



**Site Management Plan  
for the  
Valatie Village Plaza, LLC (f.k.a. Emkay  
Cleaners)**

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1048 Kinderhook Street  
Valatie, Columbia County, New York

**NYSDEC Site No. 4-11-016**

August 5, 2015

*Prepared for:*

*Valatie Village Plaza, LLC and Michael & Karen Dellarocco  
1048 Kinderhook Street  
Valatie, New York 12184*

**Revisions to Final Approved Site Management Plan:**

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

**REMEDIATION  
SOLUTIONS**

**ENVIRONMENTAL  
CONSULTING**

**DRILLING  
APPLICATIONS**

5 McCrea Hill Road  
Ballston Spa, NY 12020  
p 518.885.5383  
f 518.885.5385

**aztechtech.com**

## CERTIFICATION STATEMENT

I Fil L. Fina III certify that I am currently a [NYS registered professional engineer or Qualified Environmental Professional as in defined in 6 NYCRR Part 375] and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

  
\_\_\_\_ [P.E., QEP]

August 5, 2015      DATE



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## **1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM**

### **1.1 INTRODUCTION**

This document is required as an element of the remedial program at the Valatie Village Plaza, Valatie, New York ("site"), which is also the location of (and, formerly known as) Emkay Cleaners under the New York State (NYS) Order on Consent and Administrative Settlement administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Order on Consent Index R4-2009-1008-157, site # 411016, which was executed on April 29, 2010.

#### **1.1.1 General**

Valatie Village Plaza, LLC, Michael Della Rocco and Karen Della Rocco, entered into an Order on Consent and Administrative Settlement with the New York State Department of Environmental Conservation (NYSDEC) in April, 2010, to investigate and remediate an approximate 3.5-acre property located in Valatie, Columbia County, New York. The property is currently an active strip mall that includes a post office, sandwich shop, dry cleaner/laundromat, restaurant and hair salon/business office. A site location map is provided in **Figure 1**; a tax parcel map of the area is provided in **Figure 2**. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement (**Appendix A**).

After completing several phases of investigation associated with the site, some impacted soil and groundwater was left in the subsurface at this site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Aztech Engineering Services, PC, on behalf of Valatie Village Plaza, LLC and Michael and Karen Della Rocco, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated (June, 2010 (DER-10)), and the site-specific criteria and guidelines provided or established by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by NYSDEC via the Environmental Easement for the site.

#### **1.1.2 Purpose**

The site contains soil and groundwater impacted with the site related compounds tetrachloroethene (PCE), and its degradation by-products trichloroethene (TCE), isomers of dichloroethene (DCE) and vinyl chloride (VC), left after completion of several phases of investigation and subsequent remedial action. Engineering Controls have been incorporated into the site remedy to control exposure to remaining contamination during the use of the site to ensure protection of public health and the environment. An Environmental Easement

granted to the NYSDEC, and recorded with the Columbia County Clerk, will require compliance with this SMP and all ECs and ICs placed on the site. The ICs place restrictions on site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. The remedial action goals of the SMP have been established in accordance with the Order on Consent and Administrative Settlement (Index R4-2009-1008-157), and the SMP may only be revised with the approval of the NYSDEC. This SMP provides a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of a sub-slab depressurization system (SSDS); (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of the SSDS operation.

The April, 2010 Order on Consent and Administrative Settlement stated that the remedial action goals for the site included, but were not limited to:

- Installation, operation, maintenance and monitoring of a sub-slab depressurization system in impacted portions of the site buildings;
- Evaluation of any new structure that is constructed on the site for potential impacts from soil vapor and other environmental media required by NYSDEC;
- Evaluation of the commercial property located across Kinderhook Street from the site for potential impacts from soil vapor and other environmental media as required by NYSDEC, limited to the site related compounds identified in the subsurface investigations (PCE, TCE, isomers of DCE and VC), that the NYSDEC reasonably believes have migrated from the site upon change in use or change in accessibility for the commercial property;
- Development of a Site Management Plan (SMP) to address necessary on-site and off-site remediation/monitoring, and future construction activities; and,
- The placement of an environmental easement on the site, including a prohibition on the extraction and use of groundwater, which restriction will be removed upon a demonstration to the NYSDEC that groundwater meets applicable New York State standards.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; and, (3) an Operation and Maintenance Plan for the SSDS.

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to materially comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the Order on Consent and Administrative Settlement (Index #R4-2009-1008-157; site #411016) for the site, and thereby subject to applicable penalties.

### **1.1.3 Revisions**

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP by written confirmation via email or other form of correspondence, and append these notices to the SMP that is retained in its files.

## **1.2 SITE BACKGROUND**

### **1.2.1 Site Location and Description**

The site is located at 1048 Kinderhook Street in Valatie, Columbia County, New York and is identified as Section 33.18, Block 1 and Lot 29.100 on the Columbia County Tax Parcel Map (Figure 2). The site is situated on an approximately 3.5-acre area bounded by commercial and residential properties and Pine Drive to the north, a gasoline station/convenience store to the south, residential property and Ridge Drive to the east, and Kinderhook Street to the west. The site includes an approximately 11,625 ft<sup>2</sup> strip mall that houses four separate businesses, including: a sandwich shop; the Emkay Cleaners (Emkay); a restaurant; and, a hair salon/business office (**Figure 3**). Each of these businesses operates their own separate, roof-mounted heating, venting and air conditioning (HVAC) system. A US Post Office is in a separate building located on the northern side of the property. The boundaries of the site are identified on Figure 2 (Tax Parcel Map) and fully described in the Metes and Bounds Description and Survey included in Appendix A.

### **1.2.2 Site History**

The regulatory history of the site includes its origin as a petroleum spill in 2003. That spill file was assigned to a former Stewart's Shop convenience store (with retail gasoline sales) that operated in the portion of the strip mall that is currently occupied by the sandwich shop. Stewart's Shops operated at this location during the period between 1994 and 2003. Prior to 1994, a Bonfare convenience store (with retail gasoline sales) operated at the location of the former Stewart's Shop.

During the 2003 decommissioning of the petroleum storage and distribution infrastructure associated with the Stewart's Shop, soil and groundwater on the property were noted to be impacted with petroleum. A limited excavation was conducted at that time, but was not able to remove all of the impacted media at the site. As such, the site was managed under the Spills

Response Program by the NYSDEC's Division of Environmental Remediation via spill file no. 03-03686. During the course of investigations and monitoring conducted under the spills response program, the presence of tetrachloroethene (PCE), a chlorinated solvent typically associated with dry cleaning operations, was identified in site groundwater, while compounds typically associated with petroleum spills diminished. Consequently, NYSDEC requested that Emkay, who has operated a dry cleaning and laundromat business on the property since approximately 1977, conduct groundwater sampling and investigate the historic presence of PCE under a new spill file (no. 06-06889). This request was made by the NYSDEC because the dry cleaning process historically employed by Emkay used PCE as the dry cleaning fluid until approximately 1999, when its use at the site was discontinued. The project transitioned from the NYSDEC's Spills Response Program to their Hazardous Waste Remediation program when the Order on Consent and Administrative Settlement was executed on April 29, 2010.

### **1.2.3 Geologic Conditions**

Geographically, the site is located within the eastern flank of the Hudson River Basin. Wilds Pond is located approximately one-half mile to the northeast and the Valatie Kill flows from Wild's Pond in a southerly direction. The confluence between the Valatie Kill and the southerly flowing Kinderhook Creek is less than one-quarter mile south-southeast of the site (Figure 1).

The Surficial Geologic Map of New York - Hudson Mohawk Sheet (1987) indicates that the site is underlain by outwash sand and gravel deposits that are of a variable thickness, typically ranging from 2.0 to 20 meters. Glacial till, a compact, poorly sorted mixture that can range in composition from clay to boulders is also mapped in the area. According to the Geologic Map of New York - Hudson Mohawk Sheet (1970), these unconsolidated materials are deposited upon shale, slate and quartzite associated with the Nassau Formation.

Several phases of investigation have been conducted at the site during the period between 2006 and 2009. These have included installation of a total of eleven overburden monitoring wells (EM MW-1 to EM MW-11) and nine soil vapor sampling points (SVP-1, SVP-2, SVP-3, SVP-4, SVP-6, SVP-8, SVP-10, SVP-12 and SVP-13) for the purpose of evaluating soil, groundwater and soil vapor at on-site and off-site locations (Figure 3).

The findings of the various phases of investigation have identified the soil underlying the site and adjacent area as hard, compact, fine to very fine-grained sand, with some fine gravel. As shown on the cross-section shown on **Figure 4**, the unconsolidated materials underlying the site and surrounding area range in thickness from approximately 7.0-feet, in off-site well EM MW-7, to approximately 15 feet in on-site well EM MW-1. A saturated water bearing zone within the unconsolidated overburden was noted at several on-site locations and locations in proximity to the site (EM MW-1 through EM MW-6). Where identified, the saturated zone was encountered within the lower 1.0 to 3.0 feet of the borehole. As such, overburden monitoring wells were constructed of 2.0 to 5.0-feet of well screen installed within boreholes advanced to auger refusal. Variable

screen lengths were based on borehole depth and the thickness of the saturated zone as observed at each location during the drilling program. Well screens were also installed at several locations where a saturated zone was not noted during drilling within the overburden. This was done in anticipation that a seasonal occurrence of groundwater may enter the well and provide groundwater for future sampling. However, wells installed at several locations (EM MW-7, EM MW-9, EM MW-10) have historically been dry. Well completion specifications are included in **Table 1** below; soil boring/monitoring well construction logs are presented in **Appendix B**.

<b>TABLE 1</b> Monitoring Well Specifications					
Well ID	Auger Refusal Depth	Saturated Zone	Screened Interval	Sand Pack	Bentonite Seal
EM MW-1	16'	13.5' - 16'	11' - 16'	7.8' - 16'	3.0'-7.8'
EM MW-2	15'	13' - 15'	10' - 15'	8.0' - 15'	3.0' - 8.0'
EM MW-3	13.5'	10' - 13.5'	9.5' - 13.5'	8.0' - 13.5'	3.5' - 8.0'
EM MW-4	12.6'	10' - 12.6'	9.6' - 12.6'	8.0' - 12.6'	5.0' - 8.0'
EM MW-5	9.0'	7.5' - 9.0'	7.0' - 9.0'	6.0' - 9.0'	3.0' - 6.0'
EM MW-6	10'	8.0' - 10'	8.0' - 10'	7.0' - 10'	3.0' - 7.0'
EM MW-7	7.0'	DRY	5.0' - 7.0'	4.5' - 7.0'	1.0' - 4.5'
EM MW-8	9.0'	8.0' - 9.0'	5.0' - 9.0'	4.5' - 9.0'	1.0' - 4.5'
EM MW-9	6.5'	DRY	4.5' - 6.5'	3.5' - 6.5'	1.0' - 3.5'
EM MW-10	6.5'	DRY	4.5' - 6.5'	4.0' - 6.5'	1.0' - 4.0'
EM MW-11	11.5'	8.5' - 13.5'	6.5' - 11.5'	6.0' - 11.5'	0.5' - 6.0'
Notes: All measurements in feet below grade					

Depth to water measurements routinely collected in conjunction with quarterly groundwater sampling events indicate that groundwater is typically encountered anywhere from 6.0 feet to 10 feet below grade (depending on location and sampling event). Historic groundwater elevations obtained from these locations (tabulated and summarized in **Appendix C**) suggest groundwater movement within the unconsolidated overburden is generally toward the southwest (**Figure 5**).

### 1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

Several phases of investigation have been conducted at the site during the period between 2006 and 2009. Each phase of investigation was conducted in accordance with work plans approved by NYSDEC prior to their implementation. The findings of the various investigations conducted at the site are described in detail in the following reports:

- Subsurface Investigation Report – January 2, 2007
- Supplemental Subsurface Investigation Report – May 2, 2007
- Supplemental Subsurface Investigation Report – March 4, 2008
- Supplemental Subsurface Investigation Report – March 30, 2009
- Supplemental Subsurface Investigation Report – May 4, 2009

Each of these investigations and corresponding reports were prepared by Aztech Engineering Services, PC.

The various phases of investigation relating to the Site have included sampling and analysis of soil, groundwater, soil vapor, sub-slab vapor and indoor air. The findings relating to the various media are as follows:

### 1.3.1 Soil

The findings of the various phases of site investigation are that the soil underlying the site and adjacent area investigated is composed of hard, compact, fine- to very fine-grained sand, with some fine gravel. During the drilling program, no staining or odors were noted and soil headspace screening for concentrations of volatile organic compounds (VOCs) via a photoionization detector (PID) were not detected (ND) at all but one sampled interval. Headspace screening of soil obtained from off-site well EM MW-7, in the depth range between 4.0 feet and 7.0 feet below grade, indicated a total VOC concentration (via PID) of 1.1 parts per million (ppm). Laboratory analysis of a sample from that location and depth interval identified concentrations of m&p xylene, 1,2,4-trimethyl benzene (TMB) and tetrachloroethene (PCE) below 5.0 micrograms per kilogram (ug/kg) and orders-of-magnitude below their respective Soil Cleanup Objective (SCO) for Unrestricted Use as defined by 6 NYCRR Part 375-6.8(a).

A summary of the analytical results for the soil samples collected during the various phases of site investigation is presented below in **Table 2**. As indicated therein, concentrations of PCE and trichloroethene (TCE) are well below their respective SCO for Unrestricted use when detected. In fact, all compounds (except acetone) identified in the soil samples analyzed as part of the investigations associated with the site are well below their respective SCO for Unrestricted use when detected. Acetone, a common solvent and frequent laboratory artifact, was identified in four samples (EM MW-4 (8'–12'); EM MW-5 (7'–9'); EM MW-6 (8'–12') and EM MW-8 (8'–9') at concentrations in excess of the 50 ug/kg SCO for Unrestricted use but, well below the 100,000 ug/kg SCO for Restricted Residential use (6 NYCRR Part 375-6.8 (b)). It is important to note that the presence of acetone in these samples is likely a laboratory artifact. As such, the analytical results of all samples collected during the investigations associated with the site are below their respective SCO for Unrestricted use with respect to site-related compounds.

<b>TABLE 2</b> Summary of Soil Analytical Results							
Compound	m&p-Xylene	1,2,4-TMB	MEK	Acetone	PCE	Toluene	TCE
SCO*	260	3,600	120	50**	1,300	700	470
EM MW-1	-	-	-	-	98	-	28
EM MW-2	-	-	-	-	26	-	-
EM MW-3 (10' – 12')	-	-	-	47	8.3	3.0	-
EM MW-4 (8' – 12')	-	-	-	56	17	2.5	-
EM MW-5 (7' – 9')	-	-	-	68	2.5	4.2	-
EM MW-6 (8' – 12')	-	-	-	80	3.5	5.0	-
SVP-1 (4' – 6.8')	-	-	-	-	-	-	-
EM MW-7 (4' – 7')	2.8	2.5	-	-	4.0	-	-
SCO*	260	3,600	120	50**	1,300	700	470
SVP-8	-	-	-	-	-	-	-

TABLE 2 (continued)							
Compound	m&p-Xylene	1,2,4-TMB	MEK	Acetone	PCE	Toluene	TCE
SCO*	260	3,600	120	50**	1,300	700	470
EM MW-8 (8' – 9')	-	-	12	<b>107</b>	-	-	-
EM MW-9	-	-	-	-	-	-	-
EM MW-10	-	-	-	-	-	-	-
EM MW-11	-	-	-	-	-	-	-
SVP-3	-	-	-	35	-	-	-
<b>Notes:</b> Concentrations in micrograms per kilogram (ug/kg) - Indicates compound was not detected * SCO – Unrestricted Use Soil Cleanup Objective as defined in 6 NYCRR Part 375-6.8(a) Concentrations in bold are in excess of their respective Unrestricted Use SCO but, below the Restricted Residential use SCO per 6NYCRR Part 375-6.8(B). ** The Restricted Residential SCO for acetone is 100,000 ug/kg as defined by 6 NYCRR Part 375-6.8 (b). TMB = Trimethyl Benzene; MEK = Methyl Ethyl Ketone (aka 2-butanone); PCE = Tetrachloroethene; TCE = Trichloroethene							

The distribution of PCE concentrations in the soil samples collected during the investigations at the site is shown in **Figure 6**.

### 1.3.2 Groundwater

A saturated water bearing zone was noted within the shallow overburden in each of the drilled locations on-site and in some of the off-site locations. This water bearing zone was not identified in locations drilled south of the site on Route 9 and west of the site on Albany Avenue. In fact, wells EM MW-7, EM MW-9, EM MW-10 and EM MW-11 have historically been dry. As shown previously in Figure 5, where present within the unconsolidated overburden, groundwater movement is generally toward the southwest.

Historic groundwater analytical results obtained since 2006 indicate that the primary compound identified in groundwater is PCE (**Table 3**). This compound is typically present in wells EM MW-1, EM MW-2, EM MW-3, EM MW-4 and EM MW-6 at concentrations in excess of the groundwater standard established by NYSDEC for class GA groundwater in their Technical and Operational Guidance Series Memorandum 1.1.1 (TOGS Memo 1.1.1) of June, 1998. PCE degradation by-products TCE and/or cis-1,2-dichloroethene (DCE) have also been identified in wells EM MW-1 (TCE & DCE), EM MW-2 (TCE), EM MW-3 (TCE) and EM MW-4 (TCE). The distribution of PCE and its degradation by-products in groundwater during the October 29, 2013 quarterly sampling event is shown on **Figure 7**. This impacted groundwater could be a potential source of VOCs to soil vapor and, ultimately, to indoor air.

Table 3 Summary of Historic PCE Concentrations in Groundwater					
Well ID	Historic High		Historic Low		October 29, 2013
	Concentration	Date	Concentration	Date	
EM MW-1	749	7/3/12	62	1/10/12	62
EM MW-2	662	4/18/12	265	1/10/12	178
EM MW-3	232	4/18/12	112	4/6/07	158
EM MW-4	165	10/25/11	37	4/6/07	97
EM MW-5	8.4	10/13/10	3.2	1/10/12	1.7

Table 3 (continued)					
Well ID	Historic High		Historic Low		October 29, 2013
	Concentration	Date	Concentration	Date	
EM MW-6	88	10/25/11	60	4/7/11	71
EM MW-7	Well Historically Dry				
EM MW-9	Well Historically Dry				
EM MW-10	Well Historically Dry				
EM MW-11	< 1.0	2/25/09	Well Dry since 2/25/09		
<u>Notes</u> Concentrations in micrograms per liter (ug/l). NYSDEC GW Standard for PCE is 5.0 ug/l Summary of groundwater sampling events dating back to October 30, 2006					

### 1.3.3 Soil Vapor and Soil Vapor Intrusion

A soil vapor intrusion program was developed and implemented in accordance with the New York State Department of Health (NYSDOH) document entitled “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” (October, 2006). The soil vapor intrusion program included sampling of soil vapor, sub-slab vapor and indoor air at several locations throughout and in proximity to the Valatie Village Plaza. This included soil vapor sampling via nine on- and off-site soil vapor points (SVP-1, SVP-2, SVP-3, SVP-4, SVP-6, SVP-8, SVP-10, SVP-12 and SVP-13; note that proposed soil vapor points SVP-5, SVP-7, SVP-9 and SVP-11 were deemed unnecessary by NYSDEC and NYSDOH) and sub-slab vapor and indoor air sampling within the Valatie Village Plaza property, namely the sandwich shop, Emkay, the restaurant, the hair salon/business office and the US Post Office. Private residences at 1402 Albany Avenue and 1404 Albany Avenue were also included. Outdoor air samples were also collected during the soil vapor intrusion program.

The commercial property located across US Route 9 from the site was not included in the soil vapor intrusion program. This is because the owner of that property declined to allow sampling of soil vapor, sub-slab vapor and indoor air on-or-within the commercial property. However, soil vapor sampling was performed via soil vapor points established along the commercial property boundary/perimeter located along US Route 9.

Soil vapor and vapor intrusion sampling events were conducted on multiple occasions during the time period between March, 2007 and April, 2009. The initial vapor intrusion sampling event included sub-slab and indoor air sampling at the sandwich shop, Emkay, the restaurant and the hair salon on March 5, 2007. The findings of that sampling event concluded that there were not any vapor intrusion issues of concern at the sandwich shop and the hair salon. Based on the initial vapor intrusion sampling, a second set of vapor intrusion samples were collected from Emkay, the restaurant and two soil vapor point locations: SVP-1, located within the NYS Department of Transportation right-of-way (ROW) along Kinderhook Street, and; SVP-2, located within the Village of Valatie ROW along Albany Avenue on January 21, 2008. A third sampling event was conducted on February 25, 2009 and included soil vapor sampling from nine soil vapor sampling points (SVP-1, SVP-2, SVP-3, SVP-4, SVP-6, SVP-8, SVP-10, SVP-12 and

SVP-13); vapor intrusion samples from Emkay and the restaurant; and, residential vapor intrusion samples from the private residences located at 1402 and 1404 Albany Avenue. Outdoor air samples were also collected with each of these sampling events. The final vapor intrusion sampling event was conducted on April 17, 2009 with sub-slab and indoor air samples obtained from the adjacent Post Office.

The findings of the soil vapor intrusion program indicated that there are no vapor intrusion issues associated with the US Post Office, the sandwich shop, the hair salon/business office and the residences at 1402 and 1404 Albany Avenue. However, the findings of the soil vapor intrusion sampling indicated that mitigation was necessary beneath Emkay and the adjacent restaurant. The analytical results of the February, 2009 soil vapor and vapor intrusion sampling are represented in **Figure 8**; the analytical results of the various soil vapor and vapor intrusion sampling events are tabulated in Appendix C.

In response to the findings of the vapor intrusion sampling, pilot testing for a sub-slab depressurization system (SSDS) for Emkay and adjacent restaurant was subsequently conducted over the period from July through October, 2009 and reported to NYSDEC. An SSDS Design Proposal was subsequently submitted to NYSDEC in July, 2010 and installation commenced after authorization to proceed was obtained later that month from NYSDEC and NYSDOH.

#### **1.4 SUMMARY OF REMEDIAL ACTIONS**

Site remedial activities were implemented in accordance with the July 12, 2010 SSDS Design proposal prepared by Aztech and approved by NYSDEC and NYSDOH.

The following is a summary of the Remedial Actions performed at the site:

1. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to impacted media remaining at the site.
2. Installation and operation of a SSDS to address soil vapor intrusion issues at Emkay and the adjacent restaurant;
3. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
4. Groundwater sampling and analysis of on-site and off-site wells to monitor the remaining contamination in groundwater.

The SSDS was installed and commenced operation in July, 2010. Operation of the SSDS and routine groundwater monitoring activities are on-going.

##### **1.4.1 Site-Related Treatment Systems**

An SSDS was installed at the site in July, 2010 in order to address potential soil vapor intrusion issues associated with Emkay and the adjacent restaurant. The results of the soil vapor

intrusion investigations conducted at the other adjacent (and nearby) businesses within the Valatie Village Plaza, and residences on Albany Avenue, indicated that engineering controls were not necessary at those locations.

According to the owner of the property, the Valatie Village Plaza was constructed in stages. During each stage of construction, separate concrete foundations were installed on concrete footings to a depth of 4.0 feet. The approximate locations of these foundations/footings are shown on the schematic of the Valatie Village Plaza shown in **Figure 9**. Based on the soil vapor and indoor air sampling conducted beneath and within the businesses that occupy the Plaza, and the location of the concrete foundations/footings, the NYSDOH identified an approximate area of 7,200 square feet that requires active mitigation via an SSDS. Pilot testing for that system commenced in July, 2009.

During the period between July 17, 2009 and July 19, 2009 three vapor extraction points (VEPs), and associated vacuum monitoring points, were installed within Emkay in order to facilitate pilot testing that was conducted at that time. Each VEP was constructed by first coring a 6.0-inch diameter hole through the concrete slab and removing approximately 12-inches of subbase material via hand tooling. A 4.0-inch inside diameter (ID) machine-slotted well screen and threaded riser were subsequently installed through the concrete and sub base material to extend the VEP above the concrete slab. The annular space was backfilled with peastone and the penetration through the concrete slab was sealed with hydraulic cement. Vacuum monitoring points were installed by advancing a 1.0-inch diameter hole approximately half-way through the slab and completing the penetration with a 3/8-inch diameter drill bit to approximately 12-inches below the bottom of the concrete slab. The vacuum monitoring point was constructed of ¼-inch ID nylon tubing set into the borehole. The sub base material was allowed to collapse around the nylon tubing and the penetration through the concrete slab was sealed with beeswax. The locations of the three VEPs and vacuum monitoring points are included on **Figure 10**.

The pilot testing was conducted initially using well VEP-A for a duration of 330 minutes at a maximum wellhead vacuum of 10-inches of water column (H<sub>2</sub>O). Observed vacuum measurements collected during the initial testing indicated that the required observed vacuum (0.004-inches H<sub>2</sub>O) was not observed throughout the entire 7,200 square-foot area identified as needing sub-slab depressurization. As such, VEP-B was installed to address the areas that were not adequately depressurized via VEP-A. Testing on VEP-B was at a maximum wellhead vacuum of 13-inches H<sub>2</sub>O for a duration of 60 minutes. Testing via well VEP-B indicated that installation and testing of a third vapor extraction point (VEP-C) would be necessary. Testing of VEP-C, at a wellhead vacuum of 60-inches H<sub>2</sub>O for a duration of 155 minutes, determined that the entire footprint requiring depressurization could not be accomplished at that time. Further pilot testing was suspended until the entire concrete slab overlying the footprint requiring depressurization could be professionally sealed. Sealing was completed in October 2009.

A second phase of pilot testing was conducted in October, 2009 after the concrete sealing was completed. The testing was accomplished by manifolding VEP-A, VEP-B and VEP-C together and testing these VEPs simultaneously. The findings of the pilot testing conducted in October, 2009 indicated that the three VEPs, when operated simultaneously, applied a sufficient vacuum to the sub slab area requiring depressurization. This information, along with a conceptual design for the SSDS was provided to NYSDEC and NYSDOH in the May 13, 2010 Pilot Test Report.

The SSDS was installed by C.E. Rothermel, Inc., of Kinderhook, NY, in July, 2010. The SSD system was installed to comply with all appropriate building, fire, plumbing and electrical practices, codes, standards, manufacturer's requirements and NYSDEC/NYSDOH recommended practices and guidance. The installation was completed in accordance with the approved SSDS Design Proposal of July 12, 2010. After its installation was completed, the SSDS was inspected by F.L. Fina, PE, a NYS licensed professional engineer.

SSDS installation commenced by equipping each VEP wellhead with permanent valves, gauges, u-tube manometers and sampling ports. As shown in the as-built drawing for the SSDS (**Figure 11**) each VEP was extended to a neighboring wall via a 45 degree 4.0-inch elbow then, fastened to that wall using an appropriate number of pipe fasteners. Each VEP was continued vertically through the ceiling/roof via a sealed penetration. After penetrating the roof line, VEP-A was connected to a 90-degree elbow that attaches via 4.0-inch horizontal piping to the north side of a 4.0-inch by 3.0-inch "tee" fitting (with the 3.0-inch portion of the fitting oriented vertically). VEP-B and VEP-C are also connected into a single horizontal piping run (via a 4.0-inch tee fitting) that connects to the south side of the 4.0-inch by 3.0-inch tee fitting.

The manifolding from the three VEPs (**Figure 12**) conveys the extracted soil vapor to a unistrut structure upon which the HS2000 fan is mounted. This is located on the roof of the Valatie Village Plaza approximately 20 feet south of the tee fitting used to connect VEP-B and VEP-C. The manifolding is connected to the inlet of the fan via a 3.0-inch diameter flexible coupling extending from the 4.0-inch by 3.0-inch tee. The discharge from the fan is via 2.0-inch ID schedule 40 PVC attached via flexible coupling. The discharge line is attached to the unistrut structure and extends approximately six feet above the roof line.

Operation of the SSDS commenced on July 28, 2010. Weekly inspections were conducted during the first six weeks of its operation in order to evaluate the system's performance. Once the initial startup period was completed, monthly inspections were conducted (October, November, December, 2010) followed by quarterly inspections beginning in January, 2011. Quarterly inspections were completed in October, 2011. The SSDS is currently on an annual inspection schedule.

The operational data collected from the SSDS during the period between startup (July 27, 2010) and the January 23, 2015 annual inspection has been tabulated and is included as **Appendix D**. NYSDEC/NYSDOH have established 0.004 inches of H<sub>2</sub>O as the threshold minimum observed

vacuum value for SSDS operations. The observed vacuum measurements, as well as other SSDS operational data, are included in the operational data table (Appendix D).

Discharge samples collected from the SSDS in January, 2011 were analyzed for VOCs via EPA Method TO-15. The analytical results were used in combination with other SSDS performance data in order to compare the discharge from the system to the emission standards established by the Division of Air Resources' (DAR) Guidelines for the Control of Toxic Ambient Air Contaminants (Air Guide 1). The SSDS effluent concentrations are compliant with the emission standards established by Air Guide 1. Therefore, no treatment has been required for the effluent discharged by the SSDS.

Procedures for monitoring, operating and maintaining the SSDS are provided elsewhere in this document.

#### **1.4.2 Remaining Contamination**

During the multiple phases of investigation relating to the site, various media, including soil, soil vapor and sub-slab vapor and, groundwater have been sampled in order to characterize site conditions.

##### **1.4.2.1 Sub-Surface Soil**

Sub-surface soil samples have been collected in proximity to the water table, from within the saturated zone or, from just above bedrock during the various drilling programs. The analytical results of the soil samples collected during the site investigations were presented previously on Table 2 (Section 1.3.1); additional tables summarizing the analytical results of soil samples collected during the investigations relating to the site are included in Appendix C. Concentrations of PCE identified in those samples were presented previously in Figure 6. Analytical results of all soil samples collected during the site investigations associated with the site are below their respective SCO for Unrestricted use with respect to site-related compounds.

##### **1.4.2.2 Soil Vapor, Sub-Slab Vapor and Indoor Air**

Soil vapor, sub-slab vapor and indoor air were sampled on various occasions during the investigations at on-site and off-site locations. This includes sub-slab and indoor air samples collected from several businesses operating within the Valatie Village Plaza (the post office, the sandwich shop, Emkay, the restaurant and hair salon) as well as two private residences (1402 and 1404 Albany Avenue) located hydraulically downgradient of the site. The analytical results of the February, 2009 soil vapor and vapor intrusion sampling were presented previously in Figure 8; analytical results for each of the soil vapor and/or vapor intrusion sampling events are summarized in Appendix C.

