LABELLA Associates, D.P.C.
Engineering
Architecture
Environmental
Planning

Interim Remedial Action Work Plan
Sub-Slab Depressurization System Installation

BCP Site #C828195

Location:

113-117 North Clinton Avenue
Rochester, New York

Prepared for:

Clinton North Development Corporation
c/o Tallo Properties
10 Symington Place
Rochester, New York 14611

LaBella Project No. 2161120

October 2017

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October 2017

LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

CERTIFICATIONS

"I DANIEL P. NOLL *certify that I am currently a NYS registered professional engineer and that this Interim Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10)."*

081996	10/19/17	
NYS Professional Engineer #	Date	Signature

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Appendix

1.0 Introduction & Background

LaBella Associates, D.P.C. (LaBella) is pleased to submit this Interim Remedial Action Work Plan (IRAWP) to conduct remedial activities at 113-117 North Clinton Avenue, City of Rochester, Monroe County, New York, herein after referred to as the "Site." This IRAWP is being submitted as part of an application into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) as Site #C828195. A Site Location Map is included as Figure 2. LaBella is submitting this IRAWP Work Plan on behalf of Clinton North Development Corporation (CNDC).

1.1 Site Description and Background

The Project Site boundary is comprised of approximately 0.11± acres. Figures 1 and 2 attached illustrate the location and surrounding area of the Site. The Project Site is primarily utilized as a residential hotel (i.e., boarding house) with several small businesses located on the first floor. The Site building comprises the majority of the footprint of the Project Site.

The Project Site appears to have been first developed prior to 1875. Historical mapping indicates that the Site was developed with an apparent residential dwelling and a separate commercial structure from at least 1875 until the 1910's or 1920's. The current Site building consists of a five-story, 21,317-square foot building with a full basement and appears to have been first constructed in the mid-1920's. The Site building appears to have been utilized as a boarding house with several small commercial businesses on the first floor since the mid-1920's to the present day. These businesses have varied since first construction but appear to have included: a jewelry store; pharmacy; shoe store; liquor store; book store, men's clothing store; and a hair salon.

The Project Site is bounded by North Clinton Avenue to east, commercial properties, a park and parking lots to the east, south and west, and vacant properties to the north which were historically utilized as a dry cleaning facility and a gasoline filling station (refer to Section 1.2 for additional information).

The northern adjacent property is currently a listed NYSDEC State Superfund Site ("Former Silver Cleaners"; #828186). The property is comprised of three (3) contiguous tax parcels totaling 0.30-acres located at the corner of Andrews Street and North Clinton Avenue (refer to Figure 2). The addresses for the three (3) contiguous parcels are 245 Andrews Street, 151 Pleasant Street and 159-169 Pleasant Street. All three (3) parcels are owned by the same entity (i.e., 245 Andrews Street Corporation). The 245 Andrews Street parcel was reportedly utilized as a dry cleaning facility from 1949 to 2011 and the 159-196 Pleasant Street parcel was reportedly utilized as a gasoline filling station from 1935 to 1955.

1.2 Previous Investigations

The following environmental documents were identified for the Project Site and/or surrounding area and are summarized below:

- *Confirmatory Phase II Environmental Site Assessment (ESA),* completed by Leader Professional Services, Inc. ("Leader"), January 2013 for Former Silver Cleaners property;
- *Phase I ESA,* completed by LaBella Associates, D.P.C. ("LaBella"), August 2015 for Project Site;

- *Former Silver Cleaners, Site No. 828186 Preliminary Data*, obtained from NYSDEC, November 2015 for Former Silver Cleaners property*;*
- *113-117 North Clinton Avenue Preliminary Soil Vapor Intrusion Data*, obtained from NYSDEC, December 2015 for Project Site.

The Confirmatory Phase II ESA completed by Leader in January 2013 at the Former Silver Cleaners property reportedly included an electromagnetic survey to locate potential abandoned USTs as well as the collection of soil and groundwater samples at the northern adjacent properties. Petroleum and chlorinated solvent impacts were reportedly identified in soil and groundwater at the northern adjacent property as part of this Phase II ESA. Concentrations of tetrachloroethene (PCE; a common dry cleaning solvent) were detected in groundwater at the northern adjacent property as high as 88,500 ug/L in well GW-4, located approximately 50-ft to the north of the Project Site.

Additional subsurface investigation work was completed at the Former Silver Cleaners property by Arcadis as part of a Remedial Investigation (RI)/Feasibility Study (FS) which is reportedly still underway. Based on the review of preliminary data obtained from the NYSDEC and conversations with the NYSDEC, this work has included the advancement of soil borings and installation of groundwater monitoring wells, completion of a test pitting study, removal of a petroleum underground storage tank (UST) and sampling of sumps in buildings at and in the vicinity of the northern adjacent property.

LaBella completed a Phase I ESA for the Project Site in August 2015. The Phase I ESA did not identify any Recognized Environmental Concerns (RECs) associated with the Site itself. However, a REC was identified based on the proximity to the contaminated Former Silver Cleaners property and the resulting potential for soil vapor intrusion (SVI) issues at the Project Site.

Based on the proximity of the Project Site to the Former Silver Cleaners property, SVI testing was completed by the NYSDEC at the Project Site in November 2015. Corresponding data was provided to LaBella in December 2015. This testing reportedly included the collection of two (2) sets of SVI from the basement of the Site building. Each set included a sub-slab vapor and co-located indoor air sample. PCE (a common component of dry cleaning fluids) was identified in soil vapor intrusion samples collected from the basement of the Site building at concentrations which appear to warrant mitigation of indoor air impacts. Specifically, PCE was identified at concentrations up to 140 ug/m3 and 170 ug/m3 in sub-slab vapor and indoor air samples, respectively. The New York State Department of Health (NYSDOH) established an indoor air guideline for PCE of 30 ug/m3 in September 2013, and in its 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York, the NYSDOH required mitigation whenever PCE vapors exceeded 100 ug/m3 except if corresponding indoor air quality data showed PCE at a concentration of less than 3 ug/m3.

1.3 Pilot Testing

Based on the SVI data from the Project Site, an SSDS pilot test was performed by the NYSDEC in March 2016 to obtain pertinent design data and assess the overall feasibility of the selected remedy. Two (2) sub-slab extraction sumps (SDS-1 and SDS-2) were installed as part of the pilot test and remain in place with stickup piping. These extraction sumps will be used as part of the full-scale SSDS. Refer to Figure 3 and Appendix 5 for mapping showing the location of the extraction sumps.

This IRAWP has been developed based on the results of the SVI and pilot testing completed by the NYSDEC.

1.4 Standards, Criteria and Guidelines

This section identifies the Standards, Criteria and Guidelines (SCGs) for the Site. The SCGs identified are used in order to quantify the extent of contamination at the Site that require remedial work based on the cleanup goal. The SCGs to be utilized as part of the implementation of this IRAWP are identified below:

Soil SCGs: The following SCGs for soil were used in developing this IRAWP:

- NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (RPSCOs) for the Protection of Public Health/Restricted Residential Use;

Groundwater SCGs: The following SCGs for groundwater were used in developing this IRAWP:

- NYSDEC Part 703 Groundwater Standards

Soil Gas SCGs: Currently, no state regulatory (NYSDEC or NYSDOH) guidance values exist for soil gas.

Sub-Slab Soil Vapor and Indoor Air SCGs: The NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 is utilized for the SCG for soil vapor and indoor air.

The attached Table 1 presents the complete list of applicable SCGs for the implementation of this IRAWP.

2.0 Objective

The primary objective of this IRAWP is to mitigate chlorinated VOC impacts identified in SVI samples collected by the NYSDEC in November 2015. This objective is to be completed via the installation of a sub-slab depressurization system (SSDS) within the Site building.

The overall objective for the Site is its continued use for residential and commercial purposes.

3.0 Summary of the Remedial Goals

The Remedial Goals for this IRAWP are as follows:

- Install a SSDS to create negative sub-slab pressure beneath the basement floor slab, thus mitigating soil vapor intrusion issues within these areas of the Site building.

Although not anticipated to be generated as part of the SSDS installation, impacted soils and liquid materials shall be addressed in accordance with applicable local, state, and federal regulations as needed.

4.0 Field Activities Plan

4.1 Sub-Slab Depressurization System Installation

4.1.1 System Overview

The SSDS will be installed in substantial accordance with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 (and associated amendments). The majority of the system will be constructed of Schedule 40 polyvinyl chloride (PVC) piping and fittings which shall conform to ASTM D3034. The SSDS is designed to influence the approximately 4,500 square feet (sq. ft.) footprint of the Site building. Based on pilot testing completed by the NYSDEC, the SSDS is proposed to consist of four (4) depressurization points which will be designated SDS-1 through SDS-4. SDS-1 and SDS-3 will consist of their own sub-systems while SDS-2 and SDS-4 will comprise one manifold horizontally within the building to form a sub-system. Each sub-system will have its own mitigation fan. One (1) depressurization point (i.e., SDS-3) will be installed horizontally through the western wall of the basement. The basement does not extend entirely to the western exterior wall and thus an approximately 950-sq ft area of the first floor of the building has slab-on-grade construction (refer to Figure 3). The location of depressurization point SDS-3 was selected to create negative pressure beneath the 950-sq ft area of the first-floor slab.

As part of the SSDS installation, basement sumps and floor cracks will be sealed.

PFE monitoring points will also be installed in the building floor slab during the installation of the SSDS; however, these points will be sealed subsequent to complete system operation and confirmation of the radius of influence. Due to the age and complexity of the building, additional depressurization points may be required to be installed following the initial scope of work to achieve the required negative pressure beneath the building floor slab.

4.1.2 Depressurization Points

Each depressurization point is designed to consist of a vertical 3-in. diameter Schedule 40 PVC pipe which will comprise a horizontal manifold 3-in. diameter Schedule 40 PVC pipe (a lateral) located below the building's floor slab. The depressurization point SDS-4 was installed using the same procedure as points SDS-1 & SDS-2 that were installed during the pilot test in March 2016 (refer to section 1.3 for additional information). SDS-3 will be installed by coring a 12-inch diameter hole through the existing basement wall at the location indicated on Figure 3. The elevation of the hole will be as close to the basement ceiling as feasible. Material shall be removed to a distance of 2 feet beyond the basement wall and the entire diameter of the cored hole. A 3-inch diameter schedule 40 polyvinyl chloride (PVC) open-ended pipe shall be inserted into the wall penetration, extending approximately 2" beyond the wall. A 5-inch diameter schedule 40 galvanized steel pipe sleeve shall be used for the wall penetration and sealed to the outside of the wall penetration with non-shrink grout.

4.1.3 Fans and Lateral

The laterals are designed to consist of 3-in. diameter Schedule 40 PVC into which once connected to the vertical depressurization points SDS-2 & SDS-4 will compose a manifold. Laterals are anticipated to link together only SDS-2 & SDS-4 to create a sub-system that will be tied into a vertical riser which will extend through the roof where a fan (RadonAway HS-2000E) will be located within the building's ceiling and/or other overhead utility corridors. Depressurization points SDS-1 & SDS-3 will each be connected to separate vertical risers that will extend through the roof to their own fans (both RadonAway HS-5000E)

that will be located within the building's ceiling and/or other overhead utility corridors. Effluent from the fans shall be discharged at least 10-ft. away from any air intakes, at least 12-in. above the surface of the roof and at least 10-ft. from any opening that is less than 2-ft. below the exhaust point.

