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

Interim Remedial Measures Work Plan

Location:

Former Michelsen Furniture Co. Site
BCP Site No. C828189
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared for:

Urban League of Rochester Economic Development Corporation
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

Revised April 2015

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LABELLA

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1.0 INTRODUCTION

LaBella Associates, D.P.C. (LaBella) is pleased to submit this Interim Remedial Measures Work Plan (IRMWP) for the Former Michelsen Furniture Co. Site, New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site Number C828189, located at 182 Avenue D ("Parcel 1") and 374 Conkey Avenue ("Parcel 2") in the City of Rochester, Monroe County, New York, herein after referred to as the "Site". A Site Location Map is included as Figure 1. LaBella is submitting this IRMWP on behalf of the Urban League of Rochester Economic Development Corporation.

2.0 SITE DESCRIPTION AND HISTORY

The Site consists of two (2) contiguous tax parcels encompassing approximately 0.62 acres. The Site location and surrounding area are shown on Figure 2. The Site is located in a primarily residential urban neighborhood in the City of Rochester. It is bounded by Avenue D to the south, Conkey Avenue to the east, residential property to the north, and the El Camino Trail and City of Rochester Avenue D Recreation Center to the east.

Parcel 1, addressed 182 Avenue D, encompasses approximately 0.4 acres and is improved with an approximately 44,000 square foot, four story brick warehouse building. Parcel 2 is a vacant lot addressed 374 Conkey Avenue and encompasses approximately 0.22 acres. The Site was initially operated by the George J. Michelsen Furniture Company from at least 1918 through 1954 and was utilized for furniture manufacturing. Based on a review of historical street directories, additional operators at the Site in the 1950s included Columbia Carpet Co., Rice Tool & Die Co. and General Fabricators Co. Parcel 2 historically contained a railroad spur that serviced the Michelsen Building. The Site has been utilized primarily for warehouse and distribution from the 1960's to September 2014.

2.1 Previous Investigations

The following environmental investigations have been performed at the Site:

- Phase I Environmental Site Assessment, 182 Avenue D, Rochester, NY, LaBella Associates, P.C., September 2011
- Phase II Environmental Site Assessment, 182 Avenue D, Rochester, NY, LaBella Associates, P.C., November 2012
- Additional Subsurface Investigations, 182 Avenue D and 374 Conkey Avenue, Rochester, NY, LaBella Associates, D.P.C, January & March 2014

Previous investigation locations are depicted on Figure 2. Laboratory analysis of soil and groundwater samples collected during previous investigations is summarized on Tables 1 through 4.

2.2 Remedial Investigation Work Plan

LaBella prepared a Remedial Investigation Work Plan (RIWP) to evaluate the areas of concern identified during previous investigations and the extent of remedial actions required (if any) at the Site. The RIWP was submitted in July 2014 along with the Brownfield Cleanup Program Application. NYSDEC approved the RIWP in January 2015.

2.3 Site Redevelopment

Participation in the BCP will allow the redevelopment of the historic Michelson building on the Site into forty (40) affordable residential units. Significant rehabilitation of the building will occur, including a new roof, new HVAC systems, new plumbing, new electrical service, and construction of common areas, a rental office, tenant storage and a basement parking garage.

3.0 SOIL DISTURBANCES

3.1 Exterior Soil Disturbances for Construction

Exterior improvements associated with the redevelopment are depicted on Figure 3. Construction activities associated with the parking lot to be installed on Parcel 2, two additions to the Site building and new subsurface utility installations will require disturbance or removal of soil as depicted on Figure 4. Given the lack of space available to stage all soil at the Site, excavated soil will require removal from the Site.

On November 11, 2014 LaBella submitted a proposed sampling plan outlining proposed characterization sampling for the topsoil in the parking lot area. NYSDEC subsequently approved the proposed sampling; however, additional soil beneath the topsoil requires removal in preparation of the parking lot.

Soil removal areas are summarized as follows:

Parking Lot

Approximate Area:	120 feet by 60 feet
Approximate Depth:	1.5 feet
Approximate Volume:	Topsoil +/- 130 cubic yards Base +/- 265 cubic yards
Anticipated Action:	Characterization to determine suitable reuse

New Stairwell Foundation

Approximate Area:	32 feet by 8 feet
Approximate Depth:	8 feet
Approximate Volume:	+/- 75 cubic yards
Anticipated Action:	Characterization for disposal as non-hazardous waste at Subtitle D facility due to presence of fuel oil impacts.

New Entry Vestibule Foundation

Approximate Area:	32 feet by 8 feet
Approximate Depth:	8 feet
Approximate Volume:	+/- 115 cubic yards
Anticipated Action:	Characterization for disposal as non-hazardous waste at a Subtitle D facility. If CVOCs are detected in analysis, prepare a Contained-In Demonstration Work Plan (see Section 4.4 below). Off-Site disposal at a location determined by data and NYSDEC approval.

Utility Excavations (Storm Sewer, Underground Electric, Water)

Approximate Area: 250 linear feet (total for all utilities), +/- 3 feet in width
Approximate Depth: < 4 feet
Approximate Volume: +/- 75 cubic yards
Anticipated Action: Characterization to determine suitable reuse

3.2 Underground Storage Tanks

Two (2) 3,000 gallon underground storage tanks (USTs) are present proximate the northeast corner of the Site building and require removal. The tanks are presumed to be associated with the historical heating system of the Site building.

3.3 Interior Soil Disturbances

Development plans include installation of sink and toilet drain piping, a new sump in the existing elevator shaft and a trench drain in the future garage portion of the basement as depicted on Figure 4. The planned subsurface disturbances total approximately 600 square feet.

4.0 INTERIM REMEDIAL MEASURES

Based on the above information, LaBella is requesting approval of the following Interim Remedial Measures (IRMs):

4.1 Soil Excavation, Staging & Characterization

Soil removed to facilitate construction activities will be staged on and covered with 6-mil polyethylene sheeting as depicted on Figure 4. The polyethylene sheeting will be weighted down to prevent exposure to precipitation. Soil characterization samples will be collected from the staged soil pile(s). The number of discrete and composite samples collected for analysis will be based upon the sampling criteria outlined in Table 5.4(e) of DER-10. It is anticipated that soils to be removed to facilitate construction of the parking lot will be direct loaded into dump trucks, as such it is anticipated that characterization samples will be collected with a direct push sampling system (e.g., Geoprobe®) to facilitate pre-characterization of these soils. Staged soil piles will not remain on-site for a period of greater than 90 days.