##### **1.4.2.3 Groundwater**

Groundwater samples collected on-site and off-site demonstrate concentrations of dissolved VOCs in excess of NYS standards and guidance values. A summary of the historic analytical

results for the groundwater samples collected during the various sampling events conducted since 2006 were presented previously on Table 3 (Section 1.3.2); additional tables summarizing the analytical results of groundwater samples collected during the investigations relating to the site are included in Appendix C. The concentrations of PCE (and its degradation by-products) in the October 29, 2013 sampling event were presented previously in Figure 7.

## **2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN**

### **2.1 INTRODUCTION**

#### **2.1.1 General**

Since remaining contaminated soil, soil vapor and groundwater exist beneath the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

#### **2.1.2 Purpose**

This plan provides:

- A description of all EC/ICs on the site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC.

### **2.2 ENGINEERING CONTROLS**

#### **2.2.1 Engineering Control Systems**

##### **2.2.1.1 Soil Cover**

The site is not covered by an engineered cover system. Rather, exposure to remaining potentially impacted soil at the site is prevented by concrete slabs associated with the current structures, sidewalks, paved parking and/or lawn/landscaped areas. The Excavation Work Plan that appears in **Appendix E** outlines the procedures required to be implemented in the event that the potentially impacted soil remaining at the site is disturbed.

##### **2.2.1.2 Sub-Slab Depressurization System**

The SSDS includes three sub-slab vapor extraction points that extend to perforate the roof of Emkay. The three VEPs are manifolded on top of the roof to a Radonaway HS-2000 fan mounted on a unistrut structure. The SSDS is designed for continuous, round-the-clock operation. Procedures for operating and maintaining the SSDS are documented in the Operation and Maintenance Plan (Section 4) of this SMP. Procedures for monitoring the SSDS are included in the Monitoring Plan (Section 3) of this SMP. The Monitoring Plan also addresses

severe condition inspections in the event that a severe condition, which may affect controls at the site, occurs.

### **2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems**

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified in the April, 2010 Order on Consent and Administrative Settlement. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10 (or site-specific criteria established by the NYSDEC).

#### **2.2.2.1 Sub-slab Depressurization System (SSDS)**

Operation of the active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSDS is no longer required, a proposal to discontinue operation of the SSDS will be submitted by the property owner to the NYSDEC and NYSDOH.

#### **2.2.2.2 Monitored Natural Attenuation**

Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a concentration that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

### **2.3 INSTITUTIONAL CONTROLS**

In accordance with the implementation of the Order on Consent and Administrative Settlement, a series of Institutional Controls can be used to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface; and, (3) limit the use and development of the site to Restricted Residential Use or less restrictive use such as Commercial or Industrial Use, as defined by 6 NYCRR Part 375. Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the site must be inspected at a frequency and in a manner defined in the SMP.
- Groundwater, SSDS and other environmental/public health exposure monitoring must be performed as defined in this SMP;

- Data and information pertinent to Site Management of the site must be reported at the frequency and in a manner defined in this SMP;

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property (Valatie Village Plaza) are:

- The property may only be used for Restricted Residential, Commercial and/or Industrial use provided that the Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as Unrestricted or Residential Uses without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for the intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed within the Valatie Village Plaza parcel, and any potential impacts that are identified must be assessed for monitoring or mitigation;
- The use of vegetable gardens on the property are prohibited (although community vegetable gardens may be considered with NYSDEC/NYSDOH approval) in accordance with 6 NYCRR Part 375 ;
- Single family housing is prohibited in accordance with 6 NYCRR Part 375;
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.
- Additionally, an annual written statement shall be provided to NYSDEC by the site owner or remedial party which shall update the NYSDEC on the status of the site access and use for the commercial property across US Route 9 from VVP, which obligation will continue until NYSDEC determines that it is no longer necessary. The necessity decision will consider if the groundwater quality within two (2) monitoring wells (EM MW-3 and EM MW-4) located within the NYS Department of Transportation Right of Way

(NYS DOT-ROW) is within the standards established by NYSDEC for Class GA groundwater with respect to the site related compounds (PCE, TCE, DCE and VC).

### **2.3.1 Excavation Work Plan**

The site is considered to be remediated for Restricted Residential use. Since any future intrusive work at the site may penetrate, encounter or disturb the remaining contamination, any intrusive work will be performed in compliance with the Excavation Work Plan (EWP) attached as Appendix E to this SMP. Any work conducted pursuant to the EWP must be conducted in accordance with the procedures defined in an approved Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. The EWP, the HASP and CAMP will each be in compliance with DER-10 (or site-specific criteria established by NYSDEC), and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the inspection, certification and notification reports submitted under this Site Management Plan.

The site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

### **2.3.2 Soil Vapor Intrusion Evaluation**

Prior to the construction of any enclosed structures over areas that contain remaining contamination (and, consequently, the potential for soil vapor intrusion) a soil vapor intrusion (SVI) evaluation will be performed. The purpose of the SVI evaluation will be to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive SSDS that is capable of being converted to an active system.

Prior to conducting an SVI investigation (or installing an SSDS or other mitigation system) a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York" and applicable regulations. Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

NYSDEC and NYSDOH have not required data validation in previous phases of investigation. As such, unvalidated SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. After review and interpretation, a recommendation for follow-up action, such as mitigation will be forwarded to the agencies. If any indoor air sample results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to all tenants and occupants of the property (if applicable) within 15 days of receipt of the analytical report.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the first succeeding Periodic Review Report.

## **2.4 INSPECTIONS AND NOTIFICATIONS**

### **2.4.1 Inspections**

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether or not Engineering Controls continue to perform as designed;
- Whether or not these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- Whether or not site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in Section 3 (Monitoring Plan) of this SMP. The reporting requirements are outlined in Section 5 (Periodic Review Reporting) of this SMP.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event by a qualified environmental professional as determined by NYSDEC. The purpose of the inspection will be to verify the effectiveness of the EC/ICs implemented at the site.

### **2.4.2 Notifications**

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent and Administrative Settlement 6NYCRR Part 375, and/or Environmental Conservation Law.

- 7-day advance notice of any proposed ground-intrusive activities. Note that an approved site-specific HASP and CAMP are necessary prior to conducting ground intrusive work so, additional advance notice will be necessary to enable proper review of the HASP and CAMP.
- Notice within 48-hours of discovery of any damage or defect to foundations or structures that reduce (or has the potential to reduce) the effectiveness of other Engineering Controls. Likewise, notification of any action taken (or, to be taken) to mitigate the damage or defect.
- Verbal notice (by noon of the following day) of any emergency, such as a fire, flood, or earthquake, that reduces (or, has the potential to reduce) the effectiveness of Engineering Controls in place at the site. Written confirmation to follow (within 7 days) that includes a summary of actions taken (or, to be taken) and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Order on Consent and Administrative Settlement, this Site Management Plan, the Final Engineering Report and, the Environmental Easement
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

## **2.5 CONTINGENCY PLAN**

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

### **2.5.1 Emergency Telephone Numbers**

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below (**Table 4**). For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the site owner who will also contact a qualified environmental professional as appropriate. These emergency contact lists must be maintained in an easily accessible location at the site.

<b>Table 4</b> <b>Emergency Contact Numbers</b>	
Ambulance, Fire, and Police:	911  Valatie Rescue Squad: 758-1221  Valatie Fire Dept.: 758-7556  Columbia Co. Sheriff: 784-2551  NYS Police: 785-7010
One Call Center:	(800) 272-4480  (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills - (National Response Center - for all emergencies):	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362
NYSDEC Region 4 Office	(518) 357-2045
Site Owner (currently, Valatie Village Plaza, LLC)	(518) 664-8793
Hospital – Columbia Memorial Hospital	518-828-7601

\* Note: Contact numbers subject to change and should be updated as necessary

## 2.5.2 Map and Directions to Nearest Health Facility

Site Location: Valatie Village Plaza, 1048 Kinderhook Street, Valatie, New York

Nearest Hospital Name: Columbia Memorial Hospital

Hospital Location: 71 Prospect Avenue, Hudson, New York

Hospital Telephone: 518-828-7601

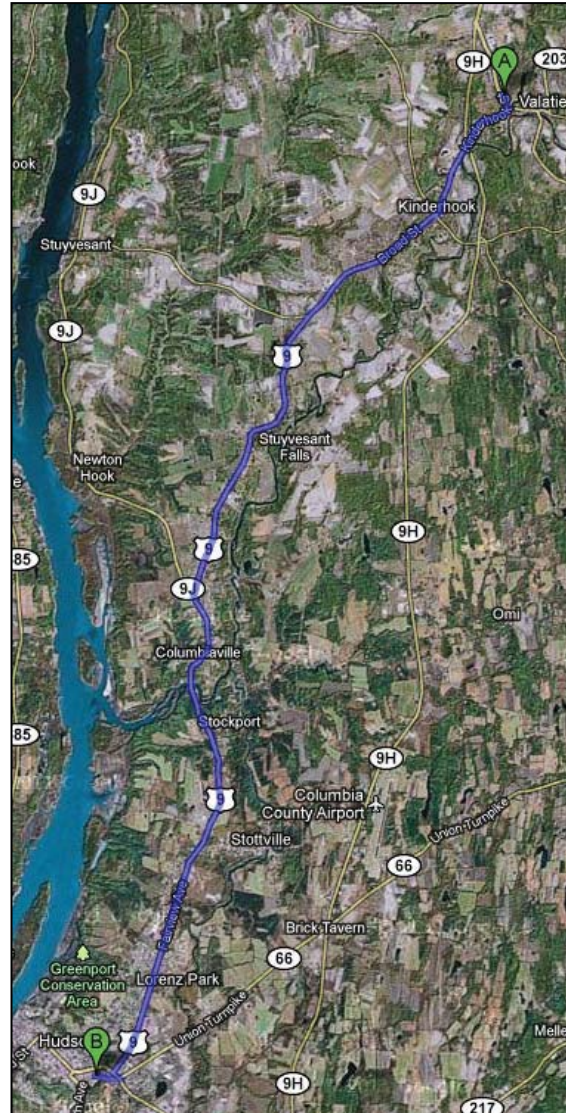
Directions to the Hospital:

1. Head southeast on US-9 S/Kinderhook St toward Rathbone Ave. Continue to follow US-9 south approximately 13.7 miles
2. After 13.7 miles, turn left onto Green St.
3. After 0.1 miles, turn right onto Columbia St.
4. After 0.2 miles, bear left onto Prospect Ave.

Destination will be on the right

Total Distance to hospital: Approximately 14 miles

Total Travel time to hospital:  
Approximately 20 minutes



### **2.5.3 Response Procedures**

The EC at the site is a SSDS driven by a RadonAway HS-2000 fan. The fan is powered by standard 120 volt alternating current (AC) on a circuit protected by a 20 ampere circuit breaker. As such, an emergency situation is not anticipated in the event of even a complete system failure. In the event of a complete system failure (or, any other malfunction of the SSDS), the circuit breaker for the SSDS will be switched to the “off” position and the site owner will be notified immediately; NYSDEC and NYSDOH will be notified by noon of the following day at the latest. If appropriate, the fire department and other emergency response group will also be notified. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 4). Also, the list will be posted prominently at the site and made readily available to all personnel at all times.

### **3.0 SITE MONITORING PLAN**

#### **3.1 INTRODUCTION**

##### **3.1.1 General**

Groundwater samples have been collected during various sampling events since 2006. Routine quarterly groundwater monitoring commenced in October, 2010. The analytical results of the various groundwater sampling events demonstrate concentrations of dissolved VOCs in excess of NYS standards and guidance values.

Operation of the SSDS commenced in July, 2010. Weekly inspections were conducted during the first six weeks of its operation in order to evaluate the system's performance. Once the initial startup period was completed, monthly inspections were conducted (October, November, December, 2010) followed by quarterly inspections beginning in January, 2011. Quarterly inspections were completed in October, 2011. The SSDS has been on an annual inspection schedule since October, 2011.

The site monitoring plan describes the measures for evaluating the performance and effectiveness of the SSDS and, routine groundwater monitoring of six monitoring wells associated with the site. Tasks specific to operation, maintenance and monitoring of the SSDS are included in Section 4.0: Operation, Monitoring and Maintenance Plan. The site monitoring plan presented herein may only be revised with the approval of NYSDEC.

##### **3.1.2 Purpose and Schedule**

This site monitoring plan describes the methods to be used for:

- Sampling and analysis/evaluation of groundwater and the SSDS ;
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards (as defined by NYSDEC's TOGS 1.1.1) SCOs for soil (6NYCRR Part 375), and soil vapor intrusion criteria (NYSDOH policies);
- Assessing achievement of the remedial performance criteria;
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this site monitoring plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;

- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Based on the historic groundwater monitoring data previously collected for the site, semi-annual monitoring of on-site and off-site groundwater will be conducted. Annual monitoring of the SSDS will also be conducted as well. Trends in contaminant levels in the SSDS influent/effluent and groundwater samples will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Recommendations for revising the groundwater sampling program and the SSDS operation/maintenance/monitoring will be made based on an evaluation of the data collected and remedial objectives. Actual modifications of the groundwater or SSDS tasks will not be made without prior written approval from NYSDEC. Monitoring programs are summarized in **Table 5** and outlined in detail in Section 3.2 below.

<b>Table 5</b> Monitoring/Inspection Schedule			
Monitoring Program	Frequency*	Matrix	Analysis
Groundwater	Semi-Annual (April & October)	Groundwater via wells EM MW-1, EM MW-2, EM MW-3, EM MW-4, EM MW-5, EM MW-6, EM MW-7, EM MW-8; EM MW-9; EM MW-10, EM MW-11	VOCs (full list) via SW846- 8260
SSDS	Annual	Sub Slab Vapor	PID Screening
SSDS Operational Modifications (e.g. shutdown)	As Appropriate	Sub Slab, Indoor Air, Ambient Air	Air Canister/TO-15 SIMS or, other approved
Site Wide Inspection	Annual	VVP and monitoring well network	Visual Inspection of site and monitoring well network
Commercial Property Status	Annual	Commercial Property across US Route 9 from VVP	Verify status of property access and use
* The frequency of events will be conducted as specified until otherwise approved/required by NYSDEC and NYSDOH			

## 3.2 MEDIA MONITORING PROGRAM

### 3.2.1 Groundwater Monitoring

Emkay commenced with a quarterly groundwater monitoring schedule in October, 2010. That monitoring program has included quarterly gauging, purging and sampling of wells EM MW-1,

EM MW-2, EM MW-3, EM MW-4, EM MW-5, EM MW-6, EM MW-7, EM MW-8, EM MW-9, EM MW-10, and EM MW-11 (Figure 3). Samples are typically available for collection from wells EM MW-1, EM MW-2, EM MW-3, EM MW-4, EM MW-5 and EM MW-6; wells EM MW-7, EM MW-9, EM MW-10, and EM MW-11 are typically dry and, EM MW-8 is sometimes dry

As discussed previously (Section 1.3.1), none of the soil samples collected from these historically dry wells has yielded concentrations of any site related VOCs in excess of their respective SCO's for Unrestricted Use as defined by 6 NYCRR Part 375-6.8 (a). Acetone, a common solvent and frequent laboratory artifact, was identified in one of these often dry locations (EM MW-8) at a concentration in excess of the 50 ug/kg SCO for Unrestricted Use but, well below the 100,000 ug/kg SCO established by (6 NYCRR Part 375-6.8 (b)) for Restricted Residential Use (see Table 2). When groundwater from well EM MW-8 was sampled (February 25, 2009), PCE was detected at a concentration (2.3 ppb) that was below the 5.0 ppb PCE standard for Class GA Groundwater. The groundwater monitoring program proposed for the site includes semi-annual groundwater sampling from wells EM MW-1, EM MW-2, EM MW-3, EM MW-4, EM MW-5, EM MW-6, EM MW-7, EM MW-8, EM MW-9, EM MW-10 and EM MW-11. Groundwater samples collected from the aforementioned wells will be analyzed by an ELAP certified laboratory for analysis of the full list of VOCs by EPA Method 8260.

The data collected during the groundwater monitoring events will be used to evaluate/verify depth to groundwater, groundwater flow direction and, trends in groundwater quality. Trends identified in groundwater quality will be a key factor on which recommendations for the frequency of future groundwater monitoring events will be made. Actual modifications to the frequency of groundwater monitoring events will not be made without written authorization from NYSDEC. In the event that modifying the frequency of groundwater monitoring events is acceptable to or required by NYSDEC, the SMP will be modified to reflect the NYSDEC-authorized changes. The network of monitoring wells has been installed to monitor both the upgradient and downgradient locations at the site. Monitoring well construction logs for all wells associated with the site are included in Appendix B.

### **3.2.1.1 Sampling Protocol**

Groundwater sampling will be conducted semi-annually in the spring and fall quarters (April and October, respectively). These months typically represent periods of relatively high water table elevation. All monitoring well sampling activities will be recorded in a field book and on a groundwater monitoring well sampling log form (presented in **Appendix F**). Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network. Each groundwater monitoring event will proceed by first opening all monitoring wells and allowing the water levels within each well to equilibrate with atmospheric conditions. After equilibration, depth to groundwater will be measured in each well using an electronic water level tape calibrated in 0.01-foot increments. Based on the depth to water and the known total depth of each well, the

volume of groundwater within each casing will be calculated. Three (3) volumes of groundwater will be purged from each monitoring well using dedicated, disposable bailers to ensure the collection of representative groundwater samples. The wells will be allowed to recharge prior to sample collection.

Groundwater samples will be placed in pre-preserved, laboratory-supplied sampling vials containing dilute hydrochloric acid. Samples will be placed on ice in a cooler and will be transported under a chain of custody to the analytical laboratory for analysis. The samples will be analyzed within their appropriate holding times for the full list of VOCs via Environmental Protection Agency (EPA) analytical method 8260.

Various media, including soil, groundwater, soil vapor, sub-slab vapor, indoor air and outdoor air have been sampled during the course of investigations associated with the site. The sampling activities associated with each phase of investigation were performed in accordance with an NYSDEC-approved work plan. A Data Usability Summary Report (DUSR) has not been required for any of the previous sampling activities. As such, a DUSR will not be required for any future sampling activities.

#### **3.2.1.2 Monitoring Well Repairs, Replacement and Decommissioning**

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells. Monitoring well replacement, repair, or decommissioning and replacement will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well decommissioning will be performed in accordance with NYSDEC's CP-43: "Groundwater Monitoring Well Decommissioning Procedures." (November 3, 2009). Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

### **3.3 SITE-WIDE INSPECTION**

Site-wide inspections will be performed on an annual basis. Site-wide inspections will also be performed as needed after severe weather conditions that may affect Engineering Controls or

monitoring devices. During these inspections, an inspection form will be completed (**Appendix G**). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that site records are up to date.

### **3.4 MONITORING/REPORTING REQUIREMENTS**

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted with letter reports and/or the Periodic Review Report.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. Letter reports will also be prepared subsequent to each sampling event. The letter reports will include, at a minimum:

- Date of sampling event;
- Personnel conducting the sampling;
- Description of the activities performed;
- Type of samples collected (e.g., groundwater; sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Analytical results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether environmental or public health exposure conditions have changed since the last reporting event.

A summary of the monitoring program deliverables are summarized in **Table 6** below.

<b>Table 6</b> Schedule of Monitoring/Inspection Reports	
<b>Task</b>	<b>Reporting Frequency*</b>
Groundwater Monitoring	Semi-Annual
SSDS	Annual (include with Periodic Review Report)
Site Wide Inspection	Annual (include with Periodic Review Report)
Commercial Property Status (Commercial Property across US Route 9 from VVP)	Annual (include with Periodic Review Report)
Periodic Review Report	Annual
* The frequency of events will be conducted as specified until otherwise approved/required by NYSDEC	

Electronic Data Deliverables (EDD) via the NYSDEC's EQulS database are not required by NYSDEC for this project.

## **4.0 OPERATION AND MAINTENANCE PLAN**

### **4.1 INTRODUCTION**

This Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the SSDS. This Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the site to operate and maintain the SSDS;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS is operated and maintained.

A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

### **4.2 SUB-SLAB DEPRESSURIZATION SYSTEM OPERATION AND MAINTENANCE**

The engineering control for the site includes an SSDS that was installed at the site in July, 2010 and began operation at that time. Weekly inspections were conducted during the first six weeks of its operation in order to evaluate the system's performance. Once the initial startup period was completed, monthly inspections were conducted (October, November, December, 2010) followed by quarterly inspections beginning in January, 2011. Quarterly inspections were completed in October, 2011. The SSDS is currently on an annual inspection schedule.

The RadonAway HS2000 fan that drives the SSDS is designed for continuous, round-the-clock operation. Additionally, there are no serviceable parts inside of the fan. As such, should a failure of the fan occur, the entire unit should be replaced.

As indicated in Section 1.4.1, the SSDS draws sub-slab vapor via three vapor extraction points spatially distributed within the footprint of Emkay. Each vapor extraction point is equipped with a u-tube manometer and gauge to verify vacuum. The u-tube manometer and vacuum gauge for each leg of the SSDS will be inspected by the site operator on a monthly basis to verify operation of the system. Both the manometer and gauge vacuum measurements will be recorded for each vacuum monitoring point on a maintenance sheet that will include the date, manometer and gauge readings and, name of the person inspecting the SSDS. The monthly inspection sheets will be included as part of the annual inspection report for the SSDS. A copy of the monthly check list is included in Appendix G.

Annual inspections of the SSDS will also be conducted by a qualified environmental professional in conjunction with the annual site wide inspection. The annual SSDS inspection will include a visual inspection of the fan, piping, slab, electrical and other aspects of the system. Specific information to be collected include:

- SSDS effluent airspeed and screening via a PID;
- Vacuum at each vapor extraction point;
- Observed vacuum at 15 vacuum monitoring point locations;
- Smoke testing of at least 10-percent of mechanical and/or glued joints;
- Identification and smoke testing of any new cracks in the slab;
- Inspection of all electrical connections, and;
- Proper labeling.

Minor repairs will be made during the annual inspection as time allows; all minor repairs not completed at the time of the annual inspection will be completed within 10 business days of the annual inspection. A checklist that will be used during the annual SSDS inspection is included in Appendix G.

Information gathered from the SSDS during the monthly and annual inspections will be incorporated into the Periodic Review Report for the site. Recommendations regarding continued operation of the SSDS and/or frequency of inspections will be made in that report. Recommendations will be implemented only upon NYSDEC authorization to do so. Maintenance reports and any other information generated during regular operations at the site will also be included in the periodic review reports.

Unscheduled SSDS inspections may take place when a suspected failure of the SSDS system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

- Date;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Nature of repair made;
- Presence/location of leaks;
- Verification of leak repair;
- Other repairs or adjustments made to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents will be included; and,
- Other documentation will be attached as appropriate.

Reporting and notifications of these unscheduled SSDS maintenance events will occur in accordance with Section 2.4 and other applicable sections of this SMP.

## **5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS**

### **5.1 SITE INSPECTIONS**

#### **5.1.1 Inspection Frequency**

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 (Monitoring Plan) and Section 4 (Operation and Maintenance Plan) of this SMP. In addition to the semi-annual reporting and the periodic review reports, three specific annual inspections are required for the site. These include the annual inspection of the SSDS, the annual site wide inspection and an annual verification of the status of the access and use of the commercial property (located across US Route 9 from VVP). Annual verification of the status of the commercial property will be conducted via a written request from VVP to the owner of the commercial property. VVP's responsibility to continue this annual certification will cease when approved by NYSDEC and NYSDOH. The need for continued verification of the commercial property status will include an evaluation of the concentrations of site related compounds in samples collected from monitoring wells EM MW-3 and EM MW-4 as compared to their respective standards for class GA groundwater. Unscheduled inspections of the SSDS will also be conducted when warranted, with appropriate notification/reporting to NYSDEC.

#### **5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports**

All inspections, verifications and monitoring events will be recorded and/or documented via the appropriate forms (included in Appendix F and Appendix G). These forms are subject to NYSDEC revision. All applicable inspection forms, sampling data and, system maintenance reports generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

#### **5.1.3 Evaluation of Records and Reporting**

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The site remedy continues to be protective of public health and the environment and is performing as designed.

### **5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS**

After the last inspection of the reporting period, a Professional Engineer licensed to practice in the state of New York will prepare the following certification:

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the NYSDEC;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the NYSDEC/NYSDOH to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the site is compliant with the environmental easement;
- The engineering control system (SSDS) is performing as designed and is effective;
- 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 in this report is accurate and complete.
- I certify that all information and statements in this certification form 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, Fil L. Fina, III, P.E., of Aztech Engineering Services, P.C., 5 McCrea Hill Road, Ballston Spa, New York, am certifying as Owner's Designated Site Representative for the site.

The signed certification will be included in the Periodic Review Report described below; an example of the certification form is included in Appendix G.

### **5.3 PERIODIC REVIEW REPORT**

An annual Periodic Review Report will be submitted to the NYSDEC every year, beginning eighteen months after the Certificate of Completion is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix A (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;

- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of analytes of concern by media (soil, groundwater, soil vapor) which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
  - The operation and the effectiveness of the SSDS , including identification of any needed repairs or modifications;
  - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - The overall performance and effectiveness of the remedy.
- A performance summary for all treatment systems at the site during the calendar year, including information such as:
  - The number of days the system was operated for the reporting period;
  - The contaminant mass removed;
  - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - A description of the resolution of performance problems;
  - A summary of the SSDS performance monitoring; and
  - Comments, conclusions, and recommendations based on data evaluation.

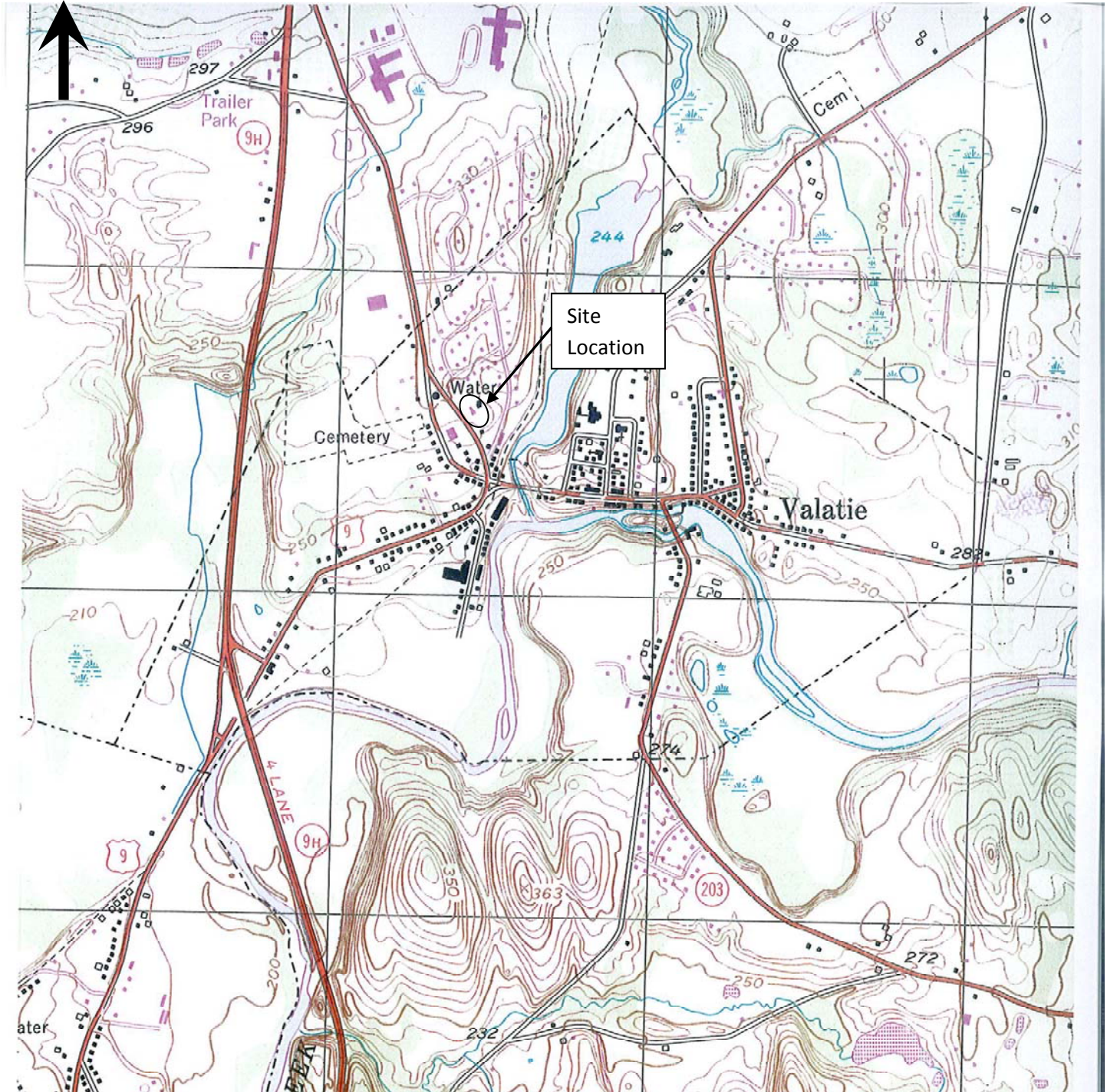
The Periodic Review Report will be submitted in electronic format to the NYSDEC Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

#### **5.4 CORRECTIVE MEASURES PLAN**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

## FIGURES

N



USGS Topographic Quadrangle Map, Kinderhook, NY

Approximate Scale 1" = 1,500'



