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July 17, 2020

Mr. Michael Squire  
Division of Environmental Remediation, Remedial Bureau C  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, New York 12233

**Re: Periodic Review Report – July 2019 to July 2020  
1-45 Orangetown Shopping Center  
Orangeburg, New York  
Site #C344066**

Dear Mr. Squire:

Enclosed is the *Periodic Progress Report* for the above referenced site prepared by Groundwater & Environmental Services, Inc. (GES) on behalf of UB Orangeburg, LLC. This document is required as an element of the remedial program at the Orangeburg (Orangetown) Shopping Center, located in the Town of Orangetown (Orangeburg), County of Rockland, New York under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC).

If you have any questions or comments regarding this submittal, please contact me at (866) 839-5195, extension 3839.

Sincerely,  
**Groundwater & Environmental Services, Inc.**

Michael DeGloria, P.G.  
Principal Project Manager

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UB Orangeburg, LLC

# Periodic Review Report (Part 1)

UB Orangeburg

1-45 Orangetown Shopping Center

NYSDEC Site Number C344066

July 2020

Version 1





## Periodic Review Report

UB Orangeburg  
1-45 Orangetown Shopping Center  
Orangeburg, New York  
NYSDEC Site #C344066

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## Acronyms

BAS	bio-augmentation treatment system	NYSDEC	New York State Department of Environmental Conservation
BCA	Brownfield Cleanup Agreement		
BCP	Brownfield Cleanup Program	NYSDOH	New York State Department of Health
CCR-1	Construction Completion Report #1 - Source Removal	OM&M	operation, maintenance, and monitoring
		ORP	oxidation-reduction potential
COC	constituent of concern	RAWP	Remedial Action Work Plan
DO	dissolved oxygen	RI	Remedial Investigation
DUSR	data usability summary report	SGS	SGS/Accutest Laboratories of Dayton, New Jersey
ECs	engineering controls		
EE	Environmental Easement	SMP	Site Management Plan
EPA	Environmental Protection Agency	SSDS	sub-slab depressurization system
GES	Groundwater & Environmental Services, Inc.	SVI	soil vapor intrusion
GWQS	groundwater quality standards	TOC	total organic carbon
HVAC	heating, venting, and air conditioning	$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
ICs	institutional controls	$\mu\text{g}/\text{l}$	micrograms per liter
i.w.	inches of water column	VOC	volatile organic compound
JLJ	JLJ Management Company		
KLF	Kleinfelder East, Inc.		
LORCO	Lorco Petroleum Services		
mg/L	milligrams per liter		
NYS	New York State		



## 1 Executive Summary

This document is required as an element of the remedial program at the Orangeburg (Orangetown) Shopping Center, located in the Town of Orangetown (Orangeburg), County of Rockland, New York (hereinafter referred to as the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The Site remediation activities have been conducted in accordance with the Brownfield Cleanup Agreement (BCA) Index #A3-0563-0906, site #C344066. JLJ Management Company (hereinafter referred to as the “JLJ”) entered into a BCA with the NYSDEC in January of 2007 to remediate a 1.33-acre portion of the approximately 11 acre property containing chlorinated solvent compounds above NYSDEC standards. The subject property was purchased from JLJ by UB Orangeburg, LLC in 2012. On March 28, 2012, the Certificate of Completion was officially transferred from JLJ to UB Orangeburg, LLC.

Groundwater & Environmental Services, Inc. (GES) continues to implement the remedial activities outlined in the *Site Management Plan* (SMP)<sup>1</sup> updated in October 2019. Groundwater concentrations of tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, vinyl chloride, and ethene (constituents of concern [COCs]) in well MW-5 have fluctuated over the monitoring period but indicate degradation of chlorinated compounds through the chlorinated solvents reductive transformation pathway.

No major non-compliance issues have been identified during the monitoring period of June 17, 2019 to June 17, 2020.

## 2 Site Overview

The approximate geographical coordinates for the Site are 41 degrees, 2 minutes, 41.6 seconds North (Latitude) by 73 degrees, 57 minutes, 10.4 seconds West (Longitude). The Site is comprised of one (1) parcel (Section, Lot & Block: 74.10-67-1) that covers an area of approximately 11 acres. Included are the following: a Site Location Map (**Figure 1**) for the general property location, a Site Map (**Figure 2**) showing the current key Site features and a Detail Site Map (**Figure 3**) showing the current locations of injection and monitoring well points near building #2.

COCs were first observed at the Site after a damaged sewer line exiting the former Sparkle Cleaners Dry Cleaners was identified. The first remedial activity consisted of source removal activities and the repair of the sewer line in January of 2009. After completion of the remedial work described in *Construction Completion Report #1 - Source Removal (CCR-1)*<sup>2</sup>, residual contamination was left in the subsurface soil in the vicinity of the release point, which is hereafter referred to as “remaining contamination”. A SMP was prepared to manage remaining contamination until the Environmental Easement (EE) is extinguished in accordance with ECL Article 71, Title 36 (EE included as **Appendix A**). Components of the selected remedy consist of sub-slab depressurization systems (SSDSs) and a bio-augmented injection gallery.

### 2.1 Sub-Slab Depressurization Systems

Because of the residual contaminated subsurface soil and contaminated groundwater, the SSDSs were designed to mitigate potential vapor intrusion from residual chlorinated volatile organic compound (VOC) contamination into the southern portion of building #2, which businesses include: former Sparkle Cleaners (currently a Verizon Store), former Deli Spot (currently TZ Liquors), and New China House. The SSDSs were configured to create a negative pressure (relative to the indoor environment) within the area beneath the concrete floor slabs of the businesses within the southern portion of building #2, thereby minimizing the potential for migration of contaminant vapor into the indoor air of the tenant spaces.

The system was installed between February and May 2010, and was activated in May 2010. The system as originally designed did not achieve the performance standard and it was subsequently modified. Additional system performance testing was completed in June 2010 and a modified plan was prepared and approved by the NYSDEC in August 2010. Modifications were implemented between August and September 2010. The system was re-started with additional blowers in place on September 29, 2010 and operation was verified with another performance (vacuum response) test. Late in 2010, it was observed that ongoing heating, venting, and air conditioning (HVAC) issues in the building potentially affected system performance. These issues were the result of foundation leaking and back draft issues associated with furnaces and other fans. These issues were resolved in early 2011. The system was re-inspected in March to verify resolution of the issues. In late April 2011, three vapor-monitoring points were replaced in the New China Restaurant and another system check was performed. This test verified that the system achieved measured vacuum greater than 0.0025 inches of water column (i.w) across the slab of the three tenant spaces.



The NYSDEC approved the temporary shutdown of the SSDSs in August 2015 and the decommissioning of two (2) of the three (3) SSDSs (former Deli Spot and Sparkle Cleaners) in January 2017 following additional soil vapor intrusion testing which verified mitigation of the soil vapor intrusion pathway as defined by the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*<sup>3</sup>, dated October 2006 and updates to Soil Vapor/Indoor Air Decision Matrices, dated May 2017. SSDS removal activities were completed only at the former Deli Spot tenant space in April 2017.

As requested by the NYSDEC, sub-slab and indoor air testing was conducted at the three (3) tenant spaces during the 2016/2017, 2017/2018, and 2018/2019 heating season for the purpose of monitoring rebound following the shutdown of the SSDSs. Following the three (3) consecutive sampling events, the NYSDEC approved the decommissioning of the third SSDS located at the New China House tenant space on August 19, 2019. Regulatory correspondences are attached in **Appendix B**.

Based on the results of the consecutive sampling events, an additional sub-slab and indoor air testing event was completed during the 2019/2020 heating season on December 10 and 11, 2019 at the former Sparkle Cleaner tenant space (sample locations VP-5 and VP-6 only). Results from the December 2019 sub-slab and indoor air testing event indicate additional monitoring is recommend based on concentrations of select COCs compared to the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*<sup>3</sup> Soil Vapor/Indoor Air Decision Matrices. An additional event will be conducted during the 2020/2021 heating season at the former Sparkle Cleaner tenant space (sample locations VP-5 and VP-6 only). If any potential impacts are identified, then conditions will be re-evaluated and monitoring will continue as described in the SMP.

A Sub-Slab Depressurization Configuration map is included as **Figure 4**.

## 2.2 Bio-Augmentation Treatment System

Because of the presence of contaminated groundwater and residual soil contamination under building #2, a bio-augmentation treatment system (BAS) was designed. This treatment promotes in-situ microbial degradation of contaminants in saturated soil and groundwater. Addition of a bio-stimulant (molasses) to subsurface soil and groundwater acts as an electron donor that stimulates metabolic reduction of chlorinated VOCs to ethene via microorganisms that have been detected as being present at the Site, as have bacteria of the genus *Dehalococcoides* (in MW-5 and MW-6) and *Dehalobacter* (in MW-5).

Bio-augmentation injection points and manifold piping were installed following the source removal excavation between February and April 2010. A batch injection tank connects to the manifold via manual gate valves to direct electron donor solution (a 10% molasses solution) and control flow to the injection points. Additional injection points were installed during April and May of 2012 and January of 2014 in accordance with the *Remedial Action Work Plan* (RAWP)<sup>4</sup>, submitted by Kleinfelder East, Inc. (KLF) in December 2011. Baseline and post injection sampling (from a network of monitoring wells), monitoring, and laboratory analysis provide the means to monitor treatment effectiveness. The initial rounds of injections were completed in May, July, and



November 2010. The first round of treatment indicated bio-augmentation was enhancing biodegradation and dechlorination of the contaminants. The results also suggested that additional injections of electron donor solution would enhance treatment. Twelve (12) subsequent injection events were conducted at the Site between August 2012 and September 2016.

Bio-augmentation monitoring and treatment of groundwater 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. This treatment will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant concentrations become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment, and/or control measures will be evaluated.

Conditions that warrant discontinuing the bio-augmentation treatment system include contaminant concentrations in groundwater that: (1) reach levels that are consistently below groundwater quality standards (GWQS), (2) have become asymptotic to a low level over an extended period of time as accepted by the NYSDEC, or (3) the NYSDEC has determined that the bio-augmentation treatment system has reached the limit of its effectiveness. This assessment will be based in part on post-remediation contaminant levels in groundwater collected from monitoring wells located throughout the Site. Monitoring wells formerly associated with the bio-augmentation system (MW-A, MW-B, MW-C, MW-D, and MW-F) were abandoned in August 2017 following approval from the NYSDEC. The existing systems will remain in place and operational until permission to discontinue their use is granted in writing by the NYSDEC.

The NYSDEC approved completing annual, rather than quarterly, monitoring of the BAS on August 19, 2019. Regulatory correspondences are attached in **Appendix B**.

Groundwater purged from on-site monitoring wells that are monitored on an annual basis will continue to be stored on-site in 55-gallon drums. During the reporting period, GES oversaw the removal of waste on September 25, 2019 and March 30, 2020. On September 25, 2019, Lorco Petroleum Services (Lorco) of Elizabeth, New Jersey transported and disposed of one (1) 55-gallon drum containing purged groundwater generated during the May 2019 sampling event. On March 30, 2020, Lorco transported and disposed of one (1) 55-gallon drum containing purged groundwater generated during the March 2020 sampling event. A copy of the non-hazardous waste manifests are provided as **Appendix C**

### 3 Evaluation of Remedy Performance and Effectiveness

#### 3.1 Sub-Slab Depressurization System Evaluation

Quarterly operation, maintenance, and monitoring (OM&M) visits were not conducted during the reporting period due to the temporary shutdown of the remaining SSDSs at the former Sparkle Cleaners and the New China House.

#### 3.2 Bio-Augmentation System Evaluation

Baseline and post-injection sampling (from a network of monitoring wells), monitoring, and laboratory analysis provide the means to monitor treatment effectiveness. Overall, 12 injection events have been completed since August 2012. A total approximate volume of 8,015 gallons of 10% molasses solution has been injected since the initiation of this remedy. The last event was conducted on September 14, 2016 utilizing injection wells IP-3, IP-4, INJ-3D, and INJ-4D.

Geochemical targets for pH and total organic carbon (TOC) concentration in the BAS monitoring network wells are established to inform decision making regarding injection frequency and quantity. The optimal geochemical target range for TOC concentrations is 50 through 500 milligrams per liter (mg/L) and a pH between 6 and 8. During the March 10, 2020 annual monitoring event, bio-parameter levels for pH were within the target range at monitoring well MW-5 (6.57); however, the TOC concentration was 44.6 mg/L which is outside of the target range. Since TOC concentrations at monitoring well MW-5 increased following the previous groundwater sampling event in May 2019 and is only 5.4 mg/L outside of the optimal geochemical target range (50 to 500 mg/L), an additional bio-augmentation injection event will not be conducted at this time. These bio-parameter levels will continue to be monitored and evaluated during the 2020/2021 monitoring period as outlined in the SMP updated in October 2019.

Groundwater well logs updated during each quarterly sampling event are included as **Appendix D**. Please refer to **Figure 5** and **Table 1** and **2** for a summary of groundwater elevation and concentrations of the COCs at all sampled monitoring wells. **Figure 6** and **Tables 3** and **4** present the general chemistry analytical results and measured bioparameter readings including optimal geochemical target range for TOC concentrations (50 mg/L through 500 mg/L) and pH (6 to 8) at the monitoring wells. Groundwater trends observed at monitoring well MW-5 during the monitoring period are illustrated in **Figure 7**.



## 4 Institutional Control & Engineering Control Plan Compliance

### 4.1 Institutional Controls

Institutional Controls (ICs) at the Site (**Appendix E**) include compliance with the EE. The EE contains the following stipulations: no new drinking water wells can be installed and new business and residences must be connected to city water. The SMP stipulates all engineering controls (ECs) must be operated and maintained as specified in the SMP, all ECs on the controlled property must be inspected at a frequency and in a manner defined in the SMP, groundwater and other environmental monitoring must be performed as defined in this SMP, and data and information pertinent to site management of the control property must be reported at a frequency and in a manner specified in the SMP.

During the monitoring period all ICs have been in compliance with the EE. No new drinking wells have been installed and no new businesses have been built which would require a connection to city water. All ECs have been operated and maintained as specified in the SMP or otherwise approved by the NYSDEC. ECs are inspected in accordance to the required frequency set forth by the SMP. Groundwater and other environmental monitoring have been performed as defined in the SMP. Progress reports summarizing groundwater and other environmental monitoring were submitted to the NYSDEC and the NYSDOH as they are completed. Approval to discontinue submittal of monthly progress reports was granted by the NYSDEC in a letter dated August 25, 2014.

Regulatory correspondences during the monitoring period are attached as **Appendix B**.

### 4.2 Engineering Controls

The SMP requires that three separate ECs be maintained at the Site: the SSDSs, the bio-augmentation system, and the composite cover system. Maintenance and inspections of the ECs at the Site are reported to the NYSDEC and NYSDOH as they are completed.

Historically, exposure to vapor intrusion within the southern portion of building #2 was mitigated by the operation of the SSDSs. This system was comprised of extraction piping, sub-slab ventilation blowers and associated appurtenances at former Sparkle Cleaners, the former Deli Spot, and New China House tenant spaces. The SSDSs created a negative pressure which intercepted potential soil vapor from beneath the concrete floor using eight branches (SSD-1 through SSD-8) and transferred extracted vapors using in-line blowers to discharge locations outside the building (above the roof). Thirteen (13) extraction points were installed between the three (3) tenant spaces. Additional extraction points were added to each tenant space after the SSDSs was initially installed. Fifteen (15) vacuum monitoring points were also installed within the three (3) tenant spaces to measure and verify vacuum beneath the concrete slab. A manometer was installed on the suction side of the in-line blower on each of the SSD branches to provide a visual indicator that the SSDSs operate properly.



The SSDSs have been temporarily shut-down since August 17, 2015 following receipt of NYSDEC approval. In May 2017, following NYSDEC approval, the former Deli Spot SSDS was permanently decommissioned.

Because of the presence of contaminated groundwater and residual soil contamination under building #2, a bio-augmentation treatment system was designed. This treatment promotes in-situ microbial degradation of contaminants in saturated soil and groundwater. Addition of a molasses solution to subsurface soil and groundwater acts as an electron donor that stimulates metabolic reduction of chlorinated VOCs to ethene. Bio-augmentation injection points and manifold piping were installed after the source removal excavation between February and April 2010. An additional nine (9) nested bio-augmentation injection points and four (4) additional monitoring wells were installed between April and May of 2012 and January of 2014 in accordance with the RAWP. Details regarding the installation of additional monitoring points and nested injection wells can be referenced in the May 2012, January 2014, and February 2014 *Monthly Progress Reports*<sup>5,6,7</sup>, submitted to the NYSDEC.

Molasses injection events were not completed during the monitoring period. The BAS monitoring network will continue to be monitored via annual sampling of wells during the 2020/2021 monitoring period to determine future injection frequency and quantity.

Maintenance and inspections of the composite cover system consisting of existing impermeable surfaces (concrete slabs and asphalt paving) were conducted during the monitoring period.

IC and EC certifications are provided in **Appendix E**.

## 5 Exposure Assessment

EC's at the Site such as the SSDSs and the composite cover system 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.

### 5.1 Historic Qualitative Exposure Assessment

#### 5.1.1 Soil Vapor Intrusion Assessment

A *Remedial Investigation* (RI) report<sup>8</sup> which included a soil vapor intrusion assessment and exposure assessment for the Site was submitted by KLF in May 2008. The soil vapor intrusion assessment, which included sub-slab soil vapor sampling, indoor air sampling, and ambient outdoor air sampling data was conducted on July 12, 2007 and November 27 to December 6, 2007. On-Site properties sampled included Building 1 through Building 3 and the off-Site properties sampled included 55 Highview Avenue, 1 Oak Street, 3 Oak Street, and 9 Oak Street. The soil vapor intrusion assessment in the RI report concluded the following:

- Building 1: Concentrations of chlorinated solvents were below laboratory detection limits for all samples.
- Building 2: Concentrations of tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride were detected in sub-slab soil vapor, indoor air, and outdoor ambient air at multiple locations in Building 2 (sample locations referred to at the time as Sparkle Cleaners, The Deli Spot, and Hikaru Restaurant).
- Building 3: Concentrations of tetrachloroethene were detected in indoor air, ambient outdoor air, outdoor soil vapor, and sub-slab soil vapor at multiple locations located in the northern portion of Building 3 (VP-207, VP-206, VP-205, and VP-203).
- 55 Highview Avenue: Concentrations of tetrachloroethene and trichloroethene were detected in an ambient outdoor air sample. Concentrations of chlorinated solvents in sub-slab soil vapor samples were below laboratory detection limits.
- 1 Oak Street: Concentrations of trichloroethene were detected in indoor air samples. Concentrations of chlorinated solvents in sub-slab soil vapor samples were below laboratory detection limits.
- 3 Oak Street: Concentrations of tetrachloroethene and trichloroethene were detected in upstairs indoor air and tetrachloroethene was detected in sub-slab soil vapor.
- 9 Oak Street: Concentrations of chlorinated solvents were below laboratory detection limits for all samples.

KLF determined that based on these findings, a correlation of sub-slab soil vapor and indoor air quality appears to only exist in Building 2 based on elevated concentrations of chlorinated solvents in both soil vapor and indoor air. KLF determined that the chlorinated solvent concentrations present in Building 3 and off-Site properties were negligible and due to an airborne source controlling indoor air quality.



### 5.1.2 Qualitative Exposure Assessment

In the 2008 RI Report, KLF includes a qualitative exposure assessment which identifies exposure pathways on-Site. The exposure assessment concluded that a complete exposure pathway existed for soil vapor at the Site and potentially complete exposure pathways existed for groundwater in relation to the groundwater plume on-site with the potential to migrate off-site and for soils located at Building 2 (specifically, Sparkle Cleaners).

Each EC at the Site addresses these complete and potentially complete exposure pathways. The complete exposure pathway that exists for soil vapor at the Site was addressed by the SSD systems installed in Building 2 at the former Sparkle Cleaners (currently a Verizon Store), former Deli Spot (currently TZ Liquors), and New China House. The potentially complete exposure pathways for groundwater was addressed by the bio-augmentation system and the quarterly/annual groundwater monitoring program and pathways for soil was addressed by the composite cover system and associated ICs.