4.1.4 Pipe Bollards

SDS-1 and SDS-2/SDS-4 piping will each be protected with 6-inch diameter schedule 40 galvanized steel pipe bollards filled with concrete. The bollards will be 6 feet in total length, with 3 feet above grade and painted safety yellow. The bollards shall be anchored with 16-inch diameter concrete piers. Bollards shall be centered in front of piping and spaced approximately 18 inches from piping.

4.2 Health and Safety and Community Air Monitoring

It should be noted that the building contains numerous tenant spaces that are fully utilized. Based on this and the nature of the work, the work will be completed during off-hours (nights and weekends). In general, this will eliminate and/or minimize tenant occupants being within the space during field activities. However, based on some tenant operations still having some staff 24-hrs a day and/or having secure/sensitive documents requiring a representative to be on-site with any visitors, some tenant occupants may be within the building at the time of the work. However, all individuals not directly involved with the planned work will be absent from the room in which the work will occur during work that will expose subsurface materials. In the event that a large open room is being worked in, individuals not directly involved with the work will be at least 30 feet from the work zone. Furthermore, all exhaust vents, openings and conduits and discharge points of such shall be evaluated and understood prior to proceeding with any subsurface work. It should also be noted that engineering controls will be utilized as part of the planned work and these include: sealing all penetrations when not in use (e.g., if work must be ceased due to the end of the workday prior to finished point installation), applying a vacuum to the coreholes and venting the sub-slab soil vapor to the exterior, evaluating and confirming the types and extents of vents, conduits, etc. from the work area and securing these as necessary.

LaBella's Health and Safety Plan (HASP) for this project is included as Appendix 1.

The NYSDOH Generic Community Air Monitoring Plan (CAMP) and Fugitive Dust and Particulate Monitoring will be utilized for this IRAWP and is included as Appendix 2. Based on the nature of the work some modifications/clarifications are warranted for the CAMP monitoring. These are provided below:

- All work will be completed within the building and thus upwind/downwind monitoring will be modified. Specifically, a background reading for VOCs and fugitive dust will be established at each work area prior to conducting any subsurface penetrations and then monitoring will be conducted within the work zone (approximate 5-ft. radius area around floor penetration). The action levels will be applied to the edge of the work zone.
- Subsequent to completing work and sealing the floor penetrations (see Section 4.1.2) a reading for VOCs will be recorded to confirm background levels have been established.
- Fugitive dust monitoring will be completed in accordance with the NYSDOH Guidance and as noted above; however, it should be noted that coring of the concrete floor will likely create some minimal dust for a short duration and wet techniques will be employed to minimize this issue.

LaBella's complete Community Air Monitoring Plan (CAMP) is included as Appendix 2

5.0 IRAWP Schedule and Reporting – Deliverables

Implementation of the IRAWP is scheduled to begin within 30 days after NYSDEC approval of this work plan. The field work is anticipated to require 60 to 90 days to complete subsequent to the approval of the IRAWP.

The above schedule assumes that an addendum to the IRAWP will not be required. If an IRAWP addendum is required, it will be submitted as the need is identified and it will include a revised schedule.

A Final Engineering Report (FER) documenting the remedial work conducted will be developed and submitted to NYSDEC subsequent to installation of the SSDS. The FER will be completed in accordance with DER 10.

The remedy for the Site assumes that a SMP will be utilized for long-term management of the residual impacts at the Site. A SMP coupled with Institutional Controls will be developed for the entire Site, including all AOCs not part of the remedy. The intent of this document will be to manage any soil impacts remaining at the Site at levels above the Part 375-6 Unrestricted Use SCOs and to restrict groundwater use at the Site. The SMP will include the following:

- Identify specific areas of residual impacted soil and groundwater that remain on-site (based on previous data) and illustrate these areas on mapping.
- Identify proper handling, characterization, transportation and disposal requirements of the various impacted material should such material be encountered during any site redevelopment or future construction activities (e.g., underground utility work).
- Indicate that groundwater cannot be used as a source of drinking water or extracted for any reason without prior approval from regulatory agencies.
- Indicate that these measures are included in an Environmental Easement that is recorded with the Monroe County Clerk.
- Indicate that a certification be submitted to NYSDEC every three years certifying that the requirements of the SMP were adhered to.
- Record an Environmental Easement with the Monroe County Clerk that indicates the above requirements

The SMP and Environmental Easement to be recorded with the Clerk will be provided to NYSDEC prior to finalizing/recording these documents.

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Tables

Table 1A

Commercial Use Soil Cleanup Objectives
6 NYCRR Subpart 375-6 and CP-51 Remedial Program Soil Cleanup Objectives
(All Soil Cleanup Objectives are in mg/kg (ppm)

Contaminant	CAS No.	Commercial	Protection of Groundwater
VOLATILE ORGANIC COMPOUNDS (VOCs)			
1,1,1-Trichloroethane	71-55-6	500 [b]	0.68
1,1-Dichloroethane	75-34-3	240	0.27
1,1-Dichloroethene	75-35-4	500 [b]	0.33
1,2-Dichlorobenzene	95-50-1	500 [b]	1.1
1,2-Dichloroethane	107-06-2	30	0.02 [f]
cis-1,2-Dichloroethene	156-59-2	500 [b]	0.25
trans-1,2-Dichloroethene	156-60-5	500 [b]	0.19
1,3-Dichlorobenzene	541-73-1	280	2.4
1,4-Dichlorobenzene	106-46-7	130	1.8
1,4-Dioxane	123-91-1	130	0.1 [e]
Acetone	67-64-1	500 [b]	0.05
Benzene	71-43-2	44	0.06
Butylbenzene	104-51-8	500 [b]	12
Carbon Tetrachloride	56-23-5	22	0.76
Chlorobenzene	108-90-7	500 [b]	1.1
Chloroform	67-66-3	350	0.37
Ethylbenzene	100-41-4	390	1
Hexachlorobenzene	118-74-1	6	3.2
Methyl Ethyl Ketone (MEK)	78-93-3	500 [b]	0.12
Methyl tert-Butyl Ether (MtBE)	1634-04-4	500 [b]	0.93
Methylene Chloride	75-09-2	500 [b]	0.05
n-Propylbenzene	103-65-1	500 [b]	3.9
sec-Butylbenzene	135-98-8	500 [b]	11
tert-Butylbenzene	98-06-6	500 [b]	5.9
Tetrachloroethene	127-18-4	150	1.3
Toluene	108-88-3	500 [b]	0.7
Trichloroethene	79-01-6	200	0.47
1,2,4-Trimethylbenzene	95-63-6	190	3.6
1,3,5-Trimethylbenzene	108-67-8	190	8.4
Vinyl Chloride	75-01-4	13	0.02
Xylenes (Mixed)	1330-20-7	500 [b]	1.6

Contaminant	CAS No.	Commercial	Protection of Groundwater
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)			
Acenaphthene	83-32-9	500 [b]	98
Acenaphthylene	208-96-8	500 [b]	107
Anthracene	120-12-7	500 [b]	1,000 [c]
Benzo(a)anthracene	56-55-3	5.6	1 [f]
Benzo(a)pyrene	50-32-8	1 [f]	22
Benzo(b)fluoranthene	205-99-2	5.6	1.7
Benzo(g,h,i)perylene	191-24-2	500 [b]	1,000 [c]
Benzo(k)fluoranthene	207-08-9	56	1.7
Chrysene	218-01-9	56	1 [f]
Dibenz(a,h)anthracene	53-70-3	0.56	1,000 [c]
Fluoranthene	206-44-0	500 [b]	1,000 [c]
Fluorene	86-73-7	500 [b]	386
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	8.2
m-Cresol	108-39-4	500 [b]	0.33 [e]
Naphthalene	91-20-3	500 [b]	12
o-Cresol	95-48-7	500 [b]	0.33 [e]
p-Cresol	106-44-5	500 [b]	0.33 [e]
Pentachlorophenol	87-86-5	6.7	0.8 [e]
Phenanthrene	85-01-8	500 [b]	1,000 [c]
Phenol	108-95-2	500 [b]	0.33 [e]
Pyrene	129-00-0	500 [b]	1,000 [c]

Notes:

SCO denotes Soil Cleanup Objectives.

NS denotes Not Specified.

[b] The SCOs for Commercial use were capped at a maximum of 500-mg/kg (ppm).

[d] The SCOs for metals were capped at a maximum of 10,000-mg/kg (ppm).

[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL was used as the SCO.

[f] For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for use of the site.

[h] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[i] The SCO is for the sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

[j] The SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts).

Table 1A (continued)

Commercial Use Soil Cleanup Objectives
6 NYCRR Subpart 375-6 and CP-51 Remedial Program Soil Cleanup Objectives
(All Soil Cleanup Objectives are in mg/kg (ppm))

Contaminant	CAS No.	Commercial	Protection of Groundwater
METALS			
Arsenic	7440-38-2	16 [f]	16 [f]
Barium	7440-39-3	400	820
Beryllium	7440-41-7	590	47
Cadmium	7440-43-9	9.3	7.5
Chromium (Hexavalet)	18540-29-9	400	19
Chromium (Trivalent)	16065-83-1	1,500	NS
Copper	7440-50-8	270	1,720
Total Cyanide	57-12-5	27	40
Lead	7439-92-1	1,000	450
Manganese	7439-96-5	10,000 [d]	2,000 [f]
Total Mercury	7439-97-6	2.8 [j]	0.73
Nickel	7440-02-0	310	130
Selenium	7782-49-2	1,500	4 [f]
Silver	7440-22-4	1,500	8.3
Zinc	7440-66-6	10,000 [d]	2,480

Contaminant	CAS No.	Commercial	Protection of Groundwater
PCB & PESTICIDES			
2,4,5-TP Acid (Silvex)	93-72-1	500 [b]	3.8
4,4'-DDE	72-55-9	62	17
4,4'-DDT	50-29-3	47	136
4,4'-DDD	72-54-8	92	14
Aldrin	309-00-2	0.68	0.19
alpha-BHC	319-84-6	3.4	0.02
beta-BHC	319-85-7	3	0.09
Chlordane (alpha)	5103-71-9	24	2.9
delta-BHC	319-86-8	500 [b]	0.25
Dibenzofuran	132-64-9	350	210
Dieldrin	60-57-1	1.4	0.1
Endosulfan I	959-98-8	200 [i]	102
Endosulfan II	33213-65-9	200 [i]	102
Endosulfan Sulfate	1031-07-8	200 [i]	1,000 [c]
Endrin	72-20-8	89	0.06
Heptachlor	76-44-8	15	0.38
Lindane	58-89-9	9.2	0.1
Polychlorinated Biphenyls	1336-36-3	1	3.2

Notes:

SCO denotes Soil Cleanup Objectives.

NS denotes Not Specified.

[b] The SCOs for Commercial use were capped at a maximum of 500-mg/kg (ppm).

[d] The SCOs for metals were capped at a maximum of 10,000-mg/kg (ppm).

[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL was used as the SCO.

[f] For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and the Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for use of the site.