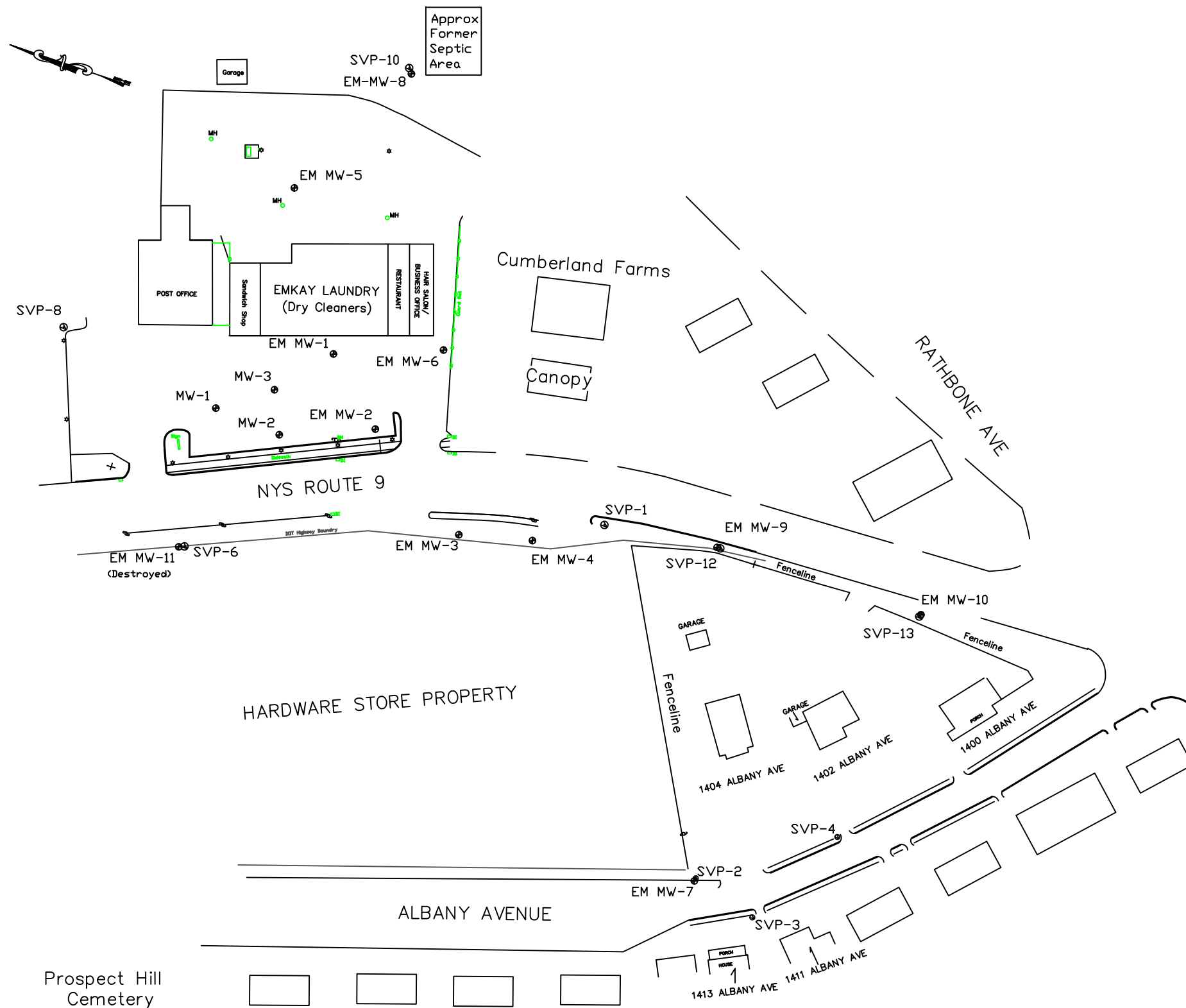
5 McCrea Hill Road  
Ballston Spa, NY 12020  
p 518.885.5383 | f 518.885.5383  
info@aztechtech.com | www.aztechtech.com


SITE: Valatie Village Plaza  
(f.k.a. Emkay Cleaners)  
1048 Kinderhook St.  
(NYS Route 9)  
Valatie, NY

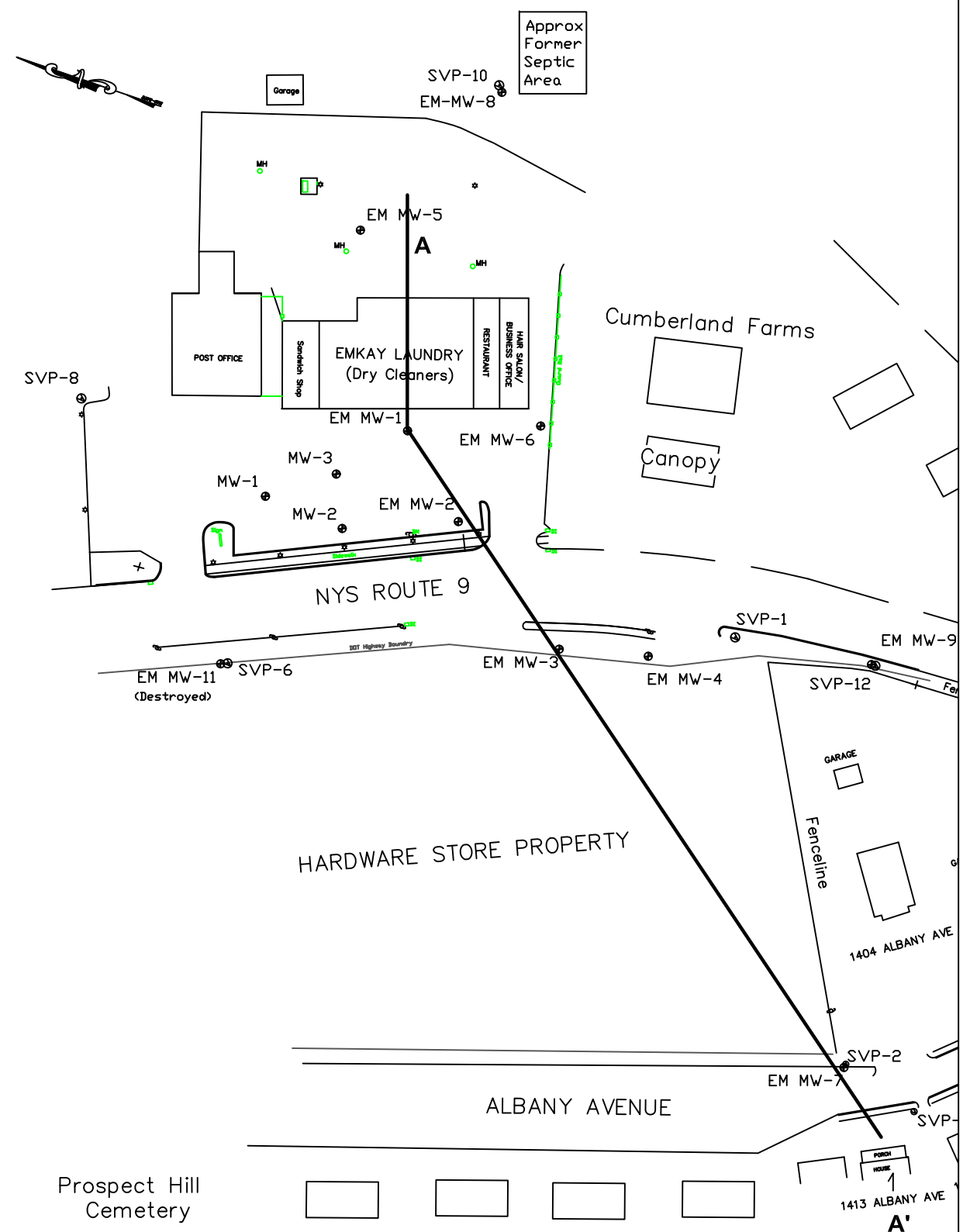
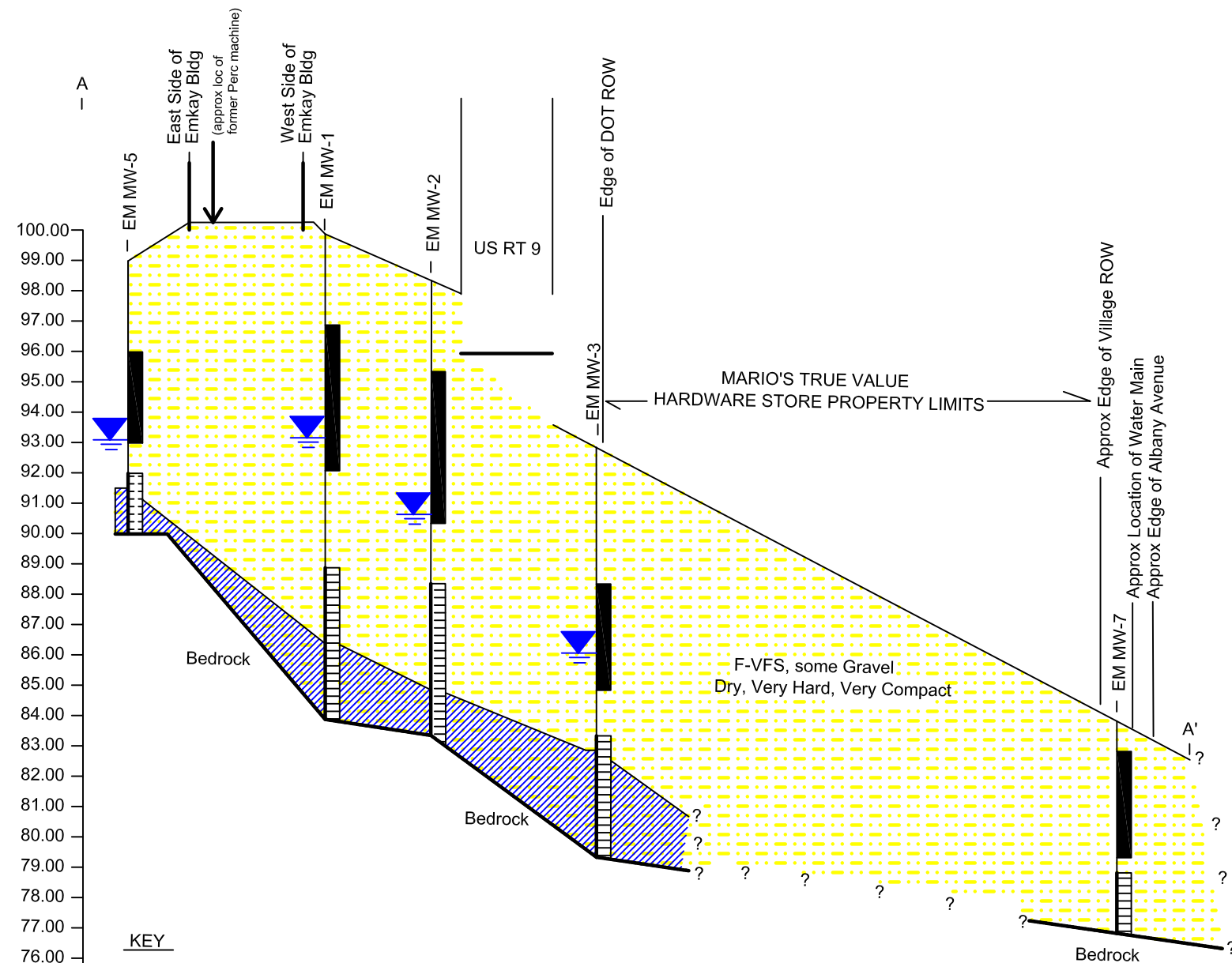
Site Location  
Map

**FIGURE 1**





 <p>5 McCrea Hill Road Ballston Spa New York, 12020</p> <p>Phone: 518-885-5383 Fax: 518-885-5385 www.aztechtech.com</p>	<b>SITE: Valatie Village Plaza (f.k.a. Emkay Cleaners)</b> 1048 Kinderhook Street (NYS Route 9) Valatie, NY NYSDEC Site No. 411016		<b>Site Map</b>  ⊙ SOIL VAPOR POINT ⊕ SHALLOW OVERBURDEN MONITORING WELL LIGHT POLE POWER POLE
	<b>FIGURE 3</b>		
	Date: July, 2011	SCALE: 1" = 100'	



**SITE: Valatie Village Plaza**  
**(f.k.a. Emkay Cleaners)**  
 1048 Kinderhook Street (NYS Route 9)  
 Valatie, NY  
 NYSDEC Site No. 411016

**FIGURE 4**

Date: January, 2008 SCALE: 1" = 100'

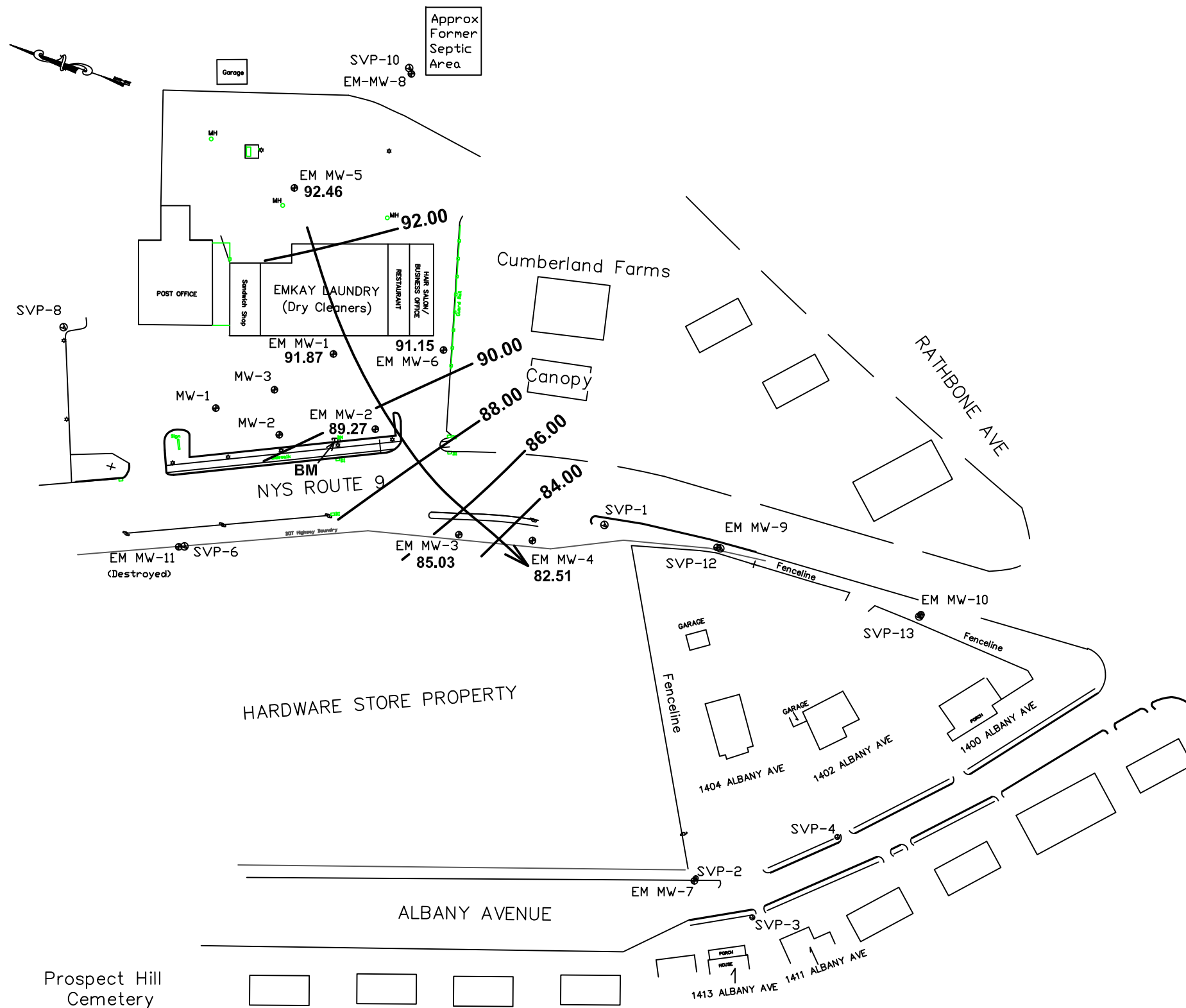
**Cross-Section A-A'**






- SOIL VAPOR POINT
- SHALLOW OVERBURDEN MONITORING WELL
- LIGHT POLE
- POWER POLE



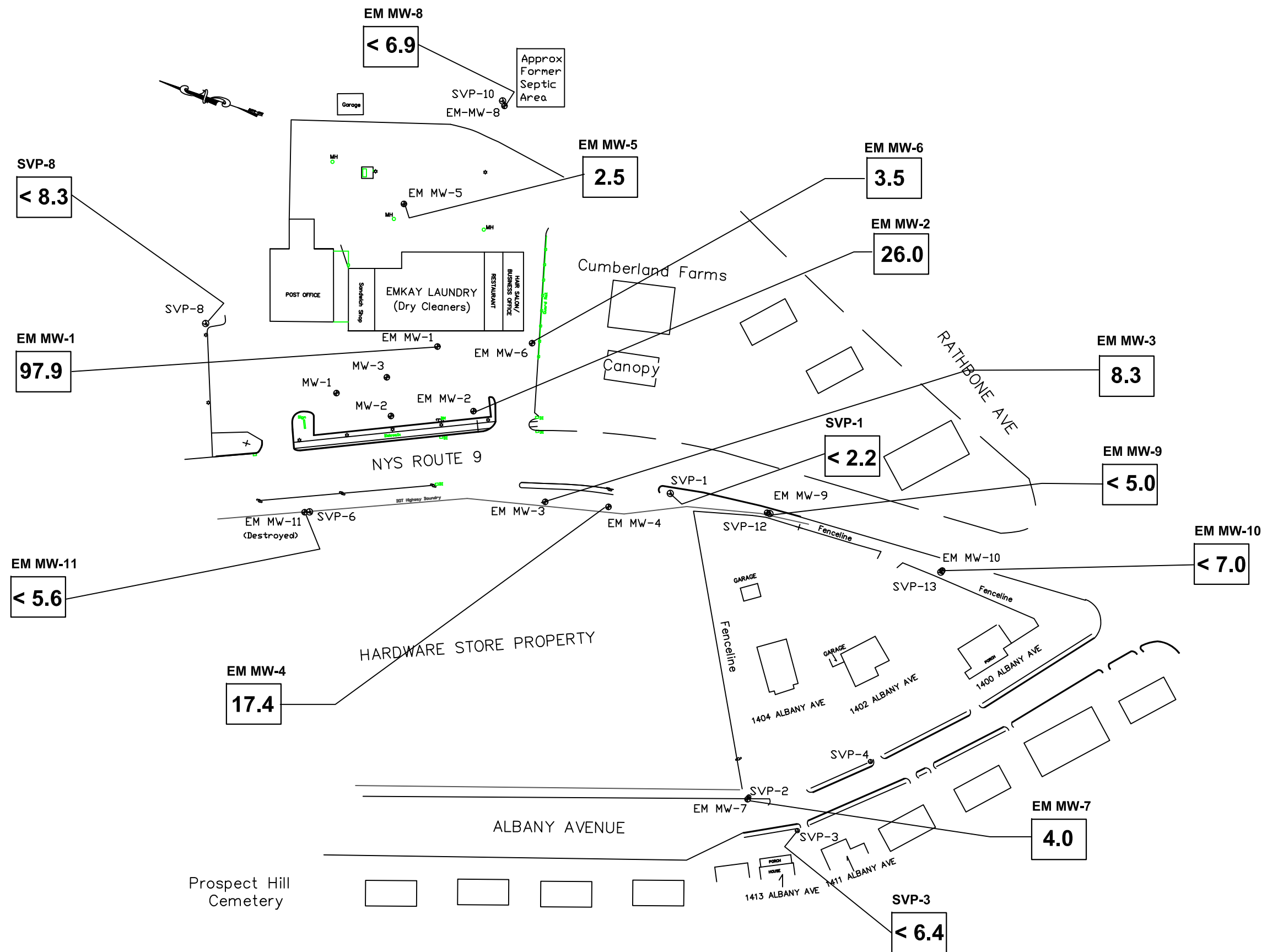
5 McCrea Hill Road  
 Ballston Spa  
 New York, 12020

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 <p>5 McCreia Hill Road Ballston Spa New York, 12020</p> <p>Phone: 518-885-5383 Fax: 518-885-5385 www.aztechtech.com</p>	<p><b>SITE: Valatie Village Plaza (f.k.a. Emkay Cleaners)</b> 1048 Kinderhook Street (NYS Route 9) Valatie, NY NYSDEC Site No. 411016</p>		<p><b>Groundwater Contour Map</b> <b>October 29, 2013</b></p>	
	<p><b>FIGURE 5</b></p>		<p>  SOIL VAPOR POINT   SHALLOW OVERBURDEN MONITORING WELL   LIGHT POLE   UTILITY POLE         </p>	
	<p>Date: October 29, 2013</p>		<p>SCALE: 1" = 100'</p>	

BM = Elevations relative to site bench mark set at 100.00 feet at utility pole near EM MW-2



5 McCrea Hill Road  
Ballston Spa  
New York, 12020

Phone: 518-885-5383  
Fax: 518-885-5385  
www.aztechtech.com

**SITE: Valatie Village Plaza  
(f.k.a. Emkay Cleaners)**  
1048 Kinderhook Street (NYS Route 9)  
Valatie, NY  
NYSDEC Site No. 411016

**FIGURE 6**

Date: January 5, 2012

SCALE: 1" = 100'

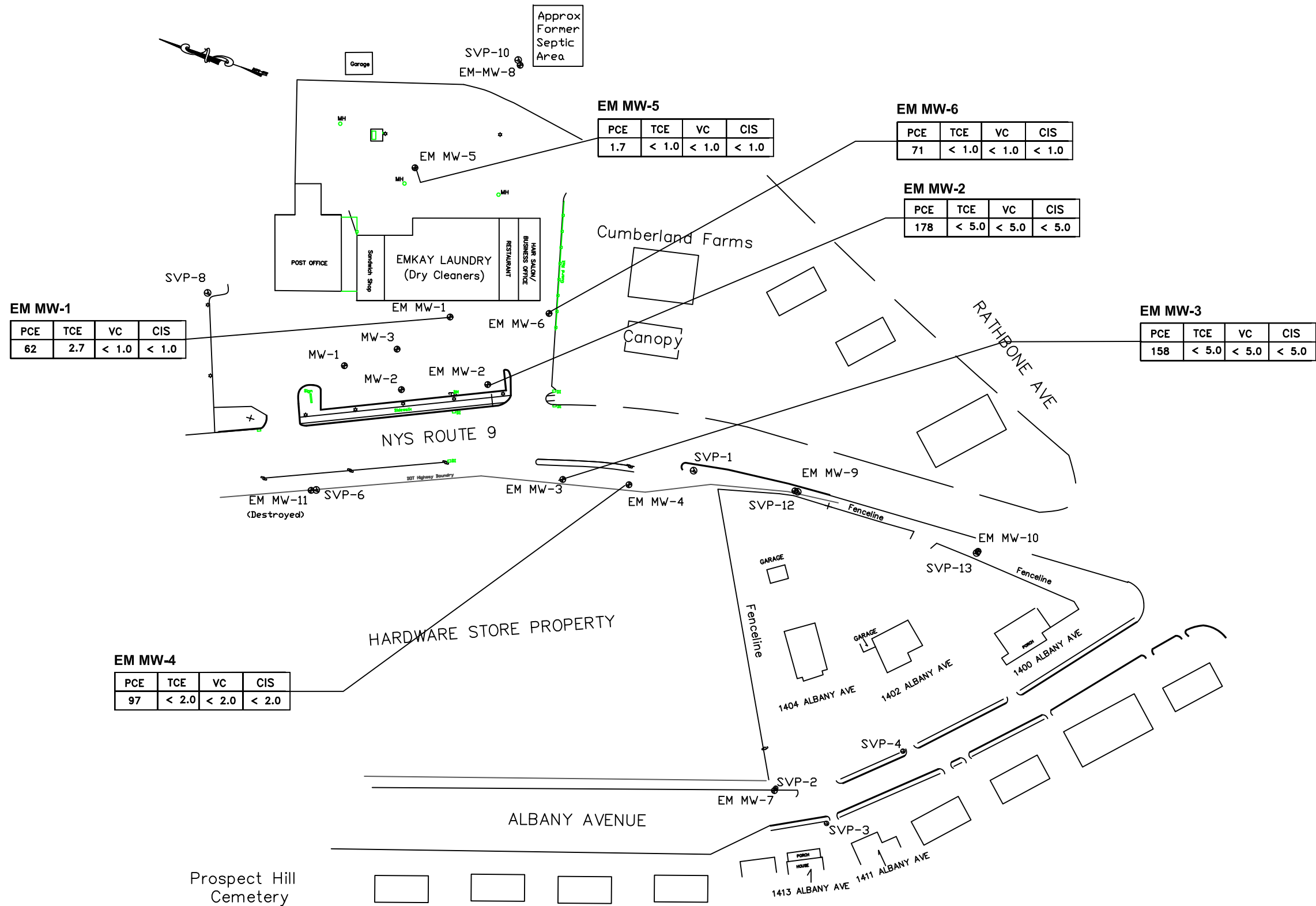
**PCE Distribution in Soil**

(samples collected during various phases of investigation)

- ⊙ SOIL VAPOR POINT
- ⊕ SHALLOW OVERBURDEN MONITORING WELL

EM MW-4  
17.4

PCE concentration in  
micrograms per kilogram (ug/kg)



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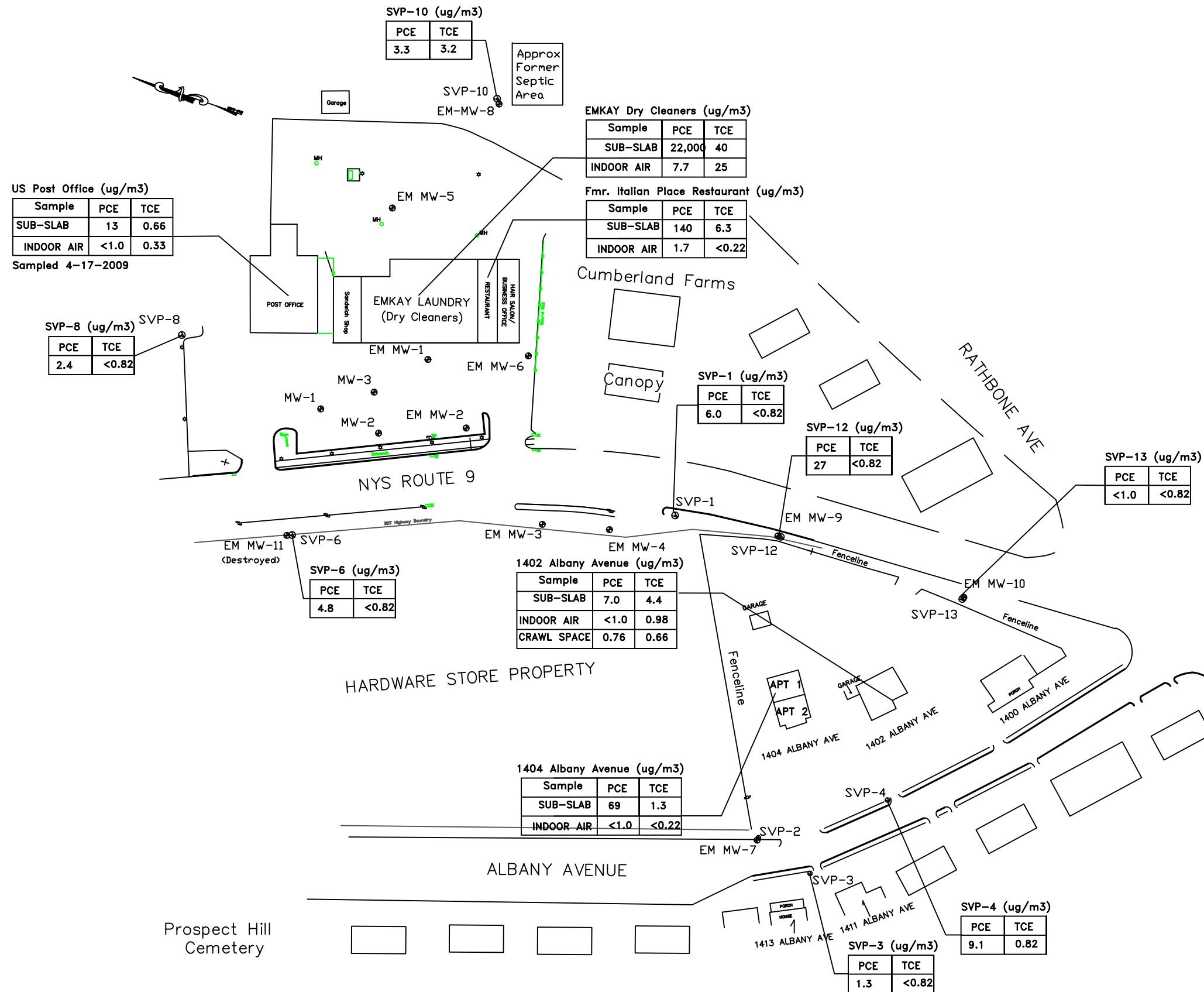
**SITE: Valatie Village Plaza  
(f.k.a. Emkay Cleaners)**  
1048 Kinderhook Street (NYS Route 9)  
Valatie, NY  
NYSDEC Site No. 411016

**FIGURE 7**

Date: October 29, 2013 SCALE: 1" = 100'

**VOC Distribution Map  
October 29, 2013**

- SOIL VAPOR POINT
- SHALLOW OVERBURDEN MONITORING WELL
- LIGHT POLE
- POWER POLE



5 McCreia Hill Road  
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New York, 12020

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Fax: 518-885-5385  
www.aztechtech.com

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1048 Kinderhook Street (NYS Route 9)  
Valatie, NY  
NYSDEC Site No. 411016

**FIGURE 8**

Date: February/April, 2009

SCALE: 1" = 100'

