PRECISION
ENVIRONMENTAL SERVICES, INC.
831 RT. 67, LOT 38 A
BALLSTON SPA, NY 12020
TEL: 518-885-4399
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CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

20 YEARS
1991 - 2011

PERIODIC REVIEW REPORT

PERIOD: January 30, 2012 to June 30, 2013

DAMBROSE CLEANERS SITE
1517-1519 Van Vranken Avenue
Schenectady, NY

NYSDEC SITE NO.: 447030

PREPARED FOR:
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL
REMEDIATION
625 BROADWAY, 12TH FLOOR
ALBANY, NY 12233

PREPARED BY:
PRECISION ENVIRONMENTAL
SERVICES, INC.
831 ROUTE 67, LOT 38A
BALLSTON SPA, NY 12020

JULY 2013

TABLE OF CONTENTS

List of Figures

Appendices

1.0 EXECUTIVE SUMMARY

This Periodic Review Report document provides a written synopsis of prior work and its effects on environmental compliance at the Dambrose Cleaners Inactive Hazardous Waste Disposal Site. Site investigation and remediation is conducted in accordance with a published Site Management Plan (SMP) and administration provided by the New York State Department of Environmental Conservation (NYSDEC or Department).

1.1 Background

The Dambrose Cleaners site is located at 1517 and 1519 Van Vranken Ave. in the City of Schenectady, Schenectady County, NY. It is located in a residential and commercial portion of the City approximately ½ mile north of Union College.

Located in a mixed urban setting and is surrounded by both private residence and commercial business. Figure 1 provides additional information on general site location. Retail dry cleaning operations from approximately 1957 through 2001 reportedly resulted in contamination of soil and groundwater due to release of Tetrachloroethene (PCE). Currently, the site consists of a two story building utilized as a drop off service for off site dry cleaning on the first floor as well as a residential apartment on the second floor.

PCE and associated degradation products were initially documented at the site in the late 1990's during environmental site assessment and investigations by private consultants for a property transaction. Ultimately, soil, groundwater, soil gas and indoor air were found to be contaminated with constituents of concern (CoCs) associated with PCE. Concentrations in groundwater were documented to be as high as 15,000 µg/L with indoor air found as high as 540 µg/m3. The Site was added to the Registry of Inactive Hazardous Waste Disposal Sites on December 6, 2001 as Site #447030.

After site planning, investigation and design, a subslab depressurization system (SSDS) was installed at the site in 2005 as part of an interim remedial measure. A Record of Decision (ROD) was issued for the site in October 2007 and a Soil Vapor Extraction System (SVES) was installed in 2011. Figure 2 presents conditions obtained from the Feb. 7, 2011 property map by Malcom Pirnie, Inc.

The SSDS and SVES remain in operation as of the date of this report. The goal of theses remedies is to remediate the identified and perceived source of PCE impacts located at the rear of the property and below the building.

1.2 Effectiveness and Compliance

The 2011 SMP describes Engineering and Institutional Controls, Site Monitoring requirements, and an Operation and Maintenance Plan. Compliance with the remedial goals was demonstrated though site monitoring and operation & maintenance. Engineering Controls include:

- Soil Cover and Concrete Cap
- Sub slab depressurization system (SSDS)
- Soil Vapor Extraction System (SVES)

1.2.1 Engineering Controls

The Soil Cover was clean imported backfill placed over the SVES. The Concrete Cap was a 10- inch thick concrete slab constructed in a parking area over the western portion of the Site. This cap system minimizes exposure to remaining contamination in soil and did not appear to be compromised during the reporting period. No obvious wear was observed during site inspections or review.

The sub-slab depressurization system includes three suction points below the basement building slab. It operated satisfactorily during the reporting period and actually demonstrated increased removals from soil gas from the prior reporting period.

The SVE system, consisting of subsurface horizontal soil vapor extraction wells bedded in trenches of granular material, was activated in January, 2011. During the prior reporting period, loss of vacuum was detected in SVE Trench 2. While sealing of surface penetrations appeared to be successful, this problem arose in 2012 also. SVE trench 2 was shut down from May 2012 through March 2013 to increase vacuum in trenches 1 and 3. Although concentrations slightly decreased thereafter in SVE Trench 1, analytical results indicated a larger increase in PCE concentrations in the effluent and SVE leg 3 after this adjustment.

1.2.2 Institutional Controls

Institutional controls implemented as part of the ROD include limiting the use and development of the property, compliance with the approved Site Management Plan, and restricting uses of groundwater as a source of potable or process water. No significant change in site or potable water use has occurred since the prior reporting period and thus compliance with these controls was satisfied.

1.2.3 Monitoring and Operation & Maintenance

Routine, monthly monitoring of the SVES, semi-annual air sampling of the SVES and SSDS and annual groundwater monitoring have been completed at the site since activation of the SVES. Analytical results indicate these two engineering controls continue to extract PCE from the site.

Groundwater monitoring of existing site wells continues annually per the SMP. Despite minor detection of constituents and PCE daughter compounds not detected last year, analytical data indicates an overall decrease in PCE concentrations in on site wells as well as significant decrease in the most heavily impacted well (MW-2R).

1.3 Recommendations

Concentrations of contaminants in groundwater, soil and subslab vapor indicate the continued need for operation of the implemented Engineering /Institutional Controls at the site. Variations in the analytical results indicate:

- performance of additional interior sampling of the basement air to further document the effectiveness of the SSDS;
- additional routine monitoring, preferably on a quarterly or seasonal basis should be carried out to document variations in concentrations;
- Continued monthly monitoring of the SVES and SSDS may be prudent. This may also be warranted due to historical loss of vacuum issues in SVE Trench 2.