[h] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[i] The SCO is for the sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

[j] The SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts).

Table 1B

Groundwater Standards and Guidance Values
(All Groundwater Criteria are in ug/L (ppb)

Contaminant	CAS No.	NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
VOLATILE ORGANIC COMPOUNDS (VOCs)		
Chloromethane	74-87-3	5
Vinyl chloride	75-01-4	2
1,1-Dichloroethene	75-35-4	5
Acetone	67-64-1	50
Carbon disulfide	75-15-0	60*
Methylene chloride	75-09-2	5
trans-1,2-dichloroethene	156-60-5	5
Methyl tert-butyl ether	1634-04-4	10
1,1-Dichloroethane	75-34-3	5
2-Butanone	78-93-3	50
cis-1,2-dichloroethene	156-59-2	5
Chloroform	67-66-3	7
Chloroethane	75-00-3	5
1,2-Dichloroethane	107-06-2	0.6
Benzene	71-43-2	1
Trichloroethene	79-01-6	5
Toluene	108-88-3	5
1,1,2-Trichloroethane	79-00-5	1
Tetrachloroethene	127-18-4	5
Ethylbenzene	100-41-4	5
Xylenes (mixed)	1330-20-7	5
Bromoform	75-25-2	50*
Isopropylbenzene	98-82-8	5
n-Propylbenzene	103-65-1	5
1,3,5-Trimethylbenzene	108-67-8	5
tert-Butylbenzene	98-06-6	5
1,2,4-Trimethylbenzene	95-63-6	5
sec-Butylbenzene	135-98-8	5
4-Isopropyltoluene	99-87-6	5
n-Butylbenzene	104-51-8	5
1,2-Dichlorobenzene	95-50-1	3
Naphthalene	91-20-3	10

Contaminant	CAS No.	NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)		
Acenaphthene	83-32-9	20
Acenaphthylene	208-96-8	NA
Anthracene	120-12-7	50
Benzo(a)anthracene	56-55-3	0.002
Benzo(a)pyrene	50-32-8	ND
Benzo(b)fluoranthene	205-99-2	0.002
Benzo(g,h,i)perylene	191-24-2	NA
Benzo(k)fluoranthene	207-08-9	0.002
Chrysene	218-01-9	0.002
Dibenz(a,h)anthracene	53-70-3	NA
Fluoranthene	206-44-0	50
Fluorene	86-73-7	50
Indeno(1,2,3-cd)pyrene	193-39-5	0.002
Naphthalene	91-20-3	10
Phenanthrene	85-01-8	50
Pyrene	129-00-0	50

Notes:

NA denotes Not Available.

* Indicates value is from Division of Water Techinical and Operational Guidance Series (TOGS 1.1.1)

Table 1B (continued)

Groundwater Standards and Guidance Values
(All Groundwater Criteria are in ug/L (ppb)

Contaminant	CAS No.	NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
METALS		
Arsenic	7440-38-2	25
Barium	7440-39-3	1,000
Beryllium	7440-41-7	3
Cadmium	7440-43-9	5
Chromium (Trivalent)	16065-83-1	50
Copper	7440-50-8	200
Total Cyanide	57-12-5	200
Lead	7439-92-1	25
Manganese	7439-96-5	300
Total Mercury	7439-97-6	0.7
Nickel	7440-02-0	100
Selenium	7782-49-2	10
Silver	7440-22-4	50
Zinc	7440-66-6	2,000

Contaminant	CAS No.	NYSDEC Part 703 Groundwater Standards and TOGS 1.1.1 Guidance Values
PCBs & PESTICIDES		
2,4,5-TP Acid (Silvex)	93-72-1	10
4,4'-DDE	72-55-9	0.2
4,4'-DDT	50-29-3	0.2
4,4'-DDD	72-54-8	0.3
Aldrin	309-00-2	50
alpha-BHC	319-84-6	0.01
beta-BHC	319-85-7	0.04
Chlordane (alpha)	5103-71-9	0.05
delta-BHC	319-86-8	0.04
Dibenzofuran	132-64-9	NA
Dieldrin	60-57-1	0.004
Endosulfan I	959-98-8	NA
Endosulfan II	33213-65-9	50
Endosulfan Sulfate	1031-07-8	50
Endrin	72-20-8	50
Heptachlor	76-44-8	0.03
Lindane	58-89-9	0.05
Polychlorinated Biphenyls	1336-36-3	0.09

Notes:

NA denotes Not Available.

* Indicates value is from Division of Water Techinical and Operational Guidance Series (TOGS 1.1.1)

Table 1C

Sub-Slab Vapor, Indoor Air and Effluent Standards, Criteria and Guidelines
Targeted Compounds Displayed
(All Guidelines are in ug/m^3)

Contaminant	CAS No.	USEPA BASE Database - 90th Percentile [(1)]	Air Guideline Derived by NYSDOH [(2)]	NYSDOH Sub-Slab Vapor Concentration Decision Matrix (minimum action level)
TARGETED VOLATILE ORGANIC COMPOUNDS (VOCs)				
1,1,1-Trichloroethane	71-55-6	20.6	NL	<100**
1,1-Dichloroethane	75-34-3	9.5	NL	NL
1,1-Dichloroethene	75-35-4	<0.7	NL	<100**
1,2-Dichloroethane	107-06-2	<1.4	NL	NL
Chloroethane	75-00-3	<1.2	NL	NL
cis-1,2-Dichloroethene	156-59-2	3.7	NL	<100**
trans-1,2-Dichloroethene	156-60-5	9.4	NL	NL
Tetrachloroethene	127-18-4	98.9	30*	<100**
Trichloroethene	79-01-6	<1.1	5	<5***
Vinyl Chloride	75-01-4	1.1	NL	<5***

Notes:

(1) USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (refer to Footnote 2), this database is referenced for the indoor air sampling results. This database is also referenced to provide initial benchmarks for comparision to data and does not represent standards or compliance values.

(2) New York State Department of Health (NYSDOH) Air Guideline established in Table 3.1 of the NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in New York State", October

NL denotes Not Listed.

*Air Guideline Values obtained from Table 3.1, NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York as updated by September 2013 Fact Sheet for PCE.

**Guidance Value obtained from Soil Vapor/Indoor Air Matrix 2 (minimum action level), NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

***Guideline Value obtained from Soil Vapor/Indoor Air Matrix 1 (minimum action level), NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

Table 2
Summary Of Detected Volatile Organic Compounds in Sub Slab & Indoor Air Samples
Collected by NYSDEC - November 2015
Results in Micrograms per Cubic Meter (µg/m^3)

113-117 North Clinton Avenue
Rochester, New York
LaBella Project No. 2161120

Parameter	Sub Slab Sample ID / Date		Indoor Air Sample ID / Date		USEPA (2001) (BASE) Database - 90th Percentile [1]	Air Guideline Derived by NYSDOH [2]
	NC-SS-01	NC-SS-02	NC-IA-01	NC-1A-02		
	11/24/2015	11/24/2015	11/24/2015	11/24/2015		
Select Volatile Organic Compounds (VOCs)						
Benzene	1.9	3.0	5.6	6.0	15.0	NL
2-Butanone (MEK)	ND (12.0)	ND(12.0)	6.1	7.4	12.0	NL
Carbon Tetrachloride	ND (0.63)	ND (0.63)	0.49	0.5	< 1.3	NL
Chloroform	1.0	**2.6**	0.8	0.9	1.4	NL
Chloromethane	0.28	0.59	1.7	1.7	3.3	NL
Cyclohexane	7.4	**77.0**	4.5	4.9	8.1	NL
Dichlorodifluoromethane (Freon 12)	1.2	1.3	0.86	0.9	NL	NL
1,2-Dichloroethane	0.9	0.9	0.28	0.3	< 0.9	NL
Ethanol	25.0	ND (7.5)	ND (2.6)	**490.0**	210.0	NL
Ethyl Benzene	2.1	3.2	1.9	2.2	NL	NL
Hexane	ND (14.0)	ND (14.0)	**22.0**	23.0	10.2	NL
Styrene	0.57	0.5	0.5	0.6	1.9	NL
Methylene Chloride	ND (3.5)	ND (3.5)	1.6	1.5	10.0	60
1,2,4-Trimethylbenzene	3.5	7.2	2.7	3.2	9.5	NL
1,3,5-Trimethylbenzene	1.5	3.1	0.7	0.9	3.7	NL
1,1,2-Trichlorotrifluoroethane (Freon 113)	3.7	5.7	ND (1.1)	ND (1.1)	NL	NL
2,2,4-Trimethylpentane	ND (1.3)	1.4	8.7	9.1	NL	NL
1,2-Dichloroethane	1.0	0.92	0.3	0.3	< 1.4	NL
Tetrachloroethylene	49.0	**140.0**	**170.0**	**170.0**	98.9	30*
Trichlorofluoromethane (Freon 11)	ND (2.2)	ND (2.2)	1.3	1.6	18.1	NL
Trichloroethylene	0.73	2.1	0.47	0.5	NL	2
Toluene	12	23.0	25.0	27.0	43.0	NL
m&p-Xylene	6.2	22.0	8.2	9.2	22.2	NL
o-Xylene	2.8	**13.0**	2.6	3.0	7.9	NL

NOTES:

VOC analysis by United States Environmental Protection Agency (USEPA) Method TO-15.

1. USEPA Building Assessment and Survey Evaluation (BASE) Database (90th Percentile). As recommended in Section 3.2.4 of the NYSDOH Guidance (Refer to Footnote "1") this database is referenced for the indoor air sampling results. This database is also referenced to provide initial benchmarks for comparison to the air sampling data and does not represent regulatory standards or compliance values.
2. New York State Department of Health (NYSDOH) Air Guideline established in Table 3.1 of the NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006.
3. "Select" VOCs determined based on the DPI Work Plan approved by the NYSDEC and NYSDOH in July 2014.
4. Air samples collected by NYSDEC November, 2015

* = Air Guideline Values obtained from Table 3.1,

Highlighted values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates).

Bold values are above USEPA (2001) BASE Database - 90th Percentile Values.