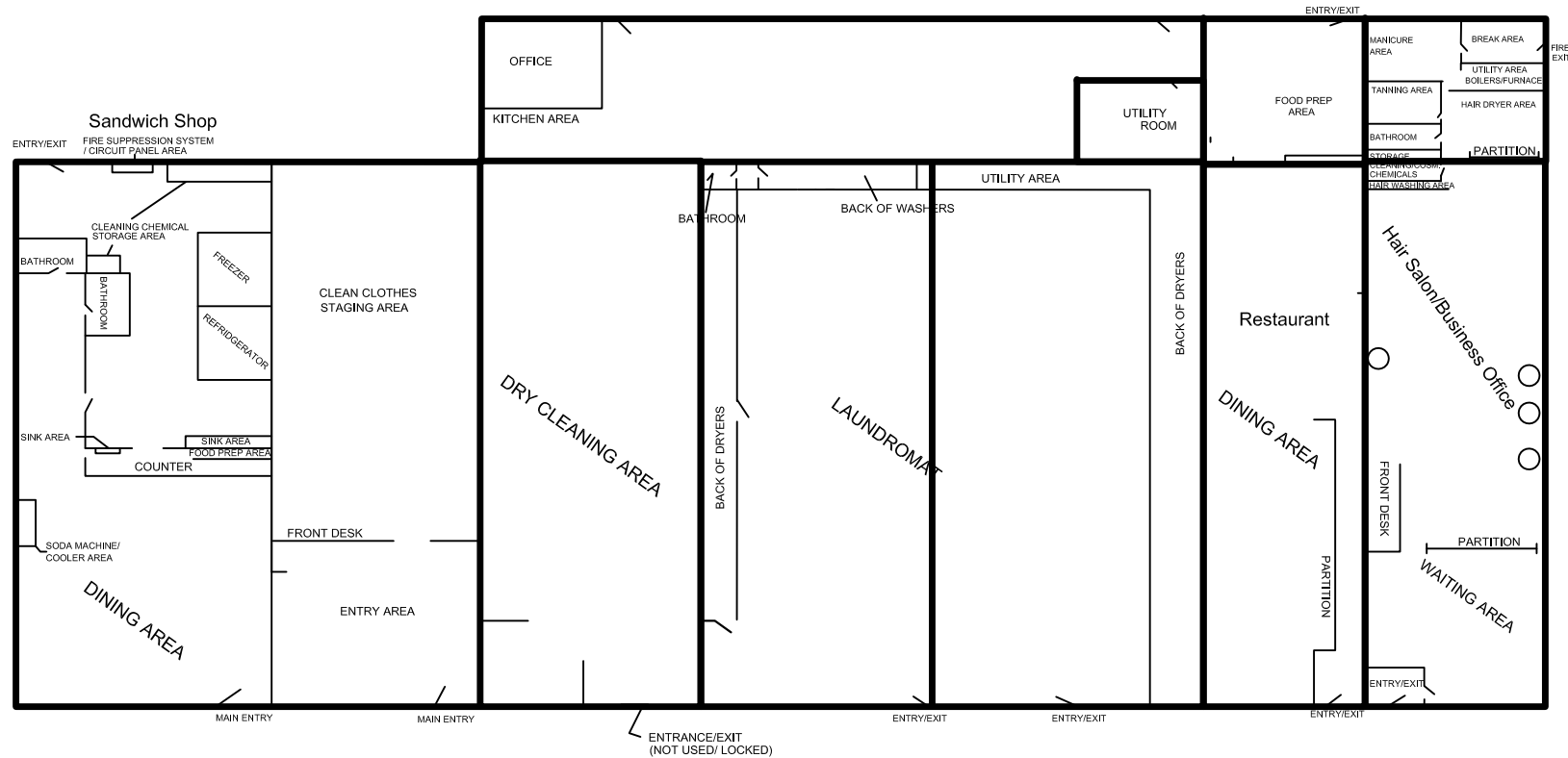
**Soil Vapor/Vapor Intrusion Data  
February 25, 2009\***

(\*samples collected 2-25-2009 unless indicated otherwise)

- ⊙ SOIL VAPOR POINT
- ⊕ SHALLOW OVERBURDEN MONITORING WELL



# EMKAY CLEANERS



5 McCrea Hill Road  
Ballston Spa  
New York, 12866

Phone: 518-885-5383  
Fax: 518-885-5385  
www.aztechtech.com

**SITE: Valatie Village Plaza (f.k.a. Emkay Cleaners)**  
1048 Kinderhook Street (NYS Route 9)  
Valatie, NY  
NYSDEC Site No. 411016

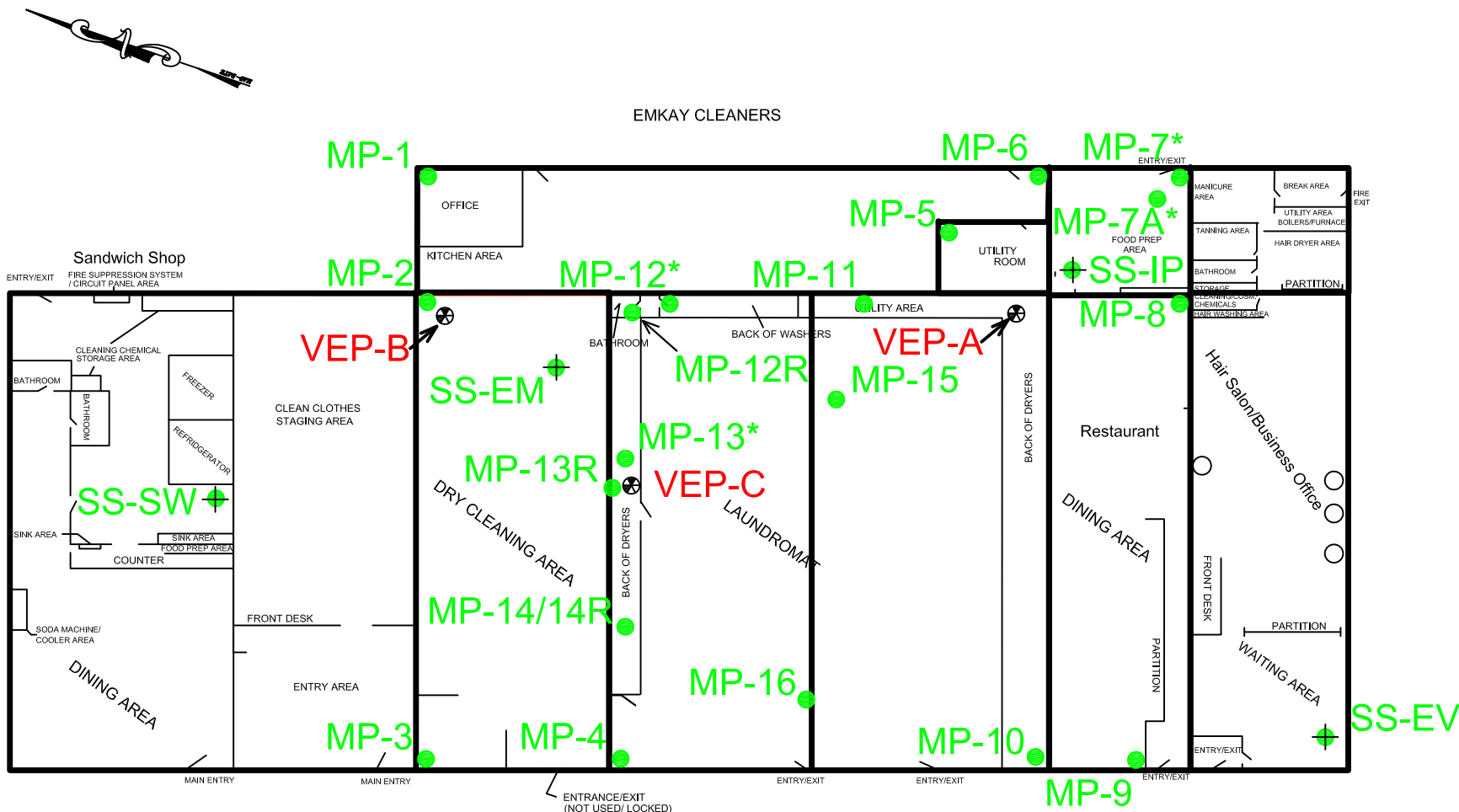
**FIGURE 9**

DATE: July, 2010

SCALE: ~1"= 20'

## Valatie Village Plaza Footings Locations

Concrete Foundation/Footing



5 McCrea Hill Road  
Ballston Spa  
New York, 12866

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Fax: 518-885-5385  
www.aztechtech.com

**SITE: Valatie Village Plaza (f.k.a. Emkay Cleaners)**  
 1048 Kinderhook Street (NYS Route 9)  
 Valatie, NY  
 NYSDEC Site No. 411016

---

**FIGURE 10**

---

DATE: as of April, 2014      SCALE: ~1"= 20'

**Vapor Extraction, Monitoring & Sub-Slab Sampling Point Locations**

4" Vapor Extraction Point

Vacuum Monitoring Point

Sub-Slab Soil Vapor Sampling Point

\* MP-7, MP-7A, MP-12, MP-13 no longer exist/accessible.

FIGURE 11A  
VAPOR EXTRACTION POINT  
As-Built Construction

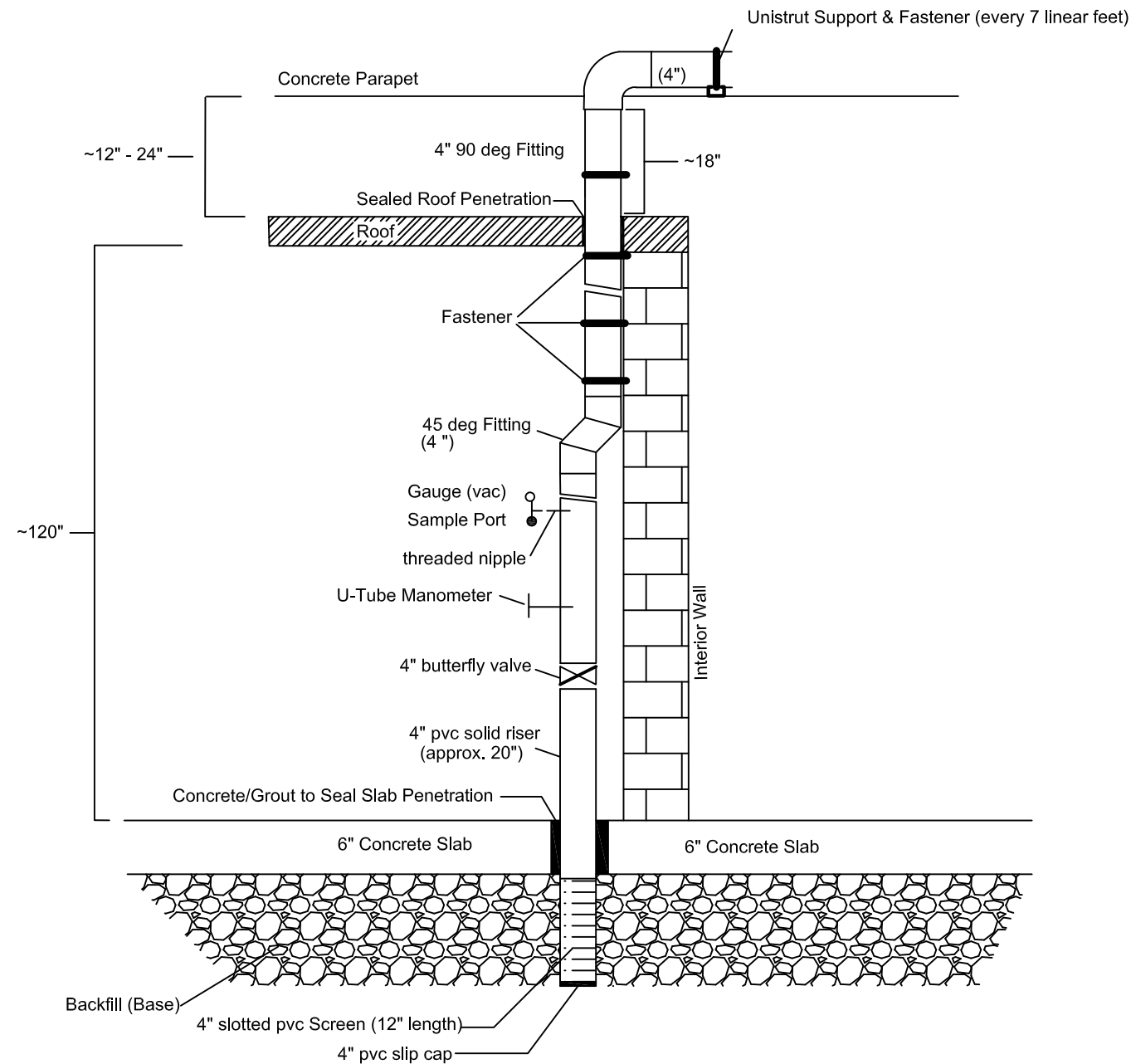
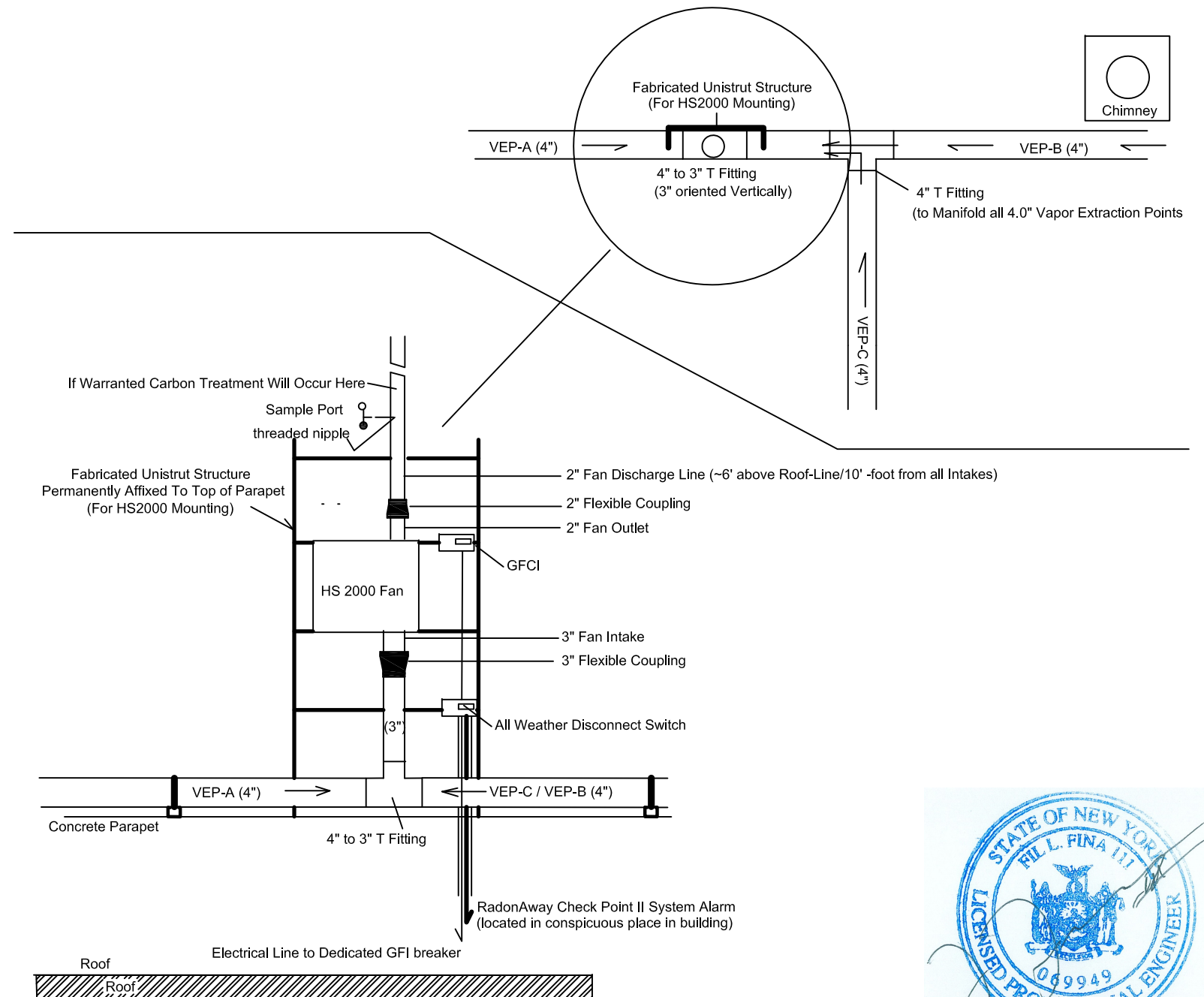


FIGURE 11B  
ROOF-LINE MANIFOLD  
VAPOR EXTRACTION DISCHARGE  
As-Built Construction (Overhead View)

(Note All 4" lines are pitched back to VEPs and fastened to respective parapet every 7')



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Ballston Spa Fax: 518-885-5385  
New York, 12020 [www.aztechtech.com](http://www.aztechtech.com)

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**(f.k.a. Emkay Cleaners)**  
 1048 Kinderhook Street (NYS Route 9)  
 Valatie, NY  
 NYSDEC Site No. 411016

FIGURE 11

Date: July, 2011

NOT TO SCALE

### Sub-Slab Depressurization System As-Built

Concrete foundation/footing

## **APPENDIX A**

### **ENVIRONMENTAL EASEMENT & METES AND BOUNDS SURVEY**



COLUMBIA COUNTY – STATE OF NEW YORK  
HOLLY C. TANNER, COUNTY CLERK  
560 Warren Street, Hudson, New York 12534

COUNTY CLERK'S RECORDING PAGE  
\*\*\*THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH\*\*\*



BOOK/PAGE: 796 / 912  
INSTRUMENT #: 20140013346

Receipt#: 375690  
Clerk: CC  
Rec Date: 11/13/2014 09:58:57 AM  
Doc Grp: D  
Descrip: EASEMENT  
Num Pgs: 10  
Rec'd Frm: TOOHER & BARONE

Party1: VALATIE VILLAGE PLAZA LLC  
Party2: PEOPLE OF THE STATE OF NEW YORK  
BY COMMISSIONER

Recording:

Cover Page	5.00
Recording Fee	65.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00

Sub Total: 95.00

Transfer Tax	
Transfer Tax - State	0.00
Transfer Tax - Columbia C	0.00

Sub Total: 0.00

Total: 95.00

\*\*\*\* NOTICE: THIS IS NOT A BILL \*\*\*\*

\*\*\*\*\* Transfer Tax \*\*\*\*\*

Transfer Tax #: 641

Transfer Tax

Consideration: 0.00

Total: 0.00

Record and Return To:

TOOHER & BARONE LLP  
313 HAMILTON ST  
ALBANY NY 12210

WARNING\*\*\*

\*\* Information may change during the verification  
process and may not be reflected on this page.

*Holly C. Tanner*

Holly C. Tanner  
Columbia County Clerk

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

**THIS INDENTURE** made this 24<sup>th</sup> day of October, 2014 between Owner(s) VALATIE VILLAGE PLAZA, LLC, having an office at 1048 Kinderhook Steet, P.O. Box 186, Valatie, County of Columbia, State of 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 1048 Kinderhook Street in the Village of Valatie, County of Columbia and State of New York, known and designated on the tax map of the County Clerk of Columbia as tax map parcel numbers: Section 33.18 Block 1 Lot 29.1, being the same as that property conveyed to Grantor by deed dated January 21, 1999 and recorded in the Columbia County Clerk's Office in Liber and Page 460/781. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 3.505 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 1, 2012 and revised June 5, 2012, February 6, 2014 and June 3, 2014 prepared by Ausfeld & Waldruff Land Surveyors LLP, which will be attached to the Site Management Plan. The Controlled Property description 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 and the terms and conditions of Order on Consent Index Number: R4-2009-1008-157, 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) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Columbia County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

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

(6) 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;

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

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

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

(10) 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. 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, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) 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;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) 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, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:      Site Number: HW 411016  
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.

Valatie Village Plaza LLC:

By: Michael L. Della Rocco

Print Name: Michael L. Della Rocco

Title: OWNER Date: 10-JUNE-14

**Grantor's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF Rensselaer

On the 10 day of June, in the year 2014, before me, the undersigned, personally appeared Michael L. DellaRocca 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.

Jennifer Molesky  
Notary Public - State of New York

Jennifer Molesky  
NOTARY PUBLIC, State of New York  
No. 01M06074369  
Qualified in Rensselaer County  
Commission Expires May 13, 2018

**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, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

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

On the 8th day of October, in the year 2014, 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, 2016**

**SCHEDULE "A" PROPERTY DESCRIPTION**

ALL that piece or parcel of land situate in the Village of Valatie, Town of Kinderhook, County of Columbia and the State of New York, bounded and described as follows:

BEGINNING at a point located in the easterly line of US Route 9 (as monumented by New York State Department of Transportation), said point being the intersection formed by said east line of US Route 9 with the division line between the lands now or formerly of Patricia A. Dorsey (Book 276 Page 1136) on the north and the lands now or formerly of Valatie Village Plaza (Cartridge 460 Frame 781) on the south; thence in an easterly direction and along said division line, North 63° 48' 00" East, 167.67 feet to a point located along the westerly line of Lot 21 as shown on the Pine Hills Subdivision; thence in a southerly direction and along said line being the westerly line of the lands now or formerly of Radez (Book 609 Page 2175), South 22° 31' 00" East 57.81 feet to a point; thence in an easterly direction and along the southerly line of the aforesaid lands of Radez and continuing along the south line of the land now or formerly of Gilmore (Book 538 Page 143) and Clifford (Book 321 Page 921), said line also being the south line of Lots 21, 22 and 23 as shown on the aforesaid subdivision map, North 76° 01' 00" East 268.83 feet to a point; thence in a southerly direction and along the westerly line of the lands now or formerly of Paul Bogarski, Trustee (Book 724 Page 943) and Kelly (Book 436 Page 1895), said line also being the westerly line of Lots 38 and 39 as shown on the aforesaid subdivision map, South 11° 25' 00" West, 157.09 feet to a point; thence in an easterly direction and along the south line of the aforesaid lands of Kelly, South 75° 22' 00" East, 171.88 feet to a point; thence in a southerly direction and along the westerly line of Ridge Drive, the following two courses: 1) South 16° 45' 00" West, 55.00 feet to a point and 2) South 34° 05' 30" West, 77.64 feet to a point; thence continuing in a southerly direction South 36° 09' 58" West, 402.25 feet to a point; thence in a northerly and westerly direction and along the lands now or formerly of V.S.H. Realty (Book 555 Page 1086), the following three courses: 1) North 18° 25' 00" East, 200.00 feet to a point; 2) North 20° 34' 00" West, 138.16 feet to a point and 3) South 72° 30' 00" West, 162.93 feet to a point; thence in a northerly direction and along the aforesaid easterly line of US Route 9 (as monumented), the following two courses: 1) North 21° 31' 51" West, 52.50 feet to an aluminum capped iron rod found and 2) North 25° 30' 12" West, 259.90 feet to the point or place of beginning

FOR CLOSING INSTRUMENTS ONLY, NOT FOR POLICY: (Containing in all 3.505 acres of land being more or less.)

Record and return to:  
Tooher & Barone LLP  
313 Hamilton St.  
Albany, NY 12210



## **APPENDIX B**

### **SOIL BORING AND MONITORING WELL CONSTRUCTION LOGS**



# EXPERTISE YOU CAN COUNT ON

5 McCrea Hill Road  
Ballston Spa  
New York, 12020

Ph: 518-885-5383  
Fax: 518-885-5385  
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## MONITORING WELL COMPLETION / SOIL BORING LOG

Well/ Boring No: **EM MW-1**

Client: <b>Emkay Cleaners</b>	Address: <b>1048 Kinderhook Street</b>
Phone No.: _____	Location: <b>Valatie, New York</b>
Date Drilled: <b>10/30/06</b>	Logged by: <b>J. McCormick</b>
Drilling Co: <b>Aztech Tech., Inc.</b>	Driller: <b>C. DiNovo</b>
Drilling Method: <b>HSA (Dia) 4 1/4"</b>	Sampling Method: <b>Direct Push MacroCore</b>
Drilled TD: <b>16'</b> (Dia): <b>8"</b>	Sampled TD: <b>16.5'</b> (Dia): <b>2"</b>
Well TD: <b>16'</b> (Dia): <b>2"</b>	Well Type: <b>GW Monitoring Well</b>
Screen Interval: <b>(11.0-16.0)'</b>	Slot Size: <b>0.010</b> Diameter: <b>2" ID</b>
Cased Interval: <b>(0.2-11.0)'</b>	Type: <b>Sch 40 PVC</b> Diameter: <b>2" ID</b>
Sand Pack Interval: <b>(7.8-16.0)'</b>	Sand Type: <b>00</b> Wellhead Prot: <b>RB</b>
Bentonite Sealed Interval: <b>(3.0-7.8)'</b>	Bentonite Type: <b>Gran</b> Grouted Inter: <b>N/A</b>

**Site Sketch:**

(refer to Appendix A - Figure 3)

Depth (ft.)	Well Construction	Notes	Sample Recovery: PID:	Description/ Soil Classification
0		8" Road Box Concrete Pad		Asphalt
2			S: (0-4)' Rec: 1'1/4' PID: 0 ppm	~(0.5-13.5)': Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact, No odors noted (PID = 0 ppm). (0.5)'
4		Bentonite	S: (4-8)' Rec: 3'1/4' PID: 0 ppm	
6				
8		00 Sand	S: (8-12)' Rec: 1'1/4' PID: 0 ppm	
10		2" PVC Riser		
12		2" PVC Screen	S: (12-13.3)' Rec: 1'1/1.3'	Probe refusal @ ~13.3' SAND, some Gravel - DRY
14			S: (13.5-16)' Rec: 1'1/2.5' PID: 0 ppm	~(13.5-16)': Brown, Fine to Very Fine SAND, some SILT; Saturated, Soft No odors noted (PID = 0 ppm). (13.5)'
16			S: (16-16.5)' Rec: 0'1/2.5' PID: 0 ppm	SAND, some Silt - WATER BEARING ZONE (16)'
18				Auger Refusal @ ~16' Probe refusal @ ~16.5'
20				Augering Terminated @ 16' Sampling Terminated @ 16.5'
22				
24				
26				
28				
30				



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New York, 12020

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## **MONITORING WELL COMPLETION / SOIL BORING LOG**

**Well/ Boring No:** EM MW-2

Client: Emkay Cleaners Address: 1048 Kinderhook Street  
Phone No.: \_\_\_\_\_ Location: Valatie, New York  
Date Drilled: 10/30/06 Logged by: J. McCormick  
Drilling Co: Aztech Tech., Inc. Driller: C. DiNovo  
Drilling Method: HSA (Dia) 4 1/4" Sampling Method: Direct Push MacroCore  
Drilled TD: 15.0' (Dia): 8" Sampled TD: 15.0' (Dia): 2"  
Well TD: 15.0' (Dia): 2" Well Type: GW Monitoring Well  
Screen Interval: (10.0-15.0)' Slot Size: 0.010 Diameter: 2" ID  
Cased Interval: (0.2-10.0)' Type: Sch 40 PVC Diameter: 2" ID  
Sand Pack Interval: (8.0-15.0)' Sand Type: 00 Wellhead Prot: RB  
Bentonite Sealed Interval: (3.0-8.0)' Bentonite Type: Gran Grouted Inter: N/A

### **Site Sketch:**

(refer to Appendix A - Figure 3)

Depth (ft.)	Well Construction	Notes	Sample Recovery: PID:	Description/ Soil Classification
0		8" Road Box Concrete Pad	S: (0-4)' Rec: 0.5'/4' PID: 0 ppm	Asphalt ~(0.5-13)': Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact, No odors noted (PID = 0 ppm). (0.5)'
2				
4		Bentonite	S: (4-8)' Rec: 4'/4' PID: 0 ppm	
6				
8		00 Sand	S: (8-12)' Rec: 3.5'/4' PID: 0 ppm	
10		2" PVC Riser		
12		2" PVC Screen	S: (12-15)' Rec: 3'/3' PID: 0 ppm	SAND, some Gravel - DRY ~(13.5-15)': Brown, Fine to Very Fine SAND, some SILT; Saturated, Soft No odors noted (PID = 0 ppm). (13)'
14				SAND, some Silt - WATER BEARING ZONE (15)'
16				Auger and Probe refusal @ ~15'
18				Augering Terminated @ 15' Sampling Terminated @ 15'
20				
22				
24				
26				
28				
30				



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## MONITORING WELL COMPLETION / SOIL BORING LOG

Well/ Boring No: **EM MW-3**

Client: Emkay Cleaners Address: 1048 Kinderhook Street  
Phone No.: \_\_\_\_\_ Location: Valatie, New York  
Date Drilled: 04/02/07 Logged by: J. McCormick  
Drilling Co: Aztech Tech., Inc. Driller: C. DiNovo  
Drilling Method: HSA (Dia) 4 1/4" Sampling Method: Direct Push MacroCore  
Drilled TD: 13.5' (Dia): 8" Sampled TD: 12.5' (Dia): 2"  
Well TD: 13.5' (Dia): 2" Well Type: GW Monitoring Well  
Screen Interval: (9.5-13.5)' Slot Size: 0.010 Diameter: 2" ID  
Cased Interval: (0.2-9.5)' Type: Sch 40 PVC Diameter: 2" ID  
Sand Pack Interval: (8.0-13.5)' Sand Type: 00 Wellhead Prot: RB  
Bentonite Sealed Interval: (3.5-8.0)' Bentonite Type: Gran Grouted Inter: N/A

### Site Sketch:

(refer to Attachment A - Figure 4)

Depth (ft.)	Well Construction	Notes	Sample: Recovery: Blow Count:	Description/ Soil Classification
0		8" Road Box Concrete Pad  Bentonite  2" PVC Riser  00 Sand	S: (0-2)' Rec: 1.75'/2' (n/a, 3, 4, 9)	Asphalt
2			S: (2-4)' Rec: 1.75'/2' (12, 14, 16, 22)	~ (0.5-10)': Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact, No odors noted (PID = 0 ppm). (0.5)'
4			S: (4-6)' Rec: 2'/2' (15, 21, 26, 34)	
6			S: (6-8)' Rec: 1.75'/2' (30, 48, 70, 50/2)	
8				SAND, some Gravel - DRY
10		2" PVC Screen	S: (10-12)' Rec: 2'/2' (28, 28, 23, 28)	~ (10-12)': Brown, Fine to Very Fine SAND, some SILT; Saturated, Soft (10)' No odors noted (PID = 0 ppm).
12			S: (12-14)' Rec: 1.75'/2' (50/2)	SAND, some Silt - WATER BEARING ZONE (12-13.5)': Weathered Bedrock (12)'
14				Probe refusal @ ~12'; Auger refusal @ 13.5'
16				<b>Augering Terminated @ 13.5'</b> <b>Sampling Terminated @ 12'</b>
18				
20				
22				
24				
26				
28				
30				



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Ballston Spa  
New York, 12020

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Fax: 518-885-5385  
www.aztk.com

## **MONITORING WELL COMPLETION / SOIL BORING LOG**

**Well/ Boring No: EM MW-4**

Client: <u>Emkay Cleaners</u>	Address: <u>1048 Kinderhook Street</u>
Phone No.: _____	Location: <u>Valatie, New York</u>
Date Drilled: <u>04/02/07</u>	Logged by: <u>J. McCormick</u>
Drilling Co: <u>Aztech Tech., Inc.</u>	Driller: <u>C. DiNovo</u>
Drilling Method: <u>HSA</u> (Dia) <u>4 1/4"</u>	Sampling Method: <u>Direct Push MacroCore</u>
Drilled TD: <u>12.6'</u> (Dia): <u>8"</u>	Sampled TD: <u>9.7'</u> (Dia): <u>2"</u>
Well TD: <u>12.6'</u> (Dia): <u>2"</u>	Well Type: <u>GW Monitoring Well</u>
Screen Interval: <u>(9.6-12.6)'</u>	Slot Size: <u>0.010</u> Diameter: <u>2" ID</u>
Cased Interval: <u>(0.2-9.6)'</u>	Type: <u>Sch 40 PVC</u> Diameter: <u>2" ID</u>
Sand Pack Interval: <u>(8.0-12.6)'</u>	Sand Type: <u>00</u> Wellhead Prot: <u>RB</u>
Bentonite Sealed Interval: <u>(5.0-8.0)'</u>	Bentonite Type: <u>Gran</u> Grouted Inter: <u>N/A</u>

