Fact Sheet.

(5) Air guidelines value referenced in Table 3.1 of Section 3.2.5 of the NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York", October 2006 and the Septemeber 2013 NYSDOH fact sheet titled "Tetrachloroethene (PERC) in Indoor and Outdoor Air".

380 Denotes a concentration that exceeds the Target Indoor Air Concentration as referenced in Note 1.

380 Bold denotes a concentration that exceeds the NYSDOH Upper Fence Value VOC Concentration as referenced in Note 2.

\- Analyte not measured at a concentration above the analytical laboratory detection limit.

= Sample collected prior to vapor intrusion mitigation measures.

TABLE 2

95 MT READ BOULEVARD
ROCHESTER, NEW YORK

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUND (VOC)
INDOOR AIR TEST RESULTS IN MICROGRAMS PER CUBIC METER (ug/m^3)

DETECTED VOCs	SAMPLE LOCATION AND DESIGNATION (Refer to Figure 2 for locations)																												USEPA 2001: BASE database (UG/M^3) (1)	NYSDOH VOC REFERENCE DATA (UG/M^3) (2)
	AOC #1																AOC #1: Location R-1													
	2004 1B 3-5-04	2006 S-1 2-28-06	2004 2B 3-5-04	2006 S-2 2-28-06	2004 3B 3-5-04	2005 M-4 4-1-05	2006 S-3 2-28-06	2004 4B 3-5-04	2006 S-4 2-28-06	2005 M-2 4-1-05	2005 M-3 4-1-05	2005 M-5 4-1-05	2006 S-6 2-28-06	2006 S-7 2-28-06	2006 S-8 2-28-06	2006 S-9 2-28-06	2005 M-1 4-1-05	2006 S-5 2-28-06	2007 E-1 3-30-07	2008 E-5 2-25-08	2008 E-7 11-24-08	2009 C-IA-9 11-8-09	2010 E-9 3-28-10	2012 E-13 3-26-12	2012 E-15 12-9-12	2013 E-19 12-8-13	2014 E-21 3-30-14	2015 E-23 1-11-15		
COMPOUNDS THAT EXCEED TARGET AIR CONCENTRATIONS THAT APPEAR POTENTIALLY ATTRIBUTABLE TO SUB-SLAB CONTAMINANTS																														
Chloroform	-	0.81	-	-	**1.6**	**2.2**	-	-	-	-	-	-	-	-	-	-	**2.1**	**5.1**	-	0.7	-	0.43	0.29	1.1	-	0.78	0.58	0.73	1.1	1.2
Trichloroethene	-	-	-	-	**5.9**	-	**2.1**	**3.6**	0.78	-	-	-	0.52	0.6	-	-	**3.2**	**10**	**9.04**	**8.5**	**10.8**	**5.2**	**2.5**	**10**	**2.53**	**8.65**	1.61	**2.69**	2 (3)	2 (3)
Tetrachloroethene	-	-	3.5	-	9.8	11	18	7.1	4.3	14	**170**	-	2.1	-	-	-	**120**	**100**	**1,440 E**	5.1	21.3	5.5	1.2	11	1.9	0.75	1.36	1.83	30 (4)	30 (4)
COMPOUNDS THAT EQUAL OR EXCEED INDOOR AIR CONCENTRATIONS THAT APPEAR POTENTIALLY ATTRIBUTABLE TO BACKGROUND CONTAMINANTS (i.e., TENANT OPERATIONS)																														
Acetone	**380**	20	**240**	13	110	96	**250**	**140**	**180**	**130**	**210**	**13**	53	**650**	-	-	59	**240**	**220 E**	**120**	80.7 JBE	110	70 B	**220**	23.45	**172.04 D**	35.64	18.04	98.9	115
Methylene Chloride	3.8	3.4	15	7	**90**	**160**	38	**62**	**87**	**620**	**1,900**	-	16	**110**	**140**	-	**130**	53	**423 E**	**210**	**141 JBE**	**610**	**82**	44	14.72	**126.74 D**	**114.94**	22.95	60 (5)	60 (5)
Benzene	-	0.89	1.9	0.8	1.8	1.8	2	-	-	3.6	-	-	-	-	**170**	-	5.2	8.9	3.86	0.93	1.86 J	1.3	0.41	1.0	0.32	0.54	0.61	1.60	9.4	13
Toluene	24	5.8	**93**	7.6	**270**	**320**	**1,200**	**430**	**920**	**400**	**1,200**	1.9	**120**	**3,300**	**860**	1.6	**330**	**560**	**399 E**	**130**	**103 JE**	**280**	40	49	20.09	47.03 D	25.66	5.34	43	57
Ethylbenzene	-	-	**13**	-	**31**	2.8	1.8	**35**	3.4	**10**	**37**	-	-	3.6	**200**	-	6.3	**9.4**	**6.63**	-	3.39 J	3.6	1.2	1.4	1.52	1.39	1.26	-	5.7	6.4
Chloromethane	-	0.96	-	0.91	-	-	-	-	-	1.5	-	-	0.97	-	-	0.88	-	1.1	1.64	1.2	-	1.2	0.99	1.4	0.87	-	-	-	3.7	4.2
Trichlorofluoromethane	9.2	4.1	5.8	5.9	4.9	3.9	4.8	3.4	2.7	2.7	-	-	4.1	-	-	1.1	8	3.8	**15.2**	5.7	11.6	12	8.2	**14**	9.05	9.38	7.92	4.95	18.1	12
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	**1.5**	-	-	-	-	-	-	-	**1.5**	**1.51**	-	-	-	0.31	**0.41**	-	-	-	-	<1.4	0.4
Vinyl Acetate	-	7.7	-	-	-	-	-	-	-		-	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA
2-Butanone (MEK)	-	3.8	-	3.1	6	5	3.3	4.3	2.9	7.9	-	-	6.2	7.7	-	1.4	5.5	10	24.0 E	32	10.3	12	4.7 B	6.8	1.62	2.74	4.42	2.36	12.0	NA