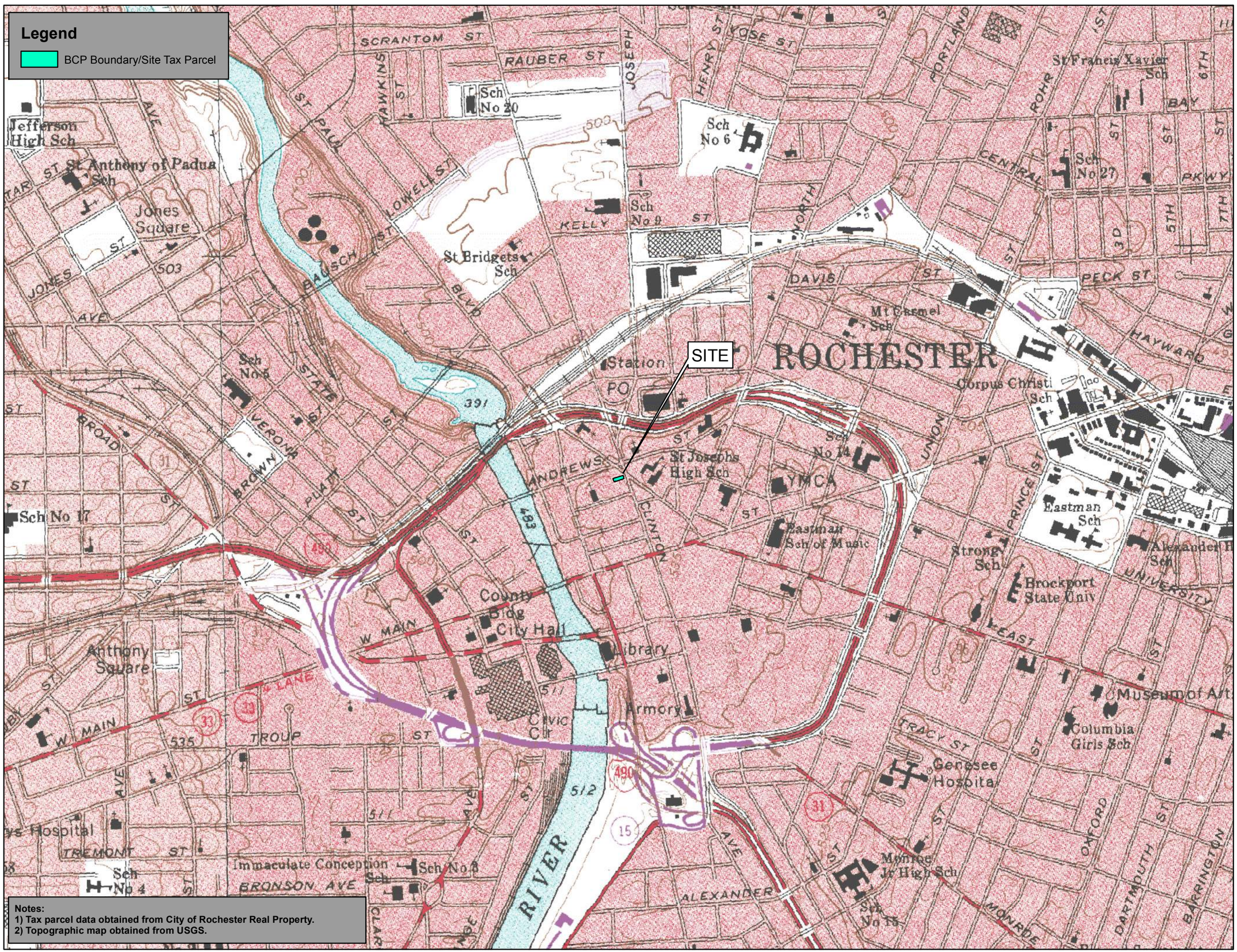
Italized values are above the Occupational Health and Safety Administration (OSHA) PEL 8-hour time-weighted average (OSHA Part #1910.1000 TABLE Z-2).

ND Indicates "constituent not detected above the laboratory detection limit shown".

NL Indicates "not listed".

LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

Figures



Notes:
1) Tax parcel data obtained from City of Rochester Real Property.
2) Topographic map obtained from USGS.

Document Path: I:\Clinton North Development Corp\2161120 - BCP Application - 113-117 N. Clinton Avenue, Rochester, NY\Reports\RAWP - SSDS\Figures\GIS Files\Figure 1A - Topo Map.mxd

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INTERIM REMEDIAL ACTION WORKPLAN: SUB-SLAB DEPRESSURIZATION SYSTEM

113-117 NORTH CLINTON AVENUE ROCHESTER, NEW YORK

Topographic Map

N
W E
S

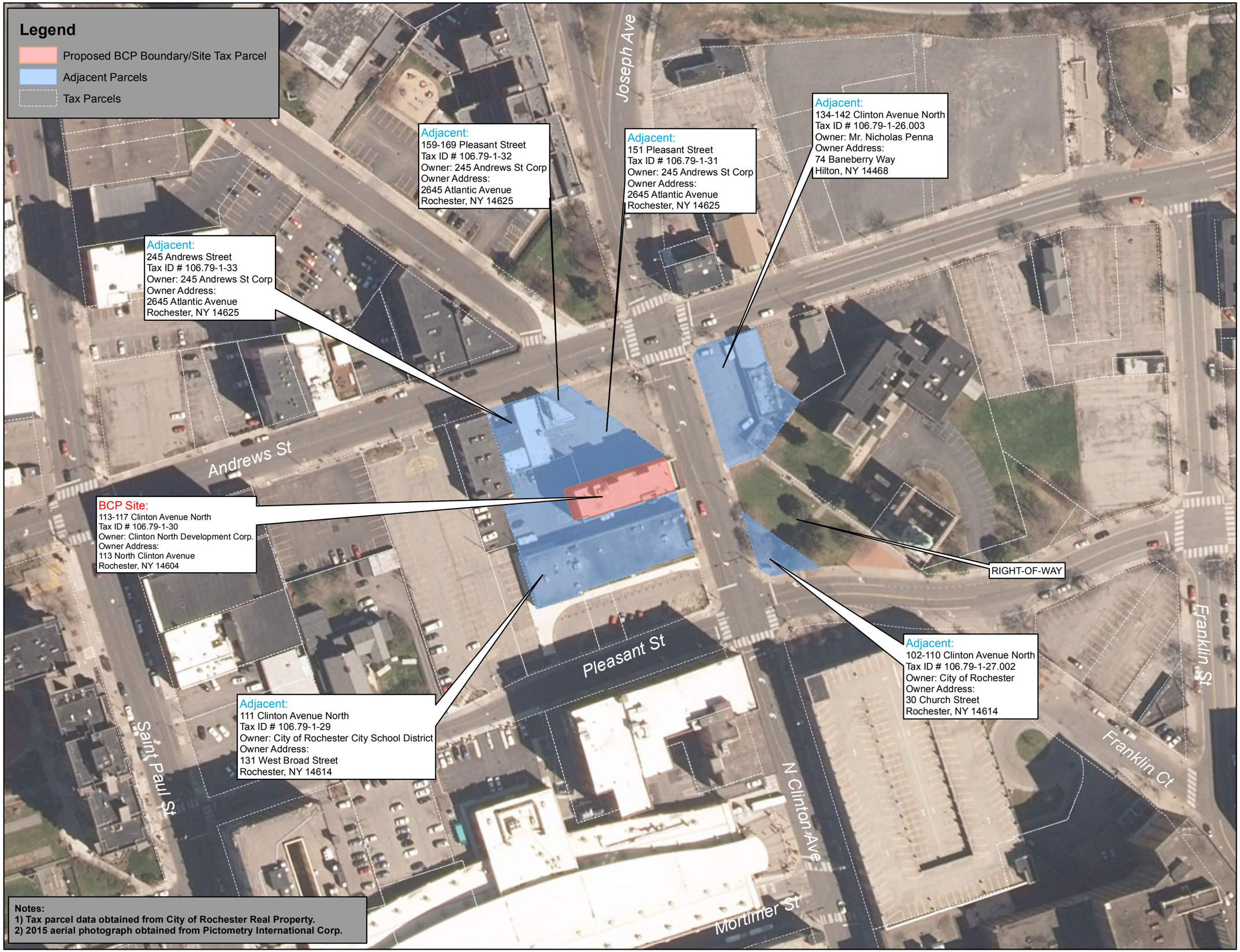
0 500 1,000 2,000 Feet

1 inch = 1,000 feet

INTENDED TO PRINT AS 11" X 17".

2161120

FIGURE 1



Notes:
1) Tax parcel data obtained from City of Rochester Real Property.
2) 2015 aerial photograph obtained from Pictometry International Corp.

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INTERIM REMEDIAL ACTION WORKPLAN: SUB-SLAB DEPRESSURIZATION SYSTEM

113-117 NORTH CLINTON AVENUE ROCHESTER, NEW YORK

Site Location Map

N
W E
S

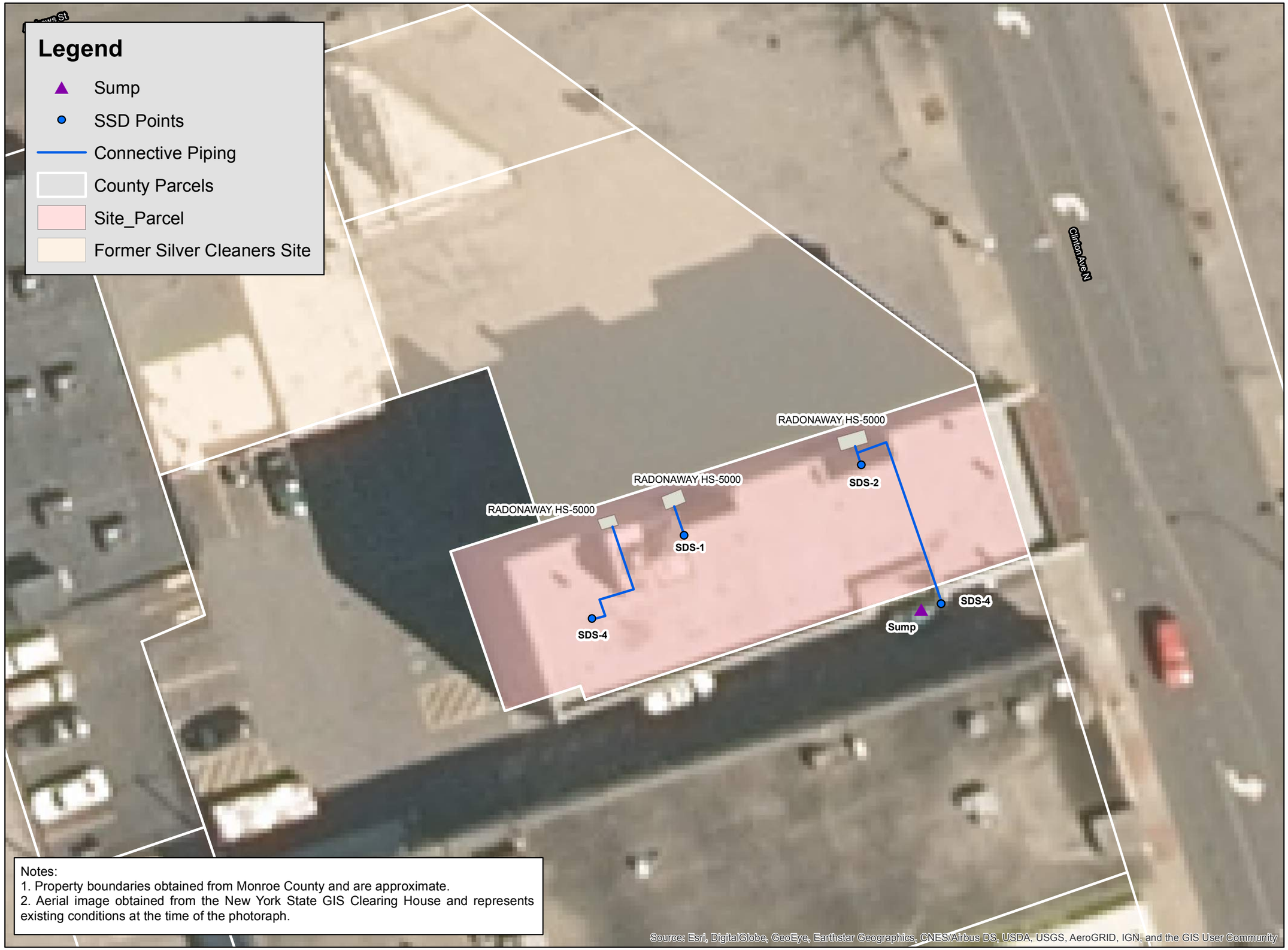
0 50 100 200 Feet

1 inch = 100 feet

INTENDED TO PRINT AS 11" X 17".