### 5.2 Quantitative Exposure Assessment

Following the exposure assessment submitted for the Site in 2008, the risk of exposure at the Site has been quantitatively assessed and summarized on a routine basis in the *Progress Reports* and/or *Soil Vapor Intrusion Summary* reports submitted to the NYSDEC and NYSDOH. Soil vapor impacts present at Building 2 were addressed with the SSDS systems and quantitatively assessed with sub-slab and indoor air sampling events conducted in April 2015, December 2015, November 2016, December 2017, December 2018, and December 2019. The SSDS systems were shut down on August 15, 2015, with all sampling events conducted with the SSDS system offline for testing. The sampling events recommended the following remedial actions (based on the NYSDOH *Guidance for Evaluation Soil Vapor Intrusion in the State of New York*) for each tenant space in Building 2:

- April 2015: No further action was recommended for each sample location.<sup>9</sup>
- December 2015: No further action was recommended for each sample location.<sup>10</sup>
- November 2016: No further action was recommended at two (2) of the tenant spaces (former Deli Spot and former Sparkle Cleaners). At the New China House space, it was recommended to identify sources and reduce exposure based on concentrations of tetrachlorethene in the indoor air samples.<sup>11</sup>
- December 2017: No further action was recommended for each sample location.<sup>12</sup>
- December 2018: No further action was recommended at two (2) of the tenant spaces (former Deli Spot and New China House). At the former Sparkle Cleaners space, it was recommended to monitor based on concentrations of tetrachlorethene and trichloroethene in the indoor air samples.<sup>13</sup>
- December 2019: At the former Sparkle Cleaners space, no further action was recommended for sample location VP-5 and monitor was recommended for sample location VP-6 based on concentrations of cis-1,2-dichloroethene and trichloroethene in the sub-slab air samples.<sup>14</sup>



Ongoing quantitative exposure assessment results show that the corrective actions completed to date have effectively reduced the presence of chlorinated compounds in the sub-surface soil and groundwater to levels that have eliminated the need for active mitigation of the historic soil vapor intrusion pathway at portions of Building 2. Additionally, the repeated testing events that were conducted every heating season after SSD systems shutdown demonstrated that sub-slab vapor concentrations have not rebounded following SSD systems shutdown and are not likely to do so.

GES has recommended in the January 2020 *Soil Vapor Intrusion Summary* report, which summarizes the December 2019 testing event, to conduct an additional sub-slab and indoor air testing event during the 2020/2021 heating season at the former Sparkle Cleaners tenant space. The data generated from this additional event will be used to further evaluate potential soil vapor intrusion issues or rebound in this area of Building 2.





## 6 Monitoring Plan Compliance

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the composite cover system, and all affected Site media identified in the SMP. Monitoring results and performance evaluation of the ECs are reported to the NYSDEC and the NYSDOH as they are completed.

Components and schedule of the current monitoring plan are summarized in **Chart 1**.

**Chart 1 – Monitoring/Inspection Schedule**

Monitoring Program	Frequency	Matrix	Analysis
Composite Cover System	Annual (minimum) or during other (more frequent) inspections as time and conditions warrant	Soil	Visual Inspection of Cover
SSDS	Temporarily Shutdown/ Permanently Decommissioned	Soil Vapor	Negative Pressure
Bio-augmentation System	“As Needed”, if TOC concentrations are below 50 mg/L	Groundwater	Total Organic Carbon
Groundwater	Annual	Groundwater	Chlorinated VOCs, ethene

### 6.1 Composite Cover Monitoring Compliance

On June 2, 2020, the composite cover system was inspected by a qualified environmental professional. The composite cover system was observed to be intact. Surficial cracks in the asphalt parking lot in areas of the well network were noted but considered de minimis in nature. Photographs of the asphalt parking lot are provided in **Appendix F**.

Additional inspections occurred during one or more of the following activities: groundwater sampling and/or site visits.

### 6.2 Sub-Slab Depressurization System Monitoring Compliance

SSDSs inspections and monitoring were not conducted this year due to the temporary shutdown of the SSDSs as of August 2015. SSDS removal activities were completed at the former Deli Spot tenant space in April 2017.

A *SSDS Decommissioning Request*<sup>15</sup> was submitted to the NYSDEC and NYSDOH (the Departments) on January 3, 2017 requesting approval to decommission two (2) of the three (3) SSDSs at the Orangetown Shopping Center. The request to decommission the former Deli Spot and former Sparkle Cleaners tenant spaces was approved by the Departments on January 20, 2017 with a contingency to collect yearly sub-slab and indoor air samples from the three (3) tenant spaces for the next two (2) heating seasons (2017/2018 and 2018/2019).

Based on the results of the consecutive sampling events, an additional sub-slab and indoor air testing event was completed during the 2019/2020 heating season focusing on the former Sparkle



Cleaner location on December 10 and 11, 2019. Indoor air and sub-slab samples were collected from sample locations VP-5 and VP-6 as illustrated on **Figure 8**. Samples were submitted to SGS/Accutest Laboratories of Dayton, New Jersey (SGS) and were analyzed for VOCs via Environmental Protection Agency (EPA) Methods VTO15NYLL and/or VTO15NYSVLL. Laboratory analytical results were compared to the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, section 3.4.2, Indoor Air Matrices A, B, and C. Based on the comparison, a recommendation of “monitor” at the former Sparkle cleaners is supported by the trichloroethene and cis-1,2-dichloroethene concentrations at sample location VP-6. The sub-slab concentrations of trichloroethene and cis-1,2-dichloroethene at sample location VP-6 were both below the Matrix A threshold for “no further action” of 60 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). However, the indoor air concentration near VP-6 was  $0.42 \mu\text{g}/\text{m}^3$  of trichloroethene and not detected less than  $0.63 \mu\text{g}/\text{m}^3$  for cis-1,2-dichloroethene, which exceed the Matrix A indoor air concentration threshold for no further action ( $0.2 \mu\text{g}/\text{m}^3$ ).

The soil vapor intrusion (SVI) investigation was summarized in the *Soil Vapor Intrusion Summary* submitted to the NYSDEC in January 2020. The NYSDEC approved conducting an additional sampling event at the former Sparkle Cleaners tenant space during the 2020/2021 heating season on June 22, 2020. Regulatory correspondences are attached in **Appendix B**. SVI investigation analytical results are summarized in **Table 5** and the comparison of analytical results to NYSDOH Indoor Air Matrices A, B, and C is included as **Table 6**.

### 6.3 Bio-Augmentation System Monitoring Compliance

Inspections and monitoring of the bio-augmentation system were completed as described in the SMP. A total of 12 injection events have been completed since August 2012. A total approximate volume of 8,015 gallons of 10% molasses solution has been injected since the initial event.

Annual baseline sampling were completed at the Site on March 10, 2020. Monitoring wells MW-3, MW-4, MW-5, MW-8A, and MW-E are sampled on an annual basis. Updates to the groundwater sampling program were submitted as revisions to the SMP in October 2019.

Annual groundwater samples were submitted to SGS for the following analysis: VOCs, ethene, nitrate, iron (total, ferrous and ferric), sulfate, and/or TOC. Analytical data provided by SGS is included in **Appendix G** and are represented in **Table 2**, **Table 4**, and **Figure 5**. The Category B laboratory analytical reports provided by SGS was submitted to RemVer for review of data quality. Subsequent to the data review, RemVer provided a data usability summary report (DUSR), included in **Appendix H**.

## 7 Operation, Monitoring & Maintenance Plan Compliance

The OM&M Plans describe the measures necessary to operate, monitor, and maintain the mechanical components of the remedy selected for the Site. This section has two specific OM&M plans: one for the SSDS and one for the bio-augmentation treatment system.

Annually, copies of the OM&M forms generated from field activities at the Site are placed inside the on-Site hazardous communications box. Additionally, a copy of the Sub-Slab Depressurization



Operation, Monitoring, and Maintenance Plan, Bio-augmentation System Operation, Maintenance, and Monitoring Plan and manuals provided by the equipment manufacturer are stored in the hazardous communications box for reference.

### **7.1 Sub-Slab Depressurization OM&M Compliance**

The SSDSs remained temporarily shutdown for the entire monitoring period. Due to the shutdown of the SSDSs, OM&M events were not completed during the June 2019 to June 2020 period.

### **7.2 Bio-Augmentation OM&M Compliance**

A BAS OM&M visit was completed for the monitoring period either during the annual EC/IC site inspection or annual groundwater sampling event and included the following activities to evaluate performance and operation of the system: an inspection for security issues, vandalism, system damage, equipment or conveyance malfunction, connection integrity or environmental effects, gauging of BAS monitoring well network, collection of general groundwater chemistry parameters, visual inspection of piping stub-ups and BAS monitoring well road boxes, and inspection of well pads and injection road boxes and road pads. No non-compliance issues were identified during the reporting period.

## 8 Conclusions and Recommendations

### 8.1 SMP Compliance

Updates to the groundwater sampling, BAS, and SSDS decommissioning sections of the SMP were submitted as revisions on October 24, 2019 and approved by the NYSDEC on November 5, 2019.

During this monitoring period, all requirements set forth in the SMP have been completed. ICs described in the SMP are in place and in compliance. Monitoring and OM&M of the two (2) active ECs (composite cover and bio-augmentation system) were conducted during the monitoring period as specified in the SMP. OM&M of SSDSs have been suspended while the remaining systems are temporarily shutdown. Inspection of the composite cover system was completed at a minimum frequency of once annually. Monitoring and OM&M of the bio-augmentation system was completed on an annual basis during either the annual EC/IC site inspection or annual groundwater sampling event.

### 8.2 Performance and Effectiveness of Remedy

#### 8.2.1 Soil Vapor and SSDS Operation

The SSDSs have been temporarily shut-down since August 17, 2015. The NYSDEC approved the request to permanently decommission the SSDSs in the former Deli Spot and the former Sparkle Cleaners in January 2017. SSDS removal activities were completed at the former Deli Spot in May 2017 and the SSDS at the former Sparkle Cleaners remains in place but inactive. As requested by the NYSDEC, sub-slab and indoor air testing was conducted at the three (3) tenant spaces during the 2016/2017, 2017/2018, and 2018/2019 heating season for the purpose of monitoring rebound following the shutdown of the SSDSs. The results of the consecutive sampling events indicated no further action for all sample points at the former Deli Spot and New China House and recommended monitoring at the former Sparkle Cleaners. Due to the no further action recommendation at the New China House tenant space, the NYSDEC approved decommissioning of the SSDS at the New China House tenant space on August 19, 2019. The SSDS at the New China House remains in place but inactive. Regulatory correspondences are attached in **Appendix B**.

An additional soil vapor sampling event was proposed to be conducted during the 2020/2021 heating season at the former Sparkle Cleaners tenant space only (sample locations VP-5 and VP-6 only). The NYSDEC approved these plans in a letter dated August 19, 2019. The results of the additional sampling event will be evaluated against the Soil Vapor/Indoor Air Matrix A, B, and C matrices to propose appropriate additional actions.

#### 8.2.2 Groundwater and Bio-Augmentation

GES evaluated VOC concentrations in groundwater at monitoring wells MW-3, MW-4, MW-5, MW-8A, and MW-E over the annual monitoring period. The results of this evaluation are summarized in the table below.



Monitoring Well Identification	COC Summary
MW-3	Stable with no COC exceedances
MW-4	Increases in cis-1,2-dichloroethene (21.5 micrograms per liter [µg/L], exceeds GWQS) and vinyl chloride (2.9 µg/L, exceeds GWQS), no other COC detections or exceedances
MW-5	Increases in trichloroethene (8.2 µg/L, exceeds GWQS) and ethene [7.1 µg/L, no standard], decrease in cis-1,2-dichloroethene [115 µg/L, exceeds GWQS], trans-1,2-dichloroethene [3.7 µg/L, below GWQS] and vinyl chloride [33.7 µg/L, exceeds GWQS], no other COC detections or exceedances
MW-8A	Decrease in trichloroethene [5.5 µg/L, exceeds GWQS], cis-1,2-dichloroethene [2.7 µg/L, below GWQS], increase in trans-1,2-dichloroethene [1.1 µg/L, below GWQS], no other COC detections or exceedances
MW-E	Increase in cis-1,2-dichloroethene [11.1 µg/L, exceeds GWQS) and vinyl chloride [2.6 µg/L, exceeds GWQS], no other COC detections or exceedances

The absence of tetrachloroethene in groundwater samples collected from MW-5 and continued generation of ethene is indicative of continued source depletion and chlorinated solvent reduction.

### 8.3 Recommendations

As approved by the NYSDEC on June 22, 2020, an additional SVI Study will be conducted at the former Sparkle Cleaner tenant space during the 2020/2021 heating season.

Bio-augmentation injection events are generally scheduled when TOC concentrations are outside the optimal geochemical range (50 mg/L to 500 mg/L) in monitoring well MW-5. The TOC concentration at monitoring well MW-5 was 44.6 mg/L during the annual groundwater sampling event in March 2020, outside of the geochemical target range. However, since the TOC concentration at monitoring well MW-5 increased compared to the previous groundwater sampling event in May 2019, was outside of the target range by only 5.4 mg/L, and overall detections of COCs are low, a molasses injection event is not currently planned at this time. TOC will continue to be monitored on an annual basis to determine if additional injections are warranted for the Site.

Groundwater monitoring will be conducted on an annual basis to evaluate the effectiveness of the bio-augmentation remedy. The groundwater quality parameters (TOC, pH, dissolved oxygen [DO], oxidation reduction potential [ORP], temperature, pH, and conductivity) will be collected during the annual sampling event. Data collected during the annual sampling event will be summarized only in the annual *Periodic Review Report*. Based on the results of the annual sampling event (to be conducted in during the second quarter of 2021), GES will reevaluate the need for continued monitoring and bio-augmentation if data indicates maximum effectiveness has been obtained or if continued groundwater sampling events and/or bio-augmentation are warranted for long-term monitoring.

## References

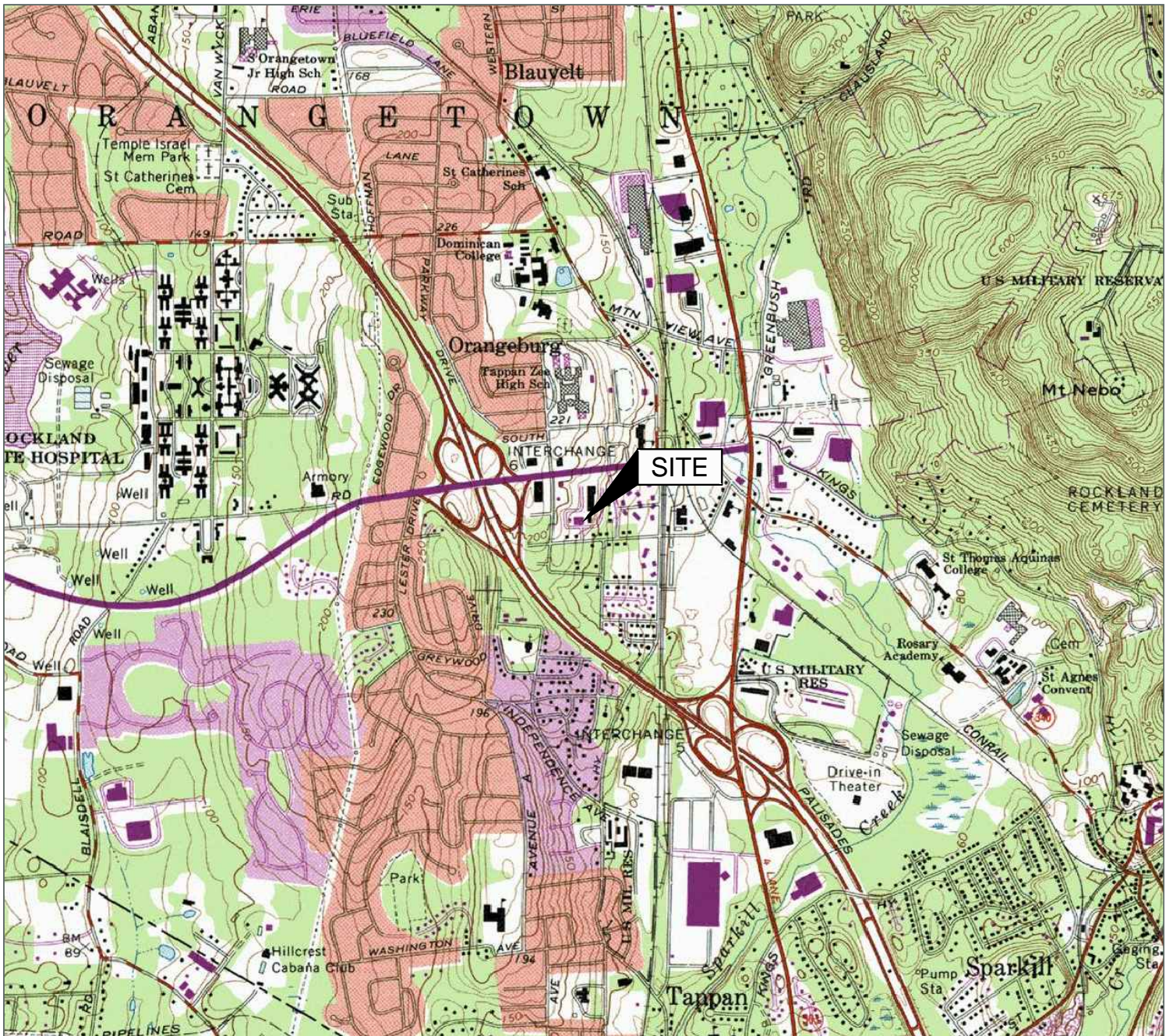
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- <sup>1</sup> Groundwater & Environmental Services, Inc., *Site Management Plan*, October 3, 2017.
- <sup>2</sup> Kleinfelder East, Inc., *Construction Completion Report #1 – Source Removal*, June 7, 2011.
- <sup>3</sup> New York State Department of Health, *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, revised May 2017.
- <sup>4</sup> Kleinfelder East, Inc., *Remedial Action Work Plan*, December 19, 2011.
- <sup>5</sup> Groundwater & Environmental Services, Inc., *May 2012 Monthly Progress Report*, May 31, 2012.
- <sup>6</sup> Groundwater & Environmental Services, Inc., *January 2013 Monthly Progress Report*, January 31, 2014.
- <sup>7</sup> Groundwater & Environmental Services, Inc., *February 2014 Monthly Progress Report*, February 28, 2014.
- <sup>8</sup> Kleinfelder East, Inc., *Remedial Investigation*, May 2008.
- <sup>9</sup> Groundwater & Environmental Services, Inc., *Soil Vapor Intrusion Investigation Summary*, June 4, 2015.
- <sup>10</sup> Groundwater & Environmental Services, Inc., *Soil Vapor Intrusion Investigation Summary*, February 9, 2016.
- <sup>11</sup> Groundwater & Environmental Services, Inc., *Soil Vapor Intrusion Investigation Summary*, March 10, 2017.
- <sup>12</sup> Groundwater & Environmental Services, Inc., *Soil Vapor Intrusion Summary*, January 30, 2018.
- <sup>13</sup> Groundwater & Environmental Services, Inc., *Soil Vapor Intrusion Summary*, February 12, 2019.
- <sup>14</sup> Groundwater & Environmental Services, Inc., *Soil Vapor Intrusion Summary*, January 20, 2020.
- <sup>15</sup> Groundwater & Environmental Services, Inc., *SSDS Decommissioning Request*, January 3, 2017.