cis-1,2-Dichloroethene	-	-	**2.8**	-	**4.2**	**2.4**	**3.9**	-	-	-	-	-	-	-	-	-	**12**	**23**	**37.3 E**	**3.9**	**7.19**	**2.7**	**1.9**	**18**	**1.03**	**1.07**	**1.23**	**0.83**	<1.9	0.4
4-Methyl-2-pentanone	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	1.7	12.9	3.9	7.08	2.7	0.33	-	-	-	0.82	-	6.0	NA
Chlorobenzene	-	-	-	-	**1.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.563 J**	-	-	-	-	-	-	-	<0.9	0.4
m,p-Xylenes	6.3	1.6	**36**	-	**85**	11	6.5	**98**	**34**	**38**	**370**	-	2.7	**26**	**2,400**	-	**22**	**35**	**35.2**	**15**	**13.3**	**13**	4.5	3.8	3.9	5.2	4.21	-	22.2	11
o-Xylene	-	-	**8.5**	-	**20**	5.2	2.6	**23**	**17**	**20**	**170**	-	1.4	**21**	**1,100**	-	**9.1**	**15**	**14.7**	5.3	5.07	6.2	1.6	1.1	0.78	1.69	1.39	-	7.9	7.1
Styrene	-	1	-	1.2	-	-	**4.2**	-	**3.5**	-	-	-	**2.7**	-	-	-	**3.3**	**8.9**	**42.2 E**	**3.5**	**13.3**	**35**	**2.6**	1.3	0.55	0.3 J	**1.45**	-	1.9	1.4
1,4-Dichlorobenzene	-	**27**	**1.9**	**2.3**	**3.4**	**2.7**	**4.2**	**5.4**	**9.9**	**3.9**	-	-	**12**	**18**	-	-	**1.8**	**6.9**	**4.17**	**37**	**1.94**	**97**	0.62	0.35	-	-	-	-	5.5	1.2
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.836	0.32	-	1.5	100	42	7.73	26.41	24.7	4.08	NA	NA
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.6	0.4
Freon 113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.875	0.65	-	0.72	0.32	0.75	-	-	-	-	NA	NA
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	1.17 J	0.84	-	-	-	-	-	-	20.6	2.5
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.568**	-	-	0.3	-	0.33	-	-	-	-	<1.9	0.4
2-Hexanone	-	-	-	-	-	-	-	-	-	-	-	-	1.7	-	-	-	1.6	-	-		-	-	0.44	0.6	-	-	-	-	NA	NA
Carbon Tetrachloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	0.511 J	0.4	-	0.72	0.31	0.31	0.44 J	0.38 J	<1.3	1.3
Dichlorodifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	2	2.3	2.3	2.77	3.51	2.57	2.23	16.5	10
Ethanol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	50.0 JE	78	75	120	36.01	45.25 D	17.08	30.73 BsH	210.0	NA
Ethyl Acetate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	NT	6.8	1.3	4.2	0.5	7.49	6.45	1.62	5.4	NA
4-Ethyl Toluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2	NT	12	0.8	0.47	0.49	0.34 J	-	-	3.6	NA
n-Heptane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	11	3.5	0.38	1.7	-	10.7	4.39	1.15	NA	18
Hexane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	3.3	4.7	0.34	-	1.20 J	1.13 J	0.42 J	3.49	10.2	14
Isopropanol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	NT	630	340	200	41.23	68.96 D	51.53	13.94	NA	NA
Tetrahydrofuran	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NT	**1.6**	**2.1**	**130**	**7.31**	**4.95**	**6.93**	**8.32**	NA	0.8
1,2,4-Trimethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**24**	**29.7 JE**	**55**	**5.1**	2.1	0.93	0.79	0.88	-	9.5	2.5
1,3,5-Trimethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**7.8**	**10.2**	**17**	2	0.88	0.49	0.29 J	-	-	3.7	3.9
Cyclohexane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25	0.91	-	0.9	-	-	-	0.65	NA	6.3
1,3-Butadiene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14	-	-	-	-	-	-	<3.0	NA
Naphthalene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	5	NA
1,1-Dichloroethylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA
Methyl tert-Butyl Ether (MTBE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5	14
1,4-Dioxane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	NA
Isopropylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	0.8
Benzene Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46 BsH, J	6.8	NA
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.52 BsH, J**	6.8	0.5
4-Isopropyltoluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.54	-	-	-	NA	NA
n-Butylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	NA	1.1
Carbon Disulfide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	0.35	-	-	-	-	-	4.2	NA