Given the lack of detected pesticides in the previously collected topsoil samples, a waiver from future pesticide sampling is requested. Based on the volume of soil to be removed the following analysis is proposed for each area:

Parking Lot Base & Utility Excavations (+/- 350 cubic yards)

Rationale: Data required to support appropriate off-Site re-use determination or disposal requirements.

- Four (4) grab samples for VOCs by USEPA Method 8260;
- One (1) composite sample for SVOCs by USEPA Method 8270;
- One (1) composite sample for PCBs by USEPA Method 8082;
- One (1) composite sample for TAL Metals by USEPA Method 6010/7470.

It is anticipated that soil excavated for basement utility installations will be re-utilized as backfill in the same excavations. Any excess material generated will be staged and sampled.

New Stairwell Foundation (+/- 75 cubic yards)

Rationale: Based on Waste Management requirements for disposal of non-hazardous petroleum contaminated soil at Mill Seat Landfill.

- Two (2) grab samples for VOCs by USEPA Method 8260;
- One (1) samples for TCLP Benzene;
- One (1) composite sample for TCLP Lead;
- One (1) composite sample for ignitability.

New Entry Vestibule Foundation (+/- 115 cubic yards)

Rationale: Based on NYSDEC Contained in Demonstration requirements and Waste Management disposal requirements. NYSDEC approval of Contained-In Demonstration Work Plan will be secured prior to sampling.

- Three (3) grab samples for VOCs by USEPA Method 8260;
- Three (3) grab samples for TCLP VOCs (if detectable concentrations of halogenated VOCs are detected in direct analysis);
- One (1) composite sample for ignitability.

4.2 Soil Removal – Parking Lot & Utility Excavations

Upon receipt of laboratory data collected as described in Section 4.1, the results will be compared to 6 NYCRR Part 375-6.8 Soil Cleanup Objectives (SCOs) to determine an appropriate relocation Site. If concentrations exceed Unrestricted Use SCOs the soil will be disposed as non-hazardous waste at a Subtitle D landfill. If concentrations are below Unrestricted Use SCOs for all constituents an appropriate re-use site will be selected. The selected re-use site will be provided to NYSDEC for approval prior to removal of soil.

4.3 Soil Removal – New Stairwell Foundation

Data from soil samples collected from this area will be submitted to Waste Management along with a completed waste profile form. It is anticipated that this material will be disposed at Mill Seat Landfill in Riga, New York as non-hazardous petroleum contaminated soil.

4.4 Contained In Demonstration – New Entry Vestibule Foundation Area

Previous investigations have detected halogenated solvents in the area of this excavation; however it is possible that contaminated soil is deeper than the proposed excavation depth. Given the presence of halogenated solvents detected in soil and groundwater samples in this area in previous investigations, the potential exists that this soil will be characterized as hazardous waste (F001/F002). In the event that detectable concentrations of halogenated VOCs are present in the staged soil, a Contained-In Demonstration Work Plan (CIDWP) will be prepared in accordance with the "Contained-In" Criteria

identified in NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 3028 and submitted to NYSDEC for review and comment.

Upon receipt the laboratory data will be reviewed to determine if it supports the Contained-In criteria. If the Contained-In criteria are met a request will be made to NYSDEC to dispose of the soil as non-hazardous waste at Mill Seat Landfill in Riga, New York.

In the event that the sampling does not meet the Contained-In criteria it will be disposed as F-list hazardous waste at Waste Management's Subtitle C landfill facility in Model City, New York.

4.5 UST Removal

Prior to removal a permit will be obtained from the City of Rochester Permit Office and the City of Rochester Fire Marshal will be notified of the date and time of the removal.

The two (2) USTs contain a total of approximately 550 gallons of residual heating oil. The residual oil will be removed with a vacuum tanker truck with a valid NYSDEC Part 364 waste transporter permit and transported to Industrial Oil Tank Services in Oriskany, New York for disposal.

Prior to removal from the ground the atmospheres of the tanks will be monitored for explosive vapors and oxygen content with an LEL/O_2 meter. Tank atmospheres will be interted as necessary prior to removal of the tanks from the ground. The tanks will then be removed from the ground, transported off-Site and decommissioned as scrap steel.

Subsequent to removal, post excavation confirmatory soil samples will be collected from the base and sidewalls of the excavation. One (1) base sample and one (1) sample from each sidewall will be collected. Samples will be submitted to a laboratory for analysis of VOCs and SVOCs listed in Table 3 of NYSDEC Commissioner Policy 51 (CP-51).

The excavation will be backfilled with imported crushed stone from a NYSDEC permitted quarry. As such, chemical testing of the imported backfill will not be performed.

4.6 Source Material

In the event that apparent source material is encountered during on-Site excavations, the material will be removed to the extent practical. If removal of the material is not practical the area will be characterized as part of the Remedial Investigation.

5.0 SUB SLAB DEPRESSURIZATION SYSTEM

As mentioned in the BCP Application, the building rehabilitation includes installation of a Sub Slab Depressurization System (SSDS). The SSDS design is depicted on Figure 5.

5.1 Post Start-up Testing

Following the installation of the SSDS, testing will be conducted to preliminarily evaluate the effectiveness and to confirm that there is adequate negative pressure beneath the entire foundation of the building. The following post start-up testing should be completed:

- **Pressure Field Extension Testing** - Seasonally for one year (4 events) each pressure testing point (shown on Figure 5) should be tested to confirm that the system is adequately depressurizing the entire sub-slab area. The testing should consist of connecting a digital micro-manometer to each location and recording the vacuum reading. In addition, the U-Tube

Manometer readings on the fans should be recorded so that the U-Tube Manometer readings can be correlated to the sub-slab measurements for future confirmation of system influence.

- **Alarm Test** – The alarms will be tested to confirm proper operation. The alarm test consists of disconnecting the fan power and confirming both the light and audible alarm are triggered.

6.0 HEALTH AND SAFETY PLAN

A Site specific Health and Safety Plan (HASP) has been developed for the Site and is included as Appendix 1.

7.0 COMMUNITY AIR MONITORING PROGRAM

A Site specific Community Air Monitoring Plan (CAMP) has been developed for the Site and is included as Appendix 2.

8.0 QUALITY ASSURANCE/QUALITY CONTROL

Activities completed at the Site will be managed under LaBella's Quality Control Program, which is included in Appendix 3 of the RIWP.

9.0 SCHEDULE

Soil characterization samples will be collected upon receipt of NYSDEC approval of this IRMWP. NYSDEC will be notified prior to loading and off-Site transport of Site soil.