2.0 SITE OVERVIEW

The Dambrose Cleaners site is located at 1517 and 1519 Van Vranken Ave. in the City of Schenectady, Schenectady County, NY. The site encompasses an 0.11 acre lot within a City block bounded by Nott Street, Van Vranken Avenue, and Hattie and Carrie Streets. The site is located in an urban setting and is surrounded by both private residence and commercial business. Figure 1 provides additional information on general site location.

Retail dry cleaning operations reportedly existed at the site from approximately 1957 through 2001. Currently, the site consists of a two story building utilized as a drop off service for off site dry cleaning on the first floor as well as a residential apartment on the second floor. Historic on premises dry cleaning operations, however, and the storage/use of Tetrachloroethene (PCE) resulted in at least one documented spill in 1989. This use is believed to have contributed to releases as a result of poor operational practices and housekeeping. Key findings and actions were:

- PCE and associated degradation products were initially documented at the site in soil, groundwater, soil gas and indoor air. PCE concentrations in groundwater were documented to be as high as 15,000 µg/L.
- Concentrations within indoor air were found as high as 540 µg/m3.
- A subslab depressurization system (SSDS) was installed at the site in 2005 as part of an interim remedial measure.
- A Record of Decision (ROD) was issued for the site in October 2007.
- In January 2011 a Soil Vapor Extraction System (SVES) was installed and made operational pursuant to the ROD.
- A Site Management Plan was prepared in October, 2011 by Malcom Pirnie, Inc. to document proposed actions intended to manage remaining contamination at the Site.
- The SSDS and SVES remain in operation as of the date of this report. The goal of the SVES is to remediate the identified and perceived source of PCE impacts located at the rear of the property.

Figure 2 is a Site Map obtained from the Feb. 7, 2011 property map by Malcom Pirnie, Inc.

3.0 EC/IC Compliance and Evaluation of performance, effectiveness, and protectiveness

Engineering controls on the site are:

- soil cover and concrete;
- sub slab depressurization system; and
- soil vapor extraction system.

Institutional Control on the site is agreement to an environmental easement to:

- Limit the use and development of the property to restricted residential use, which would also permit commercial or industrial uses;
- Require compliance with the approved Site Management Plan;
- Restrict the uses of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH;

3.1 Soil Cover and Concrete Cap

After construction completion of the SVE system, clean imported backfill was placed over the gravel trenches. A 10- inch thick concrete slab was then constructed and incorporated as a parking area over the western portion of the Site. This cap system minimizes exposure to remaining contamination in soil.

Visual inspection of the soil cap and concrete occur on a monthly basis and during annual evaluation to monitor performance of this control. Both are significantly intact as originally constructed with no obvious wear. Photo documentation of the Cap is presented in Appendix A.

3.2 Sub slab depressurization system (SSDS)

In 2005, a sub-slab depressurization system with three suction points was installed to create a negative pressure gradient between the basement and the area beneath the building slab. Additionally, cracks and seams in the slab were sealed, and the sump was capped and sealed. Vapor from beneath the slab is vented above the roofline of the Dambrose Cleaners Building.

During this monitoring period the system has operated well. Vacuum beneath the slab is documented through visual inspection of system controls and the manometer.

- Air samples of SSDS exhaust were collected and analyzed for VOCs via analytical method TO-15 in March and November 2012. As presented in the chart below, the SSDS continues to remove PCE vapors from the subsurface.

3.3 Soil Vapor Extraction System

The purpose of the SVE system is to mitigate adsorbed contaminant mass within the vadose zone and capture fugitive VOCs. The vacuum and negative airflow induced by the SVE blower draws the contaminant mass upward to the horizontal SVE lines. Following extraction by the blower, the raw recovered vapor is then discharged to the atmosphere. Currently, no method of off-gas treatment has been applied.

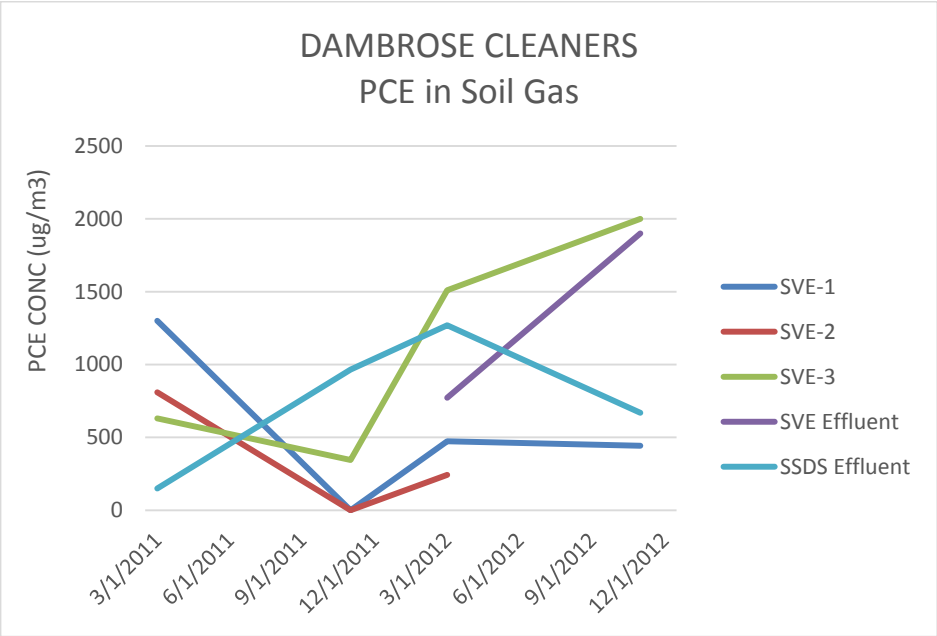
The SVE system consists of one 33 foot long and two 25 foot long subsurface horizontal soil vapor extraction wells bedded in trenches of granular material. The system activated on January 10, 2011. It has generally been in operation since this date, with periodic maintenance shutdown mostly attributed to short circuiting at SVE Trench 2.