Notes:

Samples analyzed by United States Environmental Protection Agency (USEPA) Method TO-15.

(1) The 90th percentile values from EPA Building Assessment and Survey Evaluation (BASE), and as per NYSDOH Final Soil Vapor Intrusion Guidance Table C-2, are typically used to establish initial benchmarks for indoor air in commercial buildings.

(2) The Upper Fence values from the NYSDOH Fuel Oil Study are typically used to establish initial benchmarks when evaluating residential indoor air.

(3) Air guidelines value referenced in Bureau of Toxic Substance Assessment NYSDOH Trichloroethene (TCE) In Indoor and Outdoor Air, August 2015 Fact Sheet.

(4) Air guidelines value referenced in Bureau of Toxic Substance Assessment NYSDOH Tetrachloroethene (PERC) In Indoor and Outdoor Air, September 2013 Fact Sheet.

(5) Air guidelines value referenced in Table 3.1 of Section 3.2.5 of the NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York", October 2006 and the Septemeber 2013 NYSDOH fact sheet titled "Tetrachloroethene (PERC) in Indoor and Outdoor Air".

380 Denotes a concentration that exceeds the Target Indoor Air Concentration as referenced in Note 1.

380 Bold denotes a concentration that exceeds the NYSDOH Upper Fence Value VOC Concentration as referenced in Note 2.

E = The analyte exceeds the calibration range of the instrument.

BsH = Data for this analyte may be biased high based on QC spike recoveries.

B= The analyte is present in the associated method blank as well as in the sample.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

= Sample collected prior to vapor intrusion mitigation measures.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

= Sample collected with SSDS and 3 AllerAir 6000DX and 2 AllerAir 5000D filters running.

D = Data reported from a dilution.

= Sample Collected with active SSDS and 3 AllerAir air 6000DX filters in-place.

\- Analyte not measured at a concentration above the analytical laboratory detection limit.

= Sample collected with SSDS and 2 Electrocorp Air Filters running.

= Sample collected with active SSDS ; no air filters.

TABLE 2

95 MT READ BOULEVARD
ROCHESTER, NEW YORK

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUND (VOC)
INDOOR AIR TEST RESULTS IN MICROGRAMS PER CUBIC METER (ug/m³)