2161120

FIGURE 2



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N
W E
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0 5 10 20
Feet

1 inch = 20 feet

113-117 North Clinton Ave

INTERIM REMEDIAL ACTION WORK PLAN:

SUB-SLAB DEPRESSURIZATION SYSTEM

PRELIMINARY SYSTEM SETUP

PROJECT/DRAWING NUMBER:

2161120

FIGURE 3

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LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

Appendix 1

Health & Safety Plan

Site Health and Safety Plan

Location:

113-117 North Clinton Avenue
Rochester, New York

Prepared For:

Clinton North Development Corporation
c/o Tallo Properties
10 Symington Place
Rochester, New York 14611

LaBella Project No. 2161120

October 2016

Site Health and Safety Plan

Location:

113-117 North Clinton Avenue
Rochester, New York 14611

Prepared For:

Clinton North Development Corporation
c/o Tallo Properties
10 Symington Place
Rochester, New York 14611

LaBella Project No. 2161120

October 2016

Table of Contents

Tables

SITE HEALTH AND SAFETY PLAN

Project Title:	113-117 North Clinton Avenue Brownfield Cleanup Program
Project Number:	2161120
Project Location (Site):	113-117 North Clinton Avenue, Rochester, New York 14611
Environmental Director:	Gregory Senecal, CHMM
Project Manager:	Dan Noll, P.E.
Plan Review Date:	October 12, 2016
Plan Approval Date:	October 12, 2016
Plan Approved By:	Mr. David Engert, CHMM
Site Safety Supervisor:	To Be Determined
Site Contact:	Justin Tallo
Safety Director:	Rick Rote, CIH
Proposed Date(s) of Field Activities:	To Be Determined
Site Conditions:	0.11± acres primarily utilized as a residential hotel (i.e., boarding house) with several small businesses located on the first floor
Site Environmental Information Provided By:	❑ Phase II Environmental Site Assessment, 113-117 North Clinton Avenue, Rochester, New York, prepared by Leader Professional Services, Inc. ("Leader") , dated January 2013 ❑ Building Pressurization Assessment, 3750 Monroe Avenue, Pittsford, New York, prepared by LaBella Associates, P.C., dated January 2013 ❑ Limited Interior Subsurface Evaluation, 3750 Monroe Avenue, Pittsford, New York, prepared by LaBella Associates, P.C., dated July 2013
Air Monitoring Provided By:	LaBella Associates, D.P.C.
Site Control Provided By:	Contractor(s)

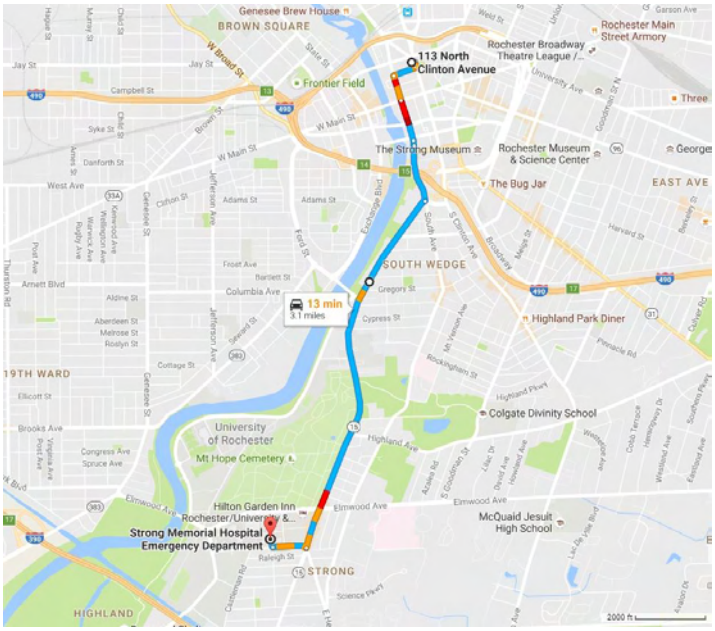
EMERGENCY CONTACTS

	Name	Phone Number
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	Strong Memorial Hospital	585-275-2100
Poison Control Center:	Finger Lakes Poison Control	716-275-5151
Police (local, state):	Rochester Police Department	911
Fire Department:	Rochester Fire Department	911
Site Contact:	Kevin Chick	Cell: 585-615-6633
Agency Contact:	NYSDEC – Todd Caffoe NYSDOH – Julia Kenney Finger Lakes Poison Control	585-226-5350 518-402-7860 1-800-222-1222
Environmental Director:	Greg Senecal, CHMM	Direct: 585-295-6243 Cell: 585-752-6480
Project Manager:	Dan Noll, P.E.	Direct: 585-295-6611 Cell: 585-301-8458
Site Safety Supervisor:	TBD	Cell:
Safety Director	Rick Rote, CIH	Direct: 585-295-6241

MAP AND DIRECTIONS TO THE MEDICAL FACILITY - STONG MEMORIAL HOSPITAL

Total Est. Time: 13 minutes **Total Est. Distance:** 3.1 miles

1. Turn right, heading south on N Clinton Ave toward Pleasant St (174 ft)
2. Turn right at the 1st cross street onto Pleasant St (0.1 mi)
3. Turn left onto St Paul St (0.1 mi)
4. Continue onto South Ave (0.2 mi)
5. Use the middle 2 lanes to stay on South Ave (141 ft)
6. Keep left to stay on South Ave (0.3 mi)
7. Turn right onto Mt Hope Ave (2.1 mi)
8. Turn right onto Crittenden Blvd (0.2 mi)
9. Turn right at Norfolk St (151 ft)



LABELLA

1.0 Introduction

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered during remedial actions at 113-117 North Clinton Avenue in the City of Rochester, Monroe County, New York (Site). This HASP only reflects the policies of LaBella Associates D.P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work site. This document's project specifications, and the Community Air Monitoring Plan (CAMP), are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or other regulatory bodies.

2.0 Responsibilities

This HASP presents guidelines to minimize the risk of injury to project personnel, and to provide rapid response in the event of injury. The HASP is applicable only to activities of approved LaBella personnel and their authorized visitors. The Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of LaBella employees to follow the requirements of this HASP, and all applicable company safety procedures.

3.0 Activities Covered

The activities covered under this HASP are limited to the following:

- Management of environmental investigation and remediation activities
- Environmental Monitoring
- Collection of samples
- Management of excavated soil and fill

4.0 Work Area Access and Site Control

The contractor(s) will have primary responsibility for work area access and site control.

5.0 Potential Health and Safety Hazards

This section lists some potential health and safety hazards that project personnel may encounter at the project site and some actions to be implemented by approved personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as site environmental and site work conditions change. The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times, the Site Safety Officer has responsibility for site safety and his instructions must be followed.

5.1 Hazards Due to Heavy Machinery

Potential Hazard:
Heavy machinery including trucks, excavators, backhoes, etc will be in operation at the site. The presence of such equipment presents the danger of being struck or crushed. Use caution when working near heavy machinery.

Protective Action:
Make sure that operators are aware of your activities, and heed operator's instructions and warnings. Wear bright colored clothing and walk safe distances from heavy equipment. A hard hat, safety glasses and steel toe shoes are required.

5.2 Excavation Hazards

Potential Hazard:
Excavations and trenches can collapse, causing injury or death. Edges of excavations can be unstable and collapse. Toxic and asphyxiant gases can accumulate in confined spaces and trenches. Excavations that require working within the excavation will require air monitoring in the breathing zone (refer to Section 9.0).

Excavations left open create a fall hazard which can cause injury or death.

Protective Action:
Personnel must receive approval from the Project Manager to enter an excavation for any reason. Subsequently, approved personnel are to receive authorization for entry from the Site Safety Officer. Approved personnel are not to enter excavations over 4 feet in depth unless excavations are adequately sloped. Additional personal protective equipment may be required based on the air monitoring.

Personnel should exercise caution near all excavations at the site as it is expected that excavation sidewalls will be unstable. Do not proceed closer than 3 feet to an unsupported or non-sloped excavation side wall.

Fencing and/or barriers accompanied by "no trespassing" signs should be placed around all excavations when left open for any period of time when work is not being conducted.

5.3 Cuts, Punctures and Other Injuries

Potential Hazard:
In any excavation and construction work site there is the potential for the presence of sharp or jagged edges on rock, metal materials, and other sharp objects. Serious cuts and punctures can result in loss of blood and infection.

Protective Action:
The Project Manager is responsible for making First Aid supplies available at the work site to treat minor injuries. The Site Safety Officer is responsible for arranging the transportation of authorized on-site personnel to medical facilities when First Aid treatment in not sufficient. Do not move seriously injured workers. All injuries requiring treatment are to be reported to the Project Manager. Serious injuries are to be reported immediately to the Site Safety Officer

5.4 Injury Due to Exposure of Chemical Hazards

Potential Hazards:
Contaminants identified in testing locations at the Site include various chlorinated solvents including but not limited to trichloroethylene (TCE) and methylene chloride and some metals have also been identified. Volatile organic vapors, chlorinated solvents or other chemicals may be encountered during excavation activities at the project work site. Inhalation of high concentrations of volatile organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis. It should also be noted that historic information (waste manifests) from previous Site operations indicated these chemicals being disposed of from the Site: 1,1,1-trochloroethane, ethanol, tetrachloroethene (PCE), isopropyl alcohol, propylene glycol, methyl ether, waste polychlorinated biphenyl-containing (PCBs) transformer oil, waste paint related material (methylene phosphoric acid), potassium hydroxide ethanol, isopropyl alcohol, waste coal tar pitch, naphthalene, and methylene phosphoric acid.

Protective Action:
The presence of organic vapors may be detected by their odor and by monitoring instrumentation. Approved employees will not work in environments where hazardous concentrations of organic vapors are present. Air monitoring (refer to Section 9.0) of the work area will be performed at least every 60 minutes or more often using a Photoionization Detector (PID). Personnel are to leave the work area whenever PID measurements of ambient air exceed 25 ppm consistently for a 5 minute period. In the event that sustained total volatile organic compound (VOC) readings of 25 ppm are encountered personnel should upgrade personal protective equipment to Level C (refer to Section 8.0) and an Exclusion Zone should be established around the work area to limit and monitor access to this area (refer to Section 6.0).

5.5 Injuries due to extreme hot or cold weather conditions

Potential Hazards:
Extreme hot weather conditions can cause heat exhaustion, heat stress and heat stroke or extreme cold weather conditions can cause hypothermia.

Protective Action:
Precaution measures should be taken such as dress appropriately for the weather conditions and drink plenty of fluid. If personnel should suffer from any of the above conditions, proper techniques should be taken to cool down or heat up the body and taken to the nearest hospital if needed.