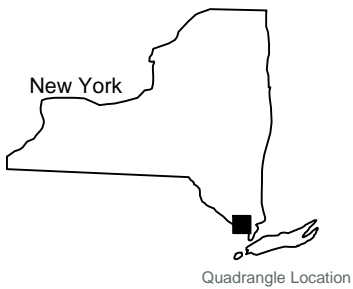


# Figures

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Source:  
 USGS 7.5 Minute Series  
 Topographic Quadrangle, 1979  
 Nyack, New York  
 Contour Interval = 10'



Site Location Map

UB Orangeburg, LLC  
 1-45 Orangetown Shopping Center  
 Orangeburg, New York

Drawn  
 W.G.S.  
 Designed  
 Approved

Date  
 1-23-18  
 Figure  
 1



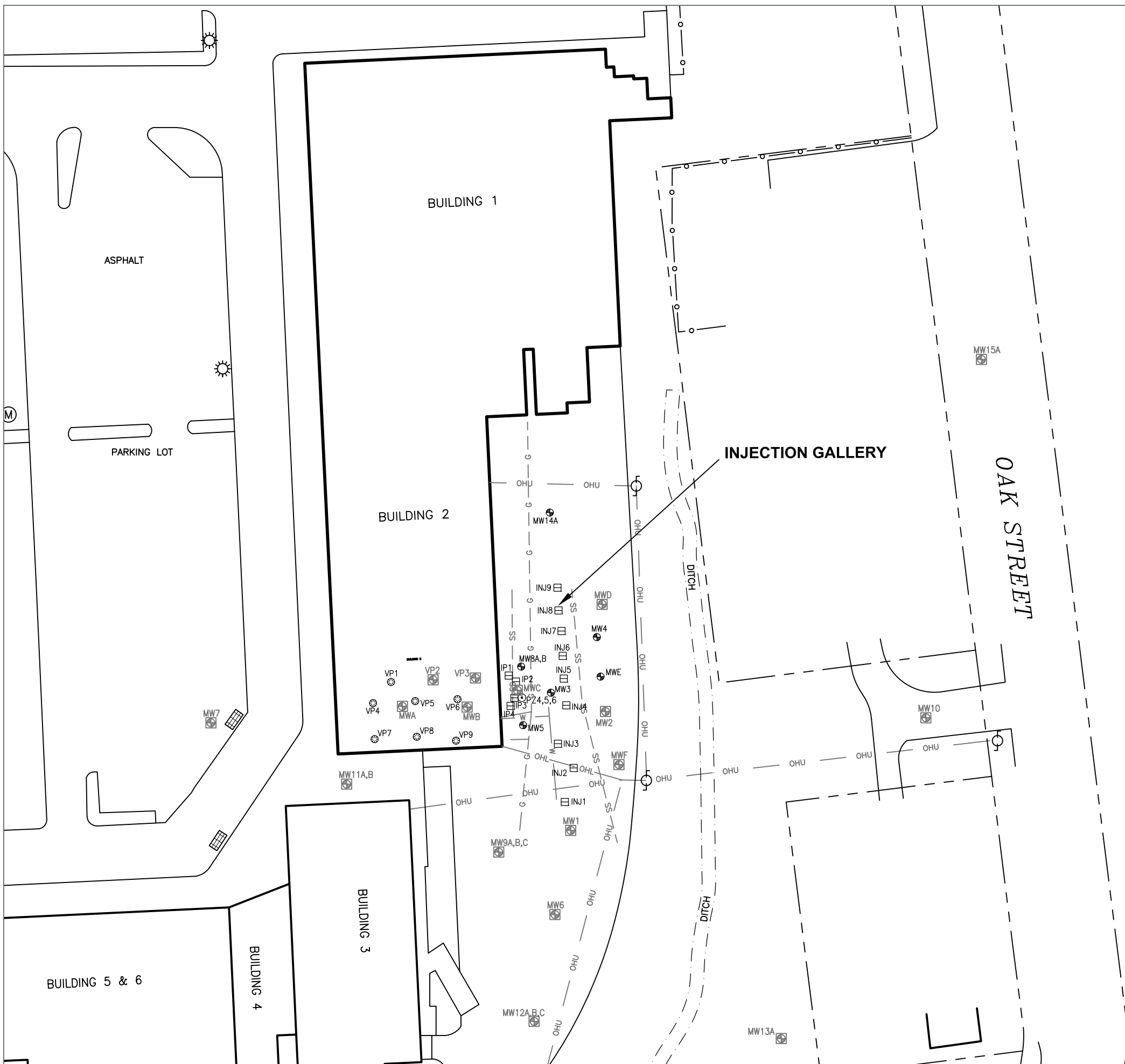
Scale In Feet



Groundwater & Environmental Services, Inc.



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**LEGEND**

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- ▤ CATCH BASIN
- Ⓜ UTILITY MANHOLE
- UTILITY POLE
- ☀ LIGHT POLE
- ⊕ FIRE HYDRANT
- ⊕ MONITORING WELL
- ▤ INJECTION WELL
- ⊕ DESTROYED MONITORING WELL
- ⊕ PIEZOMETER
- ⊕ SOIL VAPOR EXTRACTION WELL
- SS --- UNDERGROUND SANITARY SEWER LINE
- OHU --- OVERHEAD UTILITIES

<b>Site Map</b>	
UB Orangeburg, LLC 1-45 Orangetown Shopping Center Orangeburg, New York	
Drawn W.G.S. Designed  Approved	Date 4/14/20 Figure 2
<p>Scale In Feet</p>	
<p>Groundwater &amp; Environmental Services, Inc.</p>	

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- LEGEND**
- PROPERTY BOUNDARY
  - CHAIN LINK FENCE
  - ▤ CATCH BASIN
  - ⊙(M) UTILITY MANHOLE
  - (U) UTILITY POLE
  - ⊙(S) LIGHT POLE
  - ⊙(F) FIRE HYDRANT
  - ⊙(M) MONITORING WELL
  - ▤ DESTROYED MONITORING WELL
  - ⊙(P) PIEZOMETER
  - ⊙(SVE) SOIL VAPOR EXTRACTION WELL
  - SS --- UNDERGROUND SANITARY SEWER LINE
  - OHU --- OVERHEAD UTILITIES

<b>Detail Site Map</b>	
UB Orangeburg, LLC 1-45 Oranetown Shopping Center Orangeburg, New York	
Drawn W.G.S. Designed  Approved	Date 4/14/20 Figure 3
 Scale In Feet   <small>Groundwater &amp; Environmental Services, Inc.</small>	

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ONE STORY  
STUCCO STORE  
FRONT  
(BUILDING #2)

SOURCE:

1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007.
5. FIGURE GENERATED FROM KLEINFELDER ENGINEERING FIGURE DATED JULY 15, 2011.

LEGEND

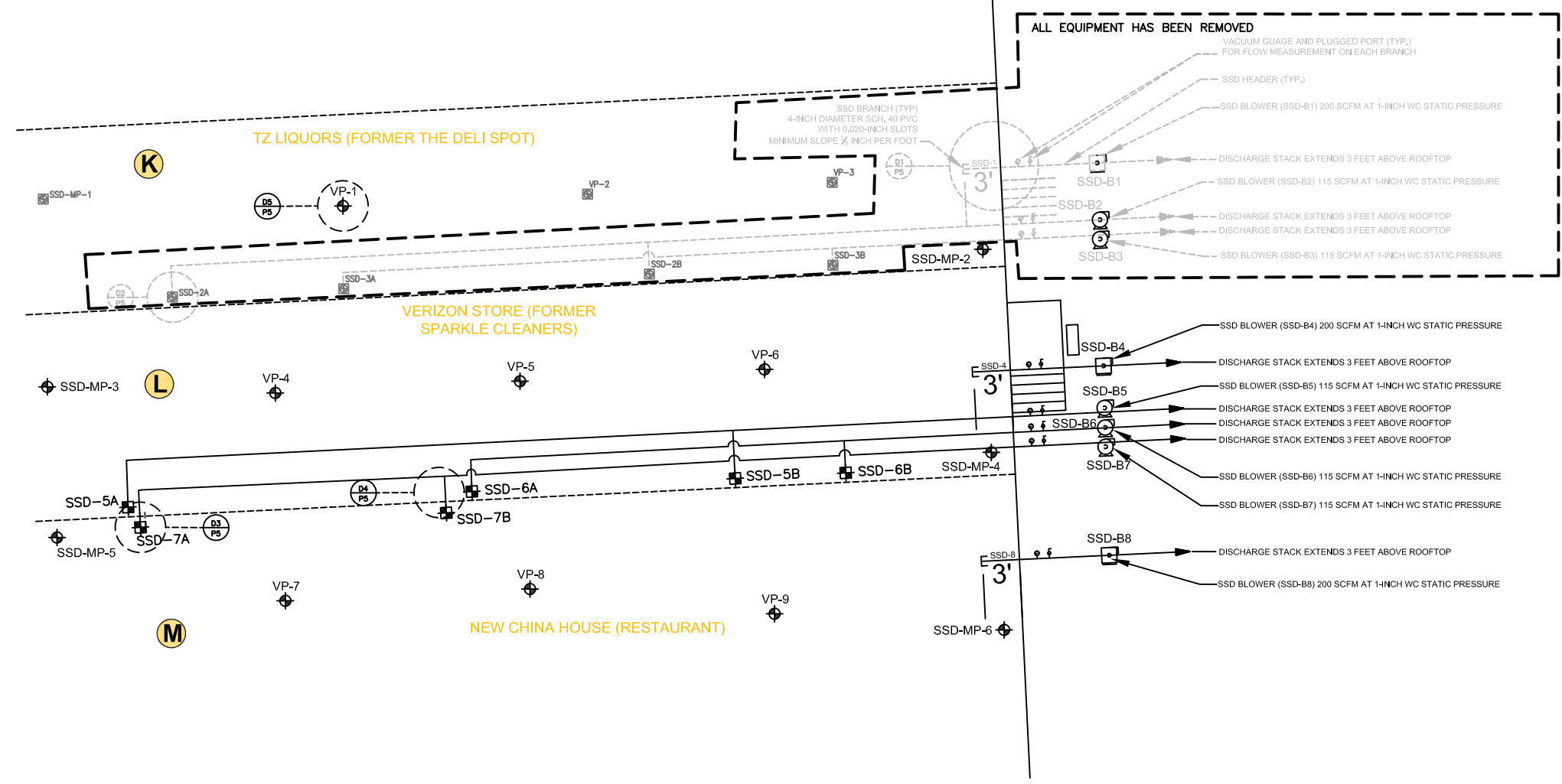
- SSD-MP-6 SUB-SLAB MONITORING PORT
- SUB-SLAB VAPOR EXTRACTION WELL
- DETAIL NUMBER  
PLATE NUMBER
- SSD BLOWER (115 SCFM)
- SSD BLOWER (200 SCFM)
- VACUUM GAUGE
- PLUGGED PORT
- ABANDONED/DESTROYED WELL

COMMERCIAL STORE ID TABLE (BUILDING #2)

- K** TZ LIQUORS (FORMER THE DELI SPOT)
- L** VERIZON STORE (FORMER SPARKLE CLEANERS)
- M** NEW CHINA HOUSE

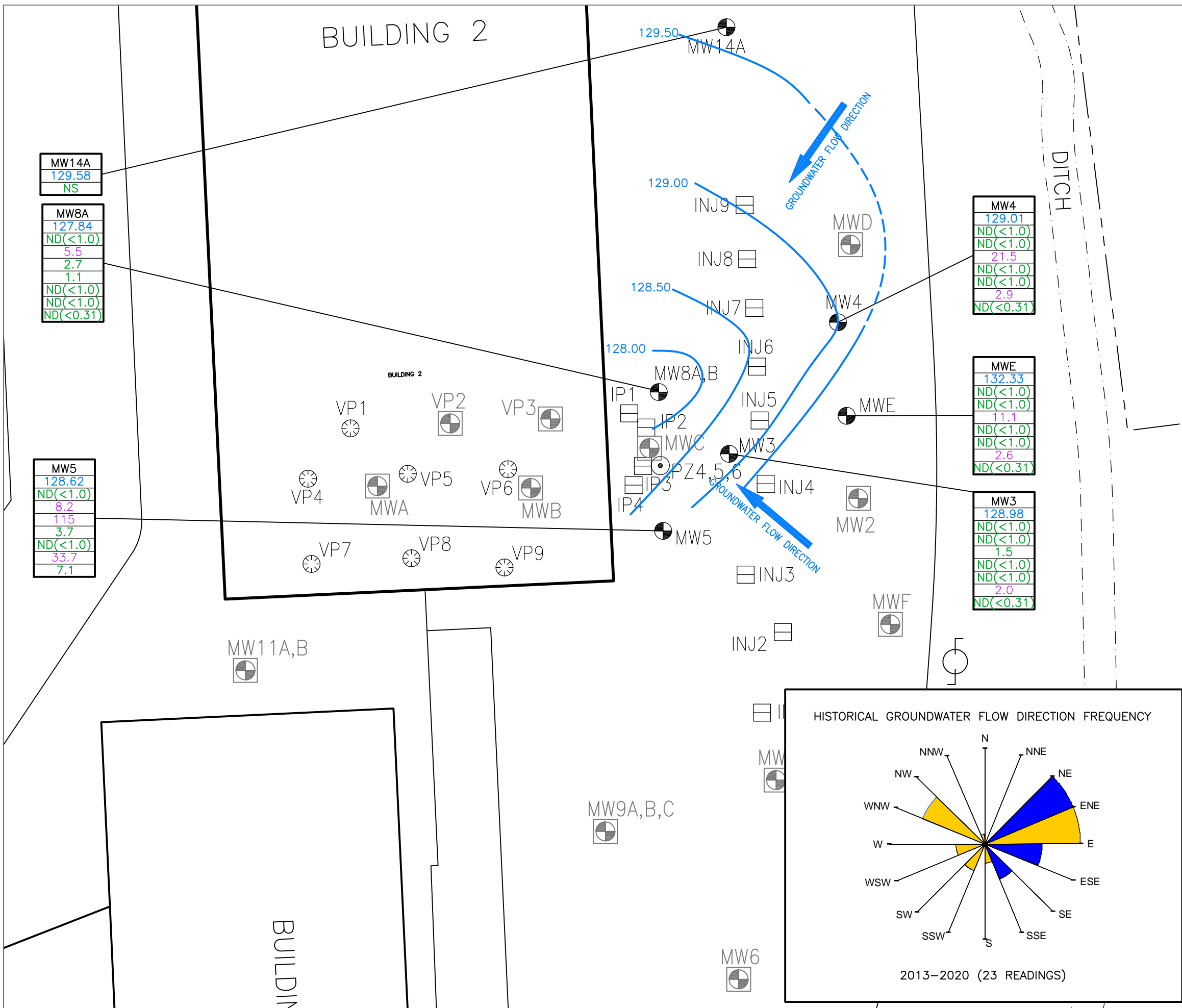
NOTES:

1. THE EXTRACTION PIPING INSIDE THE BUILDING IS ROUTED ABOVE THE SUB-CEILING OR ALONG THE EXTERIOR WALL.
2. DISCHARGE STACKS EXTEND 3 FEET ABOVE THE ROOFTOP (TYP.).



<b>Sub-Slab Depressurization Configuration</b>	
UB Orangeburg, LLC 1-45 Orangetown Shopping Center Orangeburg, New York	
Drawn <b>W.G.S.</b> Designed	Date 7/2/19 Figure 4
Approved	
Not to Scale	
 Groundwater & Environmental Services, Inc.	

M:\Graphics\1100-Patterson-LHV\Misc\Urstadt Biddle Properties\Orangeburg\Orangeburg SM.dwg, B20 sm-st, WShea



**LEGEND**

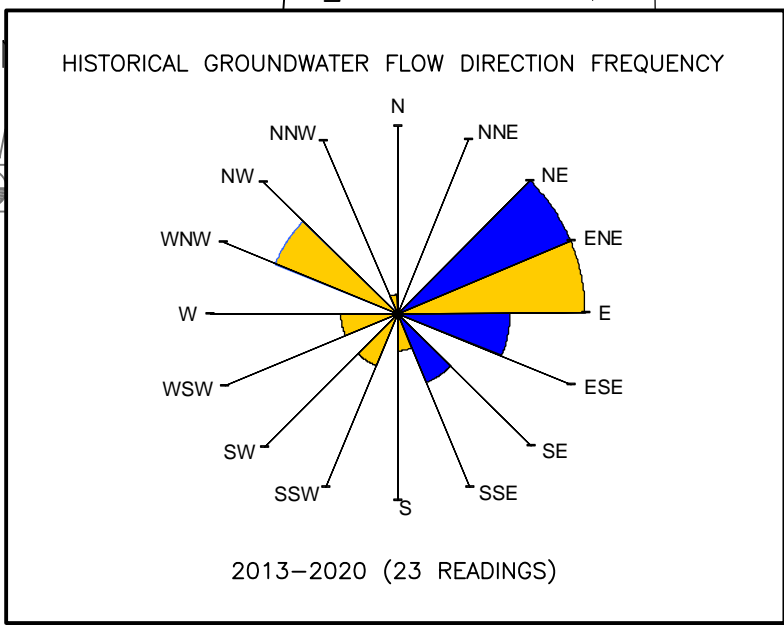
- PROPERTY BOUNDARY
- o--- CHAIN LINK FENCE
- [ ] CATCH BASIN
- (M) UTILITY MANHOLE
- (P) UTILITY POLE
- (S) LIGHT POLE
- (F) FIRE HYDRANT
- (MW) MONITORING WELL
- (IW) INJECTION WELL
- (MWX) DESTROYED MONITORING WELL
- (PZ) PIEZOMETER
- (SVE) SOIL VAPOR EXTRACTION WELL

**WELL IDENTIFICATION**

Well ID	Groundwater Elevation (feet)	Tetrachloroethene Concentration (ug/L)	Trichloroethene Concentration (ug/L)	CIS-1,2-Dichloroethene Concentration (ug/L)	TRANS-1,2-Dichloroethene Concentration (ug/L)	1,1-Dichloroethene Concentration (ug/L)	Vinyl Chloride Concentration (ug/L)	Ethene Concentration (ug/L)
MW8A	127.84	ND(<1.0)	5.5	2.7	1.1	ND(<1.0)	ND(<1.0)	ND(<0.31)

ug/L MICROGRAMS PER LITER  
 ND NOT DETECTED  
 <# WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN  
 NS NOT SAMPLED  
 - NOT AVAILABLE  
 --- GROUNDWATER CONTOUR (feet)

**NOTE:**  
 VALUE SHADED PURPLE EXCEEDS NYSDEC TOGS 1.1.1 GWQS.



**Groundwater Monitoring Map**  
 March 10, 2020

**UB Orangeburg, LLC**  
 1-45 Orangetown Shopping Center  
 Orangeburg, New York

Drawn  
 W.G.S.  
 Designed

Approved

Date  
 4/14/20  
 Figure  
 5

Scale In Feet  
 0 20

Groundwater & Environmental Services, Inc.