DETECTED VOCs	AOC #1: Location R-2										Background (exterior upwind location)								AOC #2: Location R-7								USEPA 2001: BASE database (UG/M³) (1)	NYSDOH VOC REFERENCE DATA (UG/M³) (2)
	2007 E-2 3-30-07	2008 E-6 2-25-08	2008 E-8 11-24-08	2009 C-IA-2 11-8-09	2010 E-10 3-28-10	2012 E-12 3-26-12	2012 E-16 12-9-12	2013 E-18 12-8-13	2015 E-24 1-11-15	2015 E-26 3-24-15	2009 BG 11-8-09	2010 BG 3-28-10	2012 BG 3-26-12	2012 BG 12-9-12	2013 BG 12-8-13	2014 BG 3-30-14	2015 BG 1-11-15	2015 BG 3-24-15	2007 Bsmt 3-30-07	2008 Bsmt 11-24-08	2010 E-11 3-28-10	2012 E-14 3-26-12	2012 E-17 12-9-12	2013 E-20 12-8-13	2014 E-22 3-30-14	2015 E-25 1-11-15		
Chloroform	-	0.6	-	0.36	0.41	0.62	0.24 J	0.39 J	0.49	0.58	-	-	-	-	-	-	-	-	-	-	0.48	**1.5**	0.58	0.34 J	0.68	0.88	1.1	1.2
Trichloroethene	**6.01**	**15**	**7.87**	**7.8**	**3.9**	**4.4**	**3.39**	**3.65**	**5.64**	1.4	-	-	-	-	-	-	-	-	**166 E**	**57.4 JE**	**11**	**44**	**51.65**	**48.91 D**	**48.69**	**47.62**	2 (3)	2 (3)
Tetrachloroethene	**139 E**	23	8.92	15	2.8	3.4	3.87	8.65	11.87	0.75	0.82	-	0.33	-	-	-	-	-	**1,070 E**	**146 JE**	24	**130**	**81.37**	**129.52 D**	**162.07**	**198.01 D**	30 (4)	30 (4)
Acetone	94.9 E	61	**152 BE**	87	110 B	**280**	74.14	104.08 D	25.9	38.73	11	13 B	1.0	8.2	9.7	11.43	4.68	9.32	**234 E**	61.2 JBE	22 B	**150**	55.6	32.79 D	-	11.98	98.9	115
Methylene Chloride	**447 E**	**92**	**361 JBE**	**280**	**62**	**170**	**175.01**	**95.14 D**	**343.77 BsH, D**	21.56 B	5.5	10	-	0.87	0.73	3.44	5.97	4.69 B	**103 E**	6.39 UB	21	22	1.60	5.73	-	2.71	60 (5)	60 (5)
Benzene	2.09	0.99	1.98 J	1.3	0.75	1.4	0.54	0.73	1.12	1.02	1.1	0.66	0.41	0.64	-	0.57	-	0.83	3.15	1.64 J	0.72	3.0	0.6	0.29 J	0.48	0.93	9.4	13
Toluene	**384 E**	**87**	**232 JE**	**180**	**130**	**66**	25.59	23.82	**61.71 D**	10.57	5	0.86	0.6	0.87	-	1.24	-	0.56	**598 E**	10.8	11.0	**61**	4.25	2.60	3.88	6.13	43	57
Ethylbenzene	**10.2**	2.6	6.16	2.7	2.7	3.4	1.56	1.52	4.64	0.95	0.57	-	-	-	-	-	-	-	3.51	1.87 J	0.51	1.2	0.35 J	0.3 J	**18.99**	1.17	5.7	6.4
Chloromethane	1.49	1.2	-	1.3	1	1.1	0.93	-	-	-	0.98	0.99	1.1	0.91	-	-	-	-	1.18	-	0.99	1.2	0.91	-	-	-	3.7	4.2
Trichlorofluoromethane	3.71	**19**	6.29	**21**	5.7	7.8	5.68	4.1	3.32	3.65	1.5	1.4	1.5	1.4	1.24		0.9	2.3	6.45	7.06	4.9	5.2	2.47	2.59	-	1.85	18.1	12
1,1-Dichloroethene	-	**0.75**	-	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**35.6 E**	**1.10 J**	**1.2**	0.3	0.36	-	-	-	<1.4	0.4
Vinyl Acetate	-	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	-	-	-	-	NA	NA
2-Butanone (MEK)	21.7 E	15	26.2 JE	10	8.7 B	10	9.52	3.54	4.54	13.59	1.3	2.2 B	-	0.74	0.88	1.21	-	1.53	-	11.2	6.4 B	13	12.39	3.07	5.81	3.27	12.0	NA
cis-1,2-Dichloroethene	**5.58**	**20**	**2.71 J**	**9.8**	**1**	**2.1**	**0.67**	**1.63**	**1.59**	**-**	-	-	-	-	-	-	-	-	**1,260 E**	**84.4 JE**	**53**	**270**	**32.08**	**29.82**	**45.20**	**32.67**	<1.9	0.4
4-Methyl-2-pentanone	39.2	2.1	15	2.1	1.3	1.2	0.74	0.37 J	2.21	1.31	0.19	-	-	-	-	-	-	-	3.73	4.83	1.1	1.6	0.9	-	0.7	0.78	6.0	NA
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.779 J**	-	-	-	-	-	-	<0.9	0.4
m,p-Xylenes	**48.1 E**	8.6	**23.5**	9.5	10	10	6.37	6.03	**18.99 BsH**	3.25	1.9	0.4	0.38	-	-	-	-	-	**12.1**	7.85 J	1.7	3.4	1.43	1.04	**76.74**	4.55 BsH	22.2	11
o-Xylene	**16.9**	3.1	**8.06**	4	3.9	3.5	2.17	1.95	6.03	0.91	0.74	-	-	-	-	-	-	-	4.47	3.13 J	0.73	1.2	0.39 J	0.39 J	**26.84**	2.04	7.9	7.1
Styrene	**27.8 E**	**2.5**	**27.6 JE**	**47**	**3**	**1.7**	**1.96**	0.64	**3.23**	0.85	0.23	-	-	-	-	-	-	-	1.15	0.587 J	-	0.41	-	-	-	-	1.9	1.4