6.0 Work Zones

In the event that conditions warrant establishing various work zones (i.e., based on hazards - Section 5.4), the following work zones should be established:

Exclusion Zone (EZ):
The EZ will be established in the immediate vicinity and adjacent downwind direction of site activities that elevate breathing zone VOC concentrations to unacceptable levels based on field screening. These site activities include contaminated soil excavation and soil sampling activities.

If access to the site is required to accommodate non-project related personnel then an EZ will be established by constructing a barrier around the work area (yellow caution tape and/or construction fencing). The EZ barrier shall encompass the work area and any equipment staging/soil staging areas necessary to perform the associated work. The contractor(s) will be responsible for establishing the EZ and limiting access to approved personnel. Depending on the condition for establishing the EZ, access to the EZ may require adequate PPE (e.g., Level C).

Contaminant Reduction Zone (CRZ):
The CRZ will be the area where personnel entering the EZ will don proper PPE prior to entering the EZ and the area where PPE may be removed. The CRZ will also be the area where decontamination of equipment and personnel will be conducted as necessary.

7.0 Decontamination Procedures

Upon leaving the work area, approved personnel shall decontaminate footwear as needed. Under normal work conditions, detailed personal decontamination procedures will not be necessary. Work clothing may become contaminated in the event of an unexpected splash or spill or contact with a contaminated substance. Minor splashes on clothing and footwear can be rinsed with clean water. Heavily contaminated clothing should be removed if it cannot be rinsed with water. Personnel assigned to this project should be prepared with a change of clothing whenever on site.

Personnel will use the contractor's disposal container for disposal of PPE.

8.0 Personal Protective Equipment

Generally, site conditions at this work site require level of protection of Level D or modified Level D; however, air monitoring will be conducted to determine if up-grading to Level C PPE is required (refer to Section 9.0). Descriptions of the typical safety equipment associated with Level D and Level C are provided below:

Level D:
Hard hat, safety glasses, rubber nitrile sampling gloves, steel toe construction grade boots, etc.

Level C:
Level D PPE and full or ½-face respirator and tyvek suit (if necessary). [*Note: Organic vapor cartridges are to be changed after each 8-hours of use or more frequently.*]

9.0 Air Monitoring

According to 29 CFR 1910.120(h), air monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection required for personnel working onsite. Air monitoring will consist at a minimum of the procedure listed below. Air monitoring instruments will be calibrated and maintained in accordance with the manufacturer's specifications.

The Air Monitor will utilize a photoionization detector (PID) to screen the ambient air in the work areas (excavation, soil staging, and soil grading areas) for total Volatile Organic Compounds (VOCs) and a

DustTrak tm Model 8520 aerosol monitor or equivalent for measuring particulates. Work area ambient air will generally be monitored in the work area and downwind of the work area. Air monitoring of the work areas and downwind of the work areas will be performed at least every 60 minutes using a PID and the DustTrak meter.

If sustained PID readings of greater than 25 ppm are recorded in the breathing zone, either personnel are to leave the work area until satisfactory readings are obtained or approved personnel may re-enter the work areas wearing at a minimum a ½ face respirator with organic vapor cartridges for an 8-hour duration (i.e., upgrade to Level C PPE). Organic vapor cartridges are to be changed after each 8-hour use or more frequently, if necessary. If PID readings are sustained, in the work area, at levels above 50 ppm for a 5 minute average, work will be stopped immediately until safe levels of VOCs are encountered or additional PPE will be required (i.e., Level B).

If downwind PID measurements reach or exceed 25 ppm consistently for a 5 minute period downwind of the work area, PID readings will be taken within the buildings (if occupied) on Site to ensure that the vapors are not penetrating any occupied building and effecting the personnel working within. If the PID measurements reach or exceed 25 ppm within the nearby buildings, the personnel should be evacuated via a route in which they would not encounter the work area. The building should then be ventilated until the PID measurements within the building are at or below background levels.

10.0 Emergency Action Plan

In the event of an emergency, employees are to turn off and shut down all powered equipment and leave the work areas immediately. Employees are to walk or drive out of the Site as quickly as possible, wait at the assigned 'safe area' and follow the instructions of the Site Safety Officer.

Employees are not authorized or trained to provide rescue and medical efforts. Rescue and medical efforts will be provided by local authorities.

11.0 Medical Surveillance

Medical surveillance will be provided to all employees who are injured due to overexposure from an emergency incident involving hazardous substances at this site.

12.0 Employee Training

Personnel who are not familiar with this site plan will receive training on its entire content and organization before working at the Site.

Individuals involved with the remedial investigation must be 40-hour OSHA HAZWOPER trained with current 8-hour refresher certification.

Table 1
Exposure Limits and Recognition Qualities

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	STEL (ppm)(b)	LEL (%)(e)	UEL (%)(f)	IDLH (ppm)(g)(d)	Odor	Odor Threshold (ppm)	Ionization Potential
Acetone	750	500	NA	2.15	13.2	20,000	Sweet	4.58	9.69
Anthracene	.2	.2	NA	NA	NA	NA	Faint aromatic	NA	NA
Benzene	1	0.5	5	1.3	7.9	3000	Pleasant	8.65	9.24
Benzo (a) pyrene (coal tar pitch volatiles)	0.2	0.1	NA	NA	NA	700	NA	NA	NA
Benzo (a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (b) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (k) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	10.88
Carbon Disulfide	20	1	NA	1.3	50	500	Odorless or strong garlic type	.096	10.07
Chlorobenzene	75	10	NA	1.3	9.6	2,400	Faint almond	0.741	9.07
Chloroform	50	2	NA	NA	NA	1,000	ethereal odor	11.7	11.42
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethylene	200	200	NA	9.7	12.8	400	Acrid	NA	9.65
1,2-Dichlorobenzene	50	25	NA	2.2	9.2		Pleasant		9.07
Ethyl Alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100	100	NA	1.0	6.7	2,000	Ether	2.3	8.76
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropyl Alcohol	400	200	500	2.0	12.7	2,000	Rubbing alcohol	3	10.10
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	50	NA	12	23	5,000	Chloroform-like	10.2	11.35
Naphthalene	10, Skin	10	NA	0.9	5.9	250	Moth Balls	0.3	8.12
n-propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphoric Acid	1	1	3	NA	NA	10,000	NA	NA	NA
Polychlorinated Biphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium Hydroxide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethane	NA	NA	NA	NA	NA	NA	Sweet	NA	NA
Toluene	100	100	NA	0.9	9.5	2,000	Sweet	2.1	8.82
Trichloroethylene	100	50	NA	8	12.5	1,000	Chloroform	1.36	9.45
1,2,4-Trimethylbenzene	NA	25	NA	0.9	6.4	NA	Distinct	2.4	NA
1,3,5-Trimethylbenzene	NA	25	NA	NA	NA	NA	Distinct	2.4	NA
Vinyl Chloride	1	1	NA	NA	NA	NA	NA	NA	NA
Xylenes (o,m,p)	100	100	NA	1	7	1,000	Sweet	1.1	8.56
Metals									
Arsenic	0.01	0.2	NA	NA	NA	100, Ca	NA	NA	NA
Cadmium	0.2	0.5	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	1	0.5	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.05	0.15	NA	NA	NA	700	NA	NA	NA
Mercury	0.05	0.05	NA	NA	NA	28	NA	NA	NA
Selenium	0.2	0.02	NA	NA	NA	Unknown	NA	NA	NA

(a) Skin = Skin Absorption
(b) OSHA-PEL Permissible Exposure Limit (flame weighted average, 8-hour): NIOSH Guide, June 1990
(c) ACGIH – 8 hour time weighted average from Threshold Limit Values and Biological Exposure Indices for 2003.
(d) Metal compounds in mg/m3
(e) Lower Exposure Limit (%)
(f) Upper Exposure Limit (%)
(g) Immediately Dangerous to Life or Health Level: NIOSH Guide, June 1990.

Notes:
1. All values are given in parts per million (PPM) unless otherwise indicated.
2. Ca = Possible Human Carcinogen, no IDLH information.

LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

Appendix 2

Community Air Monitoring Plan

APPENDIX 1A

New York State Department of Health
Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

Appendix 3

Con-test Environmental Services Data Package

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-SS-01
Sample ID: 15K1131-01
Sample Matrix: Sub Slab
Sampled: 11/20/2015 10:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 9013
Canister Size: 6 liter
Flow Controller ID: 3474
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Benzene	0.60	0.10		1.9	0.32	2	12/1/15 23:53	TPH
Benzyl chloride	ND	0.10		ND	0.52	2	12/1/15 23:53	TPH
Bromodichloromethane	ND	0.10		ND	0.67	2	12/1/15 23:53	TPH
Bromoform	ND	0.10		ND	1.0	2	12/1/15 23:53	TPH
Bromomethane	ND	0.10		ND	0.39	2	12/1/15 23:53	TPH
2-Butanone (MEK)	ND	4.0		ND	12	2	12/1/15 23:53	TPH
tert-Butyl Alcohol (TBA)	ND	0.41		ND	1.2	2	12/6/15 0:59	TPH
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/1/15 23:53	TPH
Chlorobenzene	ND	0.10		ND	0.46	2	12/1/15 23:53	TPH
Chloroethane	ND	0.10		ND	0.26	2	12/1/15 23:53	TPH
Chloroform	0.21	0.10		1.0	0.49	2	12/1/15 23:53	TPH
Chloromethane	0.28	0.20		0.58	0.41	2	12/1/15 23:53	TPH
Cyclohexane	2.1	0.10		7.4	0.34	2	12/1/15 23:53	TPH
Dibromochloromethane	ND	0.10		ND	0.85	2	12/1/15 23:53	TPH
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/1/15 23:53	TPH
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/1/15 23:53	TPH
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/1/15 23:53	TPH
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/1/15 23:53	TPH
Dichlorodifluoromethane (Freon 12)	0.23	0.10		1.2	0.49	2	12/1/15 23:53	TPH
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/1/15 23:53	TPH
1,2-Dichloroethane	0.25	0.10		1.0	0.40	2	12/1/15 23:53	TPH
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/1/15 23:53	TPH
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/1/15 23:53	TPH
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/1/15 23:53	TPH
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/1/15 23:53	TPH
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/1/15 23:53	TPH
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/1/15 23:53	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/1/15 23:53	TPH
1,4-Dioxane	ND	1.0		ND	3.6	2	12/1/15 23:53	TPH
Ethanol	13	4.0		25	7.5	2	12/1/15 23:53	TPH
Ethylbenzene	0.49	0.10		2.1	0.43	2	12/1/15 23:53	TPH
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/1/15 23:53	TPH
Hexane	ND	4.0		ND	14	2	12/1/15 23:53	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/1/15 23:53	TPH
Methylene Chloride	ND	1.0		ND	3.5	2	12/1/15 23:53	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/1/15 23:53	TPH
Styrene	0.13	0.10		0.57	0.43	2	12/1/15 23:53	TPH

From:	Dunham, Matthew D (DEC)
To:	Chris Passero
Subject:	FW: Silver Cleaners - North Clinton Avenue
Date:	Thursday, December 17, 2015 10:04:58 AM
Attachments:	2015-11-20_SVI_N Clinton.pdf 2015-11-20_Sump_N Clinton.pdf

---

From: Dunham, Matthew D (DEC)
Sent: Thursday, December 17, 2015 9:25 AM
To: 'cpassero@passero.com'
Subject: Silver Cleaners - North Clinton Avenue

Mr. Passero:

I've attached preliminary, unvalidated sampling data from our recent sampling at 113-117 North Clinton Avenue, Rochester, New York. This preliminary data is for informational purposes only and is subject to change upon validation and review by the New York State Department of Environmental Conservation and the New York State Department of Health. Any further action will be determined once a final report is prepared, reviewed and approved by the New York State Department of Environmental Conservation and the New York State Department of Health.