J:\URBAN LEAGUE OF ROCHESTER ECONOMIC DEVELOPMENT\214539 - MICHELSON BCP SITE RI & REMEDIATION\REPORTS\IRM - SOIL REMOVAL\RPT.12.2014.DRAFT_IRMWP_MICHELSENC828189.DOCX

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FIGURES

PROJECT/DRAWING NUMBER

214539

FIGURE 1

DRAWING TITLE

SITE LOCATION MAP

ISSUED FOR: DRAFT

DESIGNED BY: DKE

DRAWN BY: DKE

REVIEWED BY:

DATE: 06/18/2014

PROJECT/CLIENT

Interim Remedial Measures Work Plan

Former Michelsen Furniture Co. Site
BCP Site No. 828189
182 Avenue D & 374 Conkey Ave.
Rochester, New York

Client: Urban League of Rochester Economic Development Corp.

LABELLA Associates, D.P.C.
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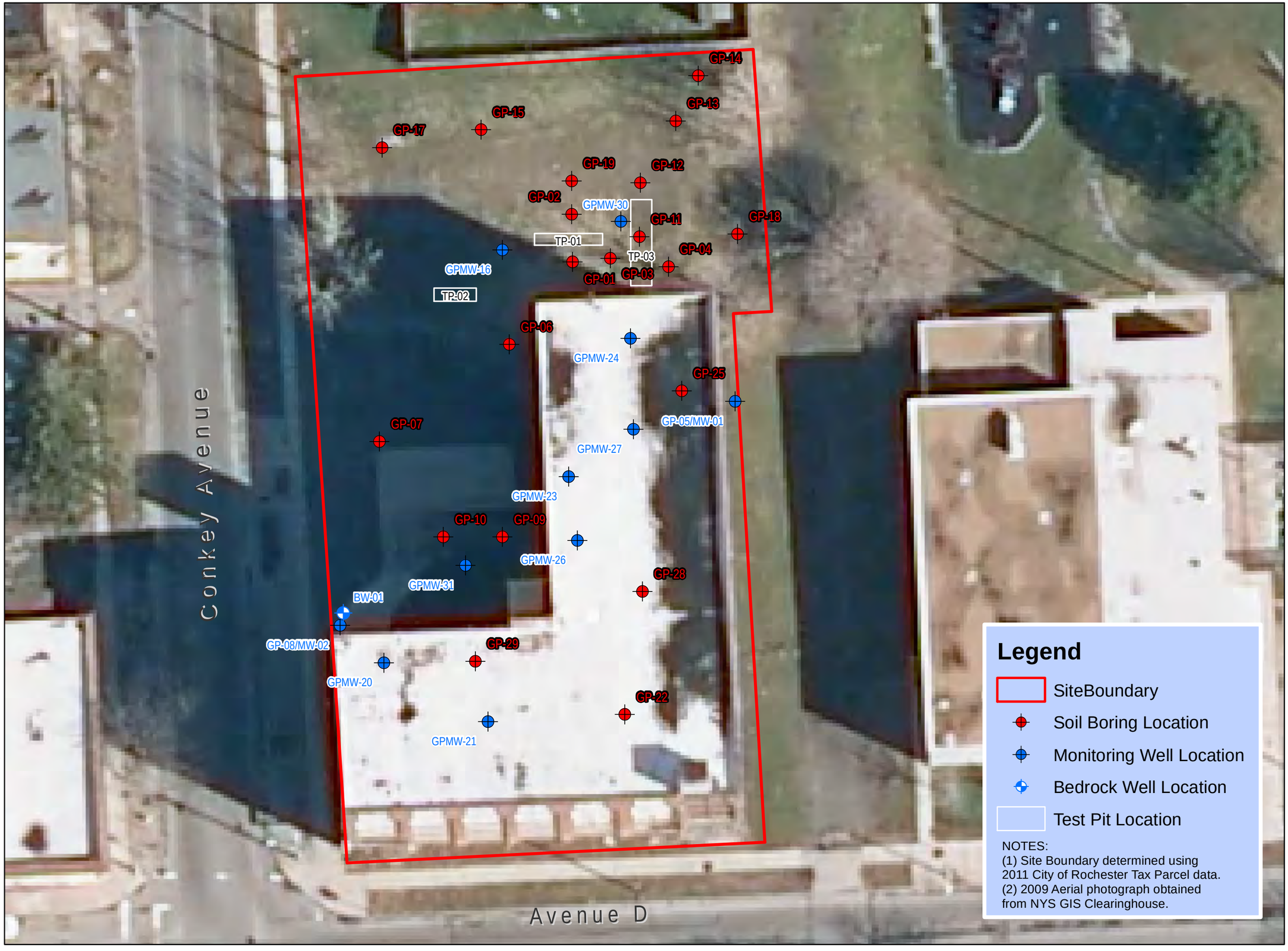
0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

N W E S

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\IRM WP\Fig. 1 - Site location.mxd

User: dengert



Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\IRM WP\Fig. 2 - Previous Investigations.mxd

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Interim Remedial Measures Work Plan

Former Michelsen Furniture Co. Site
BCP Site No. C818289

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester Economic Develoment Corporation

Title:

Previous Investigaiton Locations

N
W
E
S

10 0 10

1 inch = 25 feet

214539

Figure 2

LABELLA Associates, D.P.C.
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Interim Remedial Measures
Work Plan

Former Michelsen
Furniture Co. Site
BCP Site No. 828189

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester
Economic Develoment
Corporation

Title:

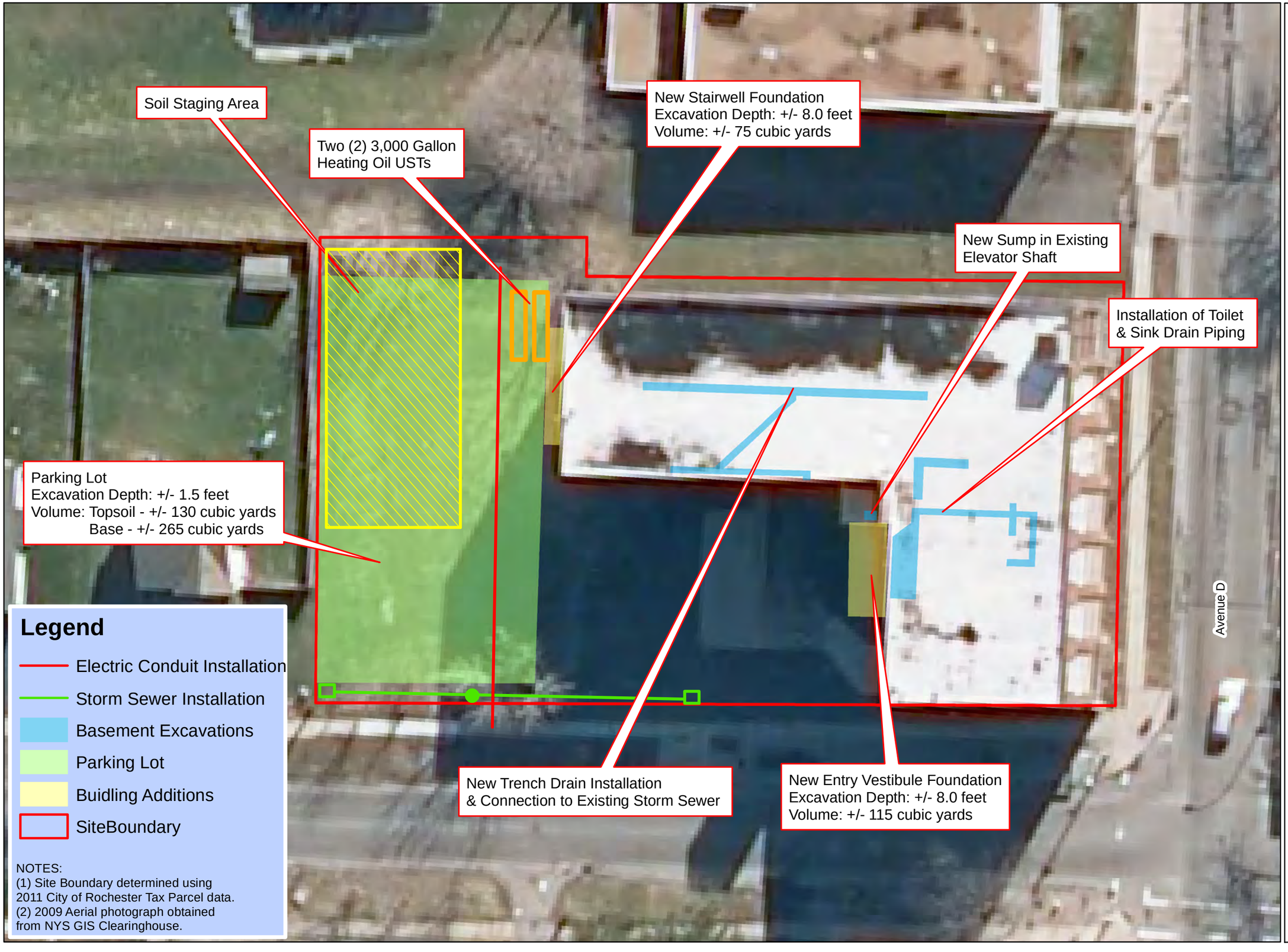
Site Plan

10 0 10

1 inch = 25 feet

214539

Figure 3



Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\IRM WP\Fig. 4 - Excavation areas.mxd

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Interim Remedial Measures Work Plan

Former Michelsen Furniture Co. Site
BCP Site No. 828189

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester Economic Develoment Corporation

Title:

Areas of Soil Disturbance

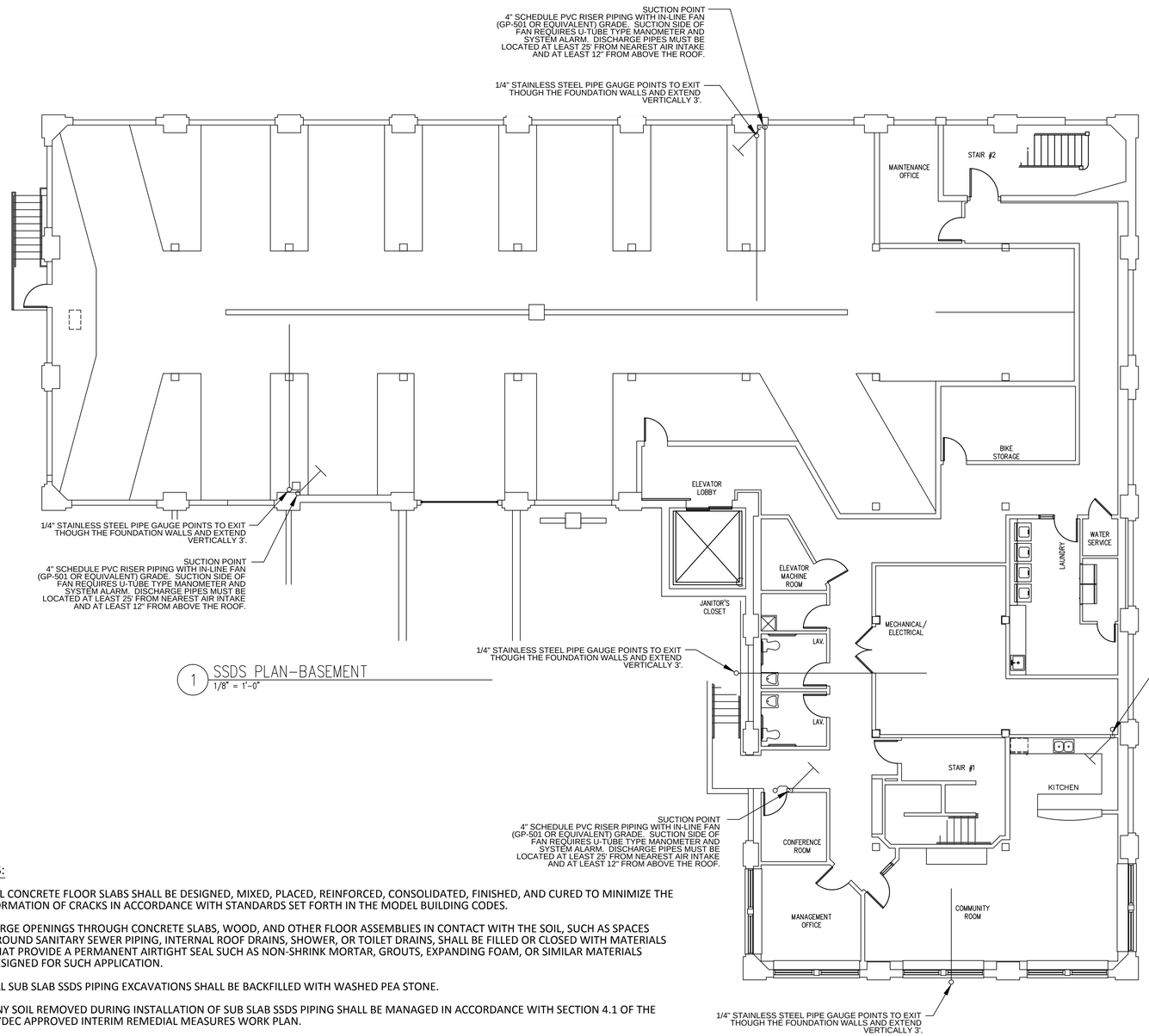
N

10 0 10

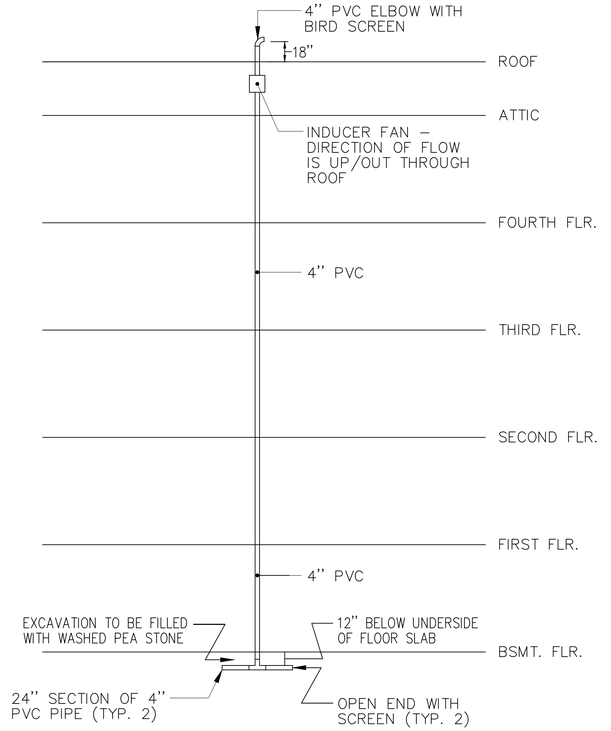
1 inch = 25 feet

214539

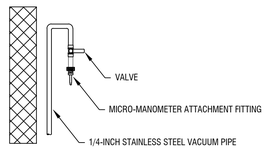
Figure 4



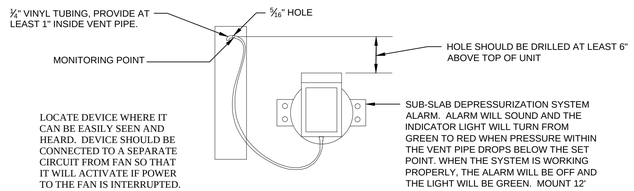
1 SSDS PLAN–BASEMENT
1/8" = 1'–0"



2 SSDS EXHAUST PROFILE DETAIL
1/8" = 1'–0"



3 PROFILE AT GUAGE POINT
NO SCALE



NOTES:
1. PRESSURE SET POINT: -0.10 INCHES WC

4 SUBSLAB DEPRESSURIZATION SYSTEM ALARM DETAIL
NO SCALE

NOTES:

1. ALL CONCRETE FLOOR SLABS SHALL BE DESIGNED, MIXED, PLACED, REINFORCED, CONSOLIDATED, FINISHED, AND CURED TO MINIMIZE THE FORMATION OF CRACKS IN ACCORDANCE WITH STANDARDS SET FORTH IN THE MODEL BUILDING CODES.
2. LARGE OPENINGS THROUGH CONCRETE SLABS, WOOD, AND OTHER FLOOR ASSEMBLIES IN CONTACT WITH THE SOIL, SUCH AS SPACES AROUND SANITARY SEWER PIPING, INTERNAL ROOF DRAINS, SHOWER, OR TOILET DRAINS, SHALL BE FILLED OR CLOSED WITH MATERIALS THAT PROVIDE A PERMANENT AIRTIGHT SEAL SUCH AS NON-SHRINK MORTAR, GROUTS, EXPANDING FOAM, OR SIMILAR MATERIALS DESIGNED FOR SUCH APPLICATION.
3. ALL SUB SLAB SSDS PIPING EXCAVATIONS SHALL BE BACKFILLED WITH WASHED PEA STONE.
4. ANY SOIL REMOVED DURING INSTALLATION OF SUB SLAB SSDS PIPING SHALL BE MANAGED IN ACCORDANCE WITH SECTION 4.1 OF THE NYDEC APPROVED INTERIM REMEDIAL MEASURES WORK PLAN.
5. THE STANDPIPE SHALL TERMINATE AT LEAST 12 INCHES ABOVE THE SURFACE OF THE ROOF; IN A LOCATION AT LEAST 25 FEET FROM ANY AIR INTAKES, AT LEAST 10 FEET AWAY FROM ANY WINDOW, AIR INTAKES, OR OTHER OPENING INTO THE CONDITIONED SPACES OF THE BUILDING THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT, AND 10 FEET FROM ANY ADJOINING OR ADJACENT BUILDINGS.
6. ALL EXPOSED AND VISIBLE INTERIOR AND EXTERIOR VENT PIPES SHALL BE IDENTIFIED WITH A LABEL AT LEAST EVERY 25-FEET.
7. ACTIVATION OF THE SUB-SLAB DEPRESSURIZATION SYSTEM SHALL BE COMPLETED BY ADDING EXHAUST FANS (IN-LINE EXHAUST FANS OF TYPE RADONAWAY GP-501 OR APPROVED EQUIVALENT) IN THE VERTICAL STAND PIPES.
8. EACH VERTICAL STANDPIPE SHALL BE EQUIPPED WITH A MANOMETER (VACU-RAY VACUMETER U-TUBE TYPE MANOMETER OR APPROVED EQUIVALENT) BELOW THE FAN, TO DEMONSTRATE THAT PRESSURE WITHIN THE PIPE IS BELOW ATMOSPHERIC PRESSURE.
9. EACH FAN SHALL BE EQUIPPED WITH A PROMINENTLY POSITIONED VISIBLE OR AUDIBLE WARNING SYSTEM (RADONAWAY CHECKPOINT IIA MITIGATION SYSTEM ALARM OR APPROVED EQUIVALENT) TO ALERT THE BUILDING OCCUPANT IF THERE IS LOSS OF PRESSURE OR AIR FLOW IN THE VENT PIPE, OR IF THE FAN CEASES OPERATION. THE WARNING SYSTEM SHALL BE INSTALLED ON A SEPARATE CIRCUIT SO THAT IN THE EVENT THE FAN LOSES POWER, THE WARNING SYSTEM WILL STILL ACTIVATE.
10. TEST POINTS CONSISTING OF AN OPEN LENGTH OF ¼-INCH STAINLESS STEEL TUBING SHALL BE INSTALLED BENEATH THE SLAB. THE VACUUM TUBING SHALL BE FABRIC-WRAPPED AT ITS SUB-SLAB TERMINATION. THE VACUUM TUBING SHALL BE ROUTED TO THE EXTERIOR THROUGH FOUNDATION WALLS, AND TERMINATE IN A BARBED FITTING SUITABLE FOR USE WITH A MAGNAHELIC MICRO PRESSURE GAUGE (SUCH AS THE INFILTEC DM-1 DIGITAL MICRO-MANOMETER OR APPROVED EQUIVALENT). THE EXTERIOR TERMINATIONS SHALL BE MOUNTED APPROXIMATELY 3-FEET ABOVE THE GROUND ON THE SIDE OF THE BUILDING, FITTED WITH A STOP VALVE PRIOR TO TERMINATION WITH THE BARBED FITTING, AND PROTECTED WITH A WEATHER PROOF HOUSING.