1,4-Dichlorobenzene	**9.26**	**21**	**2.84**	**40**	**3.4**	**-**	**-**	-	0.72	-	0.36	-	-	-	-	-	-	0.48 J	-	-	-	0.22	-	-	-	-	5.5	1.2
Trans-1,2-Dichloroethene	-	0.77	-	4.1	19	3.7	0.79	1.19	0.56	0.59	-	-	-	-	-	-	-	-	21	2.10 J	2.2	16	0.83	1.07	-	0.71	NA	NA
1,2-Dichloropropane	**1.14**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**2.5**	-	-	-	-	-	-	-	<1.6	0.4
Freon 113	-	0.6	0.768	0.61	0.54	0.89	0.69 J	0.54 J	-	1.15	0.47	0.5	0.7	0.54	-	-	-	1.15	-	-	0.47	1.1	-	-	-	-	NA	NA
1,1,1-Trichloroethane	1.99	0.88	**2.82 J**	0.5	0.27	0.41	-	-	0.38 J	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	20.6	2.5
Vinyl Chloride	-	-	-	**0.87**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**14.1**	-	**3.9**	**-**	**0.82**	0.1	-	**1.12**	<1.9	0.4
2-Hexanone	-	0.81	-	0.8	0.55	0.32	-	-	-	-	-	0.29	-	-	-	-	-	-	-	-	0.41	0.32	1.52	-	-	-	NA	NA
Carbon Tetrachloride	-	0.45	0.528 J	0.43	0.38	0.7	0.44	0.31	0.38 J	1.13	0.42	0.43	0.88	0.5 J	0.31	0.50 J	-	0.94	-	0.502 J	0.38	0.8	0.31	0.31	0.38 J	0.38 J	<1.3	1.3
Dichlorodifluoromethane	-	2.7	-	2.2	2.5	2.7	2.62	3.26	2.18	4.25	1.9	2.1	2.3	2.13	2.57	2.42	2.08	4.25	-	NT	1.9	2.2	2.03	2.62	-	2.13	16.5	10
Ethanol	-	36	91.6 JE	61	82	140	54.87	37.71 D	181.76 D	273.39 D	19	5.9	26	17.87	4.83	5.09	9.92 BsH	16.54	-	19.9 JE	33	48	9.56	14.63	-	11.11 BsH	210.0	NA
Ethyl Acetate	-	5.7	NT	3.8	8.6	14	3.82	-	3.53	21.73	0.29	-	-	0.61	-	11.42	-	5.87	-	NT	-	4.4	-	-	3.28	-	5.4	NA
4-Ethyl Toluene	-	3.4	NT	6	3.4	1.1	0.18	0.44 J	1.18	0.49	0.24	-	-	-	-	-	-	-	-	NT	0.28	0.35	0.44 J	-	-	0.25 J	3.6	NA
n-Heptane	-	7.6	**25.2 JE**	1.9	2.7	4.2	1.39	5.49	3.24	1.56	0.66	-	0.16	-	-	-	-	-	-	-	0.41	1.6	0.66	-	-	1.15	NA	18
Hexane	-	2.5	4.08	2.2	0.77	-	1.97	1.2 J	1.73 J	**16.5**	1.1	1.7	-	2.19	0.32 J	0.67 J	-	5.78	-	2.99	1.8	-	0.99 J	0.81 J	2.93	1.30 J	10.2	14
Isopropanol	-	65	NT	350	370	160	214.72	56.44 D	156.07 D	117.3 D	3.5	0.69	-	2.23	0.54 J	1.52	0.69 J	3.39	-	NT	33	100	1.94	2.55	4.96	2.65	NA	NA
Tetrahydrofuran	-	**3.7**	NT	**3.9**	**6.8**	**11**	**3.07**	0.38	**1.53**	**1.33**	-	-	-	-	-	-	-	-	-	NT	**4.3**	**7.6**	**1.03**	**-**	-	0.5	NA	0.8
1,2,4-Trimethylbenzene	-	**15**	**45.6 JE**	**28**	**19**	**3.1**	**3.64**	2.36	**6.74**	1.03	0.93	-	0.19	-	-	-	-	0.59	-	**8.54**	1	1.7	0.64	0.49	0.44 J	0.49	9.5	2.5
1,3,5-Trimethylbenzene	-	**4.9**	**16.8**	**8.6**	**6.7**	2	1.77	0.98	2.61	0.84	0.31	-	-	-	-	-	-	-	-	2.63	0.36	0.62	0.39 J	-	-	-	3.7	3.9
Cyclohexane	-	-	-	1	-	0.7	0.31 J	-	0.55	-	0.42	-	-	-	-	-	-	0.62	-	-	-	8.3	-	-	-	0.41	NA	6.3
1,3-Butadiene	-	-	-	0.17	-	-	-	-	-	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3.0	NA
Naphthalene	-	-	-	-	-	-	-	-	0.79 J	-	-	-	-	-	-	-	-	0.58 J	-	-	-	1.5	-	-	-	-	5	NA
1,1-Dichloroethylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.8	-	-	-	-	NA	NA
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26	-	-	-	-	NA	NA
Methyl tert-Butyl Ether (MTBE)	-	-	-	-	-	-	1.84	-	0.51	-	-	-	-	-	-	-	-	-	-	-	0.22	0.61	-	-	0.51	-	11.5	14
1,4-Dioxane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25 J	-	-	-	NA	NA
Isopropylbenzene	-	-	-	-	-	-	-	-	0.29 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	0.8
Benzene Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	NA
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	0.5
4-Isopropyltoluene	-	-	-	-	-	-	0.75	-	1.02 BsH	-	-	-	-	-	-	-	-	-	-	-	-	-	0.48 J	-	-	0.48 BsH, J	NA	NA
n-Butylbenzene	-	-	-	-	-	-	-	-	0.88 BsH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	1.1
Carbon Disulfide	-	-	-	0.35	0.3	-	-	-	-	-	0.15	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	4.2	NA