NC-SS-01 – Sub Slab Sample at location #1
NC-IA-01 – Indoor Air Sample at location #1

NC-SS-02 – Sub Slab Sample at location #2
NC-IA-02 – Indoor Air Sample at location #2

NC-SUMP-01 – Sump Sample

Matt Dunham

Matthew Dunham, PE
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7017
matthew.dunham@dec.ny.gov
518-402-9813

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-SS-01
Sample ID: 15K1131-01
Sample Matrix: Sub Slab
Sampled: 11/20/2015 10:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 9013
Canister Size: 6 liter
Flow Controller ID: 3474
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/1/15 23:53	TPH
Tetrachloroethylene	7.2	0.10		49	0.68	2	12/1/15 23:53	TPH
Toluene	3.1	0.10		12	0.38	2	12/1/15 23:53	TPH
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	12/1/15 23:53	TPH
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	12/1/15 23:53	TPH
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/1/15 23:53	TPH
Trichloroethylene	0.14	0.10		0.73	0.54	2	12/1/15 23:53	TPH
Trichlorofluoromethane (Freon 11)	ND	0.40		ND	2.2	2	12/1/15 23:53	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.48	0.40		3.7	3.1	2	12/1/15 23:53	TPH
1,2,4-Trimethylbenzene	0.70	0.10		3.5	0.49	2	12/1/15 23:53	TPH
1,3,5-Trimethylbenzene	0.30	0.10		1.5	0.49	2	12/1/15 23:53	TPH
2,2,4-Trimethylpentane	ND	0.27		ND	1.3	2	12/6/15 0:59	TPH
Vinyl Chloride	ND	0.10		ND	0.26	2	12/1/15 23:53	TPH
m&p-Xylene	1.4	0.20		6.2	0.87	2	12/1/15 23:53	TPH
o-Xylene	0.65	0.10		2.8	0.43	2	12/1/15 23:53	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.5	70-130	12/1/15 23:53
4-Bromofluorobenzene (2)	87.8	70-130	12/6/15 0:59

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ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-IA-01
Sample ID: 15K1131-02
Sample Matrix: Indoor air
Sampled: 11/20/2015 10:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 9004
Canister Size: 6 liter
Flow Controller ID: 3522
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -10.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Benzene	1.8	0.035		5.6	0.11	0.702	12/1/15 19:01	TPH
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/15 19:01	TPH
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/15 19:01	TPH
Bromoform	ND	0.035		ND	0.36	0.702	12/1/15 19:01	TPH
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/15 19:01	TPH
2-Butanone (MEK)	2.1	1.4		6.1	4.1	0.702	12/1/15 19:01	TPH
tert-Butyl Alcohol (TBA)	ND	0.21		ND	0.62	1	12/5/15 20:48	TPH
Carbon Tetrachloride	0.077	0.035		0.49	0.22	0.702	12/1/15 19:01	TPH
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/15 19:01	TPH
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/15 19:01	TPH
Chloroform	0.16	0.035		0.80	0.17	0.702	12/1/15 19:01	TPH
Chloromethane	0.80	0.070		1.7	0.14	0.702	12/1/15 19:01	TPH
Cyclohexane	1.3	0.035		4.5	0.12	0.702	12/1/15 19:01	TPH
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/15 19:01	TPH
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/15 19:01	TPH
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/15 19:01	TPH
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/15 19:01	TPH
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/15 19:01	TPH
Dichlorodifluoromethane (Freon 12)	0.17	0.035		0.86	0.17	0.702	12/1/15 19:01	TPH
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/15 19:01	TPH
1,2-Dichloroethane	0.069	0.035		0.28	0.14	0.702	12/1/15 19:01	TPH
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/15 19:01	TPH
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/15 19:01	TPH
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/15 19:01	TPH
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/15 19:01	TPH
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/15 19:01	TPH
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/15 19:01	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/15 19:01	TPH
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/15 19:01	TPH
Ethanol	ND	1.4		ND	2.6	0.702	12/1/15 19:01	TPH
Ethylbenzene	0.44	0.035		1.9	0.15	0.702	12/1/15 19:01	TPH
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/15 19:01	TPH
Hexane	6.3	1.4		22	4.9	0.702	12/1/15 19:01	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/15 19:01	TPH
Methylene Chloride	0.45	0.35		1.6	1.2	0.702	12/1/15 19:01	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/1/15 19:01	TPH
Styrene	0.11	0.035		0.49	0.15	0.702	12/1/15 19:01	TPH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-IA-01
Sample ID: 15K1131-02
Sample Matrix: Indoor air
Sampled: 11/20/2015 10:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 9004
Canister Size: 6 liter
Flow Controller ID: 3522
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -10.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/15 19:01	TPH
Tetrachloroethylene	25	0.035		170	0.24	0.702	12/1/15 19:01	TPH
Toluene	6.7	0.035		25	0.13	0.702	12/1/15 19:01	TPH
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/15 19:01	TPH
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/15 19:01	TPH
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/15 19:01	TPH
Trichloroethylene	0.088	0.035		0.47	0.19	0.702	12/1/15 19:01	TPH
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.3	0.79	0.702	12/1/15 19:01	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/15 19:01	TPH
1,2,4-Trimethylbenzene	0.56	0.035		2.7	0.17	0.702	12/1/15 19:01	TPH
1,3,5-Trimethylbenzene	0.15	0.035		0.74	0.17	0.702	12/1/15 19:01	TPH
2,2,4-Trimethylpentane	1.9	0.13		8.7	0.63	1	12/5/15 20:48	TPH
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/15 19:01	TPH
m&p-Xylene	1.9	0.070		8.2	0.30	0.702	12/1/15 19:01	TPH
o-Xylene	0.60	0.035		2.6	0.15	0.702	12/1/15 19:01	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.3	70-130	12/1/15 19:01
4-Bromofluorobenzene (2)	92.1	70-130	12/5/15 20:48

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-SS-02
Sample ID: 15K1131-03
Sample Matrix: Sub Slab
Sampled: 11/20/2015 10:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 9051
Canister Size: 6 liter
Flow Controller ID: 3521
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -10.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Benzene	0.93	0.10		3.0	0.32	2	12/2/15 1:19	TPH
Benzyl chloride	ND	0.10		ND	0.52	2	12/2/15 1:19	TPH
Bromodichloromethane	ND	0.10		ND	0.67	2	12/2/15 1:19	TPH
Bromoform	ND	0.10		ND	1.0	2	12/2/15 1:19	TPH
Bromomethane	ND	0.10		ND	0.39	2	12/2/15 1:19	TPH
2-Butanone (MEK)	ND	4.0		ND	12	2	12/2/15 1:19	TPH
tert-Butyl Alcohol (TBA)	ND	0.41		ND	1.2	2	12/6/15 2:16	TPH
Carbon Tetrachloride	ND	0.10		ND	0.63	2	12/2/15 1:19	TPH
Chlorobenzene	ND	0.10		ND	0.46	2	12/2/15 1:19	TPH
Chloroethane	ND	0.10		ND	0.26	2	12/2/15 1:19	TPH
Chloroform	0.52	0.10		2.6	0.49	2	12/2/15 1:19	TPH
Chloromethane	0.29	0.20		0.59	0.41	2	12/2/15 1:19	TPH
Cyclohexane	22	0.10		77	0.34	2	12/2/15 1:19	TPH
Dibromochloromethane	ND	0.10		ND	0.85	2	12/2/15 1:19	TPH
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	12/2/15 1:19	TPH
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	12/2/15 1:19	TPH
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	12/2/15 1:19	TPH
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	12/2/15 1:19	TPH
Dichlorodifluoromethane (Freon 12)	0.26	0.10		1.3	0.49	2	12/2/15 1:19	TPH
1,1-Dichloroethane	ND	0.10		ND	0.40	2	12/2/15 1:19	TPH
1,2-Dichloroethane	0.23	0.10		0.92	0.40	2	12/2/15 1:19	TPH
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	12/2/15 1:19	TPH
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/2/15 1:19	TPH
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	12/2/15 1:19	TPH
1,2-Dichloropropane	ND	0.10		ND	0.46	2	12/2/15 1:19	TPH
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/2/15 1:19	TPH
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	12/2/15 1:19	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	12/2/15 1:19	TPH
1,4-Dioxane	ND	1.0		ND	3.6	2	12/2/15 1:19	TPH
Ethanol	ND	4.0		ND	7.5	2	12/2/15 1:19	TPH
Ethylbenzene	0.75	0.10		3.2	0.43	2	12/2/15 1:19	TPH
Hexachlorobutadiene	ND	0.10		ND	1.1	2	12/2/15 1:19	TPH
Hexane	ND	4.0		ND	14	2	12/2/15 1:19	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	12/2/15 1:19	TPH
Methylene Chloride	ND	1.0		ND	3.5	2	12/2/15 1:19	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	12/2/15 1:19	TPH
Styrene	0.12	0.10		0.50	0.43	2	12/2/15 1:19	TPH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-SS-02
Sample ID: 15K1131-03
Sample Matrix: Sub Slab
Sampled: 11/20/2015 10:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 9051
Canister Size: 6 liter
Flow Controller ID: 3521
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -10.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	12/2/15 1:19	TPH
Tetrachloroethylene	21	0.10		140	0.68	2	12/2/15 1:19	TPH
Toluene	6.2	0.10		23	0.38	2	12/2/15 1:19	TPH
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	12/2/15 1:19	TPH
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	12/2/15 1:19	TPH
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	12/2/15 1:19	TPH
Trichloroethylene	0.39	0.10		2.1	0.54	2	12/2/15 1:19	TPH
Trichlorofluoromethane (Freon 11)	ND	0.40		ND	2.2	2	12/2/15 1:19	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.74	0.40		5.7	3.1	2	12/2/15 1:19	TPH
1,2,4-Trimethylbenzene	1.5	0.10		7.2	0.49	2	12/2/15 1:19	TPH
1,3,5-Trimethylbenzene	0.63	0.10		3.1	0.49	2	12/2/15 1:19	TPH
2,2,4-Trimethylpentane	0.31	0.27		1.4	1.3	2	12/6/15 2:16	TPH
Vinyl Chloride	ND	0.10		ND	0.26	2	12/2/15 1:19	TPH
m&p-Xylene	5.2	0.20		22	0.87	2	12/2/15 1:19	TPH
o-Xylene	3.1	0.10		13	0.43	2	12/2/15 1:19	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.8	70-130	12/2/15 1:19
4-Bromofluorobenzene (2)	89.0	70-130	12/6/15 2:16