Figure 6

### Total Organic Carbon Concentration

Orangetown Shopping Center/Sparkle Cleaners  
NYSDEC Site #C344066

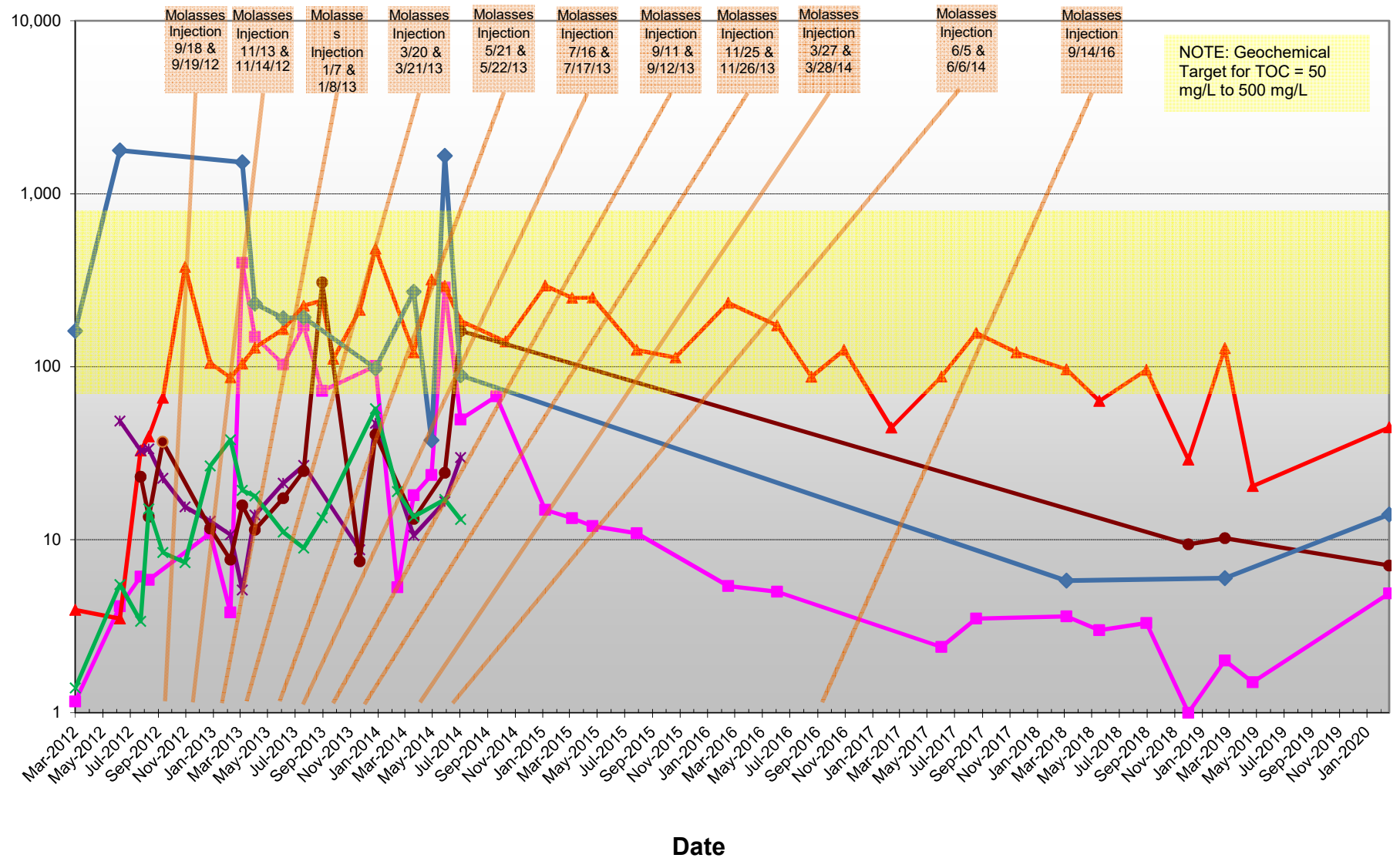
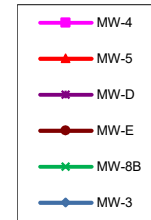
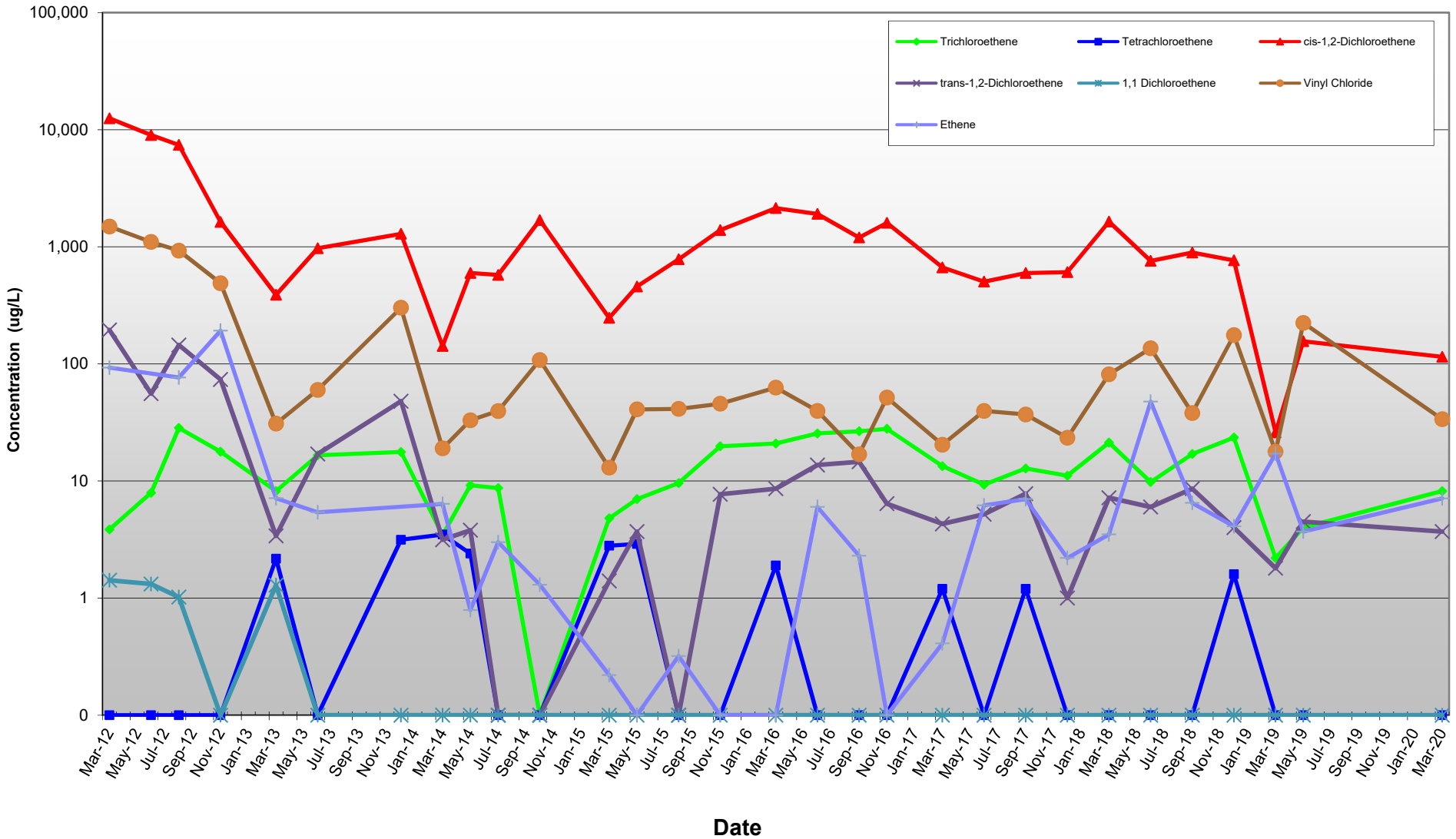


Figure 7

**MW-5**  
**Chlorinated Solvent Reductive Transformation Pathway**

Orangetown Shopping Center/Sparkle Cleaners  
NYSDEC Site #C344066












ONE STORY  
STUCCO STORE  
FRONT  
(BUILDING #2)

SOURCE:

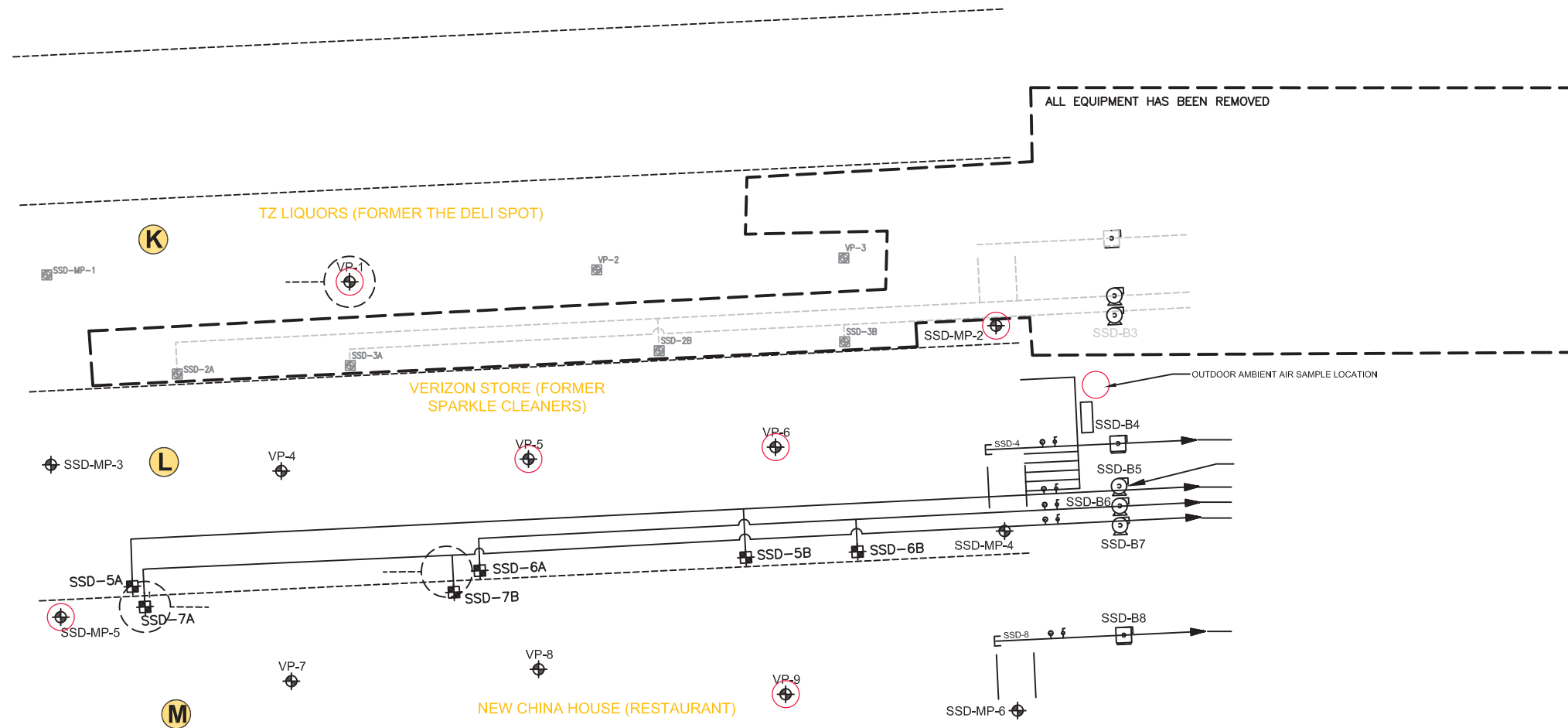
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2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007.
5. FIGURE GENERATED FROM KLEINFELDER ENGINEERING FIGURE DATED JULY 15, 2011.

LEGEND

- SSD-MP-6  SUB-SLAB MONITORING PORT
-  SUB-SLAB VAPOR EXTRACTION WELL
-  DETAIL NUMBER  
PLATE NUMBER
-  SSD BLOWER (115 SCFM)
-  SSD BLOWER (200 SCFM)
-  VACUUM GAUGE
-  PLUGGED PORT
-  ABANDONED/DESTROYED WELL
-  Sub-slab and/or Ambient Air Sample Location

COMMERCIAL STORE ID TABLE (BUILDING #2)

-  TZ LIQUORS (FORMER THE DELI SPOT)
-  VERIZON STORE (FORMER SPARKLE CLEANERS)
-  NEW CHINA HOUSE



Sub-Slab and Ambient Air Sampling Map

UB Orangeburg, LLC  
1-45 Orangetown Shopping Center  
Orangeburg, New York

Drawn W.G.S. Designed	Date 7/2/19 Figure 8
Approved	

Not to Scale





## Tables

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**Table 1**  
**GROUNDWATER GAUGING**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-3	3/22/2012	166.67	38.37	128.30	0.9
	6/28/2012	166.67	41.68	124.99	0.3
	8/13/2012	166.67	-	-	0
	8/31/2012	166.67	43.20	123.47	0
	10/1/2012	166.67	42.55	124.12	0
	11/19/2012	166.67	42.47	124.20	0
	1/14/2013	166.67	42.85	123.82	0
	2/28/2013	166.67	42.40	124.27	0
	3/26/2013	166.67	39.30	127.37	0
	4/23/2013	166.67	40.00	126.67	0
	6/25/2013	166.67	36.63	130.04	-
	12/11/2013	166.67	42.39	124.28	-
	1/15/2014	166.67	42.27	124.40	-
	3/5/2014	166.67	38.76	127.91	0
	4/10/2014	166.67	38.76	127.91	0
	5/19/2014	166.67	34.95	131.72	0
	6/18/2014	166.67	35.58	131.09	0
	7/24/2014	166.67	39.60	127.07	0
	10/10/2014	166.67	DRY	-	0
	3/27/2015	166.67	34.02	132.65	0
	5/11/2015	166.67	40.10	126.57	0
	8/17/2015	166.67	42.50	124.17	0
	11/11/2015	166.67	36.14	130.53	0
	3/7/2016	166.67	41.40	125.27	0
	6/23/2016	166.67	42.50	124.17	0
	9/7/2016	166.67	42.07	124.60	0
	11/18/2016	166.67	42.61	124.06	0
	3/3/2017	166.67	40.92	125.75	0
	6/22/2017	166.67	35.79	130.88	0.2
	12/5/2017	166.67	41.17	125.50	0
3/26/2018	166.67	38.24	128.43	0	
9/19/2018	166.67	33.45	133.22	0	
12/19/2018	166.67	32.99	133.68	0	
3/12/2019	166.67	29.62	137.05	0	
5/13/2019	166.67	29.43	137.24	0	
3/10/2020	166.67	37.69	128.98	0	
MW-4	3/21/2012	165.88	37.50	128.38	4.0
	6/28/2012	165.88	42.15	123.73	0.8
	8/13/2012	165.88	43.75	122.13	0
	8/31/2012	165.88	44.55	121.33	0
	10/1/2012	165.88	46.20	119.68	0
	11/19/2012	165.88	45.60	120.28	0
	1/14/2013	165.88	44.30	121.58	0
	2/28/2013	165.88	42.12	123.76	0
	3/26/2013	165.88	38.85	127.03	0
	4/23/2013	165.88	39.65	126.23	20.0
	6/25/2013	165.88	35.85	130.03	-
	12/11/2013	165.88	46.05	119.83	-
	1/15/2014	165.88	45.41	120.47	-

**Table 1  
GROUNDWATER GAUGING**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-4 (cont.)	3/5/2014	165.88	43.31	122.57	0
	4/10/2014	165.88	38.21	127.67	0
	5/19/2014	165.88	34.18	131.70	0
	6/18/2014	165.88	34.52	131.36	0
	7/23/2014	165.88	37.45	128.43	0
	10/10/2014	165.88	44.53	121.35	0
	1/26/2015	165.88	42.90	122.98	0
	3/27/2015	165.88	38.82	127.06	0
	5/11/2015	165.88	37.76	128.12	0
	8/17/2015	165.88	44.30	121.58	0
	11/11/2015	165.88	45.58	120.30	0
	3/7/2016	165.88	41.30	124.58	0
	6/23/2016	165.88	43.81	122.07	0
	9/7/2016	165.88	46.77	119.11	0
	11/18/2016	165.88	46.44	119.44	0
	3/3/2017	165.88	40.48	125.40	0
	6/22/2017	165.88	35.16	130.72	0.1
	9/7/2017	165.88	43.74	122.14	0
	12/5/2017	165.88	45.80	120.08	0
	3/26/2018	165.88	37.40	128.48	0
	6/7/2018	165.88	36.15	129.73	0
	9/19/2018	165.88	39.00	126.88	0
	12/19/2018	165.88	32.42	133.46	0
3/12/2019	165.88	28.47	137.41	0	
5/13/2019	165.88	28.21	137.67	0	
3/10/2020	165.88	36.87	129.01	0	
MW-5	3/21/2012	166.70	39.70	127.00	22.6
	6/28/2012	166.70	40.31	126.39	0.6
	8/13/2012	166.70	40.27	126.43	0.7
	8/31/2012	166.70	40.30	126.40	0
	10/1/2012	166.70	40.40	126.30	1.0
	11/19/2012	166.70	40.42	126.28	0
	1/14/2013	166.70	40.25	126.45	0
	2/28/2013	166.70	40.35	126.35	1.7
	3/26/2013	166.70	39.85	126.85	6.9
	4/23/2013	166.70	40.27	126.43	0
	6/25/2013	166.70	37.11	129.59	-
	12/11/2013	166.70	40.65	126.05	-
	1/15/2014	166.70	37.22	129.48	-
	3/5/2014	166.70	40.11	126.59	0
	4/10/2014	166.70	39.41	127.29	0
	5/19/2014	166.70	34.98	131.72	0
	6/18/2014	166.70	35.42	131.28	0
	7/23/2014	166.70	38.44	128.26	0
	10/10/2014	166.70	40.55	126.15	0
	1/26/2015	166.70	39.01	127.69	0
	3/27/2015	166.70	34.77	131.93	0
	5/11/2015	166.70	38.76	127.94	0
	8/17/2015	166.70	41.32	125.38	0
11/11/2015	166.70	40.81	125.89	0	
3/7/2016	166.70	40.60	126.10	0	

**Table 1**  
**GROUNDWATER GAUGING**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-5 (cont.)	6/23/2016	166.70	41.26	125.44	0
	9/7/2016	166.70	41.16	125.54	0
	11/18/2016	166.70	41.26	125.44	0
	3/3/2017	166.70	40.75	125.95	0
	6/22/2017	166.70	35.65	131.05	0
	9/7/2017	166.70	40.95	125.75	0
	12/5/2017	166.70	41.10	125.60	0
	3/26/2018	166.70	38.64	128.06	0
	6/7/2018	166.70	37.26	129.44	0
	9/19/2018	166.70	35.91	130.79	0
	12/19/2018	166.70	33.70	133.00	0
	3/12/2019	166.70	29.85	136.85	0
5/13/2019	166.70	29.70	137.00	0	
3/10/2020	166.70	38.08	128.62	0	
MW-6	3/22/2012	166.14	36.85	129.29	0
	6/28/2012	166.14	41.41	124.73	0
	8/13/2012	166.14	41.11	125.03	0
	11/19/2012	166.14	47.15	118.99	0
	3/26/2013	166.14	39.65	126.49	0
	6/25/2013	166.14	36.61	129.53	-
	12/11/2013	166.14	49.83	116.31	-
	3/5/2014	166.14	41.53	124.61	0
	5/19/2014	166.14	34.71	131.43	0
	7/23/2014	166.14	36.50	129.64	0
3/27/2015	166.14	39.22	126.92	0	
MW-7	3/21/2012	171.49	39.30	132.19	0
	6/29/2012	171.49	42.18	129.31	0
	8/13/2012	171.49	46.97	124.52	0
	11/19/2012	171.49	47.80	123.69	0
	3/26/2013	171.49	44.98	126.51	0
	4/23/2013	171.49	42.73	128.76	-
	6/25/2013	171.49	38.30	133.19	-
	12/11/2013	171.49	47.27	124.22	-
	3/5/2014	171.49	46.16	125.33	0
	5/19/2014	171.49	37.32	134.17	0
7/23/2014	171.49	39.74	131.75	0	
3/27/2015	171.49	44.72	126.77	0	
MW-8A	3/21/2012	166.15	41.90	124.25	38.0
	6/28/2012	166.15	42.00	124.15	43.5
	8/13/2012	166.15	DRY	-	34.6
	8/31/2012	166.15	41.80	124.35	24.0
	10/1/2012	166.15	42.10	124.05	12.2
	11/19/2012	166.15	42.40	123.75	39.4
	1/14/2013	166.15	42.95	123.13	0
	2/28/2013	166.15	42.60	123.55	37.6
	3/26/2013	166.15	-	-	0.1
	4/23/2013	166.15	42.05	124.10	35.5
	6/25/2013	166.15	39.95	126.20	-
	12/11/2013	166.15	41.80	124.35	-
1/15/2014	166.15	42.68	123.47	-	

**Table 1**  
**GROUNDWATER GAUGING**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-8A (cont.)	3/5/2014	166.15	42.63	123.52	0
	4/10/2014	166.15	39.67	126.48	0
	5/19/2014	166.15	42.83	123.32	0
	6/18/2014	166.15	37.12	129.03	0
	7/23/2014	166.15	42.05	124.10	0
	10/10/2014	166.15	DRY	-	0
	3/27/2015	166.15	40.31	125.84	0
	5/11/2015	166.15	42.08	124.07	0
	8/17/2015	166.15	42.30	123.85	0
	11/11/2015	166.15	41.82	124.33	0
	3/7/2016	166.15	41.80	124.35	0
	6/23/2016	166.15	41.91	124.24	0
	9/7/2016	166.15	41.90	124.25	0
	11/18/2016	166.15	41.80	124.35	0
	3/3/2017	166.15	41.72	124.43	0
	6/22/2017	166.15	36.69	129.46	0
	12/5/2017	166.15	41.45	124.70	0
	3/26/2018	166.15	38.91	127.24	0
	9/19/2018	166.15	40.40	125.75	0
	12/19/2018	166.15	33.94	132.21	0
3/12/2019	166.15	30.30	135.85	0	
5/13/2019	166.15	29.64	136.51	0	
3/10/2020	166.15	38.31	127.84	0	
MW-8B	3/21/2012	166.08	39.13	126.95	14.6
	6/28/2012	166.08	42.55	123.53	5.1
	8/13/2012	166.08	45.30	120.78	0.7
	8/31/2012	166.08	46.40	119.68	0
	10/1/2012	166.08	49.40	116.68	0.1
	11/19/2012	166.08	48.45	117.63	0
	1/14/2013	166.08	47.07	119.01	0
	2/28/2013	166.08	44.00	122.08	0
	3/26/2013	166.08	40.32	125.76	4.6
	4/23/2013	166.08	40.08	126.00	30.2
	6/25/2013	166.08	37.20	128.88	-
	12/11/2013	166.08	49.63	116.45	-
	1/15/2014	166.08	49.63	116.45	-
	3/5/2014	166.08	45.07	121.01	0
	4/10/2014	166.08	39.69	126.39	0
	5/19/2014	166.08	35.55	130.53	0
	6/18/2014	166.08	36.05	130.03	0
	7/23/2014	166.08	38.95	127.13	0
	10/10/2014	166.08	47.21	118.87	0
	3/27/2015	166.08	40.21	125.87	0
	5/11/2015	166.08	39.15	126.93	0
	8/17/2015	166.08	45.32	120.76	0
	11/11/2015	166.08	41.56	124.52	0
	3/7/2016	166.08	42.85	123.23	0
	6/23/2016	166.08	45.85	120.23	0
	9/7/2016	166.08	DRY	-	0
	11/18/2016	166.08	DRY	-	0
3/3/2017	166.08	42.11	123.97	0	
6/22/2017	166.08	36.56	129.52	0	