**Site Sketch:**

(refer to Attachment A - Figure 4)

Depth (ft.)	Well Construction	Notes	Sample: Recovery: Blow Count:	Description/ Soil Classification
0		8" Road Box Concrete Pad  Bentonite  2" PVC Riser  00 Sand  2" PVC Screen	S: (0-8) Rec: N/A  S: (6-8) Rec: 1.75/2' (30,48,70,50/.2)  S: (10-12) Rec: 0/2'	Asphalt
2				~(0.5-10)': Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact, No odors noted (PID = 0 ppm). (0.5)'
4				
6				
8				
10				SAND, some Gravel - DRY
12				~(10-12.6)': Brown, Fine to Very Fine SAND, some SILT and Weathered Bedrock; Saturated, Soft, No odors noted (PID = 0 ppm). (10)'
14				SAND, some Silt - WATER BEARING ZONE (12.6)'
16				Probe refusal @ ~9.7'; Auger refusal @ 12.6'
18				<b>Augering Terminated @ 12.6'</b> <b>Sampling Terminated @ 9.7'</b>
20				
22				
24				
26				
28				
30				



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## **MONITORING WELL COMPLETION / SOIL BORING LOG**

**Well/ Boring No: EM MW-5**

Client: Emkay Cleaners Address: 1048 Kinderhook Street  
Phone No.: \_\_\_\_\_ Location: Valatie, New York  
Date Drilled: 04/02/07 Logged by: J. McCormick  
Drilling Co: Aztech Tech., Inc. Driller: C. DiNovo  
Drilling Method: HSA (Dia) 4 1/4" Sampling Method: Direct Push MacroCore  
Drilled TD: 9.0' (Dia): 8" Sampled TD: 9.0' (Dia): 2"  
WellTD: 9.0' (Dia): 2" Well Type: GW Monitoring Well  
Screen Interval: (7.0-9.0)' Slot Size: 0.010 Diameter: 2" ID  
Cased Interval: (0.2-7.0)' Type: Sch 40 PVC Diameter: 2" ID  
Sand Pack Interval: (6.0-9.0)' Sand Type: 00 Wellhead Prot: RB  
Bentonite Sealed Interval: (3.0-6.0)' Bentonite Type: Gran Grouted Inter: N/A

### Site Sketch:

(refer to Attachment A - Figure 4)

Depth (ft.)	Well Construction	Notes	Sample: Recovery: Blow Count:	Description/ Soil Classification
0		8" Road Box Concrete Pad		Asphalt
2				~(0.5-7)': Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact, No odors noted (PID = 0 ppm). (0.5)'
4		2" PVC Riser Bentonite	S: (0-7) Rec: N/A	
6		00 Sand		SAND, some Gravel - DRY
8		2" PVC Screen	S: (7-9) Rec: 1.75/2' (30,48,70,50/.2)	~(7.5-9.0)': Brown, Fine to Very Fine SAND, some SILT and Weathered Bedrock; Saturated, Soft, No odors noted (PID = 0 ppm). (7)'
10			S: (9-11) Rec: 0/2'	SAND, some Silt - WATER BEARING ZONE (9)'
12				Probe refusal @ ~7.0'; Auger refusal @ 9.0'
14				<b>Augering Terminated @ 9.0'</b> <b>Sampling Terminated @ 7.0'</b>
16				
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**MONITORING WELL COMPLETION / SOIL BORING LOG**

**Well/ Boring No: EM MW-6**

Client: <b>Emkay Cleaners</b>	Address: <b>1048 Kinderhook Street</b>	<b>Site Sketch:</b>  (refer to Attachment A - Figure 4)
Phone No.: _____	Location: <b>Valatie, New York</b>	
Date Drilled: <b>04/02/07</b>	Logged by: <b>J. McCormick</b>	
Drilling Co: <b>Aztech Tech., Inc.</b>	Driller: <b>C. DiNovo</b>	
Drilling Method: <b>HSA (Dia) 4 1/4"</b>	Sampling Method: <b>Direct Push MacroCore</b>	
Drilled TD: <b>10'</b> (Dia): <b>8"</b>	Sampled TD: <b>10'</b> (Dia): <b>2"</b>	
Well TD: <b>10'</b> (Dia): <b>2"</b>	Well Type: <b>GW Monitoring Well</b>	
Screen Interval: <b>(8.0-10)'</b>	Slot Size: <b>0.010</b> Diameter: <b>2" ID</b>	
Cased Interval: <b>(0.2-8.0)'</b>	Type: <b>Sch 40 PVC</b> Diameter: <b>2" ID</b>	
Sand Pack Interval: <b>(7.0-10)'</b>	Sand Type: <b>00</b> Wellhead Prot: <b>RB</b>	
Bentonite Sealed Interval: <b>(3.0-7.0)'</b>	Bentonite Type: <b>Gran</b> Grouted Inter: <b>N/A</b>	

Depth (ft.)	Well Construction	Notes	Sample: Recovery: Blow Count:	Description/ Soil Classification
0			S: (0-10)' Rec: N/A	Asphalt
2				~(0.5-7)': Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact, No odors noted (PID = 0 ppm). (0.5)'
4				
6				
8				SAND, some Gravel - DRY
10				~(8.0-10)': Brown, Fine to Very Fine SAND, some SILT and Weathered Bedrock; Saturated, Soft, No odors noted (PID = 0 ppm). (8)'
12			S: (10-12)' Rec: 0'2" (50/2)	SAND, some Silt - WATER BEARING ZONE (10)'
14				Probe refusal @ ~10'; Auger refusal @ 10'
16				<b>Augering Terminated @ 10'</b>
18				<b>Sampling Terminated @ 10'</b>
20				
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WELL / BORING NO. **EM MW-7**

Site Name: EMKAY DRY CLEANERS Date Drilled: JANUARY 11, 2008  
 Location: 1048 KINDERHOOK STREET Drilling Co.: AZTECH TECHNOLOGIES, INC  
VALATIE, NEW YORK  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: HSA's (Dia): 4 1/4" Sampling Method: SPLIT SPOON (Dia): 2"  
 Drilled TD: 7' (Dia): 8" Sampled TD: 7' (Dia): 2"  
 Well TD: 7' (Dia): 2" Well Type: MONITORING WELL  
 Screen Interval: (5-7') Slot Size: 0.010-SLOT Diameter: 2.0-inch  
 Cased Interval: (0.5-5') Type: PVC Diameter: 2.0-inch  
 Sand Pack Interval: (4.5-7') Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (1-4.5') Type: GRANULAR Grouted Interval: N/A



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## KEY:

Bentonite 0.010-slot Screen  
 0 Sand pvc Riser  
 Concrete Gripper Cap

## SITE PLAN:

See Site Map

Depth (1"=10')	Well Construction	Sample; Recovery; Blows	PID (ppm):	Description / Soil Classification
0		S1; 2' / 2'; n/a	(0-2)' = 0	~(0.5-4)' - Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact (0.5)' No odors noted
2		S2; 2' / 2'; n/a	(2-4)' = 0	
4		S3; 2' / 2'; n/a	(4-7)' = 1.1	(4-7)' - Brown, Fine to Very Fine SAND, some Gravel and weathered Bedrock; Dry, Hard, Very Compact, No odors noted
6		S4; 1' / 1'; n/a Probe Refusal @ 7'		
8				BORING TERMINATED (7)
10				Advanced Augers to 7' and set EM MW-7
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WELL / BORING NO. **EM MW-8 / SVP-10**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
 Location: 1048 KINDERHOOK STREET  
VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: Driven Casing (Dia): 3" Sampling Method: Geoprobe (Dia): 2"  
 Drilled TD: 9' (Dia): 3" Sampled TD: 9' (Dia): 2"  
 Well TD: 9' (Dia): 2" Well Type: MONITORING WELL  
 Screen Interval: (5-9)' Slot Size: 0.010-SLOT Diameter: 2.0-inch  
 Cased Interval: (0.5-5)' Type: PVC Diameter: 2.0-inch  
 Sand Pack Interval: (4.5-9)' Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (1-4.5)' Type: GRANULAR Grouted Interval: N/A

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**KEY:**  
 Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

**SITE PLAN:**

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0		S1: (0-5)' Rec: 4/5'	(0-5)' = 0	Top Soil with gravel
1				~-(1-6)' - Brown, CLAY, some fine to very Fine SAND; Dry, Hard, Very Compact (1.0)' No odors noted
2				
3				
4				
5		S2: (5-10)' Rec: 4/5'	(5-9)' = 0	(6-9)' - Green-gray CLAY, some fine to very Fine Sand and Gravel.
6				(6-8)' Dry, Hard, Very Compact, No odors noted - weathered bedrock noted.
7				(8-9)' Wet, softer, No odors noted - weathered bedrock noted.
8				Groundwater noted at approximately 8'.
9				(9+)' - Weathered Bedrock (9)'
10				EM MW-8 BORING TERMINATED at equipment refusal at ~9'.  <b>SVP-10</b> SVP-10 was installed <10' from EM MW-8 with geoprobe sample tooling. The total depth of SVP-10 was 7'. A six-inch stainless steel screen was installed between 6.5-7'. Then nylon tubing was connected to the screen and extended above grade. A silica sand pack was placed around the screen, then the borehole was sealed with bentonite slurry.
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WELL / BORING NO. **EM MW-9 / SVP-12**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
 Location: 1048 KINDERHOOK STREET  
VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: Driven Casing (Dia): 3" Sampling Method: Geoprobe (Dia): 2"  
 Drilled TD: 6.5' (Dia): 3" Sampled TD: 6.9' (Dia): 2"  
 Well TD: 6.5' (Dia): 2" Well Type: MONITORING WELL  
 Screen Interval: (4.5-6.5)' Slot Size: 0.010-SLOT Diameter: 2.0-inch  
 Cased Interval: (0.5-4.5)' Type: PVC Diameter: 2.0-inch  
 Sand Pack Interval: (3.5-6.5)' Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (1-3.5)' Type: GRANULAR Grouted Interval: N/A

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**KEY:**  
 Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

**SITE PLAN:**

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0		S1: (0-5)' Rec: 4/5'	(0-5)' = 0	Top Soil with gravel
1				~ (1-6.9)' - Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact (1.0)' No odors noted
2				
3				(5-6.9)' - As Above with weathered bedrock noted.
4				
5				
6		S2: (5-10)' Rec: 1.9/5'	(5-6.9)' = 0	(6.9+) - Weathered Bedrock (6.9)'
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EM MW-9 BORING TERMINATED at equipment refusal at ~6.5'.

**SVP-12**

SVP-12 was installed <10' from EM MW-9 with geoprobe sample tooling. The total depth of SVP-12 was 5'. A six-inch stainless steel screen was installed between 4.5-5'. Then nylon tubing was connected to the screen and extended above grade. A silica sand pack was placed around the screen, then the borehole was sealed with bentonite slurry.

WELL / BORING NO. **EM MW-10 / SVP-13**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
 Location: 1048 KINDERHOOK STREET  
VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: Driven Casing (Dia): 3" Sampling Method: Geoprobe (Dia): 2"  
 Drilled TD: 6.5' (Dia): 3" Sampled TD: 7' (Dia): 2"  
 Well TD: 6.5' (Dia): 2" Well Type: MONITORING WELL  
 Screen Interval: (4.5-6.5)' Slot Size: 0.010-SLOT Diameter: 2.0-inch  
 Cased Interval: (0.5-4.5)' Type: PVC Diameter: 2.0-inch  
 Sand Pack Interval: (4-6.5)' Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (1-4)' Type: GRANULAR Grouted Interval: N/A

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**KEY:**  
 Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

**SITE PLAN:**

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0		<u>S1: (0-5)'</u> <u>Rec: 5/5'</u>	<u>(0-5)' = 0</u>	Top Soil with gravel
1				~(1-3)' - Brown, medium SAND; Dry. (1.0)' No odors noted
2				~(3-6)' - Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact. No odors noted
3				
4				
5				
6		<u>S2: (5-10)'</u> <u>Rec: 2/5'</u>	<u>(5-7)' = 0</u>	(6+) - Weathered Bedrock (6.0)'
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EM MW-10 BORING TERMINATED at equipment refusal at ~6.5'.

**SVP-13**

SVP-13 was installed in the backfill of municipal storm sewer line <10' from EM MW-10 with geoprobe sample tooling. The total depth of SVP-13 was 2'. A six-inch stainless steel screen was installed between 1.5-2'. Then nylon tubing was connected to the screen and extended above grade. A silica sand pack was placed around the screen, then the borehole was sealed with bentonite slurry.

# WELL / BORING NO. **EM MW-11 / SVP-6**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
 Location: 1048 KINDERHOOK STREET  
VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: Driven Casing (Dia): 3" Sampling Method: Geoprobe (Dia): 2"  
 Drilled TD: 11.5' (Dia): 3" Sampled TD: 13.5' (Dia): 2"  
 Well TD: 11.5' (Dia): 2" Well Type: MONITORING WELL  
 Screen Interval: (6.5-11.5)' Slot Size: 0.010-SLOT Diameter: 2.0-inch  
 Cased Interval: (0.5-6.5)' Type: PVC Diameter: 2.0-inch  
 Sand Pack Interval: (6-11.5)' Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (0.5-6)' Type: GRANULAR Grouted Interval: N/A



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**KEY:**  
 Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

## SITE PLAN:

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0				Top Soil with gravel
1		S1: (0-3)' Rec: 3/3'	(0-3)' = 0	~(1-6)' - Brown, CLAY, some to little fine to very Fine Sand; Dry, Hard, Very Compact (1.0)
2				No odors noted
3				~(3-6)' - As above - black with organics - No odors noted.
4		S2: (3-8.5)' Rec: 5/5.5'	(3-8.5)' = 0	~(6-12)' - Brown, medium Sand; Hard, Very Compact
5				
6				
7		S2: (8.5-13.5)' Rec: 5/5'	(8.5-13.5)' = 0	Groundwater noted at approximately 8.5'.
8				
9				
10				~(12-13.5)' - Brown, till-like, poorly sorted SAND, CLAY and GRAVEL - Dry, Hard.
11				Weathered Bedrock Noted
12				
13				(13.5+)' - Weathered Bedrock (13.5)'
14				
15				
16				
17				
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20				
21				
22				EM MW-11 BORING TERMINATED at equipment refusal at ~11.5'.
23				
24				<b>SVP-6</b>
25				SVP-6 was installed <10' from EM MW-11 with geoprobe sample tooling. The total depth of SVP-6 was 7'. A six-inch stainless steel screen was installed between 6.5-7'. Then nylon tubing was connected to the screen and extened above grade. A silica sand pack was placed around the screen, then the borehole was sealed with bentonite slurry.
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WELL / BORING NO. **SVP-1**

Site Name: EMKAY DRY CLEANERS Date Drilled: JANUARY 11, 2008  
 Location: 1058 KINDERHOOK STREET  
VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: DIRECT PUSH (Dia): 2" Sampling Method: SPLIT SPOON (Dia): 2"  
 Drilled TD: 6.8' (Dia): 2" Sampled TD: 6.8' (Dia): 2"  
 Well TD: 6.5' (Dia): 3/8" Well Type: SOIL VAPOR POINT  
 Screen Interval: (6-6.5') Slot Size: STAINLESS STEEL Diameter: 3/8-inch  
 Cased Interval: (0-6') Type: Nylon Tubing Diameter: 3/8-inch  
 Sand Pack Interval: (5.7-6.8') Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (0.5-5.7') Type: SLURRY Grouted Interval: N/A

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**KEY:**

Bentonite Stainless Steel Screen  
 0 Sand 3/8" nylon tubing  
 Concrete Beeswax

**SITE PLAN:**

See Site Map

Depth (1"=10')	Well Construction	Sample; Recovery; Blows	PID (ppm):	Description / Soil Classification
0		S1; 2' / 2'; n/a	(0-2)' = 0	~(0.5-4)' - Brown, Fine to Very Fine SAND, some Gravel; Dry, Hard, Very Compact (0.5)'
2		S2; 2' / 2'; n/a	(2-4)' = 0	No odors noted
4		S3; 2' / 2'; n/a	(4-6.8)' = 1.7	(4-6.8)' - Brown, Fine to Very Fine SAND, some Gravel and weathered Bedrock; Dry, Hard, Very Compact, No odors noted.
6		S4; 0.5' / 0.8'; n/a Refusal @ 6.8'		BORING TERMINATED (6.8)'
8				Backfilled boring to 6.5' and set SVP-1
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WELL / BORING NO. **SVP-2**

Site Name: EMKAY DRY CLEANERS Date Drilled: JANUARY 11, 2008  
 Location: 1058 KINDERHOOK STREET Drilling Co.: AZTECH TECHNOLOGIES, INC  
VALATIE, NEW YORK  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK  
 Drilling Method: DIRECT PUSH (Dia): 2" Sampling Method: SPLIT SPOON (Dia): 2"  
 Drilled TD: 5' (Dia): 2" Sampled TD: 5' (Dia): 2"  
 Well TD: 5' (Dia): 3/8" Well Type: SOIL VAPOR POINT  
 Screen Interval: (4.5-5)' Slot Size: STAINLESS STEEL Diameter: 3/8-inch  
 Cased Interval: (0-4.5)' Type: Nylon Tubing Diameter: 3/8-inch  
 Sand Pack Interval: (4.2-5)' Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (0.5-4.2)' Type: SLURRY Grouted Interval: N/A

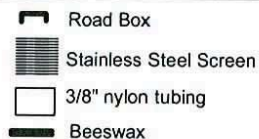
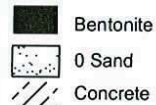


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## KEY:



## SITE PLAN:

See Site Map

Depth (1"=10')	Well Construction	Sample; Recovery; Blows	PID (ppm):	Description / Soil Classification
0		S1; 2' / 2'; n/a	(0-2)' = 0	(0.5-5)' - Brown, Fine to Very Fine SAND, some Gravel and weathered Bedrock; Dry, Hard, Very Compact, No odors noted. (0.5)'
2		S2; 2' / 2'; n/a	(2-4)' = 0	
4		S3; 0.5' / 1'; n/a	(4-5)' = 0	
6				BORING TERMINATED (5)'
8				Set SVP-1 @ 5'
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WELL / BORING NO. **SVP-3**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
1048 KINDERHOOK STREET  
 Location: VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC  
 Client: MIKE DELLA ROCCA Driller: M. HARRINGTON  
 Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK

Drilling Method: Geoprobe Tooling (Dia): 2" Sampling Method: Geoprobe (Dia): 2"  
 Drilled TD: 4' (Dia): 2" Sampled TD: 5' (Dia): 2"  
 Well TD: 4' (Dia): 3/8" Well Type: SOIL VAPOR POINT  
 Screen Interval: (3.5-4)' Slot Size: N/A Diameter: \_\_\_\_\_  
 Cased Interval: (0.5-3.5)' Type: Nylon Tubing Diameter: 3/8-inch  
 Sand Pack Interval: (3-4)' Type: 0 SAND Wellhead Prot: ROAD BOX  
 Bentonite Seal Interval: (1-3)' Type: Bentonite Slurry Grouted Interval: N/A

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**KEY:**  
 Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

**SITE PLAN:**

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0		S1: (0-5)' Rec: 5/5'	(0-5)' = 0	Top Soil with gravel
1				~(1-5)' - Brown, medium SAND, SILT and CLAY, little gravel; Dry, poorly sorted. (1.0)' No odors noted
2				
3				
4				(5)' - Equipment refusal.
5		S2: (5-10)' Rec: N/A	N/A	(5+) - Weathered Bedrock (5.0)'
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WELL / BORING NO. **SVP-4**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
 1048 KINDERHOOK STREET  
 Location: VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC

Client: MIKE DELLA ROCCA Driller: M. HARRINGTON

Phone No.: Logged by: J. MCCORMICK

Drilling Method: Geoprobe Tooling (Dia): 2" Sampling Method: Geoprobe (Dia): 2"

Drilled TD: 2.5' (Dia): 2" Sampled TD: N/A (Dia): N/A

Well TD: 2.5' (Dia): 3/8" Well Type: SOIL VAPOR POINT

Screen Interval: (2-2.5') Slot Size: N/A Diameter:

Cased Interval: (0-2') Type: Nylon Tubing Diameter: 3/8-inch

Sand Pack Interval: (1.5-2.5') Type: 0 SAND Wellhead Prot: ROAD BOX

Bentonite Seal Interval: (0.5-1.5') Type: Bentonite Slurry Grouted Interval: N/A



EXPERTISE YOU CAN COUNT ON

5 McCreia Hill Road Phone: 518-885-5383  
 Ballston Spa Fax: 518-885-5385  
 New York 12020 www.aztechtech.com

## KEY:

- Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

## SITE PLAN:

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0		N/A	N/A	0.5-2.5' - Stone Backfill around Municipal Water Main
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

**SVP-4**

SVP-4 was installed in the backfill of municipal water line with geoprobe sample tooling.

WELL / BORING NO. **SVP-8**

Site Name: EMKAY DRY CLEANERS Date Drilled: February 18, 2009  
1048 KINDERHOOK STREET  
 Location: VALATIE, NEW YORK Drilling Co.: AZTECH TECHNOLOGIES, INC

Client: MIKE DELLA ROCCA Driller: M. HARRINGTON

Phone No.: \_\_\_\_\_ Logged by: J. MCCORMICK

Drilling Method: Geoprobe Tooling (Dia): 2" Sampling Method: Geoprobe (Dia): 2"

Drilled TD: 5' (Dia): 2" Sampled TD: 6' (Dia): 2"

Well TD: 5' (Dia): 3/8" Well Type: SOIL VAPOR POINT

Screen Interval: (4.5-5)' Slot Size: N/A Diameter: \_\_\_\_\_

Cased Interval: (0.5-4.5)' Type: Nylon Tubing Diameter: 3/8-inch

Sand Pack Interval: (4-5)' Type: 0 SAND Wellhead Prot: ROAD BOX

Bentonite Seal Interval: (1-4)' Type: Bentonite Slurry Grouted Interval: N/A



**EXPERTISE YOU CAN COUNT ON**

5 McCreia Hill Road Phone: 518-885-5383  
 Ballston Spa Fax: 518-885-5385  
 New York 12020 www.aztechtech.com

**KEY:**

- Bentonite  
 0.010-slot Screen  
 0 Sand  
 Concrete  
 pvc Riser  
 Gripper Cap

**SITE PLAN:**

See Site Map

Depth (1"=20')	Well Construction	Sample: Recovery: Blows	PID (ppm):	Description / Soil Classification
0		<u>S1: (0-5)'</u> <u>Rec: 5/5'</u>	(0-5)' = 0	Top Soil with gravel
1				~ (1-5.5)' - Brown, medium SAND, SILT and CLAY, little gravel; Dry, poorly sorted. (1.0)' No odors noted
2				
3				
4				
5		<u>S2: (5-10)'</u> <u>Rec: 0.5/5'</u>	(5-6)' = 0	(5.5+) - Weathered Bedrock (5.5)'
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
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29				
30				

## **APPENDIX C**

### **SUMMARY TABLES**

# SUMMARY OF GROUNDWATER ELEVATIONS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Site No. 411016

WELL DESIGNATION	MW-1	MW-2	MW-3	EM MW-1	EM MW-2	EM MW-3	EM MW-4
TOP OF CASING	100.64	100.16	100.14	99.87	98.43	92.78	90.69
TOP OF SCREEN	95.14	94.66	94.64	88.87	88.43	83.28	81.09
BOTTOM OF WELL	85.14	84.66	84.64	83.87	83.43	79.28	78.09
MEASUREMENT DATE	GROUNDWATER ELEVATIONS*						
11/13/06	94.08	91.45	93.59	93.81	90.95	NI	NI
01/30/07	92.63	90.18	91.45	91.41	89.29	NI	NI
04/06/07	95.67	93.28	94.87	94.55	91.86	86.79	84.16
08/03/07	NG	88.01	88.77	88.59	86.95	83.65	81.80
01/21/08	93.85	91.69	93.01	93.02	90.56	85.84	83.10
02/25/09	NG	NG	NG	NG	89.92	85.36	82.90
10/13/10	NG	NG	NG	93.37	90.21	85.55	82.81
01/28/11	NG	NG	NG	90.13	88.04	84.43	81.27
04/07/11	NG	NG	NG	93.20	90.62	86.03	83.28
07/27/11	NG	NG	NG	89.69	87.77	84.29	82.06
10/25/11	NG	NG	NG	91.98	89.94	85.75	82.81
01/10/12	NG	NG	NG	91.86	89.83	85.66	82.82
04/12/12	NG	NG	NG	88.93	87.07	83.85	81.96
07/03/12	NG	NG	NG	88.72	86.97	83.81	81.97
10/18/12	NG	NG	NG	90.69	88.85	85.09	82.54
01/09/13	NG	NG	NG	90.92	88.74	84.88	82.48
04/16/13	NG	NG	NG	NG	89.71	85.53	82.89
07/30/13	NG	NG	NG	92.75	90.25	85.76	83.00
10/29/13	NG	NG	NG	91.87	89.27	85.03	82.51
01/30/14	NG	NG	NG	91.32	89.52	85.59	82.95
04/10/14	NG	NG	NG	93.88	91.29	86.47	83.80
08/05/14	NG	NG	NG	90.27	88.39	84.72	82.48
10/21/14	NG	NG	NG	87.95	85.18	82.60	81.25
<b>Notes</b> *Groundwater and top of casing elevations in feet relative to site bench mark set at 100.00 feet at utility pole located near well EM MW-2 NG = Not Gauged NI = Well not installed on that date NL = Well not located							

WELL DESIGNATION	EM MW-5	EM MW-6	EM MW-7	EM MW-8	EM MW-9	EM MW-10	EM MW-11
TOP OF CASING	98.98	99.06	83.81	95.12	87.08	75.87	99.98
TOP OF SCREEN	91.98	91.06	78.81	90.12	82.58	71.37	93.48
BOTTOM OF WELL	89.98	89.06	76.81	86.12	80.58	69.37	88.48
MEASUREMENT DATE	GROUNDWATER ELEVATIONS*						
11/13/06	NI	NI	NI	NI	NI	NI	NI
01/30/07	NI	NI	NI	NI	NI	NI	NI
04/06/07	94.36	93.24	NI	NI	NI	NI	NI
08/03/07	90.58	89.67	NI	NI	NI	NI	NI
01/21/08	93.17	91.81	Dry @ 7'	NI	NI	NI	NI
02/25/09	92.55	91.09	Dry @ 7'	88.75	Dry @ 6.5'	Dry @ 6.5'	90.77
10/13/10	93.52	92.56	NG	Dry @ 5.25'	Dry @ 5.5'	Dry @ 5.3'	NG
01/28/11	Dry @ 8.8'	Dry @ 9.3'	NG	NG	Dry @ 5.5'	Dry @ 5.3'	NG
04/07/11	93.52	92.02	NG	Dry @ 5.4'	Dry @ 5.5'	Dry @ 5.3'	Dry @ 8.0'
07/27/11	90.52	Dry @ 9.3'	NG	Dry @ 5.4'	Dry @ 5.5'	Dry @ 5.3'	Destroyed
10/25/11	92.22	90.92	NG	NL	Dry @ 5.5'	Dry @ 5.3'	Destroyed
01/10/12	92.04	90.66	NG	Dry @ 5.4'	Dry @ 5.5'	Dry @ 5.3'	Destroyed
04/12/12	Dry @ 8.8'	Dry @ 9.3'	NG	Dry @ 5.4'	Dry @ 5.5'	Dry @ 5.3'	Destroyed
07/03/12	Dry @ 8.8'	Dry @ 9.3'	NG	Dry @ 5.4'	Dry @ 5.5'	Dry @ 5.3'	Destroyed
10/18/12	91.52	90.09	NG	NL	Dry @ 5.5'	Dry @ 5.3'	Destroyed
01/09/13	91.47	89.93	NG	NL	Dry @ 5.5'	NL	Destroyed
04/16/13	92.61	91.05	NG	NL	Dry @ 5.5'	Dry @ 5.3'	Destroyed
07/30/13	93.23	91.98	NG	Dry @ 5.4'	NG	Dry @ 5.3'	Destroyed
10/29/13	92.46	91.15	NG	Dry @ 5.4'	NG	Dry @ 5.3'	Destroyed
01/30/14	91.65	90.46	NG	NL	NL	NL	Destroyed
04/10/14	93.98	92.64	NG	Dry @ 5.4'	Dry @ 5.5'	NL	Destroyed
08/05/14	90.93	89.52	NG	Dry @ 5.4'	Dry @ 5.5'	NL	Destroyed
10/21/14	90.28	Dry @ 9.3'	NG	Dry @ 5.4'	Dry @ 5.5'	NL	Destroyed
<b>Notes</b> *Groundwater and top of casing elevations in feet relative to site bench mark set at 100.00 feet at utility pole located near well EM MW-2 NG = Not Gauged NI = Well not installed on that date NL = Well not located							

# LABORATORY ANALYTICAL RESULTS - SOIL

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Site No. 411016

VOC	Soil Cleanup Objective		SAMPLE LOCATION						
	Unrestricted Use	Restricted Residential Use	EM MW-1 10/30/06	EM MW-2 10/30/06	EM MW-3 04/02/07	EM MW-4 04/02/07	EM MW-5 04/02/07	EM MW-6 04/02/07	EM MW-7 01/11/08
Tetrachloroethene	1,300	19,000	97.9	26.0	8.29	17.4	2.52	3.50	4.04
Trichloroethene	470	21,000	28	< 5.23	< 2.07	< 2.12	< 2.25	< 2.14	< 2.12
1,2,4-Trimethylbenzene	3,600	52,000	< 5.47	< 5.23	< 2.07	< 2.12	< 2.25	< 2.14	2.52
2-Butanone	120	100,000	< 5.47	< 5.23	< 2.07	< 2.12	< 2.25	< 2.14	< 2.12
Acetone	50	100,000	< 27.4	< 26.1	47	56	68	80	< 10.6
Mixed Xylenes	260	100,000	< 5.47	< 5.23	< 2.07	< 2.12	< 2.25	< 2.14	2.79
Toluene	700	100,000	< 5.47	< 5.23	2.98	2.52	4.24	5.02	< 2.12
<b>TOTAL VOCs</b>			126	26	59	76	75	88	9.4

Notes:  
Soil Samples analyzed for the full list of VOCs by EPA Method 8260  
Compounds not included in the list of VOCs hereon were not identified in any of the soil samples analyzed.  
Soil Cleanup Objectives for unrestricted use and restricted residential use as given in 6NYCRR Part 375 tables 375-6.8(a) and 375-6.8(b), respectively.  
All concentrations reported in parts per billion (ppb or ug/kg)  
Concentrations in bold are in excess of the unrestricted use criteria but, are below the residential use criteria as identified in 6NYCRR Part 375.