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ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-IA-02
Sample ID: 15K1131-04
Sample Matrix: Indoor air
Sampled: 11/20/2015 10:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 9008
Canister Size: 6 liter
Flow Controller ID: 3473
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8.5
Receipt Vacuum(in Hg): -10.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Benzene	1.9	0.035		6.0	0.11	0.702	12/1/15 19:53	TPH
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/15 19:53	TPH
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/15 19:53	TPH
Bromoform	ND	0.035		ND	0.36	0.702	12/1/15 19:53	TPH
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/15 19:53	TPH
2-Butanone (MEK)	2.5	1.4		7.4	4.1	0.702	12/1/15 19:53	TPH
tert-Butyl Alcohol (TBA)	ND	0.21		ND	0.62	1	12/5/15 21:33	TPH
Carbon Tetrachloride	0.082	0.035		0.52	0.22	0.702	12/1/15 19:53	TPH
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/15 19:53	TPH
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/15 19:53	TPH
Chloroform	0.18	0.035		0.86	0.17	0.702	12/1/15 19:53	TPH
Chloromethane	0.80	0.070		1.7	0.14	0.702	12/1/15 19:53	TPH
Cyclohexane	1.4	0.035		4.9	0.12	0.702	12/1/15 19:53	TPH
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/15 19:53	TPH
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/15 19:53	TPH
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/15 19:53	TPH
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/15 19:53	TPH
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/15 19:53	TPH
Dichlorodifluoromethane (Freon 12)	0.19	0.035		0.93	0.17	0.702	12/1/15 19:53	TPH
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/15 19:53	TPH
1,2-Dichloroethane	0.072	0.035		0.29	0.14	0.702	12/1/15 19:53	TPH
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/15 19:53	TPH
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/15 19:53	TPH
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/15 19:53	TPH
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/15 19:53	TPH
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/15 19:53	TPH
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/15 19:53	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/15 19:53	TPH
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/15 19:53	TPH
Ethanol	260	1.4	E	490	2.6	0.702	12/1/15 19:53	TPH
Ethylbenzene	0.52	0.035		2.2	0.15	0.702	12/1/15 19:53	TPH
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/15 19:53	TPH
Hexane	6.6	1.4		23	4.9	0.702	12/1/15 19:53	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/15 19:53	TPH
Methylene Chloride	0.43	0.35		1.5	1.2	0.702	12/1/15 19:53	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/1/15 19:53	TPH
Styrene	0.14	0.035		0.60	0.15	0.702	12/1/15 19:53	TPH

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ANALYTICAL RESULTS

Project Location: Rochester, NY
Date Received: 11/24/2015
Field Sample #: NC-IA-02
Sample ID: 15K1131-04
Sample Matrix: Indoor air
Sampled: 11/20/2015 10:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 9008
Canister Size: 6 liter
Flow Controller ID: 3473
Sample Type: 24 hr

Work Order: 15K1131
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8.5
Receipt Vacuum(in Hg): -10.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/15 19:53	TPH
Tetrachloroethylene	25	0.035		170	0.24	0.702	12/1/15 19:53	TPH
Toluene	7.1	0.035		27	0.13	0.702	12/1/15 19:53	TPH
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/15 19:53	TPH
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/15 19:53	TPH
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/15 19:53	TPH
Trichloroethylene	0.094	0.035		0.51	0.19	0.702	12/1/15 19:53	TPH
Trichlorofluoromethane (Freon 11)	0.29	0.14		1.6	0.79	0.702	12/1/15 19:53	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/15 19:53	TPH
1,2,4-Trimethylbenzene	0.64	0.035		3.2	0.17	0.702	12/1/15 19:53	TPH
1,3,5-Trimethylbenzene	0.17	0.035		0.85	0.17	0.702	12/1/15 19:53	TPH
2,2,4-Trimethylpentane	2.0	0.13		9.1	0.63	1	12/5/15 21:33	TPH
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/15 19:53	TPH
m&p-Xylene	2.1	0.070		9.2	0.30	0.702	12/1/15 19:53	TPH
o-Xylene	0.70	0.035		3.0	0.15	0.702	12/1/15 19:53	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.2	70-130	12/1/15 19:53
4-Bromofluorobenzene (2)	81.4	70-130	12/5/15 21:33

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Project Location: Rochester, NY | Sample Description: | Work Order: 15K1048

Date Received: 11/21/2015

Field Sample #: NC-SUMP-01 | Sampled: 11/20/2015 10:30

Sample ID: 15K1048-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1	L-04, V-05	SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Bromoform	ND	1.0	0.21	µg/L	1	V-05	SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Bromomethane	ND	5.0	0.94	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Cyclohexane	ND	5.0	0.25	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2-Dichlorobenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Toluene	ND	1.0	0.10	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1	V-05	SW-846 8260C	12/3/15	12/4/15 6:09	MFF

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Rochester, NY | Sample Description: | Work Order: 15K1048

Date Received: 11/21/2015

Field Sample #: NC-SUMP-01 | Sampled: 11/20/2015 10:30

Sample ID: 15K1048-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/3/15	12/4/15 6:09	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	117	70-130		12/4/15 6:09	
Toluene-d8	101	70-130		12/4/15 6:09	
4-Bromofluorobenzene	81.6	70-130		12/4/15 6:09	

LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

Appendix 4

Sub-slab Depressurization System Scope of Work

SCOPE OF WORK
SUB-SLAB DEPRESSURIZATION SYSTEM INSTALLATION
OFF-SITE (113 N. CLINTON AVE.)
FORMER SILVER CLEANERS SITE (#828186)
ROCHESTER, NEW YORK

1. PROJECT DESCRIPTION

The 113 North Clinton Avenue property includes an approximately 4,500 square feet, 5-story (plus basement) building with residential use and some commercial use. VI activities already conducted at the off-site property include the following:

- Air Sampling – indoor air and sub-slab soil vapors in the building's basement in November 2015. The primary volatile organic compound (VOC) detected in air samples was perchloroethylene (PCE).
- Pilot Testing – Following selection of sub-slab depressurization (SSD) as the IRM to reduce the potential for sub-slab soil vapor intrusion, an SSD pilot test was performed in March 2016 to obtain pertinent design data and assess the overall feasibility of the selected IRM. Two sub-slab extraction sumps (SDS-1 and SDS-2) were installed as part of the pilot test and remain in place with stickup piping. These extraction sumps will be used as part of the IRM.

The IRM will include four sub-slab depressurization suction points, including the SDS-1 and SDS-2 suction sumps installed as part of the pilot test.

2. SCOPE

The scope of work includes the following:

1. **SDS-3 Installation** - SDS-3 will be installed by coring a 12-inch diameter hole through the existing basement wall at the location indicated on the figure. The elevation of the hole should be as close to the basement ceiling as feasible (i.e., such that hole is as close to directly below the first floor concrete slab as possible). Material shall be removed to a distance of 2 feet beyond the basement wall and the entire diameter of the cored hole. The hole will be filled with ¾" washed gravel. A 3-inch diameter schedule 40 polyvinyl chloride (PVC) open-ended pipe shall be inserted into the wall penetration, extending approximately 2" beyond the wall. The open end of the pipe will be fit with ¼" wire mesh screen. A 5-inch diameter schedule 40 galvanized steel pipe sleeve shall be used for the wall penetration and sealed to the outside of the wall penetration with non-shrink grout. A link seal (LS-300-C-8) will be used to seal the annulus between the pipe sleeve and PVC pipe.
2. **SDS-4 Installation** – SDS-4 will be installed identically to the extraction sumps installed for SDS-1 and SDS-2.
3. **SDS-1 and SDS-2 Sub-Slab Piping Installation** – As mentioned previously, the extraction sumps for SDS-1 and SDS-2 have already been installed and remain in place with stickup piping. SDS-1 and SDS-2 will need to be retrofitted to allow conveyance

piping (3-inch diameter schedule 40 PVC) to be routed sub-slab from the extraction sumps to the adjacent wall. An approximately 6-inch wide trench will need to be cut in the existing concrete slab for both SDS-1 and SDS-2 and removed concrete placed into 55-gallon steel drums. It should be noted that a continuous wall footing directly beneath the existing basement floor slab extends as much as 3 feet from the wall. The conveyance piping may be embedded within the concrete slab and shall have a minimum of 2 inches of concrete cover. A concrete bonding agent shall be applied to the cut surface of the existing concrete; no additional reinforcement will be required. New concrete shall have a minimum compressive strength of 4,000 pounds per square inch (psi) at 28 days. Both pipes will be stubbed up at the wall allowing for vertical piping to be spaced 6 inches (on center) off of the wall.

4. **Conveyance Piping Installation for SDS-1, SDS-2, SDS-3 and SDS-4** – Conveyance piping (3-inch diameter schedule 40 PVC) shall be installed connecting the extraction points to the inline fans via the routing indicated. Piping for SDS-2 and SDS-4 will be connected such that they both utilize the same inline fan. All four extraction points shall include a vacuum gauge and sampling port, located in the basement interior. SDS-2 and SDS-4 piping will also include 3-inch diameter schedule 80 PVC butterfly valves, respectively. Piping shall slope downward toward the extraction points and be supported every 4 feet. Note wall penetration details below.
5. **Excavation for SDS-1 and SDS-2/SDS-4 Wall Penetrations** – Conveyance piping for both SDS-1 and SDS-2/SDS-4 will penetrate the basement wall at an elevation below land surface. As such, excavation in the asphalt parking area will be performed as needed to facilitate the wall penetration and routing piping to above-grade. The excavations shall be backfilled with excavated material if suitable and finished with asphalt in kind with existing. If excavated material is not suitable as backfill then imported, certified clean fill shall be used.
6. **Exterior Wall penetrations** – An 8-inch diameter hole has already been made for the SDS-3 conveyance piping. Wall penetrations for SDS-1 and SDS-2/SDS-4 shall be made via 6-inch diameter core holes. All three locations shall use pipe sleeves (5-inch diameter schedule 40 galvanized steel) and link seals (LS-300-C-8). The annulus around the pipe sleeves shall be sealed using non-shrink grout.
7. **Inline Fan Installation** – Fans for each extraction point, respectively, will be mounted outside the exterior walls at an elevation of 10 feet above grade. The inline fan type for each extraction point will be as follows:
    a. SDS-1 – RadonAway HS-5000E
    b. SDS-2/SDS-4 – RadonAway HS-2000E
    c. SDS-3 – RadonAway HS-5000E

    The inline fans will be provided power via permanent electrical wiring and conduit from the building's existing power distribution. Electrical work will be performed by an electrician licensed in the City of Rochester and necessary permits obtained (e.g., electrical permit).

8. **Discharge Stacks** – Each inline fan will have discharge piping installed and extending to a height of 3 feet above the roofline (highest roofline within 10' laterally of pipe). Discharge piping will be 3-inch diameter schedule 40 PVC and supported every 8 feet.

All exterior piping will be insulated with 1-inch fiberglass insulation and fit with aluminum jacketing. Discharge stacks will be terminated with tee fittings fitted with ¼" wire mesh.

9. **Pipe Bollards** – SDS-1 and SDS-2/SDS-4 piping will each be protected with 6-inch diameter schedule 40 galvanized steel pipe bollards filled with concrete. The bollards will be 6 feet in total length, with 3 feet above grade and painted safety yellow. The bollards shall be anchored with 16-inch diameter concrete piers. Bollards shall be centered in front of piping and spaced approximately 18 inches from piping.