**Table 1  
GROUNDWATER GAUGING**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-10	3/21/2012	137.86	9.37	128.49	0
	6/29/2012	137.86	12.58	125.28	0
	8/13/2012	137.86		122.48	0
	11/19/2012	137.86	18.00	119.86	0
	3/26/2013	137.86	9.90	127.96	0
	6/25/2013	137.86	8.05	129.81	-
	12/11/2013	137.86	19.71	118.15	-
	3/5/2014	137.86	9.33	128.53	0
	4/10/2014	137.86	9.33	128.53	0
	5/19/2014	137.86	5.75	132.11	0
	7/23/2014	137.86	9.87	127.99	0
	10/10/2014	137.86	18.12	119.74	0
	3/27/2015	137.86	9.55	128.31	0
	5/11/2015	137.86	9.92	127.94	0
	8/17/2015	137.86	15.80	122.06	0
	11/11/2015	137.86	21.47	116.39	0
	3/7/2016	137.86	12.46	125.40	0
	6/23/2016	137.86	16.04	121.82	0
9/7/2016	137.86	20.19	117.67	0	
11/18/2016	137.86	23.55	114.31	0	
3/3/2017	137.86	11.55	126.31	0	
6/22/2017	137.86	8.47	129.39	0	
MW-E	12/5/2017	165.03	-	-	-
	3/26/2018	165.03	-	-	-
	9/19/2018	165.03	32.37	132.66	0
	12/19/2018	165.03	31.61	133.42	0
	3/12/2019	165.03	28.04	136.99	0
	5/13/2019	165.03	28.02	137.01	0
	3/10/2020	165.03	32.70	132.33	0
MW-14A	12/5/2017	166.49	33.68	132.81	0
	3/26/2018	166.49	34.61	131.88	0
	9/19/2018	166.49	41.25	125.24	0
	12/19/2018	166.49	32.93	133.56	0
	3/12/2019	166.49	-	-	0
	5/13/2019	167.49	27.64	139.85	0
	3/10/2020	167.49	37.91	129.58	0

**Notes:**

- DRY = No water in well to gauge
- = Not available or measured
- ft = feet
- ppm = parts per million
- GW = groundwater
- NSD = No Survey Data

**Table 2**  
**CONSTITUENTS OF CONCERN**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Tetrachloro-ethene (ug/l)	Trichloro-ethene (ug/l)	cis-1,2-Dichloro-ethene (ug/l)	trans-1,2-Dichloro-ethene (ug/l)	1,1-Dichloro-ethene (ug/l)	Vinyl Chloride (ug/l)	Ethene (ug/l)
<b>NY TOGS 1.1.1 GWQS</b>		5	5	5	5	5	2	NA
MW-3	3/22/2012	ND<5.00 J	ND<5.00 J	60.1	ND<5.00 J	ND<5.00 J	23.4	6.28 B
	6/28/2012	ND<5.00	ND<5.00	143	ND<5.00	ND<5.00	47.5	NA
	8/13/2012	NS	NS	NS	NS	NS	NS	NS
	8/31/2012	NS	NS	NS	NS	NS	NS	NS
	10/1/2012	NS	NS	NS	NS	NS	NS	NS
	11/19/2012	NS	NS	NS	NS	NS	NS	NS
	1/14/2013	NS	NS	NS	NS	NS	NS	NS
	2/28/2013	NS	NS	NS	NS	NS	NS	NS
	3/26/2013	ND<0.250	0.327 J	2.62	0.269 J	ND<0.250	2.26	ND<2.5
	4/23/2013	NS	NS	NS	NS	NS	NS	NS
	6/25/2013	ND<0.250	ND<0.200	7.02	0.617 J	ND<0.250	3.43	ND<2.5
	12/11/2013	NS	NS	NS	NS	NS	NS	NS
	1/15/2014	NS	NS	NS	NS	NS	NS	NS
	3/5/2014	NS	NS	NS	NS	NS	NS	NS
	4/10/2014	NS	NS	NS	NS	NS	NS	NS
	5/19/2014	ND<1.0	ND<1.0	12.6	ND<1.0	ND<1.0	2.2	ND<0.31
	7/24/2014	ND<1.0	ND<1.0	1.2	ND<1.0	ND<1.0	ND<1.0	ND<0.31
	10/10/2014	NS	NS	NS	NS	NS	NS	NS
	3/27/2015	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.31
	5/11/2015	ND<1.0	ND<1.0	8.6	ND<1.0	ND<1.0	2.9	ND<0.31
8/17/2015	ND<1.0	ND<1.0	2.8	ND<1.0	ND<1.0	3.6	ND<0.31	
11/11/2015	ND<1.0	ND<1.0	7.8	ND<1.0	ND<1.0	ND<1.0	ND<0.31	
3/7/2016	ND<1.0	1.1	NA	NA	NA	6.1	ND<0.31	
6/23/2016	ND<1.0	1.7	14.8	ND<1.0	ND<1.0	ND<1.0	ND<0.31	
9/7/2016	ND<1.0	ND<1.0	15.9	ND<1.0	ND<1.0	18.8	ND<0.31	
11/18/2016	NS	NS	NS	NS	NS	NS	NS	
3/3/2017	ND<1.0	ND<1.0	6.7	ND<1.0	ND<1.0	3.2	ND<0.31	
6/22/2017	ND<1.0	ND<1.0	7.9	ND<1.0	ND<1.0	2.2	0.21	
3/26/2018	ND(<1.0)	ND(<1.0)	1.3	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)	
3/12/2019	ND(<1.0)	ND(<1.0)	1.6	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)	
3/10/2020	ND(<1.0)	ND(<1.0)	1.5	ND(<1.0)	ND(<1.0)	2.0	ND(<0.31)	
MW-4	3/21/2012	ND<0.500	5.28	276	0.680 J	ND<0.500	1.59	ND<2.50
	6/28/2012	ND<0.500	7.71	495	4.29	ND<0.500	21.9	NA
	8/13/2012	ND<1.00	4.51	197	1.16	ND<1.00	8.66	ND<5
	8/31/2012	NS	NS	NS	NS	NS	NS	NS
	10/1/2012	NS	NS	NS	NS	NS	NS	NS
	11/19/2012	ND<1.00	3.48	200	ND<1.00	ND<1.00	13.1	ND<5
	1/14/2013	NS	NS	NS	NS	NS	NS	NS
	2/28/2013	NS	NS	NS	NS	NS	NS	NS
	3/26/2013	ND<0.250	1.20	39.8	0.634 J	ND<0.250	57.7	8.3
	4/23/2013	NS	NS	NS	NS	NS	NS	NS
	6/25/2013	ND<0.250	ND<0.200	3.88	0.288 J	ND<0.250	2.84	6.09
	12/11/2013	NS	NS	NS	NS	NS	NS	NS
	1/15/2014	NS	NS	NS	NS	NS	NS	NS
	3/5/2014	ND<1.00	ND<1.00	4.25	0.336 J	ND<1.00	5.03	ND<5.00
	4/10/2014	NS	NS	NS	NS	NS	NS	NS
5/19/2014	ND<1.0	3.4	104	ND<1.0	ND<1.0	35.1	0.43	
7/24/2014	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.2	ND<0.31	
10/10/2014	ND<1.0	ND<1.0	2.3	ND<1.0	ND<1.0	1.8	ND<0.31	

**Table 2**  
**CONSTITUENTS OF CONCERN**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Tetrachloro-ethene (ug/l)	Trichloro-ethene (ug/l)	cis-1,2-Dichloro-ethene (ug/l)	trans-1,2-Dichloro-ethene (ug/l)	1,1-Dichloro-ethene (ug/l)	Vinyl Chloride (ug/l)	Ethene (ug/l)
<b>NY TOGS 1.1.1 GWQS</b>		5	5	5	5	5	2	NA
MW-4 (cont)	3/27/2015	ND<1.0	ND<1.0	3.4	ND<1.0	ND<1.0	5.8	ND<0.31
	5/11/2015	ND<1.0	ND<1.0	2.1	ND<1.0	ND<1.0	1.7	ND<0.31
	8/17/2015	ND<1.0	ND<1.0	1	ND<1.0	ND<1.0	1.8	ND<0.31
	11/11/2015	ND<1.0	ND<1.0	4	ND<1.0	ND<1.0	ND<1.0	ND<0.31
	3/7/2016	ND<1.0	ND<1.0	13.6	ND<1.0	ND<1.0	2.1	ND<0.31
	6/23/2016	ND<1.0	ND<1.0	12.9	ND<1.0	ND<1.0	3.3	0.97
	9/7/2016	NS	NS	NS	NS	NS	NS	NS
	11/18/2016	ND<1.0	1.3	3.6	ND<1.0	ND<1.0	ND<1.0	NA
	3/3/2017	ND<1.0	ND<1.0	14.6	ND<1.0	ND<1.0	ND<1.0	ND<0.31
	6/22/2017	ND<1.0	1.9	20.6	ND<1.0	ND<1.0	1.0	0.21
	9/7/2017	ND<1.0	ND<1.0	19.1	ND<1.0	ND<1.0	2.4	0.40
	12/5/2017	NA	NA	NA	NA	NA	NA	NA
	3/26/2018	ND(<1.0)	ND(<1.0)	3.5	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	6/7/2018	ND(<1.0)	1.1	8.1	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	9/19/2018	ND(<1.0)	ND(<1.0)	21.8	ND(<1.0)	ND(<1.0)	4.1	0.64
	12/21/2018	ND(<1.0)	ND(<1.0)	2.9	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	3/12/2019	ND(<1.0)	ND(<1.0)	1.7	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	5/13/2019	ND(<1.0)	ND(<1.0)	2.6	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	3/10/2020	ND(<1.0)	ND(<1.0)	21.5	ND(<1.0)	ND(<1.0)	2.9	ND(<0.31)
	MW-5	3/21/2012	ND<0.500	3.86	12,500	195	1.42	1,490
6/28/2012		ND<0.500	7.93	9,000	55.7	1.32	1,100	NA
8/13/2012		ND<1.00	28.4	7,410	145	1.02	928	76.6
8/31/2012		NS	NS	NS	NS	NS	NS	NS
10/1/2012		NS	NS	NS	NS	NS	NS	NS
11/19/2012		ND<1.00	17.8	1,630	73.6	ND<1.00	489	192
1/14/2013		NS	NS	NS	NS	NS	NS	NS
2/28/2013		NS	NS	NS	NS	NS	NS	NS
3/26/2013		2.17	8.19	389	3.40	1.29	30.9	7.12
4/23/2013		NS	NS	NS	NS	NS	NS	NS
6/25/2013		ND<2.50	16.6	972	17.0	ND<2.50	60.0	5.41
12/11/2013		3.15 J	17.7	1,290	48.0	ND<10.0	302	NA
1/15/2014		NS	NS	NS	NS	NS	NS	NS
3/5/2014		3.49 J	3.45 J	142	3.15 J	ND<10.0	19.0	6.37
4/10/2014		NS	NS	NS	NS	NS	NS	NS
5/19/2014		2.4	9.2	598	3.8	ND<1.0	33.0	0.79
7/24/2014		ND<5.0	8.7	575	ND<5.0	ND<5.0	39.6	3.00
10/10/2014		ND<10	ND<10	1,690	ND<10	ND<10	108	1.3
3/27/2015		2.8	4.8	247	1.4	ND<1.0	13	0.22
5/11/2015		2.9	7.0	458	3.7	ND<1.0	40.9	ND<0.31
8/17/2015		ND<5.0	9.6	783	ND<5.0	ND<5.0	41.3	0.32
11/11/2015		ND<5.0	19.8	1,390	7.7	ND<5.0	45.7	ND<0.31
3/7/2016		1.9	20.9	2,140	8.6	ND<1.0	62.7	ND<0.31
6/23/2016		ND<10	25.5	1,910	13.7	ND<10	39.7	6
9/7/2016		ND<10	26.6	1,200	14.6	ND<10	16.9	2.3
11/18/2016	ND<5.0	27.9	1,600	6.4	ND<5.0	51.6	ND<0.31	
3/3/2017	1.2	13.4	666	4.3	ND<1.0	20.4	0.41	
6/22/2017	ND<1.0	9.3	504	5.2	ND<1.0	39.7	6.2	
9/7/2017	1.2	12.8	597	7.8	ND<1.0	37.0	7.0	
12/5/2017	ND < 5.0	11.1	608	ND < 5.0	ND < 5.0	23.4	2.2	

**Table 2**  
**CONSTITUENTS OF CONCERN**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Tetrachloro-ethene (ug/l)	Trichloro-ethene (ug/l)	cis-1,2-Dichloro-ethene (ug/l)	trans-1,2-Dichloro-ethene (ug/l)	1,1-Dichloro-ethene (ug/l)	Vinyl Chloride (ug/l)	Ethene (ug/l)
<b>NY TOGS 1.1.1 GWQS</b>		5	5	5	5	5	2	NA
MW-5 (cont)	3/26/2018	ND(<5.0)	21.3	1,640	7.2	ND(<5.0)	81.5	3.5
	6/7/2018	ND(<5.0)	9.8	758	6.0	ND(<5.0)	136	47.6
	9/19/2018	ND(<2.0)	17.0	893	8.6	ND(<2.0)	38.1	6.5
	12/21/2018	1.6	23.5	766	4.0	ND(<1.0)	176	4.1
	3/12/2019	ND(<1.0)	2.2	26	1.8	ND(<1.0)	17.8	17.1
	5/13/2019	ND(<1.0)	4.0	156	4.5	ND(<1.0)	224	3.7
	3/10/2020	ND(<1.0)	8.2	115	3.7	ND(<1.0)	33.7	7.1
MW-8A	3/21/2012	NS	NS	NS	NS	NS	NS	NS
	6/28/2012	1.20	46.2	786	8.66	ND<0.500	29.4	NA
	8/13/2012	NS	NS	NS	NS	NS	NS	NS
	8/31/2012	NS	NS	NS	NS	NS	NS	NS
	10/1/2012	NS	NS	NS	NS	NS	NS	NS
	11/19/2012	NS	NS	NS	NS	NS	NS	NS
	1/14/2013	NS	NS	NS	NS	NS	NS	NS
	2/28/2013	NS	NS	NS	NS	NS	NS	NS
	3/26/2013	NS	NS	NS	NS	NS	NS	NS
	4/23/2013	NS	NS	NS	NS	NS	NS	NS
	6/25/2013	ND<0.250	14.8	358	4.17	ND<0.250	59.3	NA
	12/11/2013	ND<1.00	ND<1.00	7.70	0.300 J	ND<1.00	0.665 J	NA
	1/15/2014	NS	NS	NS	NS	NS	NS	NS
	3/5/2014	NS	NS	NS	NS	NS	NS	NS
	4/10/2014	NS	NS	NS	NS	NS	NS	NS
	5/19/2014	NS	NS	NS	NS	NS	NS	NS
	7/24/2014	NS	NS	NS	NS	NS	NS	NS
	10/10/2014	NS	NS	NS	NS	NS	NS	NS
	3/27/2015	ND<1.0	3.4	17.4	ND<1.0	ND<1.0	ND<1.0	NS
	3/27/2015	NS	NS	NS	NS	NS	NS	NS
	8/17/2015	NS	NS	NS	NS	NS	NS	NS
	11/11/2015	ND<1.0	ND<1.0	2.4	ND<1.0	ND<1.0	ND<1.0	NA
	3/7/2016	ND<1.0	ND<1.0	3.2	ND<1.0	ND<1.0	3.2	NA
9/7/2016	ND<1.0	1.3	2.1	ND<1.0	ND<1.0	2.2	NA	
11/18/2016	ND<1.0	1.3	2.8	ND<1.0	ND<1.0	4.4	NA	
3/3/2017	ND<1.0	1.3	ND<1.0	ND<1.0	ND<1.0	4	NA	
6/22/2017	ND<1.0	7.4	26.9	ND<1.0	ND<1.0	1.6	ND<0.31	
3/26/2018	ND(<1.0)	1.9	1.9	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)	
3/12/2019	ND(<1.0)	9.2	9.8	ND(<1.0)	ND(<1.0)	ND(<1.0)	NA	
5/13/2019	NA	NA	NA	NA	NA	NA	ND(<0.31)	
3/10/2020	ND(<1.0)	5.5	2.7	1.1	ND(<1.0)	ND(<1.0)	ND(<0.31)	
MW-E	6/28/2012	NS	NS	NS	NS	NS	NS	NS
	8/13/2012	ND<1.00 U	ND<1.00 U	7.63	ND<1.00 U	ND<1.00 U	6.75	ND<5 U
	8/31/2012	NS	NS	NS	NS	NS	NS	NS
	10/1/2012	NS	NS	NS	NS	NS	NS	NS
	11/19/2012	NS	NS	NS	NS	NS	NS	NS
	1/14/2013	NS	NS	NS	NS	NS	NS	NS
	2/28/2013	NS	NS	NS	NS	NS	NS	NS
	3/26/2013	ND<0.250 U	0.275 J	2.36	ND<0.230 U	ND<0.250 U	1.51	ND<2.5 U
4/23/2013	NS	NS	NS	NS	NS	NS	NS	
6/25/2013	ND<0.250 U	0.780 J	20.9	0.760 J	ND<0.250 U	8.86	ND<2.5 U	



**Table 2**  
**CONSTITUENTS OF CONCERN**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Tetrachloro-ethene (ug/l)	Trichloro-ethene (ug/l)	cis-1,2-Dichloro-ethene (ug/l)	trans-1,2-Dichloro-ethene (ug/l)	1,1-Dichloro-ethene (ug/l)	Vinyl Chloride (ug/l)	Ethene (ug/l)
<b>NY TOGS 1.1.1 GWQS</b>		5	5	5	5	5	2	NA
MW-E	12/11/2013	ND<1.00 U	0.371 J	2.94	0.256 J	ND<1.00 U	1.48	NA
(cont)	3/26/2018	ND(<1.0)	ND(<1.0)	4.5	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	3/12/2019	ND(<1.0)	ND(<1.0)	1.9	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<0.31)
	3/10/2020	ND(<1.0)	ND(<1.0)	11.1	ND(<1.0)	ND(<1.0)	2.6	ND(<0.31)

**Notes:**

- µg/L = Micrograms/liter
- BDL = Below Detection Limit
- DRY = No water for sampling
- GWQS = Groundwater Quality Standards
- NA = Not Available or not analyzed for that specific compound
- ND = Not detected (# is method detection limit)
- J = Estimated Value
- NS = Not sampled
- NY = New York
- TOGS = Technical and Operational Guidance Series 1.1.1