Efforts in June, 2011 to seal off surface penetrations where ambient air was believed to be entering SVE Trench 2 and causing a loss of vacuum were successful. However, this problem surfaced in 2012 also. PES and the NYSDEC assessed the possible cause(s) contributing to current short-circuiting, however, no obvious source was identified.

- To increase vacuum within the system at legs 1 and 3, SVE trench 2 was shut down from May 2012 through March 2013.

- As indicated by the chart below, with the exception if SVE Trench 2 difficulties, analytical results indicate an increasing trend in PCE concentrations in the effluent and SVE leg 3. Concentrations decreased in SVE Trench 1.

- These trends indicate varying contaminant removal results over time, however, overall removal of contaminants may be increasing after temporary deactivation SVE Trench 2. Therefore, even considering the effectiveness of SVE Trench 2, system effectiveness has been good.



3.4. Institutional controls

Institutional Control on the site is current as described below:

3.4.1. *Limit the use and development of the property to restricted residential use, which would also permit commercial or industrial uses*;

A residential apartment currently exists on floor two of the structure. Natasha Polischuk operates Union Cleaners on floor one.

3.4.2. *Require compliance with the approved Site Management Plan*;

Periodic monitoring, reporting, operation, and maintenance is conducted at the site in compliance with this periodic review report and the site management plan.

3.4.3. *Restrict the uses of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH*;

Public water is currently provided to the residential second floor apartment and to the commercial use of Union Cleaners on the first floor.

4.0 MONITORING/OPERATION & MAINTENANCE

Site Monitoring is provided to evaluate the performance and effectiveness of the remedy:

- SVES to reduce contamination at the Site;
- SSDS to control concentrations of Site contaminants in indoor air;
- Soil cover and concrete cap to function as a barrier to receptor exposure to the remaining contamination; and
- Entire remedy for green remediation principles.

As described in the Site Management Plan and the table below, routine monitoring of the remedy is required.

Monitoring Program	Frequency*	Matrix	Analysis
SVES	Initial baseline monitoring, followed by semi-annual monitoring for one year and annual monitoring thereafter	1. Contaminant concentrations in soil vapor as represented by samples of influent to the SVES 2. Vacuum maintained in each leg of the SVES collection system	1. VOCs in air by TO-15 2. Measurement of vacuum in each leg of the collection system using electronic system data
SSDS	Initial baseline monitoring, followed by semi-annual monitoring for one year and annual monitoring thereafter	Vacuum maintained under the basement slab of 1517/1519 Van Vranken Avenue	Measurement of SSDS vacuum, using the SSDS system output readings
Groundwater	Initial baseline monitoring, followed by semi-annual monitoring for one year and one monitoring event every fifth quarter thereafter	Groundwater in the monitoring wells shown on Figure 3, (subject to adjustment by the	VOCs by EPA Method 8260B and groundwater elevations
		NYSDEC)	
Soil Cover and Concrete Cap	Inspection at each monitoring event conducted for other media as identified herein	Soil Cover and Concrete Cap	Visual inspection

4.1 SVES Monitoring

This task included general system review of blower, related equipment, and system components. Based on vacuum loss issues in SVE trench two, periodic monthly monitoring (by photoionization detector only) was provided. The annual air sampling was completed November 29, 2012.

All samples were obtained by aseptic techniques, secured in clean tedlar bags provided by the analytical laboratory, labeled, and submitted under chain of

custody to Pace Analytical Labs, in Schenectady, NY to be analyzed via EPA Method TO-15.

As indicated in the table below and Table 3 in Appendix B, only tetrachloroethylene was detected within the SVE samples. According to the data, the most significant concentration of VOCs was originating from the northernmost trench of the SVE system (SVE-3).

4.2 SSDS Monitoring

This task included general system review of blower, system controls and piping. Based on vacuum loss issues in SVE trench two, periodic monthly monitoring (by photoionization detector only) was provided. The annual air sampling was completed November 29, 2012.

Similar to the SVES, these samples are secured in clean tedlar bags provided by the analytical laboratory, labeled, and submitted under chain of custody to Pace Analytical Labs, in Schenectady, NY to be analyzed via EPA Method TO-15.

Several VOCs were detected in the SSDS. While the concentration of tetrachloroethylene in 2011 was150 ug/l, the 2012 concentration was 669 ug/L.

Parameter (Method TO-15)	**SAMPLE IDENTIFICATION (ug/L)**			
	SVE-1	**SVE-3**	**SVE Exhaust**	**SSDS System**
1,2,4-Trimethylbenzene	ND	ND	ND	**128**
m&p Xylene	ND	ND	ND	**339**
Methylene Chloride	ND	ND	ND	**63.2**
n-Hexane	ND	ND	ND	**72**
o-Xylene	ND	ND	ND	**109**
Tetrachloroethylene	**443**	**2000**	**1900**	**669**
Toluene	ND	ND	ND	**113**
Total Compounds	**443**	**2,000**	**1,900**	**1,493.2**

4.3 Groundwater Monitoring

Groundwater monitoring includes water level measurements, monitory well inspection, and groundwater sampling. During the monitoring period, groundwater sampling occurred April 2012.

Water levels in nine monitoring wells (MW-1R, MW-2R, MW-3, MW-4, MW-6, MW-7, MW-8, MW-9, and MW-10) were recorded to determine the

calculate groundwater elevations. These elevations ranged from 184.48 feet (MW-8) to 196.98 (MW-3). The groundwater gauging and elevation data is presented in the attached Table 1.