Notes:

Samples analyzed by United States Environmental Protection Agency (USEPA) Method TO-15.

(1) The 90th percentile values from EPA Building Assessment and Survey Evaluation (BASE), and as per NYSDOH Final Soil Vapor Intrusion Guidance Table C-2, are typically used to establish initial benchmarks for indoor air in commercial buildings.

(2) The Upper Fence values from the NYSDOH Fuel Oil Study are typically used to establish initial benchmarks when evaluating residential indoor air.

(3) Air guidelines value referenced in Bureau of Toxic Substance Assessment NYSDOH Trichloroethene (TCE) In Indoor and Outdoor Air, August 2015 Fact Sheet.

(4) Air guidelines value referenced in Bureau of Toxic Substance Assessment NYSDOH Tetrachloroethene (PERC) In Indoor and Outdoor Air, September 2013 Fact Sheet.

(5) Air guidelines value referenced in Table 3.1 of Section 3.2.5 of the NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York", October 2006 and the Septemeber 2013 NYSDOH fact sheet titled "Tetrachloroethene (PERC) in Indoor and Outdoor Air".

380 Denotes a concentration that exceeds the Target Indoor Air Concentration as referenced in Note 1.

380 Bold denotes a concentration that exceeds the NYSDOH Upper Fence Value VOC Concentration as referenced in Note 2.

E = The analyte exceeds the calibration range of the instrument.

BsH = Data for this analyte may be biased high based on QC spike recoveries.

B= The analyte is present in the associated method blank as well as in the sample.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

= Sample collected prior to vapor intrusion mitigation measures.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

= Sample collected with SSDS and 3 AllerAir 6000DX and 2 AllerAir 5000D filters running.

D = Data reported from a dilution.

= Sample Collected with active SSDS and 3 AllerAir air 6000DX filters in-place.

\- Analyte not measured at a concentration above the analytical laboratory detection limit.

= Sample collected with SSDS and 2 Electrocorp Air Filters running.

= Sample collected with active SSDS ; no air filters.