**Table 3**  
**GENERAL GROUNDWATER CHEMISTRY**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	pH	Temperature (°C)	Specific Conductivity (uS/cm or umhos/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTUs)
MW-3	03/26/2018	6.30	10.42	1,987	1.07	-97.6	NA
	03/12/2019	7.56	11.46	1,970	2.58	-71.1	87.9
	03/10/2020	6.37	15.49	1,454	2.77	8.7	149
MW-4	03/21/2012	7.31	15.25	1,400	1.09	147.0	6.2
	06/28/2012	6.69	19.46	764	3.61	47.9	28.1
	08/13/2012	6.59	17.75	1,621	6.21	9.1	152.1
	08/31/2012	6.07	17.45	1,450	1.08	-21.4	NA
	11/19/2012	6.32	11.63	1,126	1.59	70.6	85.28
	01/14/2013	6.36	14.62	1,486	1.75	-56.9	NA
	02/28/2013	6.51	13.92	2,014	1.45	-35.1	NA
	03/26/2013	5.90	14.32	2,212	2.16	-49.0	64.7
	04/23/2013	6.54	13.31	1,685	2.02	-24.1	NA
	06/25/2013	6.51	18.03	1,982	0.82	-70.1	55.5
	08/09/2013	6.18	17.27	1,872	1.43	-39.3	NA
	09/19/2013	6.22	14.79	2,101	0.55	-72.5	143.3
	01/15/2014	6.11	14.74	10,411	0.91	-26.4	NA
	03/05/2014	6.01	12.86	3,755	1.70	-52.2	22.4
	05/19/2014	6.28	18.76	1,300	13.01	-54.8	21.8
	06/18/2014	7.23	17.09	2,770	1.73	-29.6	NA
	07/24/2014	6.32	14.92	2,284	0.89	-155.1	9.47
	10/10/2014	6.64	19.02	2,345	1.50	-34.8	20.30
	01/26/2015	6.49	12.42	5,329	2.80	-118.7	NA
	03/27/2015	6.78	12.84	2,480	0.82	-213.0	NA
	05/11/2015	6.60	17.24	2,328	2.78	-142.2	NA
	08/17/2015	6.51	15.91	4,455	0.52	-121.9	NA
	11/11/2015	6.48	14.20	2,059	1.40	-71.1	NA
	03/07/2016	6.78	14.73	1,882	1.07	-13.5	NA
	06/23/2016	6.18	18.79	1,936	0.35	-38.5	NA
	09/07/2016	NA	NA	NA	NA	NA	NA
	11/18/2016	NA	NA	NA	NA	NA	NA
03/03/2017	6.66	10.53	1,639	1.58	-70.2	NA	
06/22/2017	6.52	19.31	1,714	0.68	79.9	NA	
09/07/2017	6.46	16.09	1,743	0.62	71.2	NA	
12/05/2017	6.39	14.36	2,056	5.75	-48.5	NA	
03/26/2018	6.60	10.12	1,650	1.39	-69.9	NA	
06/07/2018	6.57	15.80	1,720	4.90	179.9	NA	
09/19/2018	6.50	18.42	1,890	1.72	130.7	153.6	
12/21/2018	5.87	14.19	105	10.25	212.1	0.0	
03/12/2019	6.44	11.13	2,606	2.45	242.0	295.3	
05/13/2019	6.69	14.30	8,784	2.90	240.0	101.6	
03/10/2020	6.36	15.28	1,717	2.08	495.8	341.6	
MW-5	03/21/2012	7.37	16.16	3,900	3.06	-30.0	0.0
	06/28/2012	6.88	22.10	1,399	1.74	28.6	29.6
	08/13/2012	6.43	19.91	2,188	1.54	-17.6	88.0
	08/31/2012	6.25	20.12	1,580	2.22	-22.5	NA
	10/01/2012	6.19	17.02	2,433	1.36	3.8	NA
	11/19/2012	6.60	14.24	13,900	1.27	70.4	1025
	01/14/2013	6.38	15.36	8,535	0.95	-103.6	NA
	02/28/2013	6.67	14.21	5,230	2.06	-63.4	NA
	03/26/2013	6.91	13.16	6,468	1.02	-27.6	171.6
	04/23/2013	6.85	14.40	6,231	1.56	-71.2	NA
	06/25/2013	6.82	20.21	8,587	0.82	-87.2	77.7
	08/09/2013	6.75	17.51	7,434	1.88	-71.7	NA
	09/19/2013	6.56	16.06	7,413	0.94	-118.8	87.9
10/14/2013	6.51	15.93	3,671	3.55	-66.8	104.3	

**Table 3**  
**GENERAL GROUNDWATER CHEMISTRY**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	pH	Temperature (°C)	Specific Conductivity (uS/cm or umhos/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)	Turbidity (NTUs)
MW-5 (cont)	12/11/2013	6.59	11.53	8,003	5.48	-135.6	52.0
	01/15/2014	6.63	12.97	19,214	1.45	-123.4	NA
	03/05/2014	6.61	11.20	14,120	0.21	-73.3	203.7
	04/10/2014	6.54	15.05	10,980	1.59	-65.5	NA
	05/19/2014	6.76	16.82	10,036	0.96	-41.4	43.0
	06/18/2014	7.94	17.14	14,984	1.00	-90.4	NA
	07/24/2014	6.72	15.85	1,271	0.51	-113.5	35.3
	10/10/2014	6.82	17.40	1,477	0.50	-66.9	147.6
	01/26/2015	6.59	9.46	17,539	1.30	-133.8	NA
	03/27/2015	7.17	12.35	15,077	0.51	-211.1	NA
	05/11/2015	6.67	24.60	16,764	0.41	-156.9	NA
	08/17/2015	6.56	16.29	9,737	0.21	-118.1	NA
	11/11/2015	6.57	13.80	9,937	1.57	-101.0	NA
	03/07/2016	7.92	14.53	2,299	1.34	-70.5	NA
	06/23/2016	6.35	17.55	11,200	0.70	-62.1	NA
	09/07/2016	5.87	17.18	11,010	0.81	-78.9	NA
	11/18/2016	6.62	15.34	6,687	0.20	-11.5	NA
	03/03/2017	6.39	10.48	6,571	0.87	-63.8	NA
	06/22/2017	6.66	18.33	10,841	0.04	-110.6	NA
	09/07/2017	6.43	17.19	10,140	0.95	-75.7	NA
12/05/2017	6.36	14.53	6,257	4.28	-83.8	NA	
03/26/2018	6.41	10.60	5,702	1.19	-61.1	NA	
06/07/2018	6.54	15.78	8,579	4.28	-22.6	NA	
9/19/2018	6.62	17.55	7,643	1.82	-61.2	142.5	
12/21/2018	6.69	11.49	4,205	1.64	8.2	9.8	
3/12/2019	6.38	12.47	2,796	1.58	-59.2	100.8	
5/13/2019	6.31	14.09	2,764	1.51	-58.4	43.6	
3/10/2020	6.57	15.45	11,580	1.86	18.9	49.7	
MW-8A	03/26/2018	6.41	10.56	2,980	1.10	-69.6	NA
	03/12/2019	6.75	12.96	2,512	4.91	9.2	120.6
	05/13/2019	6.65	14.41	2,896	3.89	56.1	34.6
	03/10/2020	6.55	15.27	1,501	2.55	279.8	161.7
MW-E	03/26/2018	NA	NA	NA	NA	NA	NA
	03/12/2019	6.37	12.50	8,923	1.56	168.7	331.4
	03/10/2020	6.15	15.30	292	2.10	382.4	927

**Notes:**

- mg/L = Milligrams per Liter
- uS/cm = Micro-Siemens per centimeter
- umhos/cm = Micro-mhos/centimeter
- mV = Millivolts
- Spec.Cond. = Specific conductance
- °C = Degrees Celsius
- pH = Potential of Hydrogen
- NA = Not Available or Measured
- NTUs = Nephelometric Turbidity Units

**Table 4**  
**GENERAL CHEMISTRY ANALYTICAL RESULTS**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Iron, Ferric (mg/l)	Iron, Ferrous (mg/l)	Iron, Total (mg/l)	Nitrate Nitrogen (mg/l)	Sulfate (mg/l)	Total Organic Carbon (mg/l)	Ethene (mg/l)
<b>NY TOGS 1.1.1 GWQS</b>		NA	NA	NA	NA	NA	NA	NA
MW-3	3/26/2018	6.5	0.21	6.71	0.14	13.3	5.8	ND(<0.31)
	3/12/2019	18.6	ND(<0.20)	18.7	ND(<0.11)	6.7	6	ND(<0.00031)
	3/10/2020	16.2	ND(<0.20)	16.2	0.19	23.4	14.0	ND(<0.00031)
MW-4	3/21/2012	0.0560	ND<50.0 J	0.0560	0.993	24.9	1.16	ND<0.00250
	6/28/2012	NA	NA	NA	NA	NA	4.13 B	NA
	8/13/2012	NA	7.01	6.97	NA	28.9	NA	ND<0.005
	8/31/2012	NA	NA	NA	NA	NA	5.87	NA
	10/1/2012	NS	NS	NS	NS	NS	NS	NS
	11/19/2012	NA	NA	NA	NA	NA	NA	ND<0.005
	1/14/2013	NA	NA	NA	NA	NA	10.9	NA
	2/28/2013	NA	NA	NA	NA	NA	3.8	NA
	3/26/2013	0.300	10.6	10.3	NA	12.2	399 B	0.0083
	4/23/2013	NA	NA	NA	NA	NA	149	NA
	6/25/2013	1.70	12.1	13.8	NA	ND<0.6	103	0.00609
	12/11/2013	NS	NS	NS	NS	NS	NS	NS
	1/15/2014	NA	NA	NA	NA	NA	101	NA
	3/5/2014	ND<0.100	NA	4.03 B	NA	27.4	5.31	ND<0.00500
	4/10/2014	NA	NA	NA	NA	NA	18.1	NA
	5/19/2014	4.1	ND<0.20	4.23	ND<0.11	10.6	23.7	0.00043
	6/18/2014	NA	NA	NA	NA	NA	287	NA
	7/24/2014	3.4	2.41	5.81	ND<0.10	ND<10	49.5	ND<0.00031
	10/10/2014	NA	NA	NA	ND<0.10	ND<10	67.4	ND<0.00031
	1/26/2015	NA	NA	NA	NA	NA	14.9	NA
	3/27/2015	3.3	0.50	3.83	ND<0.10	ND<10	13.3	ND<0.00031
	5/11/2015	3.4	ND<0.20	3.60	0.23	20.9	12.0	ND<0.00031
	8/17/2015	NA	1.8	NA	ND<0.11	12	10.9	ND<0.00031
	11/11/2015	NA	NA	NA	NA	NA	NA	ND<0.00031
	3/7/2016	2.2	ND<0.20	2.2	ND<0.11	32.6	5.0	ND<0.00031
	6/23/2016	15.9	1.1	17	ND<0.11	33.4	5.4	0.00097
	9/7/2016	NS	NS	NS	NS	NS	NS	NS
	11/18/2016	NS	NS	NS	NS	NS	NS	NS
	3/3/2017	2.4	ND<0.20	2.4	0.13	43.7	3.1	ND<0.00031
	6/22/2017	4.6	ND<0.20	4.620	0.62	29.5	2.4	0.21
	9/7/2017	NA	NA	NA	NA	NA	3.5	0.40
12/5/2017	NA	NA	NA	NA	NA	NA	NA	
3/26/2018	6.7	ND(<0.20)	6.710	ND(<0.010)	32.1	3.6	ND(<0.00031)	
6/7/2018	NA	NA	NA	NA	NA	3.0	ND(<0.00031)	
9/19/2018	NA	NA	NA	NA	NA	3.3	0.64	
12/21/2018	NA	NA	NA	NA	NA	ND(<1.0)	ND(<0.00031)	
3/12/2019	8.3	ND(<0.20)	8.370	2.1	32.8	2.0	ND(<0.00031)	
5/13/2019	2.1	ND(<0.20)	2.080	0.78	6.7	1.5	ND(<0.00031)	
3/10/2020	6.1	ND(<0.20)	6.070	ND(<0.11)	21.6	4.9	ND(<0.00031)	
MW-5	3/21/2012	2.27	0.253 J	2.52	ND<0.0500	7.65	3.92	0.0929
	6/28/2012	NA	NA	NA	NA	NA	3.5 B	NA
	8/13/2012	NA	3.37	4.1	NA	10.1	NA	0.0766
	8/31/2012	NA	NA	NA	NA	NA	39.5	NA
	10/1/2012	NA	NA	NA	NA	NA	66.1	NA
	11/19/2012	0.430	6.74	7.17	NA	26.5	377	0.192
	1/14/2013	NA	NA	NA	NA	NA	105	NA
2/28/2013	NA	NA	NA	NA	NA	86.6	NA	

**Table 4**  
**GENERAL CHEMISTRY ANALYTICAL RESULTS**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Iron, Ferric (mg/l)	Iron, Ferrous (mg/l)	Iron, Total (mg/l)	Nitrate Nitrogen (mg/l)	Sulfate (mg/l)	Total Organic Carbon (mg/l)	Ethene (mg/l)
<b>NY TOGS 1.1.1 GWQS</b>		NA	NA	NA	NA	NA	NA	NA
MW-5 (cont)	3/26/2013	4.10	12.5	16.6	NA	15.9	104 B	0.00712
	4/23/2013	NA	NA	NA	NA	NA	129 B	NA
	6/25/2013	0.900	9.03	8.13	NA	1.47	165	0.00541
	12/11/2013	ND<0.100	NA	3.75	NA	12.8	213	NA
	1/15/2014	NA	NA	NA	NA	NA	480	NA
	3/5/2014	5.80	NA	16.5 B	NA	1.69	NA	0.00637
	4/10/2014	NA	NA	NA	NA	NA	121	NA
	5/19/2014	13.6	4.4	18	ND<0.15	14.0	319	0.00079
	6/18/2014	NA	NA	NA	NA	NA	293	NA
	7/24/2014	13.7	2	15.70	ND<0.10	ND<10	184	ND<0.00030
	10/10/2014	NA	NA	NA	ND<0.10	12.0	NA	0.0013
	10/30/2014	NA	NA	NA	NA	NA	140	0.0013
	1/26/2015	NA	NA	NA	NA	NA	295	NA
	3/27/2015	31.0	1.9	32.9	ND<0.10	94.6	250	0.00022
	5/11/2015	NS	5.8	NS	ND<0.11	ND<200	251	ND<0.00031
	8/17/2015	8.3	3.5	11.8	ND<0.11	ND<10	125	0.83
	11/11/2015	8.9	0.9	9.8	0.02	ND<10	113	ND<0.00031
	3/7/2016	61.1	18	79.1	ND<0.11	ND<10	234	ND<0.00031
	6/23/2016	14.6	3.9	18.5	ND<0.11	23.7	173	0.0006
	9/7/2016	4.3	9.8	14.1	0.23	ND<10	87.4	0.0023
	11/18/2016	3.3	3.1	6.41	ND<0.11	ND<10	125.0	ND<0.00031
	3/3/2017	11.6	19	30.6	ND<0.010	ND<10	44.4	0.00041
	6/22/2017	19.0	13.5	32,500	ND<0.11	5.8	87.8	6.2
	9/7/2017	NA	NA	NA	NA	NA	157.0	7.0
	12/5/2017	NA	NA	NA	NA	NA	121	2.2
	3/26/2018	7.6	5.1	12.7	0.011	6.6	96.6	3.5
	6/7/2018	NA	NA	NA	NA	NA	63.3	47.6
	9/19/2018	NA	NA	NA	NA	NA	95.7	6.5
	12/21/2018	NA	NA	NA	NA	NA	29.6	0.0041
	3/12/2019	20.7	7.7	28.4	ND(<0.11)	10	128	0.0171
	5/13/2019	97.5	ND(<0.20)	97.5	ND(<0.11)	34.3	20.4	0.0037
	3/10/2020	16.3	8.5	24.8	ND(<0.11)	14.0	44.6	0.0071
MW-8A	3/26/2018	26.2	ND(<0.20)	26.2	0.38	19.0	4.9	ND(<0.31)
	5/13/2019	25.3	ND(<0.20)	25.3	1.2	6.9	1.7	ND(<0.00031)
	3/10/2020	10.6	ND(<0.20)	10.6	0.59	12.1	2.1	ND(<0.00031)
MW-E	3/26/2018	1,030	0.64	1,030.64	2.7	45.9	9.4	ND(<0.31)
	3/12/2019	35.4	ND(<0.20)	35.5	0.63	28.8	10.2	ND(<0.00031)
	3/10/2020	1,310	ND(<0.20)	1,310	179	27.5	7.1	ND(<0.00031)

**Table 4**  
**GENERAL CHEMISTRY ANALYTICAL RESULTS**



Orangetown Shopping Center  
NYSDEC Site # C344066

Monitoring Well	Date	Iron, Ferric (mg/l)	Iron, Ferrous (mg/l)	Iron, Total (mg/l)	Nitrate Nitrogen (mg/l)	Sulfate (mg/l)	Total Organic Carbon (mg/l)	Ethene (mg/l)
NY TOGS 1.1.1 GWQS		NA	NA	NA	NA	NA	NA	NA

**Notes:**

- mg/L = Milligrams per liter (parts per million)
- NA = Not available/not analyzed for that specific compound
- ND = Not detected (# is method detection limit)
- J\* = Holding time for this test is immediate
- HF = Field parameter with holding time of 15 minutes
- B1 = Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
- B = Analyte was detected in associated method blank
- NY = New York
- TOGS = Technical and Operational Guidance Series 1.1.1
- GWQS = Groundwater Quality Standards or Guidance Values