In addition to determining the depth to groundwater, select monitoring wells were purged of a minimum of three well volumes by manual repetitive bailing, allowed to re-charge to equilibration, and sampled. All samples were obtained by aseptic techniques, secured in clean laboratory supplied glassware, labeled, and placed on iced storage for subsequent submission under chain of custody to the NYS DEC contract laboratory, Test America of Buffalo, NY to be analyzed via EPA Method 8260.

As the attached Table 2 indicates, constituents of concern, including PCE and its daughter compounds, were found in five monitoring wells (MW-1R, MW-2R, MW-4, MW-6, and MW-7) three of which (MW-1R, MW-2R and MW-6) were at or above the standards established in the NYSDEC - *Division of Water Resources, Classes, and Quality Standards for Groundwater*, Chapter 10 of Title 6, Article 2, Part 703.5. The data also indicates the PCE contaminant plume is generally limited to the Dambrose Cleaners site and properties located immediately down gradient.

Trends in PCE contamination in *select* groundwater monitoring wells can be viewed in the table below. Despite minor detection of constituents and PCE daughter compounds not detected last year, the data indicates:

- an overall decrease in PCE concentrations in on site wells,
- significant decrease in the most heavily impacted well (MW-2R).

PCE in Groundwater (ug/L)

	MW-1R	MW-2R	MW-3	MW-4
5/6/2011	**0.8**	**360**	**0.7**	**2**
4/9/2012	0	**6.5**	0	**2.6**

4.3 Soil Cover and Concrete Cap Monitoring

At the time of each monitoring event, a visual inspection of the soil cover and concrete cap was conducted. The purpose of the visual inspection was to identify any changes, such as damage, to the surficial media which could compromise the functionality of the soil cover and/or concrete cap. In addition, cursory inspection was provided during monthly monitoring of the SVES.

No significant wear on the soil cover and concrete cap was observed. This control appears to be maintained in satisfactory condition.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 SMP Compliance

This Periodic Review Report described how all requirements of the SMP were met. This was accomplished through each component of the remedy - the respective monitoring, operation and maintenance of the following Engineering controls and Institutional Controls:

- soil cover and concrete;
- sub slab depressurization system;
- soil vapor extraction system.
- Site environmental easement.

5.2 Performance and Effectiveness of the Remedy

Successful implementation of each component of the remedy contributed to achievement of remedial objectives for the site.

Air samples of SSDS exhaust were collected and analyzed for VOCs via analytical method TO-15 in March and November 2012. The SSDS continues to remove PCE vapors from the subsurface.

- SVE trench 2 was shut down from May 2012 through March 2013 o increase vacuum within the system at legs 1 and 3. Analytical results indicate an increasing trend in PCE concentrations in the effluent and SVE leg 3. Concentrations decreased in SVE Trench 1. These trends indicate varying contaminant removal results over time, however, overall removal of contaminants may be increasing.

- Groundwater monitoring indicates an overall decrease in PCE concentrations in on site wells, including significant decrease in the most heavily impacted well (MW-2R).

Concentrations of contaminants in groundwater, soil and subslab vapor indicate the continued need for operation of the implemented Engineering Controls (ECs) at the site. PCE concentrations documented in system exhaust indicate that the SVES is still removing PCE impacts and therefore should remain in place.

Decreases in contaminants may be a result of active remediation by the engineering controls, however, it could also be due to seasonal variation. PES recommends:

- performance of additional interior sampling of the basement air to further document the effectiveness of the SSDS;
- additional routine monitoring, preferably on a quarterly or seasonal basis should be carried out to document variations in concentrations;
- continued monthly monitoring of the SVES and SSDS may be prudent. This may also be warranted due to historical loss of vacuum issues in SVE Trench 2.