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PROJECT/CLIENT
FORMER MICHELSEN FURNITURE CO. SITE
BCP SITE #C828189
182 AVENUE D & 374 CONKEY STREET
ROCHESTER, NEW YORK

DRAWING TITLE
SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS

ISSUED FOR: SITET
DESIGNED BY: DJE
DRAWN BY: CTJ
REVIEWED BY: DPN
DATE: FEBRUARY 2015

PROJECT/DRAWING NUMBER
214539

FIGURE 5

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

TABLES

Table 1
Interim Remedial Measures Work Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Soil Samples													NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives
	GP-05	GP-08	GP-09	GP-12	GP-22	GP-23	GP-24	GP-26	GP-27	GP-28	GP-29	GP-30	GP-31	
Depth	3'-4'	13'-13.5'	13'-14.1'	12'	7.6'	6.8'-8.4'	2'-3'	7.5'-7.7'	8'-8.2'	6.8'-7.1'	7.8'-8.4'	13.5'-14'	13.5'-14'	
Sample Collection Date	10/10/12	10/10/12	10/10/12	1/17/14	1/17/14	1/17/14	1/17/14	3/14/2014	3/14/2014	3/14/2014	3/14/2014	3/14/2014	3/14/2014	
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05
Methyl acetate	ND	ND	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Methyl cyclohexane	ND	ND	ND	0.820	ND	ND	0.160	ND	ND	ND	ND	ND	ND	NA
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3**
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06
Trichloroethene	ND	**0.960**	ND	ND	ND	0.012	ND	**3.300**	0.022	0.011	**0.470**	ND	0.230	0.47
Toluene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	0.7
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	NA
Tetrachloroethene	ND	0.016	ND	ND	ND	ND U	ND	0.039	ND	ND	ND	ND	0.010	1.3
Ethylbenzene	ND	ND	ND	0.170	ND	ND U	0.270	ND	ND	ND	ND	0.160	ND	1
m,p-Xylene	ND	ND	ND	0.072	ND	ND U	0.150	ND	ND	ND	ND	ND	ND	0.26
o-Xylene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	0.26
Isopropylbenzene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	2.3**
n-Propylbenzene	ND	ND	ND	0.460	ND	ND U	0.370	ND	ND	ND	ND	ND	ND	3.9
1,3,5-Trimethylbenzene	ND	ND	ND	2.600	ND	ND U	0.840	ND	ND	ND	ND	1.400	ND	8.4
1,2,4-Trimethylbenzene	ND	ND	ND	0.760	ND	ND U	2.000	ND	ND	ND	ND	1.400	ND	3.6
tert-Butylbenzene	ND	ND	ND	0.044	ND	ND U	ND	ND	ND	ND	ND	0.036	ND	5.9**
sec-Butylbenzene	ND	ND	ND	0.580	ND	ND U	0.280	ND	ND	ND	ND	0.520	ND	11
4-Isopropyltoluene	ND	ND	ND	0.950	ND	ND U	0.410	ND	ND	ND	ND	0.400	ND	10**
n-Butylbenzene	ND	ND	ND	0.910	ND	ND U	0.370	ND	ND	ND	ND	0.690	ND	12
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	1.1
Naphthalene	ND	ND	ND	2.500	ND	ND U	3.100	ND	ND	ND	ND	4.000	ND	12

Notes:
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.
Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available
*Indicates no Part 375-6 SCO for this compound; SCO from NYSDEC Commissioner Policy 51 Supplemental SCOs for Protection of Groundwater.
**Indicates no Part 375-6 SCO or CP-51 SSCO for this compound; SCO from NYSDEC CP-51 Table 2: Soil Cleanup Levels for Gasoline Contaminated Soil.

Table 2
Interim Remedial Measures Work Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Semi-Volatile Organic Compounds (SVOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Soil Samples						NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives
	GP-05	GP-08	GP-09	GP-22	GP-23	GP-24	
Depth	3'-4'	13'-13.5'	13'-14.1'	7.6'	6.8'-8.4'	2'-3'	
Sample Collection Date	10/10/12	10/10/12	10/10/12	1/17/14	1/17/14	1/17/14	
Naphthalene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	2.700	12
Acenaphthylene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.120	100
Acenaphthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.600	20
Fluorene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.690	30
Phenanthrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	2.000	100
Anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.120	100
Fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.042	100
Pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.200	100
Benzo(a)anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Chrysene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Benzo(b)fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Benzo(k)fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	0.8
Benzo(a)pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Indeno(1,2,3-cd)pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	0.5
Dibenzo(a,h)anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	0.33
Benzo(g,h,i)perylene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	100

Notes:

SVOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8270.

Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives

U - Indicates that the constituent was not detected.

NA = Not Applicable or Not Available

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

APPENDIX 1

Site Specific Health & Safety Plan

Site Health and Safety Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D and 374 Conkey Avenue
Rochester, New York

Prepared For:

Urban League of Rochester
Economic Development Corporation
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

June 2014

Site Health and Safety Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D and 374 Conkey Avenue
Rochester, New York

Prepared For:

Urban League of Rochester
Economic Development Corporation
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