VOC	Soil Cleanup Objective		SAMPLE LOCATION						
	Unrestricted Use	Restricted Residential Use	SVP-1 01/11/08	EM MW-8 / SVP-10 02/18/09	EM MW-9 / SVP-12 02/18/09	EM MW-10 02/18/09	EM MW-11 / SVP-6 02/18/09	SVP-3 02/18/09	SVP-8 02/18/09
Tetrachloroethene	1,300	19,000	< 2.17	< 6.94	< 5.02	< 6.99	< 5.62	< 6.37	< 8.33
Trichloroethene	470	21,000	< 2.17	< 6.95	< 5.02	< 6.99	< 5.62	< 6.37	< 8.33
1,2,4-Trimethylbenzene	3,600	52,000	< 2.17	< 6.95	< 5.02	< 6.99	< 5.62	< 6.37	< 8.33
2-Butanone	120	100,000	< 2.17	12	< 5.02	< 6.99	< 5.62	< 6.37	< 8.33
Acetone	50	100,000	< 10.9	107	< 25.1	< 34.9	< 28.1	35	< 41.6
Mixed Xylenes	260	100,000	< 2.17	< 6.95	< 5.02	< 6.99	< 5.62	< 6.37	< 8.33
Toluene	700	100,000	< 2.17	< 6.95	< 5.02	< 6.99	< 5.62	< 6.37	< 8.33
<b>TOTAL VOC</b>			< 10.9	119	< 25.1	< 34.9	< 28.1	35	< 41.6

Notes:  
Soil Samples analyzed for the full list of VOCs by EPA Method 8260  
Compounds not included in the list of VOCs hereon were not identified in any of the soil samples analyzed.  
Soil Cleanup Objectives for unrestricted use and restricted residential use as given in 6NYCRR Part 375 tables 375-6.8(a) and 375-6.8(b), respectively.  
All concentrations reported in parts per billion (ppb or ug/kg)  
Concentrations in bold are in excess of the unrestricted use criteria but, are below the residential use criteria as identified in 6NYCRR Part 375.

# SUMMARY OF HISTORIC GROUNDWATER ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Site No. 411016

WELL ID/DATE	COMPOUND				
	PCE	TCE	VC	Cis-1,2 DCE	Total VOC
<b>NYSDEC Standard* (ug/l)</b>	<b>5.0</b>	<b>5.0</b>	<b>2.0</b>	<b>5.0</b>	<b>-</b>
<b>MW-2</b>					
11/13/06	Initial sampling event by Emkay (historically this well was sampled by Stewart's)				
11/13/06	3.7	< 1.0	< 1.0	< 1.0	3.7
04/06/07	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0
1/21/08 - 10/29/13	Not Sampled				
<b>MW-3</b>					
11/13/06	Initial sampling event by Emkay (historically this well was sampled by Stewart's)				
11/13/06	2.8	< 1.0	< 1.0	< 1.0	2.8
04/06/07	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0
1/21/08 - 10/29/13	Not Sampled				
<b>EM MW-1</b>					
10/30/06	Monitoring Well Installed				
11/13/06	108	30	< 1.0	7.0	145
04/06/07	127	21	< 1.0	4.8	152
01/21/08	67	14	< 1.0	2.9	84
02/25/09	Not Sampled				
10/13/10	107	16	< 1.0	3.9	128
01/28/11	65	8.3	< 1.0	3.7	79
04/07/11	68	4.0	< 1.0	1.4	73
07/27/11	107	5.1	< 1.0	2.2	114
10/25/11	182	< 5.0	< 5.0	< 5.0	182
01/10/12	62	5.0	< 1.0	2.3	69
04/18/12	590	< 10	< 10	< 10	590
07/03/12	749	< 10	< 10	< 10	749
10/18/12	141	< 20	< 20	< 20	141
01/09/13	96	4.7	< 2.0	< 2.0	101
04/16/13	Not Sampled - Well Not Accessible				
07/30/13	52	2.4	< 1.0	< 1.0	56
10/29/13	62	2.7	< 1.0	< 1.0	66
<b>EM MW-2</b>					
10/30/06	Monitoring Well Installed				
11/13/06	302	1.9	< 1.0	< 1.0	304
04/06/07	300	1.0	< 1.0	< 1.0	301
01/21/08	297	1.6	< 1.0	< 1.0	299
02/25/09	383	< 5.0	< 5.0	< 5.0	383
10/13/10	426	2.1	< 1.0	< 1.0	430
01/28/11	369	< 5.0	< 5.0	< 5.0	369
04/07/11	Not Sampled - Car Parked Over Well				
07/27/11	416	1.1	< 1.0	< 1.0	417
10/25/11	347	< 10	< 10	< 10	347
01/10/12	265	< 5.0	< 5.0	< 5.0	265
04/18/12	662	< 10	< 10	< 10	662
07/03/12	576	< 10	< 10	< 10	576
10/18/12	366	< 10	< 10	< 10	366
01/09/13	264	< 10	< 10	< 10	264
04/16/13	136	1.1	< 1.0	< 1.0	137
07/30/13	295	1.0	< 1.0	< 1.0	296
10/29/13	178	< 5.0	< 5.0	< 5.0	178
<b>EM MW-3</b>					
04/02/07	Monitoring Well Installed				
04/06/07	112	1.4	< 1.0	< 1.0	113
01/21/08	143	1.7	< 1.0	< 1.0	145

# SUMMARY OF HISTORIC GROUNDWATER ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Site No. 411016

WELL ID/DATE	COMPOUND				
	PCE	TCE	VC	Cis-1,2 DCE	Total VOC
<b>NYSDEC Standard* (ug/l)</b>	<b>5.0</b>	<b>5.0</b>	<b>2.0</b>	<b>5.0</b>	<b>-</b>
<b>EM MW-3 (continued)</b>					
02/25/09	197	< 1.0	< 1.0	< 1.0	197
10/13/10	163	1.8	< 1.0	< 1.0	166
01/28/11	198	< 5.0	< 5.0	< 5.0	198
04/07/11	142	1.3	< 1.0	< 1.0	143
07/27/11	186	1.6	< 1.0	< 1.0	188
10/25/11	208	< 5.0	< 5.0	< 5.0	208
01/10/12	181	< 5.0	< 5.0	< 5.0	181
04/18/12	232	< 5.0	< 5.0	< 5.0	232
07/03/12	197	< 5.0	< 5.0	< 5.0	197
10/18/12	148	1.2	< 1.0	< 1.0	149
01/09/13	146	< 2.0	< 2.0	< 2.0	146
04/16/13	85	1.3	< 1.0	< 1.0	87
07/30/13	335	1.5	< 1.0	< 1.0	338
10/29/13	158	< 5.0	< 5.0	< 5.0	158
<b>EM MW-4</b>					
04/02/07	Monitoring Well Installed				
04/06/07	37	< 1.0	< 1.0	< 1.0	37
01/21/08	99	2.2	< 1.0	< 1.0	102
02/25/09	121	1.5	< 1.0	< 1.0	123
10/13/10	118	2.4	< 1.0	< 1.0	120
01/28/11	120	2.5	< 1.0	< 1.0	123
04/07/11	85	1.8	< 1.0	< 1.0	87
07/27/11	127	2.5	< 1.0	< 1.0	130
10/25/11	165	< 5.0	< 5.0	< 5.0	165
01/10/12	136	< 5.0	< 5.0	< 5.0	136
04/18/12	116	< 5.0	< 5.0	< 5.0	116
07/03/12	145	< 5.0	< 5.0	< 5.0	145
10/18/12	111	1.9	< 1.0	< 1.0	113
01/09/13	100	2.4	< 2.0	< 2.0	102
04/16/13	52	1.5	< 1.0	< 1.0	54
07/30/13	107	2.0	< 1.0	< 1.0	109
10/29/13	97	< 2.0	< 2.0	< 2.0	97
<b>EM MW-5</b>					
04/02/07	Monitoring Well Installed				
04/06/07	3.5	< 1.0	< 1.0	< 1.0	3.5
01/21/08	4.5	< 1.0	< 1.0	< 1.0	4.5
02/25/09	3.8	< 1.0	< 1.0	< 1.0	3.8
10/13/10	8.4	< 1.0	< 1.0	< 1.0	8.4
01/28/11	Well Dry				
04/07/11	3.6	< 1.0	< 1.0	< 1.0	3.6
07/27/11	7.3	< 1.0	< 1.0	< 1.0	7.3
10/25/11	4.3	< 1.0	< 1.0	< 1.0	4.3
01/10/12	3.2	< 1.0	< 1.0	< 1.0	3.2
04/18/12	Well Dry				
07/03/12	Well Dry				
10/18/12	8.3	< 1.0	< 1.0	< 1.0	8.3
01/09/13	3.6	< 1.0	< 1.0	< 1.0	3.6
04/16/13	2.9	< 1.0	< 1.0	< 1.0	9.1
07/30/13	2.9	< 1.0	< 1.0	< 1.0	4.1
10/29/13	1.7	< 1.0	< 1.0	< 1.0	3.0

# SUMMARY OF HISTORIC GROUNDWATER ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Site No. 411016

WELL ID/DATE	COMPOUND				
	PCE	TCE	VC	Cis-1,2 DCE	Total VOC
NYSDEC Standard* (ug/l)	5.0	5.0	2.0	5.0	-
EM MW-6					
04/02/07	Monitoring Well Installed				
04/06/07	76	< 1.0	< 1.0	< 1.0	76
01/21/08	88	< 1.0	< 1.0	< 1.0	88
02/25/09	75	< 1.0	< 1.0	< 1.0	75
10/13/10	63	< 1.0	< 1.0	< 1.0	63
01/28/11	Well Dry				
04/07/11	60	< 1.0	< 1.0	< 1.0	60
07/27/11	Well Dry				
10/25/11	88	< 1.0	< 1.0	< 1.0	88
01/10/12	69	< 1.0	< 1.0	< 1.0	69
04/18/12	Well Dry				
07/03/12	Well Dry				
10/18/12	83	< 1.0	< 1.0	< 1.0	83
01/09/13	18	< 1.0	< 1.0	< 1.0	18
04/16/13	50	< 1.0	< 1.0	< 1.0	51
07/30/13	62	< 1.0	< 1.0	< 1.0	63
10/29/13	71	< 1.0	< 1.0	< 1.0	73
EM MW-7					
01/11/08	Monitoring Well Installed				
01/11/08 - 10/29/13	Not Sampled - Well Dry				
EM MW-8					
02/18/09	Monitoring Well Installed				
02/25/09	2.3	< 1.0	< 1.0	< 1.0	2.3
2/26/09 - 10/29/13	Not Sampled - Well Dry				
EM MW-9					
02/18/09	Monitoring Well Installed				
2/18/09 - 10/29/13	Not Sampled - Well Dry				
EM MW-10					
02/18/09	Monitoring Well Installed				
2/18/09 - 10/29/13	Not Sampled - Well Dry				
EM MW-11					
02/18/09	Monitoring Well Installed				
02/25/09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2/26/09 - 10/29/13	Not Sampled - Well Not Located				
Notes:					
All concentrations presented in micrograms per liter (ug/l)					
* NYSDEC Standard for class GA groundwater given in 6NYCRR Part 703.5 Table 1.					
Concentrations in bold are in excess of their respective Standard for class GA groundwater.					
All samples analyzed for the full list of volatile organic compounds by EPA Method 8260					
Total VOC = Sum of all VOCs identified in that sample					
Abbreviations:					
PCE = Tetrachloroethene		Cis 1,2-DCE = Cis-1,2-dichloroethene			
TCE = Trichloroethene		VC = Vinyl Chloride			

# VAPOR / AIR LABORATORY ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

AIR / VAPOR SAMPLING LOCATION									
VOCs by EPA Method 1015									
DATE SAMPLED	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07
BUSINESS NAME	SANDWICH SHOP				EMKAY CLEANERS		RESTAURANT		HAIR SALON/BUSINESS OFFICE
TO15 COMPOUND LIST	SS-SW-1 (Sub-slab @ Subway)	IA - SW-1 (Indoor Air @ Subway)	SS-EM-1 (Sub-slab @ Emkay)	IA-EM-1 (Indoor Air @ Emkay)	SS-IP-1 (Sub-slab @ Italian Pl)	IA-IP-1 (Indoor Air @ Italian Pl)	SS-EV-1 (Sub-slab @ Envogue)	IA-EV-1 (Indoor Air @ Envogue)	OA-1 (Outdoor Air)
1,1,1-Trichloroethane	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.832
1,1,2,2-Tetrachloroethane	<1.0	<1.05	<1.0	<1.05	<1.0	<1.05	<1.0	<1.05	<1.05
1,1,2-Trichloroethane	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.832
1,1-Dichloroethane	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.617
1,1-Dichloroethene	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.605
1,2,4-Trichlorobenzene	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.13
1,2,4-Trimethylbenzene	9.3	2.85	45	2.95	7.5	3.40	5.0	1.55	1.40
1,2-Dibromoethane	<1.2	<1.17	<1.2	<1.17	<1.2	<1.17	<1.2	<1.17	<1.17
1,2-Dichlorobenzene	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.917
1,2-Dichloroethane	1.2	<0.617	1.5	<0.617	<0.62	<0.617	0.82	<0.617	<0.617
1,2-Dichloropropane	<0.70	<0.705	<0.70	<0.705	<0.70	<0.705	<0.70	<0.705	<0.705
1,3,5-Trimethylbenzene	2.6	1.05	14	0.899	3.8	1.40	2.9	0.700	<0.750
1,3-butadiene	<0.34	<0.337	<0.34	<0.337	<0.34	<0.337	<0.34	<0.337	<0.337
1,3-Dichlorobenzene	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.917
1,4-Dichlorobenzene	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.917
1,4-Dioxane	<1.1	<1.10	<1.1	<1.10	<1.1	<1.10	<1.1	<1.10	<1.10
2,2,4-trimethylpentane	2.6	<0.712	1.3	<0.712	0.90	0.665	1.6	0.807	<0.712
4-ethyltoluene	4.5	1.20	25	0.899	5.9	1.20	5.9	0.550	<0.750
Acetone	750	19.8	690	44.8	47	42.7	380	45.6	18.8
Allyl chloride	<0.48	<0.477	<0.48	<0.477	<0.48	<0.477	<0.48	<0.477	<0.477
Benzene	3.0	0.779	6.0	1.20	4.4	1.07	2.4	0.909	<0.877
Benzyl chloride	<0.88	<0.877	<0.88	<0.877	<0.88	<0.877	<0.88	<0.877	<0.877
Bromodichloromethane	<1.0	<1.02	<1.0	<1.02	<1.0	<1.02	<1.0	<1.02	<1.02
Bromoforn	<1.6	<1.58	<1.6	<1.58	<1.6	<1.58	<1.6	<1.58	<1.58
Bromomethane	<0.59	<0.592	<0.59	<0.592	<0.59	<0.592	<0.59	<0.592	<0.592
Carbon disulfide	0.95	<0.475	0.57	<0.475	<0.47	<0.475	0.66	<0.475	<0.592
Carbon tetrachloride	<0.96	0.384	<0.96	0.512	<0.96	0.448	<0.96	0.448	0.512
Chlorobenzene	<0.70	<0.702	<0.70	<0.702	<0.70	<0.702	<0.70	<0.702	<0.702
Chloroethane	<0.40	<0.402	<0.40	<0.402	<0.40	<0.402	<0.40	<0.402	<0.402
Chloroform	0.50	<0.744	1.5	<0.744	0.84	0.744	0.69	<0.744	<0.744
Chloromethane	<0.31	1.43	<0.31	<0.315	<0.31	1.64	<0.31	1.22	<0.315
cis-1,2-Dichloroethane	<0.60	<0.604	<0.60	<0.604	1.3	<0.604	<0.60	<0.604	<0.604
cis-1,3-Dichloropropene	<0.69	<0.692	<0.69	<0.692	<0.69	<0.692	<0.69	<0.692	<0.692
Cyclohexane	11	<0.525	5.9	<0.525	6.1	<0.525	2.0	<0.525	<0.525
Dibromochloromethane	<1.3	<1.30	<1.3	<1.30	<1.3	<1.30	<1.3	<1.30	<1.30
Ethyl acetate	8.8	9.16	5.4	1.58	4.8	19.8	7.3	36.6	<0.916
Ethylbenzene	8.7	1.68	7.8	0.574	11	1.06	9.1	0.794	0.441
Freon 11	1.1	1.14	1.4	1.71	1.0	1.26	0.91	1.26	1.14
Freon 113	<1.2	<1.17	<1.2	<1.17	<1.2	<1.17	<1.2	<1.17	<1.17
Freon 114	<1.1	<1.07	<1.1	<1.07	<1.1	<1.07	<1.1	<1.07	<1.07
Freon 12	33	2.31	6.1	2.61	2.0	2.61	1.8	2.21	<1.07
Heptane	4.8	0.791	4.2	0.542	3.2	3.67	4.4	0.542	<0.625
Hexachloro-1,3-butadiene	<1.6	<1.63	<1.6	<1.63	<1.6	<1.63	<1.6	<1.63	<1.63
Hexane	7.5	1.07	<0.54	<0.537	2.3	2.79	<0.54	0.896	<0.375
Isopropyl alcohol	15	14.2	23	216	<0.37	<0.375	<0.37	30.2	<0.375
m&p-Xylene	18	6.97	13	2.38	21	2.60	17	2.43	1.15
Methyl Butyl Ketone	<1.2	<1.25	<1.2	<1.25	<1.2	<1.25	<1.2	<1.25	<1.25
Methyl Ethyl Ketone	13	2.61	24	276	3.9	4.50	<0.90	5.28	0.630
Methyl Isobutyl Ketone	1.7	<1.25	1.7	34.6	0.87	<1.25	1.8	<1.25	<1.25
Methyl tert-butyl ether	<0.55	<0.550	<0.55	<0.550	<0.55	<0.550	<0.55	<0.550	<0.550
Methylene chloride	87	0.812	24	0.777	2.0	0.671	18	0.600	0.636
o-Xylene	6.5	5.16	8.9	1.02	9.0	1.50	6.8	1.02	0.530
Propylene	<0.26	<0.262	<0.26	<0.262	<0.26	<0.262	<0.26	<0.262	<0.262

VAPOR / AIR LABORATORY ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

AIR / VAPOR SAMPLING LOCATION									
VOCs by EPA Method T015	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07
DATE SAMPLED	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07	03/05/07
BUSINESS NAME	SANDWICH SHOP		EMKAY CLEANERS		RESTAURANT		HAIR SALON/BUSINESS OFFICE		
TO15 COMPOUND LIST	SS-SW-1 (Sub-slab @ Subway)	IA - SW-1 (Indoor Air @ Subway)	SS-EM-1 (Sub-slab @ Emkay)	IA-EM-1 (Indoor Air @ Emkay)	SS-IP-1 (Sub-slab @ Italian Pl)	IA-IP-1 (Indoor Air @ Italian Pl)	SS-EV-1 (Sub-slab @ Envogue)	IA-EV-1 (Indoor Air @ Envogue)	OA-1 (Outdoor Air)
Styrene	9.0	2.77	9.7	1.69	12	2.86	9.5	1.17	0.823
Tetrachloroethylene	13	1.31	110	35.3	560	3.86	12	4.48	1.45
Tetrahydrofuran		<0.450	<0.45	0.420	4.3	1.20	6.6	<0.450	<0.450
Toluene	37	7.47	56	7.93	62	7.66	33	8.43	7.32
trans-1,2-Dichloroethene	<0.60	<0.604	<0.60	<0.604	<0.60	<0.604	<0.60	<0.604	<0.604
trans-1,3-Dichloropropene	<0.69	<0.692	<0.69	<0.692	<0.69	<0.692	<0.69	<0.692	<0.692
Trichloroethene	<0.82	0.655	59	1.560	23	1.04	<0.82	2.68	<0.218
Vinyl acetate	<0.54	<0.537	<0.54	<0.537	<0.54	<0.537	<0.54	<0.537	<0.537
Vinyl Bromide	<0.67	<0.667	<0.67	<0.667	<0.67	<0.667	<0.67	<0.667	<0.667
Vinyl chloride	<0.39	<0.390	<0.39	<0.390	<0.39	<0.390	<0.39	<0.390	<0.390
TOTAL VOC	1,063	86	1,145	2,194	800	120	529	151	39
All concentrations reported in ug/m <sup>3</sup> All samples analyzed by EPA Method TO15									

# VAPOR / AIR LABORATORY ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

VOCs by EPA Method T015		INDOOR VAPOR INTRUSION SAMPLING										SOIL VAPOR POINTS (SVP)	
DATE SAMPLED	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	01/21/08
BUSINESS NAME		RESTAURANT										NYSDOT / VOV ROWs	
TO15 COMPOUND LIST		EMKAY CLEANERS										SVP-1 (NYSDOT ROW)	SVP-2 (Village of Valatie ROW)
	(SS-EM-1)	SS-EM-2 (Sub-slab @ Emkay)	(IA-EM-1)	IA-EM-2 (Indoor Air @ Emkay)	(SS-IP-1)	SS-IP-2 (Sub-slab @ Italian Pl)	(IA-IP-1)	IA-IP-2 (Indoor Air @ Italian Pl)	(OA-1)	OA-2 (Outdoor Air)			
1,1,1-Trichloroethane	<0.83	1.0	<0.832	<0.832	<0.83	<0.83	<0.832	<0.832	<0.832	<0.832	<0.83	<0.83	<0.83
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.05	1.05	<1.0	<1.0	<1.05	<1.05	<1.05	<1.05	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<0.83	<0.83	<0.832	<0.832	<0.83	<0.83	<0.832	<0.832	<0.832	<0.832	<0.83	<0.83	<0.83
1,1-Dichloroethane	<0.62	<0.62	<0.617	<0.617	<0.62	<0.62	<0.617	<0.617	<0.617	<0.617	<0.62	<0.62	<0.62
1,1-Dichloroethene	<0.60	<0.60	<0.605	<0.605	<0.60	<0.60	<0.605	<0.605	<0.605	<0.605	<0.60	<0.60	<0.60
1,2,4-Trichlorobenzene	<1.1	<1.1	<1.13	<1.13	<1.1	<1.1	<1.13	<1.13	<1.13	<1.13	<1.1	<1.1	<1.1
1,2,4-Trimethylbenzene	45	16	2.95	4.55	7.5	13	3.40	2.60	1.40	2.40	4.9	4.9	1.5
1,2-Dibromochloroethane	<1.2	<1.2	<1.17	<1.17	<1.2	<1.2	<1.17	<1.17	<1.17	<1.17	<1.2	<1.2	<1.2
1,2-Dichlorobenzene	<0.92	<0.92	<0.917	<0.917	<0.92	<0.92	<0.917	<0.917	<0.917	<0.917	<0.92	<0.92	<0.92
1,2-Dichloroethane	1.5	1.3	<0.617	<0.617	<0.62	<0.62	<0.617	<0.617	<0.617	<0.617	<0.62	<0.62	<0.62
1,2-Dichloropropane	<0.70	<0.70	<0.705	<0.705	<0.70	<0.70	<0.705	<0.705	<0.705	<0.705	<0.70	<0.70	<0.70
1,3,5-Trimethylbenzene	14	6.1	0.899	1.80	3.8	5.1	1.40	2.40	<0.750	0.899	3.1	3.1	0.70
1,3-butadiene	<0.34	<0.34	<0.337	<0.337	<0.34	<0.34	<0.337	<0.337	<0.337	<0.337	<0.34	<0.34	<0.34
1,3-Dichlorobenzene	<0.92	<0.92	<0.917	<0.917	<0.92	<0.92	<0.917	<0.917	<0.917	<0.917	<0.92	<0.92	<0.92
1,4-Dichlorobenzene	<0.92	2.7	<0.917	<0.917	<0.92	1.5	<0.917	<0.917	<0.917	<0.917	<0.92	<0.92	<0.92
1,4-Dioxane	<1.1	<1.1	<1.10	<1.10	<1.1	<1.1	<1.10	<1.10	<1.10	<1.10	<1.1	<1.1	<1.1
2,2,4-trimethylpentane	1.3	1.5	<0.712	0.712	0.90	1.1	0.665	0.712	<0.712	0.807	94	94	1.0
4-ethyltoluene	25	7.5	0.899	1.45	5.9	5.3	1.20	1.15	<0.750	0.999	2.3	2.3	0.70
Acetone	690	68	44.8	18.1	47	120	42.7	<0.477	18.8	14.6	57	57	21
Allyl chloride	<0.48	<0.48	<0.477	<0.477	<0.48	<0.48	<0.477	<0.477	<0.477	<0.477	<0.48	<0.48	<0.48
Benzene	<0.88	<0.88	<0.877	<0.877	<0.88	<0.88	<0.877	<0.877	<0.877	<0.877	<0.88	<0.88	<0.88
Benzyl chloride	<1.0	<1.0	<1.02	<1.02	<1.0	<1.0	<1.02	<1.02	<1.02	<1.02	<1.0	<1.0	<1.0
Bromodichloromethane	<1.6	<1.6	<1.58	<1.58	<1.6	<1.6	<1.58	<1.58	<1.58	<1.58	<1.6	<1.6	<1.6
Bromochloromethane	<0.59	<0.59	<0.592	<0.592	<0.59	<0.59	<0.592	<0.592	<0.592	<0.592	<0.59	<0.59	<0.59
Carbon disulfide	0.57	0.76	<0.475	<0.475	<0.47	0.44	<0.475	0.348	<0.475	<0.475	140	140	2.8
Carbon tetrachloride	<0.96	0.77	0.512	0.831	<0.96	0.90	0.448	0.703	0.512	0.831	<0.96	<0.96	0.90
Chlorobenzene	<0.70	<0.70	<0.702	<0.702	<0.70	<0.70	<0.702	<0.702	<0.702	<0.702	<0.70	<0.70	<0.70
Chloroethane	<0.40	<0.40	<0.402	<0.402	<0.40	<0.40	<0.402	<0.402	<0.402	<0.402	<0.40	<0.40	<0.40
Chloroform	1.5	2.8	<0.744	3.47	0.84	0.69	0.744	1.94	<0.744	<0.744	<0.74	<0.74	<0.74
Chloromethane	<0.31	<0.31	<0.315	<0.315	<0.31	<0.31	1.64	<0.315	<0.315	<0.315	<0.31	<0.31	<0.31
cis-1,2-Dichloroethene	<0.60	4.2	<0.604	<0.604	1.3	3.6	<0.604	<0.604	<0.604	<0.604	<0.60	<0.60	<0.60
cis-1,3-Dichloropropene	<0.69	<0.69	<0.692	<0.692	<0.69	<0.69	<0.692	<0.692	<0.692	<0.692	<0.69	<0.69	<0.69
Cyclohexane	5.9	<0.52	<0.525	<0.525	6.1	<0.52	<0.525	<0.525	<0.525	0.490	22	22	<0.52
Dibromochloromethane	<1.3	<1.3	<1.30	<1.30	<1.3	<1.3	<1.30	<1.30	<1.30	<1.30	<1.3	<1.3	<1.3
Ethyl acetate	5.4	15	1.58	3.52	4.8	25	19.8	24.2	<0.916	<0.916	<0.92	<0.92	<0.92
Ethylbenzene	7.8	16	0.574	1.28	11	12	1.06	11.5	0.441	1.15	9.0	9.0	1.9
Freon 11	1.4	2.5	1.26	2.00	1.0	2.5	1.71	2.28	1.14	2.00	2.9	2.9	2.2
Freon 113	<1.2	0.93	<1.17	0.857	<1.2	0.93	<1.17	0.857	<1.17	0.779	11	11	<1.2
Freon 114	<1.1	<1.1	<1.07	2.56	<1.1	8.7	<1.07	8.67	<1.07	<1.07	<1.1	<1.1	<1.1
Freon 12	6.1	83	2.61	3.92	2.0	4.3	2.61	3.87	2.21	3.92	<0.75	<0.75	<0.75
Heptane	4.2	13	0.542	<0.625	3.2	8.9	3.67	7.41	<0.625	0.958	55	55	1.4
Hexachloro-1,3-butadiene	<1.6	<1.6	<1.63	<1.63	<1.6	<1.6	<1.63	<1.63	<1.63	<1.63	<1.6	<1.6	<1.6
Hexane	<0.54	<0.54	<0.537	<0.537	2.3	<0.54	2.79	1.72	0.896	1.50	170	170	<0.54
Isopropyl alcohol	23	120	216	37.5	<0.37	37	<0.375	<0.375	<0.375	<0.375	<0.37	<0.37	<0.37
m&p-Xylene	13	43	2.38	4.37	21	30	2.60	45.90	1.15	3.22	26	26	6.5
Methyl Butyl Ketone	<1.2	<1.2	<1.25	<1.25	<1.2	<1.2	<1.25	<1.25	<1.25	<1.25	<1.2	<1.2	<1.2
Methyl Ethyl Ketone	24	130	276	13.5	3.9	75	4.50	4.08	0.630	<0.899	<0.90	<0.90	1.3