FIGURES

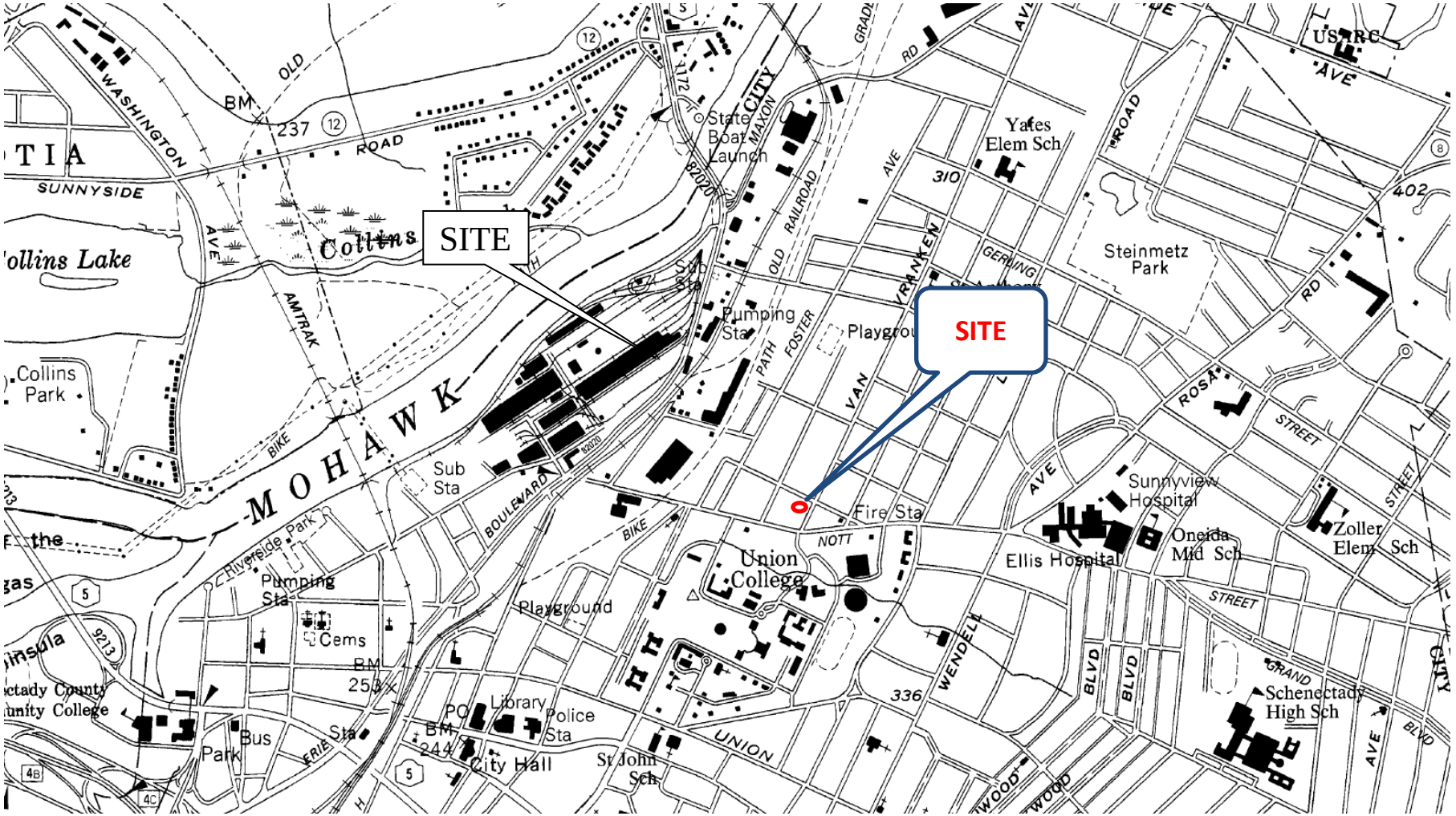


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Figure 1 – LOCATION MAP

Dambrose Cleaners – 1517 Van Vranken Avenue

City of Schenectady, Schenectady County, New York

NYSDEC Site # 447030 **Scale: NONE**

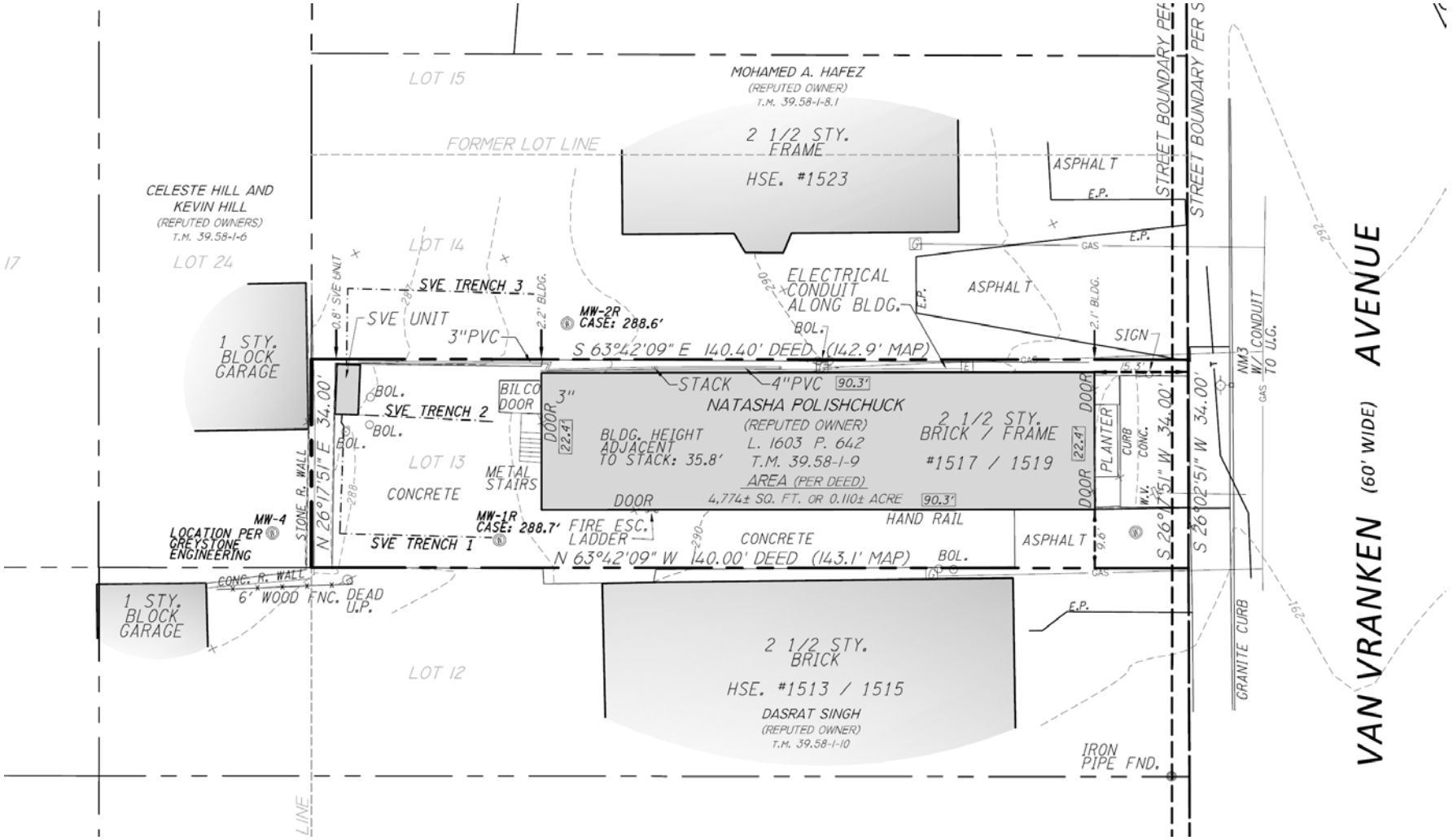

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Figure 2 – Site Map

Dambrose Cleaners – 1517 Van Vranken Avenue

City of Schenectady, Schenectady County, New York

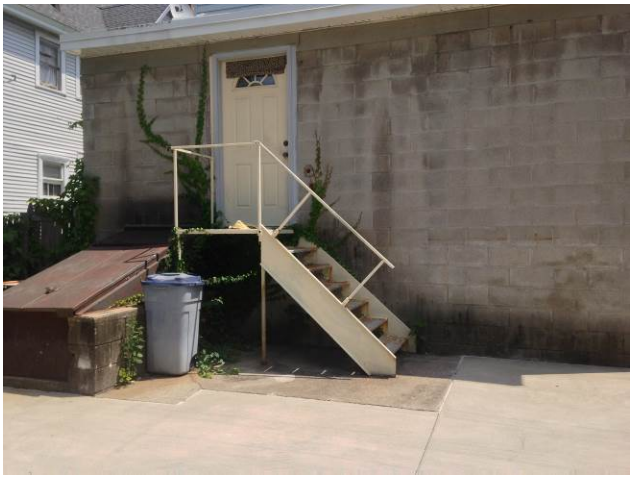
Source: Malcolm Pirnie **NYSDEC Site # 447030** **Scale: NONE**

APPENDIX A

PHOTOGRAPHS

Soil cover and concrete cap

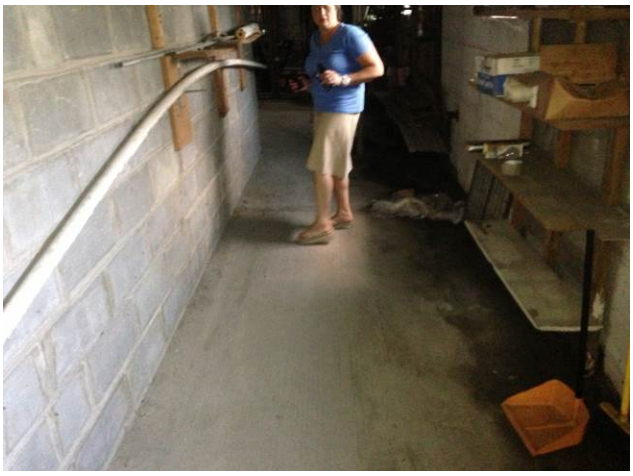
SVES



Soil cover and concrete cap

SSDS Piping

SSDS Blower and Piping



Basement Are

APPENDIX B

TABLES

TABLE - 1

Summary of Groundwater Gauging and Elevation Data

Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Monitoring Well ID	Top of Casing Elevation	Depth to Water From Top of Casing	Watertable Elevation
		4/9/2012	
MW-1R	200.07	7.91	192.16
MW-2R	199.56	7.45	192.11
MW-3	202.91	7.40	195.51
MW-4*	193.47	1.90	191.57
MW-5	197.78	-	-
MW-6	191.10	5.55	185.55
MW-7	195.04	3.90	191.14
MW-8	190.43	5.95	184.48
MW-9	190.99	5.35	185.64
MW-10	191.17	5.15	186.02
MW-11	200.13	-	-

* MW-4 data collected on April 19, 2012
All Values are expressed in feet
Survey data courtesy of NYS DEC and performed by PES

TABLE - 2

Summary of Groundwater Analytical Results

Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Parameter (EPA METHOD 8260B)	MONITORING WELL/SAMPLE IDENTIFICATION							NYS DEC Groundwater Standards
	MW-1R	MW-2R	MW-3	MW-4	MW-6	MW-7	MW-10	