June 2014

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

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SITE HEALTH AND SAFETY PLAN

Project Title:	Former Michelsen Furniture Co. Site - Brownfield Cleanup Program
Project Number:	214539
Project Location (Site):	182 Avenue D & 374 Conkey Ave Rochester, New York
Environmental Director:	Gregory Senecal, CHMM
Project Manager:	Dave Engert, CHMM
Plan Review Date:	_____
Plan Approval Date:	_____
Plan Approved By:	_____ Mr. Richard Rote, CIH
Site Safety Supervisor:	Jennifer Gillen
Site Contact:	To Be Determined
Safety Director:	Rick Rote, CIH
Proposed Date(s) of Field Activities:	To Be Determined
Site Conditions:	Level, encompassing approximately 0.62 acres
Site Environmental Information Provided By:	• Phase I Environmental Site Assessment, LaBella, 2011 • Phase II ESA, LaBella, 2012 • Follow Up Subsurface Investigation Activities, LaBella, 2014
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:	Rochester General Hospital	585-922-8000
Poison Control Center:	Upstate New York Poison Control Center	1-800-222-1222
Police (local, state):	Rochester Police Department	911
Fire Department:	Rochester Fire Department	911
Site Contact:	John Dubikas	585-342-4700
Agency Contact:	NYSDEC – Todd Caffoe, P.E. NYSDOH – TBD	585-226-5350
Environmental Director:	Greg Senecal, CHMM	Direct: 585-295-6243 Cell: 585-752-6480
Project Manager:	Dave Engert, CHMM.	Direct: 585-295-630 Cell: 585-737-3293
Site Safety Supervisor:	Jennifer Gillen	Direct: 585-295-6648 Cell: 315-402-6480
Safety Director	Rick Rote, CIH	Direct: 585-295-6241

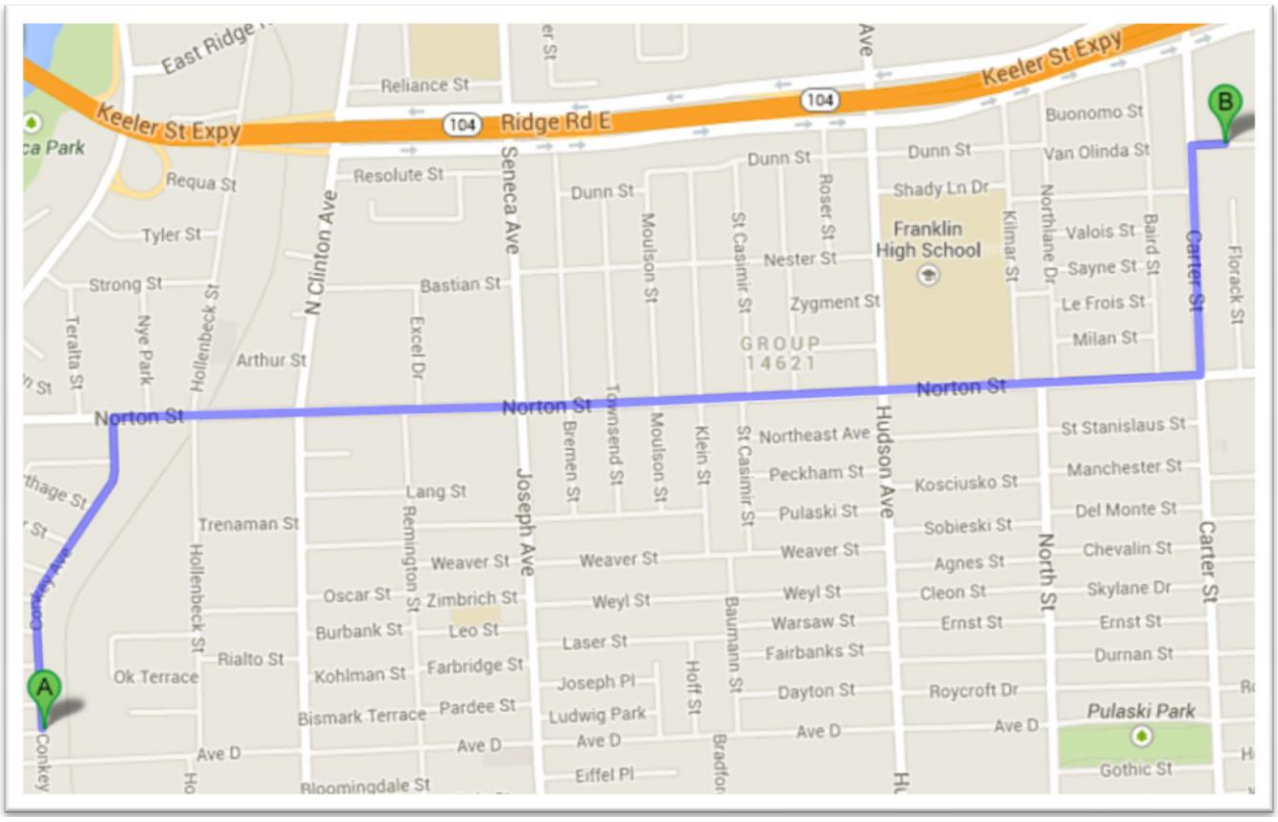
MAP AND DIRECTIONS TO THE MEDICAL FACILITY
ROCHESTER GENERAL HOSPITAL

Total Time: 6 minutes
Total Distance: 2.1 miles

Directions:

1. Turn Right onto Conkey Avenue, travel north 0.4 miles
2. Turn Right onto Norton Street, travel east 1.3 miles
3. Turn Left onto Carter Street, travel north 0.3 miles
4. Turn Right into Rochester General Hospital

Map:



1.0 Introduction

The purpose of this Health and Safety Plan (HASP) it to provide guidelines for responding to potential health and safety issues that may be encountered during the Remedial Investigation (RI) at the Former Michelsen Furniture Site, located at 182 Avenue D and 374 Conkey Avenue in the City of Rochester, Monroe County, New York. 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 were developed in general accordance with 29 CFR 1910 and 29 CFR 1926 and do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or and other regulatory body.

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. However, a minimum requirement for work area designation and control will consist of:

- Drilling (Geoprobe®/Rotary) – Orange cones to establish at least a 10-foot by 10-foot work area
- Test Pitting – Orange cones and orange temporary fencing to establish at least 10-feet of distance between test pit and fencing.

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 or her 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. All excavations will be backfilled by the end of each day. Additionally, no test pit will be left unattended during the day.

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 or 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:
Volatile organic vapors from petroleum products, chlorinated solvents or other chemicals may be encountered during excavation activities at the project work site. Inhalation of high concentrations of organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis.

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 and to the Modified CAMP in Appendix 2) 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 is 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.

5.6 Potential Exposure to Asbestos

Potential Hazards:
During ground intrusive activities (e.g., test pitting or drilling) soil containing asbestos may be encountered. Asbestos is friable when dry and can be inhaled when exposed to air.

Protective Action:
The presence of asbestos can be identified through visual observation of a white magnesium silicate material. If encountered, work should be halted and a sample of the suspected asbestos should be collected and placed in a plastic sealable bag. This sample should be sent to the asbestos laboratory at LaBella Associates for analysis.