# VAPOR / AIR LABORATORY ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

INDOOR VAPOR INTRUSION SAMPLING										SOIL VAPOR POINTS (SVP)	
VOCs by EPA Method T015	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	01/21/08
RESTAURANT										NYSDOT / VOV ROWs	
BUSINESS NAME	EMKAY CLEANERS					OUTDOOR AIR					
T015 COMPOUND LIST	(SS-EM-1) (Sub-slab @ Emkay)	SS-EM-2	(IA-EM-1) (Indoor Air @ Emkay)	IA-EM-2	(SS-IP-1) (Sub-slab @ Italian Pl)	SS-IP-2	(IA-IP-1) (Indoor Air @ Italian Pl)	IA-IP-2	(OA-1) (Outdoor Air)	OA-2	(NYSDOT ROW) (Village of Valatie ROW)
VOCs by EPA Method T015	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	03/05/07	01/21/08	01/21/08
RESTAURANT										NYSDOT / VOV ROWs	
BUSINESS NAME	EMKAY CLEANERS					OUTDOOR AIR					
T015 COMPOUND LIST	(SS-EM-1) (Sub-slab @ Emkay)	SS-EM-2	(IA-EM-1) (Indoor Air @ Emkay)	IA-EM-2	(SS-IP-1) (Sub-slab @ Italian Pl)	SS-IP-2	(IA-IP-1) (Indoor Air @ Italian Pl)	IA-IP-2	(OA-1) (Outdoor Air)	OA-2	(NYSDOT ROW) (Village of Valatie ROW)
Methyl Isobutyl Ketone	1.7	8.1	34.6	<1.25	0.87	<1.2	<1.25	<1.25	<1.25	0.916	54
Methyl tert-butyl ether	<0.55	<0.55	<0.550	<0.550	<0.55	<0.55	<0.550	<0.550	<0.550	<0.550	<0.55
Methylene chloride	24	20	0.777	0.953	2.0	59	0.671	1.27	0.636	1.27	6.0
o-Xylene	8.9	14	1.02	1.72	9.0	11	1.50	18.50	0.530	1.19	7.6
Propylene	<0.26	<0.26	<0.262	<0.262	<0.26	<0.26	<0.262	<0.262	<0.262	<0.262	<0.26
Styrene	9.7	6.9	1.69	<0.649	12	5.4	2.86	<0.649	0.823	<0.649	<0.65
Tetrachloroethylene	110	550	35.3	3.17	560	8.5	3.86	2.76	1.45	0.827	700
Tetrahydrofuran	<0.45	28	0.420	<0.450	4.3	71	1.20	<0.450	<0.450	<0.450	<0.45
Toluene	56	93	7.93	8.12	62	80	7.66	9.00	7.32	5.90	78
trans-1,2-Dichloroethene	<0.60	<0.60	<0.604	<0.604	<0.60	<0.60	<0.604	<0.604	<0.604	<0.604	<0.60
trans-1,3-Dichloropropene	<0.69	<0.69	<0.692	<0.692	<0.69	<0.69	<0.692	<0.692	<0.692	<0.692	<0.69
Trichloroethene	59	59	1.560	3.99	23	31	1.04	0.655	<0.218	0.601	8.3
Vinyl acetate	<0.54	<0.54	<0.537	<0.537	<0.54	<0.54	<0.537	<0.537	<0.537	<0.537	<0.54
Vinyl Bromide	<0.67	<0.67	<0.667	<0.667	<0.67	<0.67	<0.667	<0.667	<0.667	<0.667	<0.67
Vinyl chloride	<0.39	<0.39	<0.390	<0.104	<0.39	<0.39	<0.390	<0.104	<0.390	<0.104	<0.39
TOTAL VOC	40,291	40,788	41,340	39,589	39,946	40,104	39,266	39,635	39,185	39,515	40,942
All concentrations reported in ug/m <sup>3</sup>											
All samples analyzed by EPA Method T015											

# VAPOR / AIR LABORATORY ANALYTICAL RESULTS - EMKAY CLEANERS PLAZA

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

VOCs by EPA Method T015		SOIL VAPOR INTRUSION SAMPLING																US POST OFFICE	
DATE SAMPLED		03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	04/17/09	04/17/09	
BUSINESS NAME		EMKAY CLEANERS														OUTDOOR AIR		SS-PO-1 (Sub-slab)	
TO15 COMPOUND LIST		RESTAURANT														IA-IP-3 (Indoor Air @ Italian Pl)		IA-PO-1 (Indoor Air)	
	(SS-EM-1)   (SS-EM-2)   (SS-EM-3) (Sub-slab @ Emkay)	(IA-EM-1)   (IA-EM-2)   (IA-EM-3) (Indoor Air @ Emkay)	(SS-IP-1)   (SS-IP-2)   (SS-IP-3) (Sub-slab @ Italian Pl)	(IA-IP-1)   (IA-IP-2)   (IA-IP-3) (Indoor Air @ Italian Pl)	(OA-1)   (OA-2)   (OA-3) (Outdoor Air @ Emkay Plaza)	(SS-PO-1)   (SS-PO-2)   (SS-PO-3) (Sub-slab)	(IA-PO-1)   (IA-PO-2)   (IA-PO-3) (Indoor Air)	(OA-PO-1)   (OA-PO-2)   (OA-PO-3) (Outdoor Air)	(SS-PO-1)   (SS-PO-2)   (SS-PO-3) (Sub-slab)	(IA-PO-1)   (IA-PO-2)   (IA-PO-3) (Indoor Air)	(OA-PO-1)   (OA-PO-2)   (OA-PO-3) (Outdoor Air)	(SS-PO-1)   (SS-PO-2)   (SS-PO-3) (Sub-slab)	(IA-PO-1)   (IA-PO-2)   (IA-PO-3) (Indoor Air)	(OA-PO-1)   (OA-PO-2)   (OA-PO-3) (Outdoor Air)	(SS-PO-1)   (SS-PO-2)   (SS-PO-3) (Sub-slab)	(IA-PO-1)   (IA-PO-2)   (IA-PO-3) (Indoor Air)	(OA-PO-1)   (OA-PO-2)   (OA-PO-3) (Outdoor Air)		
1,1,1-Trichloroethane	<0.83 <1.0	1.8 <1.0	<0.832 <1.05	<0.83 <1.0	<0.832 <1.05	<0.83 <1.0	<0.832 <1.05	<0.83 <1.05	<0.832 <1.05	<0.83 <1.0	<0.832 <1.05	<0.83 <1.0	<0.832 <1.05	<0.83 <1.0	<0.832 <1.05	<0.83 <1.0	<0.83 <1.0	<0.83 <1.0	
1,1,2,2-Tetrachloroethane	<0.83	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.832	<0.83	<0.83	<0.83	
1,1,2-Trichloroethane	<0.62	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.62	<0.62	
1,1-Dichloroethane	<0.60	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.60	<0.605	<0.60	<0.60	<0.60	
1,2,4-Trichlorobenzene	<1.1	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.1	<1.13	<1.1	<1.1	<1.1	
1,2,4-Trimethylbenzene	45	16	2.95	4.55	3.4	7.5	13	2.1	3.40	2.60	5.1	3.40	2.60	5.1	3.40	2.60	5.1	3.40	
1,2-Dibromoethane	<1.2	<1.2	<1.17	<1.17	<1.2	<1.2	<1.17	<1.17	<1.2	<1.2	<1.17	<1.17	<1.2	<1.2	<1.17	<1.17	<1.2	<1.2	
1,2-Dichlorobenzene	<0.92	<0.92	<0.917	<0.917	<0.92	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.92	<0.92	
1,2-Dichloroethane	1.5	1.3	<0.62	<0.617	<0.62	<0.62	<0.62	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.617	<0.62	<0.62	<0.62	
1,2-Dichloropropane	<0.70	<0.70	<0.705	<0.705	<0.70	<0.70	<0.705	<0.70	<0.705	<0.70	<0.705	<0.70	<0.705	<0.70	<0.705	<0.70	<0.70	<0.70	
1,3,5-Trimethylbenzene	14	6.1	1.7	0.899	1.80	3.8	5.1	1.6	1.40	2.40	3.0	1.40	2.40	3.0	1.40	2.40	3.0	1.40	
1,3-Butadiene	<0.34	<0.34	<0.337	<0.337	<0.34	<0.34	<0.337	<0.34	<0.337	<0.34	<0.337	<0.34	<0.337	<0.34	<0.337	<0.34	<0.34	<0.34	
1,3-Dichlorobenzene	<0.92	<0.92	<0.917	<0.917	<0.92	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.92	<0.92	
1,4-Dichlorobenzene	<0.92	2.7	1.3	<0.917	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.917	<0.92	<0.92	<0.92	
1,4-Dioxane	<1.1	<1.1	<1.10	<1.10	<1.1	<1.1	<1.10	<1.1	<1.10	<1.1	<1.10	<1.1	<1.10	<1.1	<1.10	<1.1	<1.1	<1.1	
2,2,4-trimethylpentane	1.3	1.5	<0.71	<0.712	<0.71	0.90	1.1	<0.71	0.665	0.712	0.57	0.665	0.712	0.57	0.665	0.712	0.57	0.665	
4-ethyltoluene	25	7.5	1.4	0.899	1.45	5.9	5.3	0.75	1.20	1.15	1.6	1.20	1.15	1.6	1.20	1.15	1.6	1.20	
Acetone	690	68	37	44.8	18.1	32	120	32	42.7	<0.724	41	42.7	<0.724	41	18.8	14.6	23	120	
Allyl chloride	<0.48	<0.48	<0.477	<0.477	<0.48	<0.48	<0.477	<0.48	<0.477	<0.477	<0.48	<0.477	<0.477	<0.48	<0.477	<0.48	<0.48	<0.48	
Benzene	6.0	5.2	0.78	1.20	1.82	1.7	1.3	1.4	10.7	14.9	3.5	10.7	14.9	3.5	10.7	14.9	3.5	10.7	
Benzyl chloride	<0.88	<0.88	<0.877	<0.877	<0.88	<0.88	<0.877	<0.88	<0.877	<0.877	<0.88	<0.877	<0.877	<0.88	<0.877	<0.88	<0.88	<0.88	
Bromodichloromethane	<1.0	<1.0	<1.02	<1.02	<1.0	<1.0	<1.02	<1.0	<1.02	<1.02	<1.0	<1.02	<1.02	<1.0	<1.02	<1.0	<1.0	<1.0	
Bromofrom	<1.6	<1.6	<1.58	<1.58	<1.6	<1.6	<1.58	<1.6	<1.58	<1.58	<1.6	<1.58	<1.58	<1.6	<1.58	<1.6	<1.6	<1.6	
Bromomethane	<0.59	<0.59	<0.592	<0.592	<0.59	<0.59	<0.592	<0.59	<0.592	<0.592	<0.59	<0.592	<0.592	<0.59	<0.592	<0.59	<0.59	<0.59	
Carbon disulfide	0.57	0.76	<0.47	<0.475	<0.47	<0.47	<0.475	<0.47	<0.475	<0.475	0.348	<0.475	<0.475	<0.47	<0.475	<0.47	<0.47	<0.47	
Carbon tetrachloride	<0.96	0.77	0.64	0.512	0.831	1.3	0.90	1.0	0.448	0.703	0.64	0.448	0.703	0.64	0.512	0.831	0.96	<0.96	
Chlorobenzene	<0.70	<0.70	<0.702	<0.702	<0.70	<0.70	<0.702	<0.70	<0.702	<0.702	<0.70	<0.702	<0.702	<0.70	<0.702	<0.70	<0.70	<0.70	
Chloroethane	<0.40	<0.40	<0.402	<0.402	<0.40	<0.40	<0.402	<0.40	<0.402	<0.402	<0.40	<0.402	<0.402	<0.40	<0.402	<0.40	<0.40	<0.40	
Chloroform	1.5	2.8	6.3	0.744	3.47	9.0	0.84	0.69	0.744	1.94	2.2	0.744	1.94	2.2	0.744	1.94	2.2	0.744	
Chloromethane	<0.31	<0.31	<0.315	<0.315	<0.31	<0.31	<0.315	<0.31	<0.315	<0.315	3.1	<0.315	<0.315	<0.31	<0.315	<0.31	<0.31	<0.31	
cis-1,2-Dichloroethene	<0.60	4.2	<0.60	<0.604	<0.60	1.3	3.6	1.1	<0.604	<0.604	<0.60	<0.604	<0.604	<0.60	<0.604	<0.60	<0.60	<0.60	
cis-1,3-Dichloropropene	<0.69	<0.69	<0.692	<0.692	<0.69	<0.69	<0.692	<0.69	<0.692	<0.692	<0.69	<0.692	<0.692	<0.69	<0.692	<0.69	<0.69	<0.69	
Cyclohexane	5.9	<0.52	<0.52	<0.525	<0.52	6.1	<0.52	<0.52	<0.525	<0.525	1.3	<0.525	<0.525	<0.52	0.490	<0.52	<0.52	<0.52	
Dibromochloromethane	<1.3	<1.3	<1.30	<1.30	<1.3	<1.3	<1.30	<1.3	<1.30	<1.30	<1.3	<1.30	<1.30	<1.3	<1.30	<1.3	<1.3	<1.3	
Ethyl acetate	5.4	15	<0.92	1.58	3.52	4.1	4.8	25	1.06	11.5	1.7	1.06	11.5	1.7	0.441	<0.916	<0.92	1.9	
Ethylbenzene	7.8	16	1.4	0.574	1.28	0.97	11	12	1.9	1.9	1.9	1.9	1.9	1.9	0.441	1.15	0.57	2.6	
Freon 11	1.4	2.5	3.2	1.26	2.00	2.7	1.0	2.5	3.7	2.28	3.1	1.71	2.28	3.1	1.14	2.00	2.9	2.5	
Freon 113	<1.2	0.93	1.0	<1.17	0.857	1.2	<1.2	0.93	<1.17	0.857	1.1	<1.17	0.857	1.1	<1.17	0.779	1.2	<1.2	
Freon 114	<1.1	<1.1	<1.1	<1.07	2.56	<1.1	<1.1	8.7	<1.07	8.67	<1.1	<1.07	8.67	<1.1	<1.07	<1.07	<1.1	<1.1	
Freon 12	6.1	83	42	2.61	3.92	3.9	2.0	4.3	2.61	3.87	3.9	2.61	3.87	3.9	2.21	3.92	4.6	<0.75	
Heptane	4.2	13	1.1	0.542	<0.625	1.3	3.2	8.9	4.4	3.67	7.41	3.67	7.41	18	<0.625	0.958	0.92	3.0	
Hexachloro-1,3-butadiene	<1.6	<1.6	<1.63	<1.63	<1.6	<1.6	<1.63	<1.6	<1.63	<1.63	<1.6	<1.63	<1.63	<1.6	<1.63	<1.6	<1.6	<1.6	
Hexane	<0.54	<0.54	<0.537	<0.537	<0.54	2.3	<0.54	<0.54	2.79	1.72	<0.54	2.79	1.72	<0.54	0.896	1.50	<0.54	<0.54	
Isopropyl alcohol	23	120	44	216	37.5	240	<0.37	37	<0.375	<0.375	<0.37	<0.375	<0.375	<0.37	<0.375	<0.375	<0.37	11	
m&p-Xylene	13	43	4.4	2.38	4.37	3.3	30	5.8	2.60	45.9	4.7	2.60	45.9	4.7	1.15	3.22	1.5	8.4	
Methyl Butyl Ketone	<1.2	<1.2	<1.25	<1.25	<1.2	<1.2	<1.25	<1.2	<1.25	<1.25	<1.2	<1.25	<1.25	<1.2	<1.25	&lt			

VAPOR / AIR LABORATORY ANALYTICAL RESULTS - EMKAY CLEANERS PLAZA

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

SOIL VAPOR INTRUSION SAMPLING													
VOCs by EPA Method T015	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	04/17/09
DATE SAMPLED	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	03/05/07	01/21/08	02/25/09	04/17/09
BUSINESS NAME	EMKAY CLEANERS												
TO15 COMPOUND LIST	(SS-EM-1)   (Sub-slab @ Emkay)	(SS-EM-2)   (Sub-slab @ Emkay)	SS-EM-3	(IA-EM-1)   (Indoor Air @ Emkay)	IA-EM-2	IA-EM-3	(SS-IP-1)   (Sub-slab @ Italian Pl)	(SS-IP-2)   (Sub-slab @ Italian Pl)	SS-IP-3	(IA-IP-1)   (Indoor Air @ Italian Pl)	(IA-IP-2)   (Indoor Air @ Italian Pl)	IA-IP-3	(OA-1)   (Outdoor Air @ Emkay Plaza)
	(OA-2)   (Outdoor Air @ Emkay Plaza)	OA-3	SS-PO-1 (Sub-slab)	IA-PO-1 (Indoor Air)									
Propylene	<0.26	<0.26	<0.26	<0.262	<0.262	<0.262	<0.26	<0.26	<0.26	<0.262	<0.262	<0.26	<0.26
Styrene	9.7	6.9	2.9	1.69	<0.649	<0.649	12	5.4	1.9	2.86	<0.649	0.823	<0.65
Tetrachloroethylene	110	550	22,000	35.3	3.17	3.17	560	8.5	140	3.86	2.76	1.7	13
Tetrahydrofuran	<0.45	28	1.7	0.420	<0.450	<0.45	4.3	7.1	<0.45	1.20	<0.450	<0.45	<0.45
Toluene	56	93	6.5	7.93	8.12	8.12	62	80	23	7.66	9.00	24	37
trans-1,2-Dichloroethene	<0.60	<0.60	<0.60	<0.604	<0.604	<0.60	<0.60	<0.60	<0.60	<0.604	<0.604	<0.60	<0.60
trans-1,3-Dichloropropene	<0.69	<0.69	<0.69	<0.692	<0.692	<0.69	<0.69	<0.69	<0.69	<0.692	<0.692	<0.69	<0.69
Trichloroethene	59	59	40	1,560	3.99	3.99	23	31	6.3	1.04	0.655	<0.22	0.66
Vinyl acetate	<0.54	<0.54	<0.54	<0.537	<0.537	<0.54	<0.54	<0.54	<0.54	<0.537	<0.537	<0.54	<0.54
Vinyl Bromide	<0.67	<0.67	0.93	<0.667	<0.667	<0.67	<0.67	<0.67	1.1	<0.667	<0.667	0.89	<0.67
Vinyl chloride	<0.39	<0.39	<0.39	<0.390	<0.104	<0.10	<0.39	<0.39	<0.39	<0.390	<0.104	<0.10	<0.39
TOTAL VOC	1,145	1,320	22,213	2,194	121	567	800	636	262	120	167	183	390
All concentrations reported in ug/m <sup>3</sup>													
All samples analyzed by EPA Method TO15													

# SOIL VAPOR POINT LABORATORY ANALYTICAL RESULTS

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

VOCs by EPA Method T015	SOIL VAPOR POINT SAMPLING									
DATE SAMPLED	01/21/08	02/25/09	01/21/08	02/25/09	02/25/09	02/25/09	02/25/09	02/25/09	02/25/09	02/25/09
TO15 COMPOUND LIST	SVP-1	SVP-2	SVP-3	SVP-4	SVP-6	SVP-8	SVP-10	SVP-12	SVP-13	
1,1,1-Trichloroethane	<0.83	<0.83	<0.83	<0.83	0.67	1.1	<0.83	<0.83	<0.83	<0.83
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
1,1-Dichloroethane	<0.62	<0.62	<0.62	<0.62	<0.62	<0.62	<0.62	<0.62	<0.62	<0.62
1,1-Dichloroethene	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
1,2,4-Trichlorobenzene	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
1,2,4-Trimethylbenzene	4.9	1.7	1.5	5.7	5.5	3.8	5.4	5.6	1.4	1.1
1,2-Dibromoethane	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dichlorobenzene	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
1,2-Dichloroethane	<<0.62	0.66	<0.62	0.91	1.6	3.3	<0.62	<0.62	<0.62	<0.62
1,2-Dichloropropane	<0.70	<0.70	<0.70	<0.70	<0.70	1.9	<0.70	<0.70	<0.70	<0.70
1,3,5-Trimethylbenzene	3.1	0.55	0.70	2.6	2.1	1.2	1.6	2.1	0.60	<0.75
1,3-butadiene	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
1,3-Dichlorobenzene	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
1,4-Dichlorobenzene	<0.92	0.73	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
1,4-Dioxane	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
2,2,4-trimethylpentane	94	0.52	1.0	17	<0.71	1.0	15	53	<0.71	<0.71
4-ethyltoluene	2.3	0.70	0.70	2.7	2.3	2.4	2.1	3.0	0.85	<0.75
Acetone	57	32	21	460	220	32	30	42	11	18
Allyl chloride	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48
Benzene	23	3.6	2.5	3.4	1.6	3.6	5.1	5.7	1.1	1.3
Benzyl chloride	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.6	1.2	<1.6	<1.6	2.0	5.1	<1.6	<1.6	<1.6	<1.6
Bromomethane	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
Carbon disulfide	140	0.63	2.8	29	8.9	1.6	19	<0.47	<0.47	<0.47
Carbon tetrachloride	<0.96	1.1	0.90	<0.96	<0.96	0.90	0.70	<0.96	<0.96	0.70
Chlorobenzene	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Chloroethane	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Chloroform	<0.74	<0.74	<0.74	<0.74	1.1	2.3	0.89	<0.74	<0.74	<0.74
Chloromethane	<0.31	1.8	<0.31	<0.31	<0.31	<0.31	<0.31	0.57	<0.31	1.3
cis-1,2-Dichloroethene	<0.60	<0.60	<0.60	<0.60	2.0	<0.60	<0.60	12	<0.60	<0.60
cis-1,3-Dichloropropene	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69
Cyclohexane	22	<0.52	<0.52	7.7	<0.52	1.0	5.0	7.3	<0.52	<0.52
Dibromochloromethane	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Ethyl acetate	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
Ethylbenzene	9.0	0.93	1.9	5.0	6.3	3.6	4.5	7.4	1.0	0.57
Freon 11	2.9	2.6	2.2	2.8	2.6	8.2	2.1	1.4	1.8	1.9
Freon 113	11	1.5	<1.2	2.7	1.1	1.5	1.1	0.93	1.0	1.0
Freon 114	<1.1	<1.1	<1.1	6.3	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Freon 12	<0.75	4.8	<0.75	4.0	4.4	4.7	3.2	3.0	3.5	3.6
Heptane	55	<0.62	1.4	26	8.2	4.0	10	62	0.92	0.67
Hexachloro-1,3-butadiene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Hexane	170	2.5	<0.54	37	<0.54	4.7	24	70	<0.54	<0.54
Isopropyl alcohol	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	3.8	2.3
m&p-Xylene	26	1.9	6.5	8.1	18	6.3	11	12	1.9	1.1
Methyl Butyl Ketone	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Methyl Ethyl Ketone	<0.90	2.6	1.3	36	20	20	25	41	6.6	5.4
Methyl Isobutyl Ketone	54	1.4	1.4	15	5.1	3.0	7.8	45	0.75	0.58
Methyl tert-butyl ether	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55
Methylene chloride	6.0	1.0	1.9	2.4	0.74	1.1	0.56	0.71	0.67	0.71
o-Xylene	7.6	0.88	2.6	3.4	5.7	2.7	3.4	3.6	0.84	0.44
Propylene	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Styrene	<0.65	0.82	0.82	2.8	3.2	3.4	1.2	1.7	<0.65	<0.65
Tetrachloroethylene	700	6.0	0.76	1.3	9.1	4.8	2.4	3.3	27	<1.0
Tetrahydrofuran	<0.45	<0.45	<0.45	58	17	41	43	54	12	8.4
Toluene	78	6.1	4.2	11	12	22	23	21	3.2	2.6
trans-1,2-Dichloroethene	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
trans-1,3-Dichloropropene	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69
Trichloroethene	8.3	<0.82	0.71	<0.82	0.82	<0.82	<0.82	3.2	<0.82	<0.82
Vinyl acetate	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Vinyl Bromide	<0.67	1.2	<0.67	1.2	1.6	1.5	<0.67	<0.67	<0.67	<0.67
Vinyl chloride	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
TOTAL VOC	1,474	79	57	752	364	194	247	462	80	52

All concentrations reported in ug/m<sup>3</sup>

All samples analyzed by EPA Method TO15

**VAPOR / AIR LABORATORY ANALYTICAL RESULTS - RESIDENCES**

Valatie Village Plaza  
1048 Kinderhook Street (NYS Route 9)  
Valatie, New York  
Spill No. 06-06889

VOCs by EPA Method T015	SOIL VAPOR INTRUSION SAMPLING - OFFSITE RESIDENCES					
DATE SAMPLED	02/21/09	02/21/09	02/21/09	02/21/09	02/21/09	02/21/09
LOCATION	1402 ALBANY AVENUE			1404 ALBANY AVENUE		OUTDOOR AIR
TO15 COMPOUND LIST	SS-1402-1 sub-slab - basement	IA-1402-1 indoor air - basement	IA-1402-CS-1 indoor air - crawl space	SS-1404-1 sub-slab - basement (eastern apt.)	IA-1404-BM-1 indoor air - basement (eastern apt.)	OA-4 outdoor air
1,1,1-Trichloroethane	9.5	<0.83	<0.83	<0.83	<0.83	<0.83
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
1,1-Dichloroethane	<0.62	<0.62	<0.62	<0.62	<0.62	<0.62
1,1-Dichloroethene	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
1,2,4-Trichlorobenzene	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
1,2,4-Trimethylbenzene	9.6	2.7	2.2	3.0	1.8	3.5
1,2-Dibromoethane	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dichlorobenzene	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
1,2-Dichloroethane	0.82	<0.62	<0.62	<0.62	<0.62	<0.62
1,2-Dichloropropane	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
1,3,5-Trimethylbenzene	2.5	0.95	0.75	1.3	0.80	0.75
1,3-butadiene	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
1,3-Dichlorobenzene	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
1,4-Dichlorobenzene	5.0	0.61	<0.92	<0.92	<0.92	<0.92
1,4-Dioxane	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
2,2,4-trimethylpentane	0.8	<0.71	<0.71	<0.71	<0.71	<0.71
4-ethyltoluene	3.7	0.80	0.75	1.1	0.60	1.0
Acetone	50	16	19	21	23	12
Allyl chloride	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48
Benzene	5.2	1.1	1.1	0.39	1.3	1.0
Benzyl chloride	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Bromomethane	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
Carbon disulfide	0.70	<0.47	<0.47	<0.47	<0.47	<0.47
Carbon tetrachloride	0.90	0.64	0.64	<0.96	0.70	0.70
Chlorobenzene	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Chloroethane	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Chloroform	0.60	<0.74	<0.74	1.7	<0.74	<0.74
Chloromethane	<0.31	1.3	1.4	<0.31	1.6	1.3
cis-1,2-Dichloroethene	1.2	<0.60	<0.60	<0.60	<0.60	<0.60
cis-1,3-Dichloropropene	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69
Cyclohexane	1.4	0.42	0.42	<0.52	<0.52	<0.52
Dibromochloromethane	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Ethyl acetate	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92
Ethylbenzene	4.9	0.84	0.75	0.97	0.79	1.1
Freon 11	2.5	3.5	3.5	2.9	1.9	2.0
Freon 113	0.93	0.78	0.78	1.0	<1.2	1.1
Freon 114	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Freon 12	3.1	3.3	3.6	3.6	3.6	3.6
Heptane	4.3	0.87	0.62	0.71	0.75	0.79
Hexachloro-1,3-butadiene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Hexane	<0.54	1.1	1.2	<0.54	1.1	1.4
Isopropyl alcohol	<0.37	<0.37	<0.37	4.3	360	<0.37
m&p-Xylene	15	2.5	2.4	3.3	2.5	4.0
Methyl Butyl Ketone	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Methyl Ethyl Ketone	6.0	1.4	1.6	2.1	1.4	1.1
Methyl Isobutyl Ketone	3.2	0.71	0.50	0.58	0.62	0.67
Methyl tert-butyl ether	<0.55	<0.55	<0.55	<0.55	<0.55	<0.55
Methylene chloride	2.7	0.56	0.88	0.64	0.64	0.60
o-Xylene	4.5	1.1	1.0	1.0	1.1	2.0
Propylene	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Styrene	6.7	1.0	0.87	1.3	1.1	3.0
Tetrachloroethylene	7.0	<1.0	0.76	69	<1.0	<1.0
Tetrahydrofuran	6.1	<0.45	<0.45	<0.45	<0.45	<0.45
Toluene	18	3.9	3.9	5.5	3.8	3.9
trans-1,2-Dichloroethene	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
trans-1,3-Dichloropropene	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69
Trichloroethene	4.4	0.98	0.66	1.3	<0.22	<0.22
Vinyl acetate	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Vinyl Bromide	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
Vinyl chloride	<0.39	<0.10	<0.10	<0.39	<0.10	<0.10
<b>TOTAL VOC</b>	181	47	49	127	409	46
All concentrations reported in ug/m^3						
All samples analyzed by EPA Method TO15						