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	10
1,1,2,2-Trichlorothethane	ND	ND	ND	ND	ND	ND	ND	0.7
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	ND	**3.5 J**	ND	-
Benzene	ND	ND	ND	ND	ND	ND	ND	0.7
Bromomethane	ND	ND	ND	ND	ND	ND	ND	5
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	60
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	5
Chloroethane	ND	ND	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	-
cis-1,2-Dichloroethene	**9.8**	**5.0**	ND	**4.3**	**33**	**0.86 J**	ND	5
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	0.4
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	-
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	5
MTBE	ND	ND	ND	ND	ND	ND	ND	10
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	5
Styrene	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	**6.5**	ND	**2.6**	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	5
Trichloroflouromethane	ND	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	**1.4**	ND	**0.69 J**	ND	ND	ND	5
Vinyl chloride	**9.4**	**5.2**	ND	**1.4**	ND	ND	ND	2
m & p - Xylene	ND	ND	ND	ND	ND	ND	ND	5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	5
Xylenes (Total)	ND	ND	ND	ND	ND	ND	ND	5
Total Compounds	**19.20**	**18.10**	**0.00**	**8.30**	**33.00**	**4.36**	**0.00**	

Samples collected on April 9, 2012, with the exception of MW-4 which was collected on April 19, 2012
All Values are Reported in ug/L (parts per billion - ppb)
ND = Not Detected
J - Result is less than the RL but greater than or equal to the MDL. Concentration is an approximate value.
Analytical Facility - Test America - Buffalo
Highlighted values equal or exceed NYSDEC groundwater standards.