5.7 Potential Exposure to Thorium^{232}

Potential Hazards:
During ground intrusive activities (e.g., test pitting or drilling) soil containing ^{232}Thorium may be encountered. ^{232}Thorium is a radioactive substance and poses an exposure risk to humans once encountered.

Protective Action:
Each test pit, soil sample, or other soil from the subsurface should initially be screened with the Ludlum meter to check the level of radiation on the soil as compared to the Site background level of radiation. Should the level of radiation on the soil sample exceed 2 times the Site background level, then work should be halted at the specified location and Mr. Rick Rote of LaBella Associates, P.C. should be contacted immediately (see page ii Emergency Contacts).

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 procedures described in Appendix 2 "Site Specific CAMP". Please refer to the Site Specific CAMP for further details on air monitoring at the Site.

The Air Monitor will utilize a photoionization Detector (PID) to screen the ambient air in the work 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 or more often using a PID, and the DustTrak meter.

If sustained PID readings of greater than 25 ppm are recorded in the breathing zone, then 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-hours of use or more frequently, if necessary. If PID readings are sustained, in the work area, at levels above 25 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 dust concentrations exceed the upwind concentration by 150 $\mu g/m^3$ (0.15 mg/m^3) consistently for a 10 minute period within the work area or at the downwind location, then LaBella personnel may not re-enter the work area until dust concentrations in the work area decrease below 150 $\mu g/m^3$ (0.15 mg/m^3), which may be accomplished by the construction manager implementing dust control or suppression measures.

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 and wait at the assigned 'safe area'. 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.

J:\URBAN LEAGUE OF ROCHESTER ECONOMIC DEVELOPMENT\214539 - MICHELSON BCP SITE RI & REMEDIATION\REPORTS\RIWP\APPENDIX 4 HASP\HASP.DOCX

Table 1
Exposure Limits and Recognition Qualities

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	STEL	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	0.2	0.2	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	0.096	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
Ethylbenzene	100	100	NA	1	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
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
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	Almond	NA	NA
Cadmium	0.2	0.5	NA	NA	NA	NA	NA	NA	NA
Chromium	1	0.5	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	Odorless	NA	NA
Selenium	0.2	0.02	NA	NA	NA	Unknown	NA	NA	NA
Other									
Asbestos	0.1 (f/cc)	NA	1.0 (f/cc)	NA	NA	NA	NA	NA	NA

Table 1 Notes:

(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, P.C. | Engineering Architecture Environmental Planning

APPENDIX 2

Site Specific Community Air Monitoring Plan

Community Air Monitoring Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared for:

Urban League of Rochester Economic Development Corporation
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

Revised
January 2015

Community Air Monitoring Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared for:

Urban League of Rochester Economic Development Corporation
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

Revised
January 2015

Table of Contents

Page

1.0 INTRODUCTION

This Site Specific Community Air Monitoring Plan (CAMP) has been prepared by LaBella Associates, D.P.C. on behalf of the Urban League of Rochester Economic Development Corporation (ULREDC). This CAMP addresses potential Volatile Organic Vapor (VOC) and particulate emissions that may occur during implementation of the Remedial Investigation Work Plan (RIWP) at the Former Michelsen Furniture Co. Site located at 182 Avenue D and 374 Conkey Avenue which encompasses approximately 0.62 acres in the City of Rochester, Monroe County, New York herein after referred to as the "Site."

1.1 PURPOSE

Various levels of VOCs, semi-VOCs, and metals (collectively refered to as "constituents of concern (COCs)) have been detected in the soil and groundwater at the Site or are suspected to be contained in the soil and/or groundwater at the Site. The presence of these COCs through disturbance of soil and groundwater at the Site can potentially result in nuisance odors or health threats to the neighborhood in the immediate vicinity of the Site as well as to the various occupants of the Site.

This CAMP is specific to activities being conducted as part of the Remedial investigation at the Site. The CAMP describes the air monitoring activities to be completed in order to provide a measure of protection for any downwind receptors including Site occupants and occupants of neighboring properties. This CAMP is not intended to provide action levels for respiratory protection of workers involved with the RI. Rather, a Health & Safety Plan (HASP) has been developed and is included as Appendix 4 to the RIWP to cover workers directly involved with the RI work.

This CAMP includes the requirements of the New York State Department of Health (NYSDOH) Generic CAMP (included as Appendix 1A of the Draft DER-10 New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Site Investigation and Remediation dated December 2002).

Pursuant to the New York State Department of Environmental Conservation (NYSDEC) Technical Administrative Guidance Manual (TAGM) #4031 – Fugitive Dust Suppression and particulate Monitoring Program at Inactive Hazardous Waste Sites, (HWR-89-4031), this CAMP addresses methods that will be utilized to monitor particulate (dust) levels at the perimeter of, and within the work areas of the Site. If elevated levels of particulate emissions are encountered, this CAMP identifies the procedures that will be employed to mitigate elevated particulate levels.

Air monitoring procedures for these COCs are also included in this CAMP. Monitoring for COCs in, or near, the work areas of the Site will also be conducted per the HASP.

2.0 METHODOLOGY

This CAMP has been designed for remedial investigation activities at the Site. The CAMP pertains primarily to remedial investigation activities that disturb soil and groundwater at the Site. The following procedures will be implemented to monitor and, if necessary, mitigate the potential migration of fugitive particulate and/or COC emissions at the Site.

2.1 Site Background Monitoring

Each day of field work during the ground intrusive work a wind sock or flag will be used to monitor wind direction in the work areas. Based upon daily wind conditions three temporary monitoring points, one up wind, one downwind, and one in the direction of the closest sensitive receptor to the work areas, will be identified. The wind direction will be observed and noted frequently throughout the day and monitoring stations will be adjusted appropriately.

This CAMP will utilize a photoionization Detector (PID) to screen the ambient air in the work areas for total VOCs and a DustTrak tm Model 8530 aerosol monitor or equivalent for measuring particulates.

Each day, prior to the commencement of the ground intrusive work, background concentrations of particulates and VOCs will be measured and recorded as 15 minute averages at the identified three locations (one upwind, one downwind, and one in the direction of the closest sensitive receptor) with the typical equipment engines and any other gas/diesel engines operating on Site. This will be established as the Site background level for the day.

2.2 VOC Monitoring, Response Levels and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis. The PID will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. 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 will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
2. 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 will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will 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.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.
4. All 15-minute readings will be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

2.3 Particulate Monitoring, Response Levels and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The equipment will 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.

1. 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 will 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.
2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will 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.
3. All readings will be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

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