## **APPENDIX D**

### **SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) OPERATIONAL DATA**

## SUB-SLAB DEPRESSURIZATION SYSTEM OPERATIONAL DATA

1048 Kinderhook Street, Valatie, New York  
NYSDEC Site No. 411016

Valley Village Plaza - USE ENGINEERING, DESIGN, VALUATE, INC.										SITE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
System		Start Date		7/27/2020		EXTINGUISH POINT		STREET VALUATE, INC.		COLLECTED VACUUM POINTS DURING POINTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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HEAD		VEP-A		VEP-B		MP-1	MP-2	MP-3	MP-4	MP-5	MP-6	MP-7A	MP-8	MP-9	MP-10	MP-11	MP-12	MP-13	MP-14	MP-15	MP-16	MP-17	MP-18	MP-19	MP-20	MP-21	MP-22	MP-23	MP-24	MP-25	MP-26	MP-27	MP-28	MP-29	MP-30	MP-31	MP-32	MP-33	MP-34	MP-35	MP-36	MP-37	MP-38	MP-39	MP-40	MP-41	MP-42	MP-43	MP-44	MP-45	MP-46	MP-47	MP-48	MP-49	MP-50	MP-51	MP-52	MP-53	MP-54	MP-55	MP-56	MP-57	MP-58	MP-59	MP-60	MP-61	MP-62	MP-63	MP-64	MP-65	MP-66	MP-67	MP-68	MP-69	MP-70	MP-71	MP-72	MP-73	MP-74	MP-75	MP-76	MP-77	MP-78	MP-79	MP-80	MP-81	MP-82	MP-83	MP-84	MP-85	MP-86	MP-87	MP-88	MP-89	MP-90	MP-91	MP-92	MP-93	MP-94	MP-95	MP-96	MP-97	MP-98	MP-99	MP-100	MP-101	MP-102	MP-103	MP-104	MP-105	MP-106	MP-107	MP-108	MP-109	MP-110	MP-111	MP-112	MP-113	MP-114	MP-115	MP-116	MP-117	MP-118	MP-119	MP-120	MP-121	MP-122	MP-123	MP-124	MP-125	MP-126	MP-127	MP-128	MP-129	MP-130	MP-131	MP-132	MP-133	MP-134	MP-135	MP-136	MP-137	MP-138	MP-139	MP-140	MP-141	MP-142	MP-143	MP-144	MP-145	MP-146	MP-147	MP-148	MP-149	MP-150	MP-151	MP-152	MP-153	MP-154	MP-155	MP-156	MP-157	MP-158	MP-159	MP-160	MP-161	MP-162	MP-163	MP-164	MP-165	MP-166	MP-167	MP-168	MP-169	MP-170	MP-171	MP-172	MP-173	MP-174	MP-175	MP-176	MP-177	MP-178	MP-179	MP-180	MP-181	MP-182	MP-183	MP-184	MP-185	MP-186	MP-187	MP-188	MP-189	MP-190	MP-191	MP-192	MP-193	MP-194	MP-195	MP-196	MP-197	MP-198	MP-199	MP-200	MP-201	MP-202	MP-203	MP-204	MP-205	MP-206	MP-207	MP-208	MP-209	MP-210	MP-211	MP-212	MP-213	MP-214	MP-215	MP-216	MP-217	MP-218	MP-219	MP-220	MP-221	MP-222	MP-223	MP-224	MP-225	MP-226	MP-227	MP-228	MP-229	MP-230	MP-231	MP-232	MP-233	MP-234	MP-235	MP-236	MP-237	MP-238	MP-239	MP-240	MP-241	MP-242	MP-243	MP-244	MP-245	MP-246	MP-247	MP-248	MP-249	MP-250	MP-251	MP-252	MP-253	MP-254	MP-255	MP-256	MP-257	MP-258	MP-259	MP-260	MP-261	MP-262	MP-263	MP-264	MP-265	MP-266	MP-267	MP-268	MP-269	MP-270	MP-271	MP-272	MP-273	MP-274	MP-275	MP-276	MP-277	MP-278	MP-279	MP-280	MP-281	MP-282	MP-283	MP-284	MP-285	MP-286	MP-287	MP-288	MP-289	MP-290	MP-291	MP-292	MP-293	MP-294	MP-295	MP-296	MP-297	MP-298	MP-299	MP-300	MP-301	MP-302	MP-303	MP-304	MP-305	MP-306	MP-307	MP-308	MP-309	MP-310	MP-311	MP-312	MP-313	MP-314	MP-315	MP-316	MP-317	MP-318	MP-319	MP-320	MP-321	MP-322	MP-323	MP-324	MP-325	MP-326	MP-327	MP-328	MP-329	MP-330	MP-331	MP-332	MP-333	MP-334	MP-335	MP-336	MP-337	MP-338	MP-339	MP-340	MP-341	MP-342	MP-343	MP-344	MP-345	MP-346	MP-347	MP-348	MP-349	MP-350	MP-351	MP-352	MP-353	MP-354	MP-355	MP-356	MP-357	MP-358	MP-359	MP-360	MP-361	MP-362	MP-363	MP-364	MP-365	MP-366	MP-367	MP-368	MP-369	MP-370	MP-371	MP-372	MP-373	MP-374	MP-375	MP-376	MP-377	MP-378	MP-379	MP-380	MP-381	MP-382	MP-383	MP-384	MP-385	MP-386	MP-387	MP-388	MP-389	MP-390	MP-391	MP-392	MP-393	MP-394	MP-395	MP-396	MP-397	MP-398	MP-399	MP-400	MP-401	MP-402	MP-403	MP-404	MP-405	MP-406	MP-407	MP-408	MP-409	MP-410	MP-411	MP-412	MP-413	MP-414	MP-415	MP-416	MP-417	MP-418	MP-419	MP-420	MP-421	MP-422	MP-423	MP-424	MP-425	MP-426	MP-427	MP-428	MP-429	MP-430	MP-431	MP-432	MP-433	MP-434	MP-435	MP-436	MP-437	MP-438	MP-439	MP-440	MP-441	MP-442	MP-443	MP-444	MP-445	MP-446	MP-447	MP-448	MP-449	MP-450	MP-451	MP-452	MP-453	MP-454	MP-455	MP-456	MP-457	MP-458	MP-459	MP-460	MP-461	MP-462	MP-463	MP-464	MP-465	MP-466	MP-467	MP-468	MP-469	MP-470	MP-471	MP-472	MP-473	MP-474	MP-475	MP-476	MP-477	MP-478	MP-479	MP-480	MP-481	MP-482	MP-483	MP-484	MP-485	MP-486	MP-487	MP-488	MP-489	MP-490	MP-491	MP-492	MP-493	MP-494	MP-495	MP-496	MP-497	MP-498	MP-499	MP-500	MP-501	MP-502	MP-503	MP-504	MP-505	MP-506	MP-507	MP-508	MP-509	MP-510	MP-511	MP-512	MP-513	MP-514	MP-515	MP-516	MP-517	MP-518	MP-519	MP-520	MP-521	MP-522	MP-523	MP-524	MP-525	MP-526	MP-527	MP-528	MP-529	MP-530	MP-531	MP-532	MP-533	MP-534	MP-535	MP-536	MP-537	MP-538	MP-539	MP-540	MP-541	MP-542	MP-543	MP-544	MP-545	MP-546	MP-547	MP-548	MP-549	MP-550	MP-551	MP-552	MP-553	MP-554	MP-555	MP-556	MP-557	MP-558	MP-559	MP-560	MP-561	MP-562	MP-563	MP-564	MP-565	MP-566	MP-567	MP-568	MP-569	MP-570	MP-571	MP-572	MP-573	MP-574	MP-575	MP-576	MP-577	MP-578	MP-579	MP-580	MP-581	MP-582	MP-583	MP-584	MP-585	MP-586	MP-587	MP-588	MP-589	MP-590	MP-591	MP-592	MP-593	MP-594	MP-595	MP-596	MP-597	MP-598	MP-599	MP-600	MP-601	MP-602	MP-603	MP-604	MP-605	MP-606	MP-607	MP-608	MP-609	MP-610	MP-611	MP-612	MP-613	MP-614	MP-615	MP-616	MP-617	MP-618	MP-619	MP-620	MP-621	MP-622	MP-623	MP-624	MP-625	MP-626	MP-627	MP-628	MP-629	MP-630	MP-631	MP-632	MP-633	MP-634	MP-635	MP-636	MP-637	MP-638	MP-639	MP-640	MP-641	MP-642	MP-643	MP-644	MP-645	MP-646	MP-647	MP-648	MP-649	MP-650	MP-651	MP-652	MP-653	MP-654	MP-655	MP-656	MP-657	MP-658	MP-659	MP-660	MP-661	MP-662	MP-663	MP-664	MP-665	MP-666	MP-667	MP-668	MP-669	MP-670	MP-671	MP-672	MP-673	MP-674	MP-675	MP-676	MP-677	MP-678	MP-679	MP-680	MP-681	MP-682	MP-683	MP-684	MP-685	MP-686	MP-687	MP-688	MP-689	MP-690	MP-691	MP-692	MP-693	MP-694	MP-695	MP-696	MP-697	MP-698	MP-699	MP-700	MP-701	MP-702	MP-703	MP-704	MP-705	MP-706	MP-707	MP-708	MP-709	MP-710	MP-711	MP-712	MP-713	MP-714	MP-715	MP-716	MP-717	MP-718	MP-719	MP-720	MP-721	MP-722	MP-723	MP-724	MP-725	MP-726	MP-727	MP-728	MP-729	MP-730	MP-731	MP-732	MP-733	MP-734	MP-735	MP-736	MP-737	MP-738	MP-739	MP-740	MP-741	MP-742	MP-743	MP-744	MP-745	MP-746	MP-747	MP-748	MP-749	MP-750	MP-751	MP-752	MP-753	MP-754	MP-755	MP-756	MP-757	MP-758	MP-759	MP-760	MP-761	MP-762	MP-763	MP-764	MP-765	MP-766	MP-767	MP-768	MP-769	MP-770	MP-771	MP-772	MP-773	MP-774	MP-775	MP-776	MP-777	MP-778	MP-779	MP-780	MP-781	MP-782	MP-783	MP-784	MP-785	MP-786	MP-787	MP-788	MP-789	MP-790	MP-791	MP-792	MP-793	MP-794	MP-795	MP-796	MP-797	MP-798	MP-799	MP-800	MP-801	MP-802	MP-803	MP-804	MP-805	MP-806	MP-807	MP-808	MP-809	MP-810	MP-811	MP-812	MP-813	MP-814	MP-815	MP-816	MP-817	MP-818	MP-819	MP-820	MP-821	MP-822	MP-823	MP-824	MP-825	MP-826	MP-827	MP-828	MP-829	MP-830	MP-831	MP-832	MP-833	MP-834	MP-835	MP-836	MP-837	MP-838	MP-839	MP-840	MP-841	MP-842	MP-843	MP-844	MP-845	MP-846	MP-847	MP-848	MP-849	MP-850	MP-851	MP-852	MP-853	MP-854	MP-855	MP-856	MP-857	MP-858	MP-859	MP-860	MP-861	MP-862	MP-863	MP-864	MP-865	MP-866	MP-867	MP-868	MP-869	MP-870	MP-871	MP-872	MP-873	MP-874	MP-875	MP-876	MP-877	MP-878	MP-879	MP-880	MP-881	MP-882	MP-883	MP-884	MP-885	MP-886	MP-887	MP-888	MP-889	MP-890	MP-891	MP-892	MP-893	MP-894	MP-895	MP-896	MP-897	MP-898	MP-899	MP-900	MP-901	MP-902	MP-903	MP-904	MP-905	MP-906	MP-907	MP-908	MP-909	MP-910	MP-911	MP-912	MP-913	MP-914	MP-915	MP-916	MP-917	MP-918	MP-919	MP-920	MP-921	MP-922	MP-923	MP-924	MP-925	MP-926	MP-927	MP-928	MP-929	MP-930	MP-931	MP-932	MP-933	MP-934	MP-935	MP-936	MP-937	MP-938	MP-939	MP-940	MP-941	MP-942	MP-943	MP-944	MP-945	MP-946	MP-947	MP-948	MP-949	MP-950	MP-951	MP-952	MP-953	MP-954	MP-955	MP-956	MP-957	MP-958	MP-959	MP-960	MP-961	MP-962	MP-963	MP-964	MP-965	MP-966	MP-967	MP-968	MP-969	MP-970	MP-971	MP-972	MP-973	MP-974	MP-975	MP-976	MP-977	MP-978	MP-979	MP-980	MP-981	MP-982	MP-983	MP-984	MP-985	MP-986	MP-987	MP-988	MP-989	MP-990	MP-991	MP-992	MP-993	MP-994	MP-995	MP-996	MP-997	MP-998	MP-999	MP-1000	MP-1001	MP-1002	MP-1003	MP-1004	MP-1005	MP-1006	MP-1007	MP-1008	MP-1009	MP-1010	MP-1011	MP-1012	MP-1013	MP-1014	MP-1015	MP-1016	MP-1017	MP-1018	MP-1019	MP-1020	MP-1021	MP-1022	MP-1023	MP-1024	MP-1025	MP-1026	MP-1027	MP-1028	MP-1029	MP-1030	MP-1031	MP-1032	MP-1033	MP-1034	MP-1035	MP-1036	MP-1037	MP-1038	MP-1039	MP-1040	MP-1041	MP-1042	MP-1043	MP-1044	MP-1045	MP-1046	MP-1047	MP-1048	MP-1049	MP-1050	MP-1051	MP-1052	MP-1053	MP-1054	MP-1055	MP-1056	MP-1057	MP-1058	MP-1059	MP-1060	MP-1061	MP-1062	MP-1063	MP-1064	MP-1065	MP-1066	MP-1067	MP-1068	MP-1069	MP-1070	MP-1071	MP-1072	MP-1073	MP-1074	MP-1075	MP-1076	MP-1077	MP-1078	MP-1079	MP-1080	MP-1081	MP-1082	MP-1083	MP-1084	MP-1085	MP-1086	MP-1087	MP-1088	MP-1089	MP-1090	MP-1091	MP-1092	MP-1093	MP-1094	MP-1095	MP-1096	MP-1097	MP-1098	MP-1099	MP-1100	MP-1101	MP-1102	MP-1103	MP-1104	MP-1105	MP-1106	MP-1107	MP-1108	MP-1109	MP-1110	MP-1111	MP-1112	MP-1113	MP-1114	MP-1115	MP-1116	MP-1117	MP-1118	MP-1119	MP-1120	MP-1121	MP-1122	MP-1123	MP-1124	MP-1125	MP-1126	MP-1127	MP-1128	MP-1129	MP-1130	MP-1131	MP-1132	MP-1133	MP-1134	MP-1135	MP-1136	MP-1137	MP-1138	MP-1139	MP-1140	MP-1141	MP-1142	MP-1143	MP-1144	MP-1145	MP-1146	MP-1147	MP-1148	MP-1149	MP-1150	MP-1151	MP-1152	MP-1153	MP-1154	MP-1155	MP-1156	MP-1157	MP-1158	MP-1159	MP-1160	MP-1161	MP-1162	MP-1163	MP-1164	MP-1165	MP-1166	MP-1167	MP-1168	MP-1169	MP-1170	MP-1171	MP-1172	MP-1173	MP-1174	MP-1175	MP-1176	MP-1177	MP-1178	MP-1179	MP-1180	MP-1181	MP-1182	MP-1183	MP-1184	MP-1185	MP-1186	MP-1187	MP-1188	MP-1189	MP-1190	MP-1191	MP-1192	MP-1193	MP-1194	MP-1195	MP-1196	MP-1197	MP-1198	MP-1199	MP-1200	MP-1201	MP-1202	MP-1203	MP-1204	MP-1205	MP-1206	MP-1207	MP-1208	MP-1209

**APPENDIX E**

**EXCAVATION WORK PLAN**

## **EXCAVATION WORK PLAN**

This excavation work plan (EWP) is being prepared in the event that future site development activities encounter soil potentially impacted with the VOCs associated with the site. At the time this EWP is being prepared, there are no anticipated site development activities that would require implementation of the provisions outlined herein. The purpose of the EWP is to document the basic procedures to be followed in the event that site development activities are undertaken in the future. In addition, prior notice requirements related to change in use for the site must be satisfied appropriately.

### **E-1 NOTIFICATION**

At least 7 days prior to the start of any excavation activity, the site owner or their representative will notify the NYSDEC. Currently, this notification will be made to:

Mr. James Quinn, P.E.  
Regional Hazardous Waste Remediation Engineer  
1130 North Westcott Road, Schenectady, NY 12306

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the ground surface, estimated volumes of soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentrations of chemicals of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required analytical testing results. Backfill material must be pre-approved by NYSDEC in accordance with DER-10 and 6NYCRR Part 375-6.7.

### **E-2 SOIL SCREENING METHODS**

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work

performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

### **E-3 STOCKPILE METHODS**

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

### **E--4 MATERIALS EXCAVATION AND LOAD OUT**

A qualified environmental professional or person under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site if warranted. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site, as appropriate, until the activities performed under this plan are complete.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

#### **E-5 MATERIALS TRANSPORT OFF-SITE**

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded/labeled.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the site if warranted. Truck wash waters will be collected and disposed in an appropriate manner.

Truck transport routes will be developed in conjunction with site development plans. . All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes. Truck routes will take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; (f) overall safety in transport; and. (g) community input if applicable.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

#### **E-6 MATERIALS DISPOSAL OFF-SITE**

All soil/fill/solid waste excavated and removed from the site will be characterized and treated/handled as appropriate. Any soil/fill/ solid waste determined to be impacted by site related compounds in excess of regulatory levels will be treated/handled as contaminated. All soil/fill/solid waste that is excavated and determined to exceed applicable regulatory levels will be considered to be regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill/solid waste from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate (i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C&D recycling facility, etc...). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet 6 NYCRR Part 375 Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

#### **E-7 MATERIALS REUSE ON-SITE**

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable excavated material does not remain on-site. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing will not be reused on-site.

#### **E-8 FLUIDS MANAGEMENT**

All liquids generated during excavation dewatering will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering fluids will not be recharged back to the land surface or subsurface of the site without prior treatment and authorization from NYSDEC. Alternatively, dewatering fluids may be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit if necessary.

#### **E-9 COVER SYSTEM RESTORATION**

The site is not covered by an engineered cover system. Rather, exposure to remaining potentially impacted soil at the site is prevented by concrete slabs associated with the current structures, sidewalks, paved parking and/or lawn/landscaped areas. As such, after completing soil removal (or any other invasive activities), the ground cover will be restored to pre-excavation or similar conditions at a minimum. A figure showing the modified/restored surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

#### **E-10 BACKFILL FROM OFF-SITE SOURCES**

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. All imported soils will meet the soil quality standards for protection of groundwater or

restricted residential use (whichever is less) established in 6NYCRR 375-6.7 (d) and 375-6.8(b). Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases and precipitation run-on and run-off.

#### **E-11 STORM WATER POLLUTION PREVENTION**

If necessary, a Storm Water Pollution Prevention Plan (SWPP) that conforms to the requirements of NYSDEC Division of Water guidelines and NYS regulations will be developed and implemented during excavation activities. Elements of the SWPP may include:

- Installation of silt fencing or hay bales around the perimeter of the construction area.
- Silt fencing and/or hay bale checks may be installed and inspections conducted once a week and/or after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.
- Accumulated sediments will be removed as required to keep silt fencing and/or hay bale functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

#### **E-12 CONTINGENCY PLAN**

If underground tanks, drums or other previously unidentified contaminant sources are found during excavation or development related construction, excavation activities will be suspended until the situation can be properly assessed and sufficient equipment can be mobilized to address the condition. Additionally, the NYSDEC project manager and, if necessary, the NYSDEC spills hotline will be promptly notified.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper management methods. Based on the site's association with compounds related to dry cleaning, sample analysis will be performed for the full target compound list (TCL) of VOCs unless the nature of the feature/impact encountered suggests that additional analyses are appropriate for proper characterization. All requested analyses will be subject to NYSDEC approval.

These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

### **E-13 COMMUNITY AIR MONITORING PLAN**

A Community Air Monitoring Program (CAMP) will be developed for future excavation activities when appropriate. The CAMP will be prepared in accordance with DER-10 or, alternative criteria as established by the NYSDEC based on site-specific conditions. At a minimum, the CAMP will include a figure showing the location of air sampling stations based on generally prevailing wind conditions. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP (if any) will be reported to NYSDEC and NYSDOH Project Managers. CAMP data and evaluation records will be provided to NYSDEC and NYSDOH as part of the periodic reports pursuant to Section 3.5 of this SMP, or more frequently as deemed reasonably necessary and appropriate.

### **E-14 ODOR CONTROL PLAN**

An Odor Control Program will be developed, if necessary, for future excavation. The purpose of the odor control program will be to control emissions of nuisance odors. Specific odor control methods to be used on a routine basis will be identified. If an odor control program is determined to be necessary, implementation of that plan will be subject to NYSDEC and NYSDOH approval. Additionally, implementation of all odor controls, including any work stoppages, are the responsibility of the property owner's qualified environmental professional and/or appropriate NYSDEC/NYSDOH staff, and, any measures that are implemented as part of the odor control program will be discussed in the Periodic Review Report.

Elements of an Odor Control Program may include:

- limiting the area of open excavations and size of soil stockpiles;
- shrouding open excavations with tarps and other covers;
- using foams to cover exposed odorous soils.

If odors develop that cannot be otherwise controlled, additional means to eliminate odor nuisances may include:

- direct load-out of soils to trucks for off-site disposal;
- use of chemical deodorants in spray or misting systems; and,
- use of staff to monitor odors in surrounding neighborhoods.

### **E-15 DUST CONTROL PLAN**

A Dust Suppression Plan will be developed, if necessary, for future excavation. The purpose of the dust suppression plan will be to manage dust generated during excavation activities.

### **E-16 OTHER NUISANCES**

Plans for other nuisances, such as rodents, noise, etc...will be developed as necessary.

## **APPENDIX F**

### **GROUNDWATER MONITORING WELL SAMPLING LOG FORM**

**Sampling Data**  
**Valatie Village Plaza**  
**1048 Kinderhook Street, Valatie, NY**  
NYSDEC Site No. 411016

Well ID	Diam. (in)	Depth (ft)	Measured Depth (ft)	Static DTP/DTW (ft)	Notes
<b>EM MW-1</b>	2"	15.50			
Volume Purged:		Odor:			
Color:		Sheen:			
<b>EM MW-2</b>	2"	14.75			
Volume Purged:		Odor:			
Color:		Sheen:			
<b>EM MW-3</b>	2"	12.51			
Volume Purged:		Odor:			
Color:		Sheen:			
<b>EM MW-4</b>	2"	12.16			
Volume Purged:		Odor:			
Color:		Sheen:			
<b>EM MW-5</b>	2"	8.73			
Volume Purged:		Odor:			
Color:		Sheen:			
<b>EM MW-6</b>	2"	9.34			
Volume Purged:		Odor:			
Color:		Sheen:			

**Data Collected by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## **APPENDIX G**

### **SITE WIDE INSPECTION FORM & OTHER CERTIFICATIONS**

**SSDS Monthly Inspection**  
**Valatie Village Plaza**  
**1048 Kinderhook Street, Valatie, NY**  
 NYSDEC Site No. 411016

**Vapor Extraction Points – Measured Vacuum**

Date	VEP-A		VEP-B		VEP-C		Personnel
	Manometer	Gauge	Manometer	Gauge	Manometer	Gauge	

**Notes:**

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**SSDS Annual Inspection**  
**Valatie Village Plaza**  
**1048 Kinderhook Street, Valatie, NY**  
**NYSDEC Site No. 411016**

Well ID	Vacuum (" H <sub>2</sub> O) (Manometer/Gauge)	Notes
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**SSDS Extraction Points (Wellhead Vacuum)**

VEP-A	/	
VEP-B	/	
VEP-C	/	

**Vacuum Monitoring Points (Observed Vacuum)**

MP-1		MP-9	
MP-2		MP-10	
MP-3		MP-11	
MP-4		MP-12	
MP-5		MP-13	
MP-6		MP-14	
MP-7		MP-15	
MP-8		MP-16	

**SSDS Blower Status:**                      **Operating**                      **Not Operating**

**SSDS Effluent PID (via ppbRae):**

**SSDS Vacuum @ Blower (on roof):**                      **inches H<sub>2</sub>O**

**SSDS Airspeed @ Blower (on roof):**                      **feet per second**

**SSDS Fan – Mounting on Unistrut Structure (note condition):**

**SSDS On/Off Switch Functionality:**                      **GFCI Functionality:**

**Unistrut Structure on Building (note condition):**

**Piping Connections to Blower (note condition):**

**Inspected By:**

**Date:**

**SSDS Annual Inspection**  
**Valatie Village Plaza**  
**1048 Kinderhook Street, Valatie, NY**  
(Continued)

Piping Check	Arrival		Departure		Notes
	Yes	No	Yes	No	
Glue at all joints ?					
VEPs sealed thru slab ?					
Piping properly supported ?					
Valves, manometers, gauges at proper locations					
Excessive noise @ joints ?					
10% of old joints smoke tested ?					
Does smoke enter any joints ?					
If yes, was joint re-sealed ?					
Does smoke enter re-sealed joint on re-test ?					
Is piping properly labeled ?					
<b>Slab Check</b>					
New cracks observed ?					
If yes, were new cracks smoke tested ?					
Does smoke enter crack ?					
If yes, was crack re-sealed ?					
Does smoke enter re-sealed crack?					
<b>Electrical Check</b>					
Are electrical wires/connections secure ?					
Is each junction box closed ?					
Are conduits supported properly ?					
Does circuit breaker work ?					
Is circuit breaker properly labeled ?					
<b>Notes/Comments:</b>					

**Inspected By:**

**Date:**

**Annual Site Wide Inspection**  
**Emkay Cleaners**  
**1048 Kinderhook Street, Valatie, NY**  
 NYSDEC Site No. 411016

	Yes	No	Notes
SSDS System Operating ?			
SSDS Monthly Checklist Filled-Out ?			
SSDS Monthly Checklist Retrieved/Copied ?			
New SSDS Monthly Checklist Left at Site ?			
Locate all SSDS Vacuum Monitoring Points ?			
SSDS Vacuum Monitoring Point Repairs Needed ?			
List of Emergency Phone Numbers Prominently Displayed ?			
Locate all Monitoring Wells ?			
Monitoring Well Road Box Repairs Needed ?			
Have Any New Retail Establishments Opened on the Property ?			
Has Hardware Store Across Street Changed Status over the past Year ?			

**Notes/Comments:**


**Inspected By:**

**Date:**



DATE

Marios True Value Hardware  
1057 Kinderhook Street,  
Valatie, New York 12184

Re: Property Access Request  
NYSDEC Project #411016  
Valatie Village Plaza, LLC

Dear Sir,

The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health have been overseeing the investigation and remediation of impacted groundwater at and nearby the Valatie Village Plaza (VVP) for the past several years. As a condition of the Order on Consent and Administrative Settlement between NYSDOH and VVP, this letter is written to request access at your Kinderhook Street hardware store location to conduct soil vapor intrusion sampling. The intent of this request is to determine if impacted groundwater from the VVP property is potentially generating soil vapors at your property that would adversely impact the indoor air quality of the building(s) thereon.

Previous conversations between VVP representatives and you or your representatives have indicated your objection to providing property access for environmental sampling purposes. Please contact me as to your current position regarding property access by representatives of VVP. If no response is received within 10 days of receipt of this letter, then the refusal of property access will be assumed, and this letter will be re-sent again next year.

Please feel free to contact any of the following regarding questions about this access request:

- NYSDOH Project Manager: Mr. Christopher O'Neill, P.E., 518-357-2394
- NYSDOH Project Manager: Mr. Christopher Doroski, 518-402-7860
- VVP Legal Counsel: Mr. John Barone, Esq., 518-432-4100
- Michael & Karen Della Rocco: 518-664-8793

Sincerely,

**AZTECH ENGINEERING SERVICES, P.C.**

Randy Hoose  
Project Manager

for  
Fil L. Fina, III, PE  
Vice President

**Periodic Review Report  
Institutional Controls/Engineering Controls - Certification Form  
Valatie Village Plaza, LLC (f.k.a. Emkay Cleaners)**

**Site Details**

**Box 1**

**Site No.**        **411016**

**Site Name**    **Valatie Village Plaza, LLC (f.k.a. Emkay Cleaners)**

Site Address: 1048 Kinderhook Street

Zip Code: 12184

City/Town: Valatie

County: Columbia

Site Acreage: 3.5

Reporting Period: \_\_\_\_\_ to \_\_\_\_\_

**YES**

**NO**

1. Is the information above correct?  
If NO, include handwritten correction 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, etc...) 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. 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/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 DO NOT COMPLETE THE REST OF THIS FORM. A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

**IF THE ANSWER TO QUESTION 6 and 7 IS YES, PLEASE CONTINUE**

\_\_\_\_\_  
Signature of Professional Engineer

\_\_\_\_\_  
Date

<b>Site No.</b>	<b>411016</b>	<b>Box 3</b>
<b>Description of Institutional Controls</b>		
<u>Parcel</u> <b>33.18-1-29.10</b>	<u>Owner</u> Valatie Village Plaza, LLC	<u>Institutional Control</u> Site Management Plan (Date Pending) and Environmental Easement (Date Pending)
<b>Description of Engineering Controls</b>		
<u>Parcel</u> <b>33.18-1-29.10</b>	<u>Engineering Control</u> Monitoring Well Network  Sub-Slab Depressurization System	

<b>Periodic Review Report (PRR) Certification Statements</b>	<b>Box 4</b>
<b>Institutional Controls:</b>	
1. I certify by checking "YES" below that:	
	<div style="display: flex; justify-content: space-between;"> <span><u>YES</u></span> <span><u>NO</u></span> </div>
a) The inspection of the site to confirm the effectiveness of the institutional controls (Site Management Plan/Environmental Easement) required by the remedial program was performed under my direction;	
b) The Site Management Plan/Environmental Easement employed at this site is unchanged from the date that it was put in place, or, last approved by the Department;	
C.) Nothing has occurred that would impair the ability of the Site Management Plan/Environmental Easement to protect the public health and the environment;	
D.) Nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan/Environmental Easement;	
E.) Use of this site is compliant with the Site Management Plan/Environmental Easement;	
<b>Engineering Controls – Monitoring Well Network</b>	
1. I certify by checking "YES" below that:	
	<div style="display: flex; justify-content: space-between;"> <span><u>YES</u></span> <span><u>NO</u></span> </div>
a) The inspection of the site to confirm the effectiveness of the engineering control (monitoring well network) required by the remedial program was performed under my direction;	
b) The monitoring well network employed at this site is unchanged from the date that it was put in place, or, last approved by the Department;	
C.) Nothing has occurred that would impair the ability of the monitoring well network to protect the public health and the environment;	
D.) Nothing has occurred that would constitute a violation or failure to comply with any site management plan for the monitoring well network;	
E.) Access to the site will continue to be provided to the Department to evaluate the continued maintenance of the monitoring well network;	
F.) The Monitoring Well Network is performing as designed and is effective:	

<b>Site No.</b>	<b>411016</b>	<b>Box 4 (Continued)</b>
<b>Periodic Review Report (PRR) Certification Statements (Continued)</b>		
<b>Engineering Controls – Sub-Slab Depressurization System (SSDS)</b>		
1. I certify by checking "YES" below that:		
	<u><b>YES</b></u>	<u><b>NO</b></u>
a) The inspection of the site to confirm the effectiveness of the engineering control (SSDS) required by the remedial program was performed under my direction;		
b) The SSDS employed at this site is unchanged from the date that it was put in place, or, last approved by the Department;		
c.) Nothing has occurred that would impair the ability of the SSDS to protect the public health and the environment;		
D.) Nothing has occurred that would constitute a violation or failure to comply with any site management plan for the SSDS;		
E.) Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of the SSDS;		
F.) The SSDS is performing as designed and is effective:		

<b>Site No.</b>	<b>411016</b>	<b>Box 5</b>
<b>IC/EC CERTIFICATION</b>		
<b>Professional Engineer Signature</b>		
<b>General Certification Statement:</b>		
1. I certify by checking "YES" below that:		
	<u><b>YES</b></u>	<u><b>NO</b></u>
A) 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,		
B.) The information presented in this report is accurate and complete		
<p><b>I certify that all information and statements in this certification form 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 (<u>certifying Engineer</u>) P.E. of (<u>Company/Address</u>) am certifying as the Owner's Designated Representative for the site.</b></p>		
<div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 40%;"> <hr style="border: 0; border-top: 1px solid black;"/>           Signature of Professional Engineer         </div> <div style="width: 20%; text-align: center;">           Stamp (Required for PE)         </div> <div style="width: 40%; text-align: right;"> <hr style="border: 0; border-top: 1px solid black;"/>           Date         </div> </div>		