**Table 5**  
**SVI STUDY ANALYTICAL RESULTS SUMMARY**



Orangetown Shopping Center  
NYSDEC Site # C44066

Client Sample ID:	OUTSIDE	VP-6	VP-6	VP-5	VP-5	REGULATORY GUIDANCE		
	JD234-5	JD234-1	JD234-2	JD234-3	JD234-4	NYSDOH 2003 Soil Vapor Indoor 95th Percentile (1)	NYSDOH 2003 Soil Vapor Intrusion Air Guidance Value (2)	EPA 2001 BASE 90th Percentile (3)
Date Sampled:	12/11/2019	12/11/2019	12/11/2019	12/11/2019	12/11/2019			
Matrix:	Ambient Air Comp.	Soil Vapor Comp.	Ambient Air Comp.	Soil Vapor Comp.	Ambient Air Comp.			
Acetone	8.1	33.5	196	35.4	176	140	NS	98.9
1,3-Butadiene	ND<(0.35)	ND<(0.44)	ND<(0.35)	ND<(0.44)	ND<(0.35)	NS	NS	<3.0
Benzene	0.70	ND<(0.64)	0.89	ND<(0.64)	ND<(0.51)	29	NS	9.4
Bromodichloromethane	ND<(0.54)	ND<(0.67)	ND<(0.54)	ND<(0.67)	ND<(0.54)	NS	NS	NS
Bromoform	ND<(0.33)	ND<(0.41)	ND<(0.33)	ND<(0.41)	ND<(0.33)	NS	NS	NS
Bromomethane	ND<(0.62)	ND<(0.78)	ND<(0.62)	ND<(0.78)	ND<(0.62)	0.9	NS	<1.7
Bromoethene	ND<(0.70)	ND<(0.87)	ND<(0.70)	ND<(0.87)	ND<(0.70)	NS	NS	NS
Benzyl Chloride	ND<(0.82)	ND<(1.0)	ND<(0.82)	ND<(1.0)	ND<(0.82)	NS	NS	<6.8
Carbon disulfide	ND<(0.50)	ND<(0.62)	ND<(0.50)	ND<(0.62)	ND<(0.50)	NS	NS	4.2
Chlorobenzene	ND<(0.74)	ND<(0.92)	ND<(0.74)	ND<(0.92)	ND<(0.74)	<0.25	NS	<0.9
Chloroethane	ND<(0.42)	ND<(0.53)	ND<(0.42)	ND<(0.53)	ND<(0.42)	0.6	NS	<1.1
Chloroform	ND<(0.78)	2.0	ND<(0.78)	ND<(0.98)	ND<(0.78)	4.6	NS	1.1
Chloromethane	0.91	1.3	0.91	0.52	1.1	5.2	NS	3.7
3-Chloropropene	ND<(0.50)	ND<(0.63)	ND<(0.50)	ND<(0.63)	ND<(0.50)	NS	NS	NS
2-Chlorotoluene	ND<(0.83)	ND<(1.0)	ND<(0.83)	ND<(1.0)	ND<(0.83)	NS	NS	NS
Carbon tetrachloride	0.43	ND<(0.25)	ND<(0.20)	ND<(0.25)	ND<(0.20)	1.1	NS	<1.3
Cyclohexane	ND<(0.55)	ND<(0.69)	ND<(0.55)	ND<(0.69)	ND<(0.55)	19	NS	NS
1,1-Dichloroethane	ND<(0.65)	ND<(0.81)	ND<(0.65)	ND<(0.81)	ND<(0.65)	<0.25	NS	<0.7
1,1-Dichloroethylene	ND<(0.63)	ND<(0.79)	ND<(0.63)	ND<(0.79)	ND<(0.63)	<0.25	NS	<1.4
1,2-Dibromoethane	ND<(0.61)	ND<(0.77)	ND<(0.61)	ND<(0.77)	ND<(0.61)	<0.25	NS	<1.5
1,2-Dichloroethane	ND<(0.65)	ND<(0.81)	ND<(0.65)	ND<(0.81)	ND<(0.65)	<0.25	NS	<0.9
1,2-Dichloropropane	ND<(0.74)	ND<(0.92)	ND<(0.74)	ND<(0.92)	ND<(0.74)	<0.25	NS	<1.6
1,4-Dioxane	ND<(0.58)	ND<(0.72)	ND<(0.58)	ND<(0.72)	ND<(0.58)	NS	NS	NS
Dichlorodifluoromethane	2.0	1.9	1.9	1.9	2.0	26	NS	16.5
Dibromochloromethane	ND<(0.68)	ND<(0.85)	ND<(0.68)	ND<(0.85)	ND<(0.68)	NS	NS	NS
trans-1,2-Dichloroethylene	ND<(0.63)	1.4	ND<(0.63)	ND<(0.79)	ND<(0.63)	NS	NS	NS
cis-1,2-Dichloroethylene	ND<(0.63)	26	ND<(0.63)	5.2	ND<(0.63)	1.2	NS	<1.9
cis-1,3-Dichloropropene	ND<(0.73)	ND<(0.91)	ND<(0.73)	ND<(0.91)	ND<(0.73)	<0.25	NS	<2.3
m-Dichlorobenzene	ND<(0.48)	ND<(0.60)	ND<(0.48)	ND<(0.60)	ND<(0.48)	1	NS	<2.4
o-Dichlorobenzene	ND<(0.19)	ND<(0.24)	ND<(0.19)	ND<(0.24)	ND<(0.19)	0.9	NS	<1.2
p-Dichlorobenzene	ND<(0.48)	ND<(0.60)	ND<(0.48)	ND<(0.60)	ND<(0.48)	2.6	NS	5.5
trans-1,3-Dichloropropene	ND<(0.73)	ND<(0.91)	ND<(0.73)	ND<(0.91)	ND<(0.73)	<0.25	NS	<1.3
Ethanol	5.8	60.9	334 E	67.6	369 E	NS	NS	210
Ethylbenzene	ND<(0.69)	ND<(0.87)	ND<(0.69)	ND<(0.87)	ND<(0.69)	13.0	NS	5.7
Ethyl Acetate	ND<(0.58)	1.4	2.3	1.8	0.76	NS	NS	5.4
4-Ethyltoluene	ND<(0.79)	ND<(0.98)	ND<(0.79)	ND<(0.98)	ND<(0.79)	NS	NS	NS
Freon 113	ND<(0.61)	ND<(0.77)	ND<(0.61)	ND<(0.77)	ND<(0.61)	NS	NS	3.5
Freon 114	ND<(0.56)	ND<(0.70)	ND<(0.56)	ND<(0.70)	ND<(0.56)	NS	NS	NS
Heptane	ND<(0.66)	ND<(0.82)	ND<(0.66)	ND<(0.82)	ND<(0.66)	NS	NS	NS
Hexachlorobutadiene	ND<(0.77)	ND<(0.96)	ND<(0.77)	ND<(0.96)	ND<(0.77)	11.0	NS	<6.8
Hexane	ND<(0.56)	1.3	0.56	1.9	ND<(0.56)	NS	NS	NS
2-Hexanone	ND<(0.65)	ND<(0.82)	ND<(0.65)	ND<(0.82)	ND<(0.65)	NS	NS	NS
Isopropyl Alcohol	0.96	9.1	27.5	11	26.3	NS	NS	250
Methylene chloride	ND<(0.56)	ND<(0.69)	0.56	5.9	ND<(0.56)	45.0	60	10
Methyl ethyl ketone	ND<(0.47)	1.3	0.65	2.4	0.50	39.0	NS	NS
Methyl Isobutyl Ketone	ND<(0.66)	ND<(0.82)	ND<(0.66)	ND<(0.82)	ND<(0.66)	5.3	NS	NS
Methyl Tert Butyl Ether	ND<(0.58)	ND<(0.72)	ND<(0.58)	ND<(0.72)	ND<(0.58)	71.0	NS	11.5
Methylmethacrylate	ND<(0.66)	ND<(0.82)	ND<(0.66)	ND<(0.82)	ND<(0.66)	1.1	NS	NS
Propylene	ND<(0.69)	ND<(0.86)	ND<(0.69)	ND<(0.86)	ND<(0.69)	NS	NS	NS
Styrene	ND<(0.68)	ND<(0.85)	ND<(0.68)	ND<(0.85)	ND<(0.68)	2.3	NS	1.9
1,1,1-Trichloroethane	ND<(0.44)	ND<(0.55)	ND<(0.44)	ND<(0.55)	ND<(0.44)	6.9	NS	20.6
1,1,2,2-Tetrachloroethane	ND<(0.55)	ND<(0.69)	ND<(0.55)	ND<(0.69)	ND<(0.55)	<0.25	NS	NS
1,1,2-Trichloroethane	ND<(0.44)	ND<(0.55)	ND<(0.44)	ND<(0.55)	ND<(0.44)	<0.25	NS	<1.5
1,2,4-Trichlorobenzene	ND<(0.59)	ND<(0.74)	ND<(0.59)	ND<(0.74)	ND<(0.59)	6.3	NS	<6.8
1,2,4-Trimethylbenzene	ND<(0.79)	ND<(0.98)	ND<(0.79)	ND<(0.98)	ND<(0.79)	18	NS	9.5
1,3,5-Trimethylbenzene	ND<(0.79)	ND<(0.98)	ND<(0.79)	ND<(0.98)	ND<(0.79)	6.5	NS	NS
2,2,4-Trimethylpentane	ND<(0.75)	ND<(0.93)	ND<(0.75)	ND<(0.93)	ND<(0.75)	NS	NS	NS

**Table 5**  
**SVI STUDY ANALYTICAL RESULTS SUMMARY**



Orangetown Shopping Center  
NYSDEC Site # C44066

Client Sample ID:	OUTSIDE	VP-6	VP-6	VP-5	VP-5	REGULATORY GUIDANCE		
	JD234-5	JD234-1	JD234-2	JD234-3	JD234-4	NYSDOH 2003 Soil Vapor Indoor 95th Percentile (1)	NYSDOH 2003 Soil Vapor Intrusion Air Guidance Value (2)	EPA 2001 BASE 90th Percentile (3)
Date Sampled:	12/11/2019	12/11/2019	12/11/2019	12/11/2019	12/11/2019			
Matrix:	Ambient Air Comp.	Soil Vapor Comp.	Ambient Air Comp.	Soil Vapor Comp.	Ambient Air Comp.			
Tertiary Butyl Alcohol	ND<(0.49)	0.61	ND<(0.49)	ND<(0.61)	ND<(0.49)	NS	NS	NS
Tetrachloroethylene	0.29	<b>18</b>	<b>6.2</b>	3.1	ND<(0.22)	<b>4.1</b>	30	<b>15.9</b>
Tetrahydrofuran	ND<(0.47)	ND<(0.59)	ND<(0.47)	ND<(0.59)	ND<(0.47)	9.4	NS	NS
Toluene	0.64	ND<(0.75)	1.1	ND<(0.75)	ND<(0.60)	110	NS	43
Trichloroethylene	ND<(0.17)	<b>9.7</b>	0.42	<b>2.7</b>	ND<(0.17)	<b>0.8</b>	2	<b>4.2</b>
Trichlorofluoromethane	1.1	2.4	1.2	2.6	1.1	30	NS	18.1
Vinyl chloride	ND<(0.082)	ND<(0.10)	ND<(0.082)	ND<(0.10)	ND<(0.082)	<0.25	NS	<1.9
Vinyl Acetate	ND<(0.56)	ND<(0.70)	ND<(0.56)	ND<(0.70)	ND<(0.56)	NS	NS	NS
m,p-Xylene	ND<(0.69)	ND<(0.87)	ND<(0.69)	ND<(0.87)	ND<(0.69)	21.0	NS	22.2
o-Xylene	ND<(0.69)	ND<(0.87)	ND<(0.69)	ND<(0.87)	ND<(0.69)	13.0	NS	7.9
Xylenes (total)	ND<(0.69)	ND<(0.87)	ND<(0.69)	ND<(0.87)	ND<(0.69)	NS	NS	NS

**Note:**

Results and Standards expressed in micrograms per cubic meter (µg/m<sup>3</sup>)

ND<# = Not detected, less than the laboratory reporting limit

NS = No Standard

E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.

A = Result is from run #2.

**BOLD** = results exceed NYSDOH 2003 Soil Vapor Indoor Upper Fence (1) standard

*ITALIC* = results exceed NYSDOH 2003 Soil Vapor Intrusion Air Guidance Value (2) standard

"Gray" = results exceed EPA 2001 BASE 90th Percentile (3) standard

**BOLD**, *ITALIC*, or "Gray" indicators in the Regulatory Guidance columns indicate at least one historic exceedance was observed.

(1) Upper fence indoor air values from "Table C1. NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes", published in the NYSDOH Soil Vapor Intrusion Guidance Document, Appendix C" (October 2006)

(2) NYSDOH Air Guideline Values (AGVs) from "Table 3.1 Air guideline values derived by the NYSDOH" presented in the Final Guidance for evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 ("NYSDOH Vapor Intrusion Guidance Document")

(3) 90th percentile indoor air values from "Table C-2. EPA 2001: Building Assessment and Survey Evaluation (BASE) Database, SUMMA canister method" published in the NYSDOH Soil Vapor Intrusion Guidance Document, Appendix C" (October 2006)



**Table 6**  
**SVI STUDY CONSTITUENTS OF CONCERN COMPARISON SUMMARY**

Orangetown Shopping Center  
 NYSDEC Site #C344066

Samples			Chemical Compound								Action Required		
Sample Date	Sample Location	Sample Type	TCE	c12-DCE	11 - DCE	Carbon Tetrachloride	PCE	1,1,1-TCA	Methylene Chloride	Vinyl Chloride	Matrix A (TCE, c12-DCE, 11-DCE, Carbon Tetrachloride)	Matrix B (PCE, 111-TCA, Methylene Chloride)	Matrix C (Vinyl Chloride)
12/11/2019	VP-6	Indoor Air	0.42	ND<0.63	ND<0.63	ND<0.20	6.2	ND<0.44	0.56	ND<0.082	Monitor	No Further Action	No Further Action
		Sub-slab	9.7	26	ND<0.79	ND<0.25	18	ND<0.55	ND<0.69	ND<0.10			
12/11/2019	VP-5	Indoor Air	ND<0.17	ND<0.63	ND<0.63	ND<0.20	ND<0.22	ND<0.44	ND<0.56	ND<0.082	No Further Action	No Further Action	No Further Action
		Sub-slab	2.7	5.2	ND<0.79	ND<0.25	3.1	ND<0.55	5.9	ND<0.10			

**Notes:**

Results expressed in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )  
 TCE= Trichloroethene (Trichloroethylene)  
 c12-DCE= cis-1,2-Dichloroethene  
 11-DCE= 1,1-Dichloroethene (1,1-dichloroethylene)  
 PCE= Tetrachloroethene (Tetrachloroethylene)  
 1,1,1-TCA= 1,1,1-trichloroethane



## Appendix A – Environmental Easement

---

**Rockland County, NY**  
**Paul Piperato County Clerk**

1 South Main St Ste 100  
New City, NY 10956  
Phone Number : (845) 638-5070

Official Receipt : 2011-00049305

Printed On : 10/13/2011 at 11:01:36 AM

By : 76 on INDEX9

**Customer :**

CLASS ABSTRACT SERVICES INC  
72 JERICO TPKE SUITE 3  
MINEOLA, NY 11501

Date Recorded : October 04, 2011

**Instrument ID**

**Amount**

File Number : 2011-00035889

\$101.00

Transaction : Ease, Rightway, A/Rent

Name(s): JLJ MANAGEMENT CO

To : PEOPLE OF THE STATE OF NEW YORK

Remarks : HAH

**Itemized Check Listing**

Check Number : 13622

\$101.00

**Total Due :** \$101.00

**Paid by Check :** \$101.00

**Change Tendered :** \$0.00

HAVE A NICE DAY!

Paul Piperato, County Clerk  
1 South Main St Ste 100  
New City, NY 10956  
(845) 638-5070

### Rockland County Clerk Recording Cover Sheet

Received From :  
CLASS ABSTRACT SERVICES INC  
72 JERICHO TPKE SUITE 3  
MINEOLA, NY 11501

Return To :  
CLASS ABSTRACT SERVICES INC L  
72 JERICHO TPKE SUITE 3  
MINEOLA, NY 11501

**First GRANTOR**

JLJ MANAGEMENT CO

**First GRANTEE**

PEOPLE OF THE STATE OF NEW YORK

Index Type : Land Records  
Instr Number : 2011-00035889  
Book : Page :

Type of Instrument : Easement  
Type of Transaction : Ease, Rightway, A/Rent  
Recording Fee : \$101.00

Recording Pages : 11

The Property affected by this instrument is situated in Orangetown, in the County of Rockland, New York

Real Estate Transfer Tax

RETT # : 815  
Deed Amount : \$0.00  
RETT Amount : \$0.00

State of New York

County of Rockland

I hereby certify that the within and foregoing was recorded in the Clerk's office for Rockland County, New York

On (Recorded Date) : 10/04/2011

At (Recorded Time) : 10:58:00 AM

Total Fees : \$101.00



Doc ID - 023456330011

Paul Piperato, County Clerk



UNOFFICIAL COPY

This sheet constitutes the Clerks endorsement required by Section 319 of Real Property Law of the State of New York

Entered By: HAH Printed On : 10/13/2011 At : 3:11:40PM

County: Rockland

Site No: C 344066

BCA Index No: A3-0563-0906

CLC 4079920

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

THIS INDENTURE made this 16<sup>th</sup> day of September, 2011, between Owner(s) JLJ Management Co., a New York Partnership, having an office at 197 Trenor Drive, New Rochelle, County of Rockland, 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 1-45 Orangetown Shopping Center in the Town of Orangetown, County of Rockland and State of New York, known and designated on the tax map of the County Clerk of Rockland as tax map parcel numbers: Section 74.70 Block 1 Lot 67, being the same as that property conveyed to Grantor by deed dated April 4, 1990 recorded in the Rockland County Clerk's Office in Book 0404 at Page 2555, the Environmental Easement area of which comprising approximately 1.3308 ± acres, and hereinafter more fully described in the Land Title Survey dated April 27, 2011 prepared by Joseph R. Link of Link Land Surveyors P.C., which will be attached to the Site Management Plan. The property description and survey (the "Controlled Property") is set forth in and attached hereto as Schedule A, and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of human 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

Environmental Easement Page 1

Sec  
74.10  
Blk  
1  
part of lot  
67

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Number: A3-0563-0906, 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:

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

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

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

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

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

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

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

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

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

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes, 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 with 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 annually, or such time as NYSDEC may allow, 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.



County: Rockland

Site No: C 344066

BCA Index No: A3-0563-0906

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: C 344066  
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. Recording. 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

County: Rockland

Site No: C 344066

BCA Index No: A3-0563-0906

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

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

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

Grantor: **JLJ Management Co., a New York Partnership**

**DAFO Realty Corp., its General Partner**

By: Hilton Saniker

Print Name: Hilton Saniker

Title: President Date: 9/2/11

**ODAF Realty Corp., its General Partner**

By: Hilton Saniker

Print Name: Hilton Saniker

Title: President Date: 9/2/11

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Environmental Easement Page 6

County: Rockland

Site No: C 344066

BCA Index No: A3-0563-0906

Grantor's Acknowledgment

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

On the 2nd day of September, in the year 2011, before me, the undersigned, personally appeared Hilton Sankar, 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.

[Signature]  
Notary Public - State of New York

JEROME KAMERMAN  
Notary Public, State of New York  
No. 02KA7146175  
Qualified in Westchester County  
Certificate Filed in New York County  
Commission Expires October 31, 2015

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

On the 2nd day of September, in the year 2011, before me, the undersigned, personally appeared Hilton Sankar, 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.

[Signature]  
Notary Public - State of New York

JEROME KAMERMAN  
Notary Public, State of New York  
No. 02KA7146175  
Qualified in Westchester County  
Certificate Filed in New York County  
Commission Expires October 31, 2015

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Environmental Easement Page 7

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: [Signature]
Dale A. Desnoyers, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK )
COUNTY OF Albany ) ss:

On the 16th day of September, in the year 2011, before me, the undersigned, personally appeared Dale Desnoyers, 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.

[Signature]
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 0108508446
Qualified in Schoharie County
Commission Expires August 22, 2014

UNOFFICIAL COPY

**SCHEDULE "A" ENVIRONMENTAL EASEMENT**  
**PROPERTY DESCRIPTION**

1-45 ORANGETOWN SHOPPING CENTER  
ORANGETOWN, COUNTY OF ROCKLAND, NY  
SECTION: 74.10 BLOCK: 1 LOT: 67

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH IMPROVEMENTS THEREON ERECTED, SITUATED AND LYING AND BEING IN THE TOWN OF ORANGETOWN, COUNTY OF ROCKLAND AND STATE OF NEW YORK.

BEGINNING AT A POINT ON THE WESTERLY SIDE OF OAK STREET WHERE THE SAME IS INTERSECTED BY THE DIVISION LINE BETWEEN LAND NOW OR FORMERLY JLJ MANAGEMENT ON THE SOUTH AND LAND NOW OR FORMERLY SEEBACH ON THE NORTH, SAID POINT ALSO BEING 430.52 FEET SOUTHERLY FROM THE SOUTHERLY END OF A CURVE HAVING A RADIUS OF 36.15 LENGTH OF 56.81 FEET CONNECTING THE SOUTHERLY SIDE OF ORANGEBURG ROAD AND THE WESTERLY SIDE OF OAK STREET.

THENCE RUNNING ALONG THE WESTERLY SIDE OF OAK STREET SOUTH 7°24'00" EAST 60.89 FEET TO THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY HOFFMAN;

THENCE ALONG SAID DIVISION LINE SOUTH 82° 36'00" WEST 100.00 FEET  
THENCE CONTINUING ALONG SAID DIVISION LINE AND ALONG THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY FARINI SOUTH 7°24'00" EAST 88.00 FEET.

THENCE RUNNING THROUGH LANDS OF JLJ MANAGEMENT THE FOLLOWING FIVE (5) COURSES AND DISTANCES;

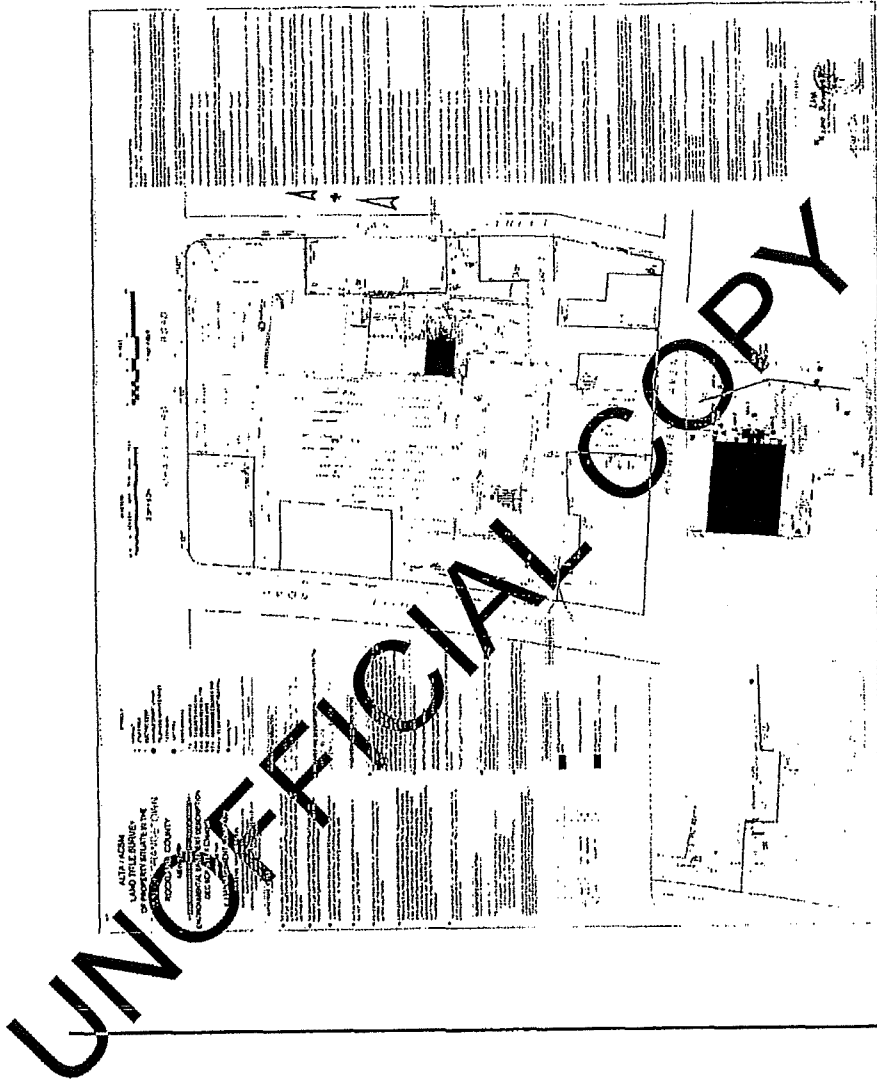
1. SOUTH 82° 36' 00" WEST 168.00 FEET;
2. NORTH 3° 04' 00" WEST 111.00 FEET;
3. SOUTH 87° 02' 00" WEST 56.00 FEET;
4. NORTH 2° 58' 00" WEST 182.10 FEET;
5. NORTH 87° 02' 00" EAST 176.89 FEET TO THE WESTERLY SIDE OF LAND NOW OR FORMERLY UCKER

THENCE RUNNING ALONG LAND OF UCKER AND CONTINUING ALONG LAND OF SEEBACH SOUTH 7° 24' 00" WEST 134.00 FEET AND NORTH 82° 36' 00" EAST 125.00 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 1.3308 ACRES / 57,970 SQ. FT.