TABLE 3
Summary of VOCs in System Air Analytical Results

Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Parameter (Method TO-15)	**SAMPLE IDENTIFICATION**			
	SVE-1	**SVE-3**	**SVE Exhaust**	**SSDS System**
1,2,4-Trimethylbenzene	ND	ND	ND	**128**
2,2,4-Trimethylpentane	ND	ND	ND	ND
Acetone	ND	ND	ND	ND
Benzene	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
m&p Xylene	ND	ND	ND	**339**
Methylene Chloride	ND	ND	ND	**63.2**
n-Heptane	ND	ND	ND	ND
n-Hexane	ND	ND	ND	**72**
o-Xylene	ND	ND	ND	**109**
Tetrachloroethene	**443**	**2000**	**1900**	**669**
Toluene	ND	ND	ND	**113**
Total Compounds	**443**	**2,000**	**1,900**	**1,493.2**

Samples collected on November 29, 2012
All Values are Reported in ug/m3
ND = Not Detected
Only parameters with detections summarized
Analytical Facility - Pace Analytical Laboratory, Inc. Schenectady, New York

APPENDIX C

OWNER CERTIFICATION

Enclosure 1
Institutional and Engineering Controls - Property Owner Survey

Site Details **Box 1**

Site No. **447030**

Site Name Dambrose Cleaners

Site Address: 1517 VanVranken Avenue Zip Code: 12308
City/Town: Schenectady
County: Schenectady
Site Acreage: 0.1

Reporting Period: January 30, 2012 to June 30, 2013

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2, 3 or 4, include documentation with this form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7. Are all Institutional Controls (ICs) in place and functioning as designed?	☒	☐

N. Polumbo
Signature of Propert Owner

5.23.13
Date

SITE NO. 447030 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
39.58-1-9	Natasha Polishchuk	Ground Water Use Restriction Landuse Restriction Soil Management Plan Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

From ROD:

Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to residential use, which would also permit commercial or industrial uses; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) periodic certification of institutional and engineering controls.

Development of a site management plan which will include the following institutional and engineering controls: (a) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;
(b) continued operation of the sub-slab depressurization system at the Dambrose building whenever it is occupied; (c) monitoring of groundwater and soil vapor; (d) identification of any use restrictions on the site; and (e) provisions for the continued proper operation and maintenance of the components of the remedy.

The Department will periodically certify the institutional and engineering controls until the Department determines that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; and (b) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
39.58-1-9	Air Sparging/Soil Vapor Extraction Vapor Mitigation

Sub-slab Depressurization System for 1517 Van Vranken Ave. and Soil Vapor Extraction system for horizontal wells on site and adjacent property.

Box 5

Periodic Review Report (PRR) Survey Statements

For each Institutional or Engineering control listed in Boxes 3 and/or 4, by checking "YES" below I believe all of the following statements to be true:

(a) the Institutional Control(s) and/or Engineering Control(s) employed at this site remain unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control; and

(d) if a Site Management Plan (SMP) exists, nothing has occurred that would constitute a violation or failure to comply with the SMP for this Control.

YES	NO
☒	☐

N. [signature] 5.23.13

Signature of Property Owner Date

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 3rd day of January, 2012 between Owner(s) Natasha Polishchuk, having an office at 1517 VanVranken Avenue, Schenectady, New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 1517 VanVranken Avenue in the City of Schenectady, County of Schenectady and State of New York, known and designated on the tax map of the County Clerk of Schenectady as tax map parcel numbers: Section 39.58 Block 1 Lot 9, being the same as that property conveyed to Grantor by deed dated June 15, 2001 and recorded in the Schenectady County Clerk's Office on June 29, 2001 in Liber 1603 at page 641, comprising approximately 0.11 ± acres, and hereinafter more fully described in the Land Title Survey dated February 2, 2011 prepared by Popli Design Group, which will be attached to the Site Management Plan. The property description and survey (the "Controlled Property") is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns, and obligations of the NYSDEC pursuant to a Consent Order. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall comply with the SMP reporting requirements and if required annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the institutional controls and/or engineering controls employed at such site:
(i) are in-place;
(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
(2) the owner will continue to allow access to such real property;
(3) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls; and
(4) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: 447030
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Grantor: Natasha Polishchuk

By: N Polishchuk

Print Name: Natasha Polishchuk

Title: _____ Date: 12/22/11

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Albany)

On the 22nd day of December in the year 20 __, before me, the undersigned, personally appeared Natasha Polishchuk, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Annette L Keech
Notary Public - State of New York

ANNETTE L. KEECH
Notary Public, State of New York
Qualified in Albany County
No. 01KE5021559
Commission Expires December 20, 20 13

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner.

By: _____
Robert W. Schick Acting ~~Dale A. Desnoyers,~~ Director
Division of Environmental Remediation

Grantee's Acknowledgment

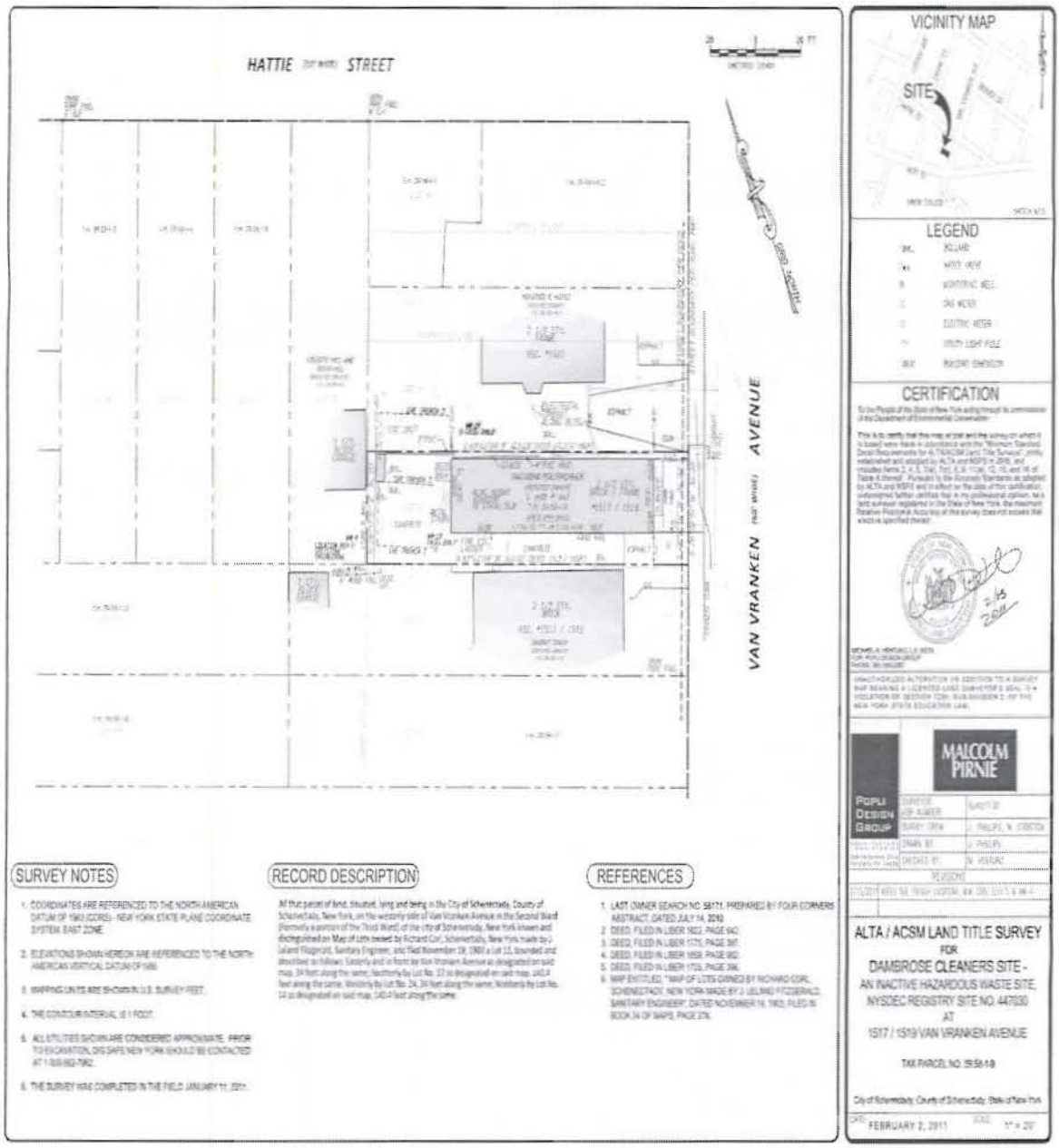
STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 31st day of January, in the year 2012, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

SURVEY


HATTIE STREET
VAN VRANKEN AVENUE
VICINITY MAP
SITE
LEGEND
CERTIFICATION
SURVEY NOTES
RECORD DESCRIPTION
REFERENCES
MALCOLM PIRNIE
POPLI DESIGN GROUP
ALTA / ACSM LAND TITLE SURVEY
FOR
DAMBROSE CLEANERS SITE -
AN INACTIVE HAZARDOUS WASTE SITE,
NYSDEC REGISTRY SITE NO. 447030
AT
1517 / 1519 VAN VRANKEN AVENUE
TAX PARCEL NO. 39.58-1-9
City of Schenectady, County of Schenectady, State of New York
FEBRUARY 2, 2011

SCHEDULE "A" PROPERTY DESCRIPTION

Address:

All that parcel of land, situated, lying and being in the City of Schenectady, County of Schenectady, New York, on the westerly side of Van Vranken Avenue in the Second Ward (Formerly a portion of the Third Ward) of the city of Schenectady, New York known and distinguished on Map of Lots owned by Richard Corl, Schenectady, New York made by J. Leland Fitzgerald, Sanitary Engineer, and filed November 19, 1903 a Lot 13, bounded and described as follows: Easterly and in front by Van Vranken Avenue as designated on said map, 34 feet along the same; Southerly by Lot No. 12 as designated on said map, 140.4 feet along the same; Westerly by Lot No. 24, 34 feet along the same; Northerly by Lot No. 14 as designated on said map, 140.4 feet along the same.

APPENDIX D

ENGINEER CERTIFICATION

Enclosure 1
Engineering Controls - Engineering Standby Contractor Certification Form

Site Details **Box 1**

Site No. **447030**

Site Name Dambrose Cleaners

Site Address: 1517 VanVranken Avenue Zip Code: 12308
City/Town: Schenectady
County: Schenectady
Site Acreage: 0.1

Reporting Period: January 30, 2012 to June 30, 2013

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Engineering Standby Contractor Date

SITE NO. 447030 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
39.58-1-9	Natasha Polishchuk	Ground Water Use Restriction Landuse Restriction Soil Management Plan Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

From ROD:

Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to residential use, which would also permit commercial or industrial uses; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) periodic certification of institutional and engineering controls.

Development of a site management plan which will include the following institutional and engineering controls: (a) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;
(b) continued operation of the sub-slab depressurization system at the Dambrose building whenever it is occupied; (c) monitoring of groundwater and soil vapor; (d) identification of any use restrictions on the site; and (e) provisions for the continued proper operation and maintenance of the components of the remedy.

The Department will periodically certify the institutional and engineering controls until the Department determines that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; and (b) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
39.58-1-9	Air Sparging/Soil Vapor Extraction Vapor Mitigation

Sub-slab Depressurization System for 1517 Van Vranken Ave. and Soil Vapor Extraction system for horizontal wells on site and adjacent property.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the current certifying period, if any;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Engineering Manager/Contractor — Date: 7/30/2013

STATE OF NEW YORK
WILLIAM C. HENNESSY, JR.
067889
LICENSED PROFESSIONAL ENGINEER

IC/EC CERTIFICATIONS

Box 6

Professional Engineer Signature

I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I William Hennessy at Hennessy Engineering

print name

PO Box 118

Voorheesville, NY 12186

(print business address)

am certifying as a Professional Engineer.

W Hennessy Jr.

Signature of Professional Engineer

Stamp

7/30/2013

Date