UNOFFICIAL COPY

SURVEY



Environmental Easement Page 10

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

**THIS INDENTURE** made this 16<sup>th</sup> day of September, 2011, between Owner(s) JLJ Management Co., a New York Partnership, having an office at 197 Trenor Drive, New Rochelle, County of Rockland, 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 1-45 Orangetown Shopping Center in the Town of Orangetown, County of Rockland and State of New York, known and designated on the tax map of the County Clerk of Rockland as tax map parcel numbers: Section 74.10 Block 1 Lot 67, being the same as that property conveyed to Grantor by deed dated April 4, 1990 recorded in the Rockland County Clerk's Office in Book 0404 at Page 2555, the Environmental Easement area of which comprising approximately 1.3308 ± acres, and hereinafter more fully described in the Land Title Survey dated April 27, 2011 prepared by Joseph R. Link of Link Land Surveyors P.C., which will be attached to the Site Management Plan. The property description and survey (the "Controlled Property") is set forth in and attached hereto as Schedule A; and

**WHEREAS**, the Department accepts this Environmental Easement in order to ensure the protection of human 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 Brownfield Cleanup Agreement Number: A3-0563-0906, 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:

**Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

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

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

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

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

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

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

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



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

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes, 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 annually, or such time as NYSDEC may allow, 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: C 344066  
Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:    Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

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

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

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

9. Extinguishment. This Environmental Easement may be extinguished only by a release by

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

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

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

**Grantor: JLJ Management Co., a New York Partnership**

**DAFO Realty Corp., its General Partner**

By: Hilton Souiker

Print Name: Hilton Souiker

Title: President Date: 9/2/11

**ODAF Realty Corp., its General Partner**

By: Hilton Souiker

Print Name: Hilton Souiker

Title: President Date: 9/2/11

**Grantor's Acknowledgment**

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

On the 2nd day of September, in the year 2011, before me, the undersigned, personally appeared Hilton Soniker, 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.

Jerome Kamerman  
Notary Public - State of New York

JEROME KAMERMAN  
Notary Public, State of New York  
No. 02KA7146175  
Qualified in Westchester County  
Certificate Filed in New York County  
Commission Expires October 31, 2015

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

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Jerome Kamerman  
Notary Public - State of New York

JEROME KAMERMAN  
Notary Public, State of New York  
No. 02KA7146175  
Qualified in Westchester County  
Certificate Filed in New York County  
Commission Expires October 31, 2015



**SCHEDULE "A" ENVIRONMENTAL EASEMENT**  
**PROPERTY DESCRIPTION**

1-45 ORANGETOWN SHOPPING CENTER  
ORANGETOWN, COUNTY OF ROCKLAND, NY  
SECTION: 74.10 BLOCK: 1 LOT: 67

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH IMPROVEMENTS THEREON ERECTED, SITUATED AND LYING AND BEING IN THE TOWN OF ORANGETOWN, COUNTY OF ROCKLAND AND STATE OF NEW YORK.

BEGINNING AT A POINT ON THE WESTERLY SIDE OF OAK STREET WHERE THE SAME IS INTERSECTED BY THE DIVISION LINE BETWEEN LAND NOW OR FORMERLY JLJ MANAGEMENT ON THE SOUTH AND LAND NOW OR FORMERLY SEEBACH ON THE NORTH, SAID POINT ALSO BEING 430.52 FEET SOUTHERLY FROM THE SOUTHERLY END OF A CURVE HAVING A RADIUS OF 36.15 LENGTH OF 56.81 FEET CONNECTING THE SOUTHERLY SIDE OF ORANGEBURG ROAD AND THE WESTERLY SIDE OF OAK STREET.

THENCE RUNNING ALONG THE WESTERLY SIDE OF OAK STREET SOUTH 7°24'00" EAST 60.89 FEET TO THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY HOFFMAN;

THENCE ALONG SAID DIVISION LINE SOUTH 82° 36'00" WEST 100.00 FEET;  
THENCE CONTINUING ALONG SAID DIVISION LINE AND ALONG THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY FARINI SOUTH 7°24'00" EAST 88.00 FEET.

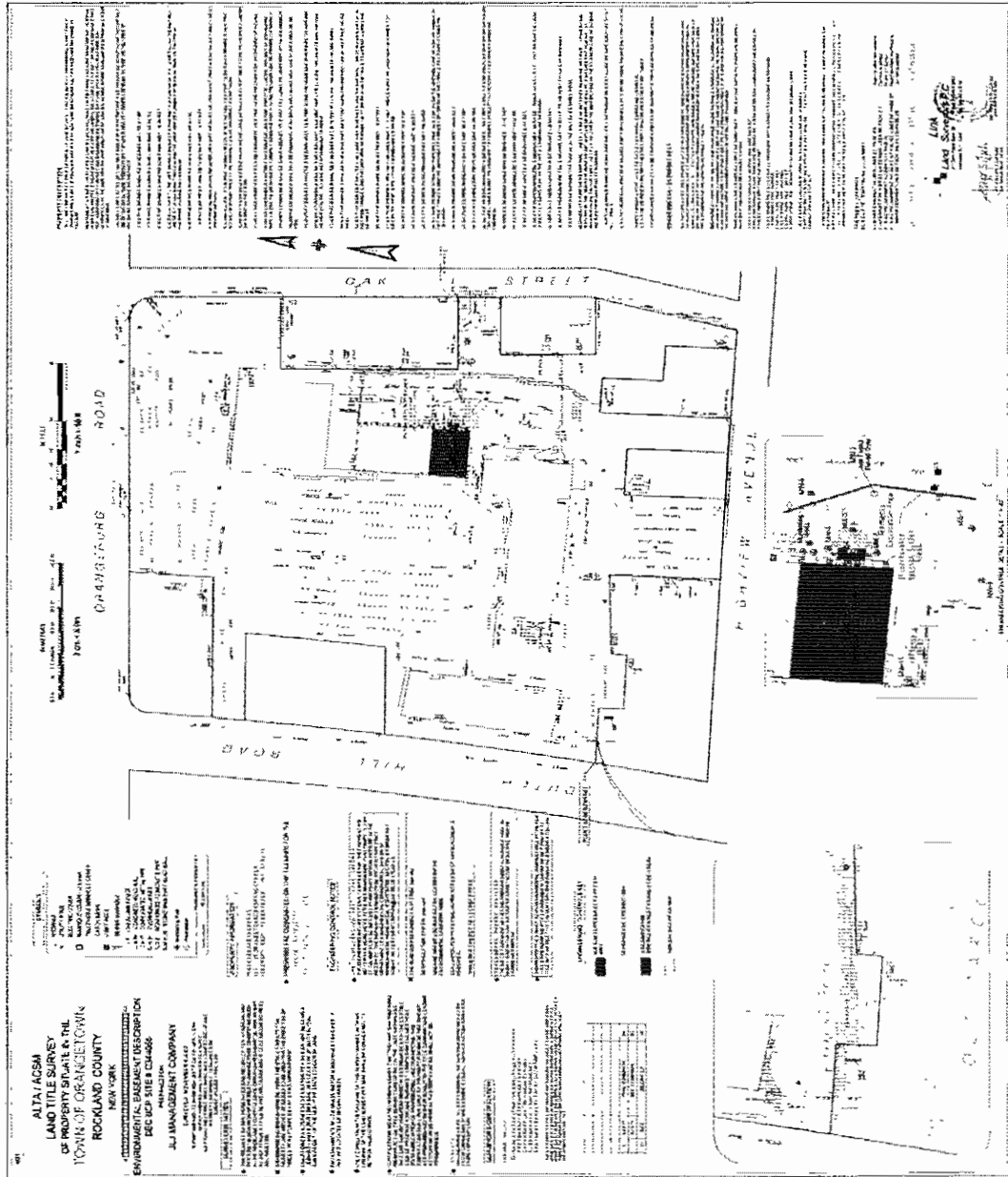
THENCE RUNNING THROUGH LANDS OF JLJ MANAGEMENT THE FOLLOWING FIVE (5) COURSES AND DISTANCES;

1. SOUTH 82° 36' 00" WEST 168.00 FEET;
2. NORTH 3° 04' 00" WEST 111.00 FEET;
3. SOUTH 87° 02' 00" WEST 56.00 FEET;
4. NORTH 2° 58' 00" WEST 182.10 FEET;
5. NORTH 87° 02' 00" EAST 176.89 FEET TO THE WESTERLY SIDE OF LAND NOW OR FORMERLY UCKER

THENCE RUNNING ALONG LAND OF UCKER AND CONTINUING ALONG LAND OF SEEBACH SOUTH 7° 24' 00" WEST 134.00 FEET AND NORTH 82° 36' 00": EAST 125.00 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 1.3308 ACRES / 57,970 SQ. FT.

**SURVEY**







## Appendix B – Regulatory Correspondence

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## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C  
625 Broadway, 11th Floor, Albany, NY 12233-7014  
P: (518) 402-9662 | F: (518) 402-9679  
www.dec.ny.gov

August 19, 2019

Michael DeGloria, PG  
Groundwater & Environmental Services, Inc.  
63 E Main Street, Suite 3  
Pawling, New York 12564

RE: Periodic Review Report  
NYSDEC Site No. C344066  
Orangeburg (Orangetown) Shopping Center  
Orangeburg, New York

Dear Mr. DeGloria,

The New York State Department of Environmental Conservation and Department of Health have reviewed the Periodic Review Report (PRR) for the Orangeburg (Orangetown) Shopping Center site (the site), dated July 2019. The PRR addresses the requirements and complies with the Site Management Plan dated October 2017. This PRR is hereby approved with the following modifications:

The request to decommission the sub-slab depressurization system (SSDS) at the New China House is approved, based on the past three soil vapor and indoor air quality sampling events indicating that no further action is required according to the Department of Health's indoor air and soil vapor matrices. Following decommissioning, the SSDS is to remain in place.

The request to conduct groundwater monitoring of wells MW-3, MW-4, MW-5, MW-8A, and MW-E annually, and to reduce operations management and monitoring of the bio-augmentation treatment system to be annually, are approved based on the concentrations of contaminants of concern remaining stable or decreasing.

The frequency of Periodic Reviews for this site is annually, so the next PRR is due on July 31, 2020. A reminder letter will be sent out 45 days prior to the due date. Should you have any questions, please contact me at michael.squire@dec.ny.gov or at 518-402-9662.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael Squire". The signature is fluid and cursive, with the first name "Michael" written in a larger, more prominent script than the last name "Squire".

Michael Squire,  
Project Manager,  
Remedial Bureau C

Ec: Amen Omorogbe, NYSDEC Central Office  
Renata Ockerby, NYSDOH  
DECDocs

**From:** [Squire, Michael H \(DEC\)](#)  
**To:** [Jessica Thomas](#)  
**Cc:** [Michael C. DeGloria](#); [Monica Roth](#); [msung@ubproperties.com](mailto:msung@ubproperties.com); [soniker@kamso.com](mailto:soniker@kamso.com)  
**Subject:** RE: Site #C344066, Site Management Plan, Orangeburg, NY  
**Date:** Tuesday, November 5, 2019 1:52:49 PM

---

Jessica,

I don't have any questions or comments, and will upload the updated SMP to our servers.

Michael

---

**From:** Jessica Thomas <JThomas@gesonline.com>  
**Sent:** Thursday, October 24, 2019 10:31 AM  
**To:** Squire, Michael H (DEC) <Michael.Squire@dec.ny.gov>  
**Cc:** Michael C. DeGloria <MDeGloria@gesonline.com>; Monica Roth <mroth@ubproperties.com>; msung@ubproperties.com; soniker@kamso.com  
**Subject:** Site #C344066, Site Management Plan, Orangeburg, NY

*ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.*

Good morning Michael,

Attached for Department review and file is the update to the *Site Management Report* for the Orangetown Shopping Center (Site #C344066) located in Orangeburg, New York. The *Site Management Report* has been updated to reflect modifications requested in the August 21, 2019 *Periodic Review Report* and approved by the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH).

Please let us know if you have any questions and/or comments regarding this submittal.

Thanks,  
Jessica

**Jessica Thomas**  
Staff Remediation Specialist

**Office:** 800.360.9405 ext. 4328  
**Mobile:** 315.416.8979  
[jthomas@GESonline.com](mailto:jthomas@GESonline.com)

Groundwater & Environmental Services, Inc.  
89 Cabot Court, Suite A  
Hauppauge, NY 11788

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**Safety by Choice, Not by Chance.**

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# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C  
625 Broadway, 12th Floor, Albany, NY 12233-7014  
P: (518) 402-9662 | F: (518) 402-9679  
www.dec.ny.gov

June 22, 2020

Michael DeGloria, PG  
Groundwater & Environmental Services, Inc.  
63 E Main Street, Suite 3  
Pawling, New York 12564

RE: Soil Vapor Intrusion Summary Report  
NYSDEC Site No. C344066  
Orangeburg (Orangetown) Shopping Center  
Orangeburg, New York

Dear Mr. DeGloria,

The New York State Department of Environmental Conservation (NYSDEC) and Department of Health (NYSDOH) have reviewed the Soil Vapor Intrusion Summary Report (SVIR) for the Orangeburg (Orangetown) Shopping Center site (the site), dated January 20, 2020.

The NYSDEC and NYSDOH agree with the recommendation that an additional annual soil vapor intrusion sampling event take place for the former Sparkle Cleaners during the next heating season.

Section 3.1 of the SVIR describes a floor crack in the vicinity of sample location VP-5 that was filled in the day prior to the 2019 sampling event. A pre-sampling inspection and any subsequent needed repairs should be conducted prior to collecting sub-slab soil vapor and indoor air samples in the future.

Please provide the NYSDEC and NYSDOH with a notice at least 5 business days before starting the soil vapor intrusion sampling event. Should you have any questions, please contact me at michael.squire@dec.ny.gov or at 518-402-9662.

Sincerely,



Michael Squire,  
Project Manager,  
Remedial Bureau C



Department of  
Environmental  
Conservation



Ec: Amen Omorogbe, NYSDEC  
Renata Ockerby, NYSDOH  
Maureen Schuck, NYSDOH  
DECDocs



## Appendix C – Waste Manifests

---





450 SOUTH FRONT STREET, ELIZABETH, NJ 07202

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. 11221026

2. Page 1 of 1

NHZ 1034816

3. Generator's Name and Mailing Address

UB Orangeburg, LLC c/o

Groundwater + Environmental  
63 East Main Street  
Suite 3  
Pawling, NY 12564

Orangeburg Shopping Center  
145 Orangeburg  
Shopping Center  
Orangeburg, NY 10962

4. Generator's Phone (966-937-5175 X 3935

5. Transporter 1 Company Name  
LORCO Petroleum Services

6. US EPA ID Number  
NJR000023036

A. Transporter's Phone  
905-820-8800

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

LORCO Petroleum Services  
450 South Front Street  
Elizabeth, NJ 07202

10. US EPA ID Number  
NJR000023036

C. Facility's Phone  
905-820-8800

11. Waste Shipping Name and Description

a. Low level chlorinated solvents, non RCRA non DOT regulated

12. Containers	13. Total Quantity	14. Unit Wt/Vol
001	50G	XXX-50G

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 hour Emergency response 800-255-3924

DECAT #  
ERG # 27

Truck # 164

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY



450 SOUTH FRONT STREET, ELIZABETH, NJ 07202

Please print or type  
(Form designed for use on 11x17 (pitch) typewriter.)

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No.  
1034808

2. Page 1  
of 1

**NHZ 1034808**

3. Generator's Name and Mailing Address

UB Orangeburg, LLC 40

Groundwater + Environmental  
63 East Main Street  
Suite 3 Paulding, NY 12564

Orangetown Shopping Center  
1-45 Orangetown  
Shopping Center  
Orangeburg, NY 10962

4. Generator's Phone

(866) 839-5195 x3835

5. Transporter 1 Company Name

Lorco Petroleum Services

6. US EPA ID Number

NJ.R.00.0.023036

A. Transporter's Phone

908-820-8800

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Lorco Petroleum Services  
450 South Front Street  
Elizabeth, NJ 07202

10. US EPA ID Number

NJ.R.00.0023036

C. Facility's Phone

908-820-8800

11. Waste Shipping Name and Description

a. low level chlorinated solvents, non HCRH non DCL regulated

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

001 DM XXX 50 G

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 hour emergency response 800-255-3924

Death #  
ERG # 27

Truck # 164

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Clave Markovic on behalf of UB Orangeburg

Signature

Chr on behalf of UB Orangeburg

Month Day Year

3 30 20

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Stella Dink

Signature

Stella Dink

Month Day Year

03 30 20

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY



## Appendix D – Groundwater Well Logs

---

# GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: **MW-3**

## 1. PROJECT INFORMATION:

Site: Orangetown Shopping Center Client: UB Orangeburg, LLC Date: 3-10-20  
 Address: 1-45 Orangetown Shopping Ctr. Project #: 1102323-05-206 Sampler: LM  
Orangeburg, New York NYSDEC Site #: C344066 Weather: OVERCAST 55°

## 2. MONITORING WELL DATA:

Depth to Water: 37.69 Depth to Bottom (last round): \_\_\_\_\_  
 Casing Diameter: 2 Calculated Purge Amount: 2.8 gallons

Purge Volume Calculation:

(DTB - DTW)\*X = \_\_\_\_\_ (1 well volume in gallons)

X	0.041	0.163	0.367	0.653
Well Diameter	1"	2"	3"	4"

\*Remove at least 3 well volumes\*

## 3. PURGE DATA

Purge Method: Dedicated Teflon Bailers Did well recharge? Yes  No   
 Did well purge dry? Yes  No  Depth to Water after purge: 38.04  
 Actual Purge Amount: 2.8 gallons Depth to Water after recharge: 38.04  
 Water Quality Meter Model: YSI 650 MDS Time elapsed for recharge: NA

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume	6.39	16.11	1.543	1.21	1.1	28.4	
Second Volume	6.38	15.67	1.440	2.55	1.8	51.7	
Third Volume*	6.37	15.49	1.454	2.77	8.7	149	

\* - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.

## 4. SAMPLE DATA

Sample ID: WW3 Depth to Water at time of Sampling: 38.04  
 Sample Time: 1720 Number of Containers: 2  
 Analyses: SEE COC Duplicate Sample Collected? Yes  No   
 MS/MSD Sample Collected? Yes  No   
 Was there enough sample volume to fill all sample jars? Yes  No  explain: \_\_\_\_\_  
 Depth to Bottom of Well (measure after sampling): 43.65 Depth to DNAPL: ND

## 5. COMMENTS

# GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: **MW-4**

## 1. PROJECT INFORMATION:

Site: Orangetown Shopping Center Client: UB Orangeburg, LLC Date: 3-10-20  
 Address: 1-45 Orangetown Shopping Ctr. Project #: 1102323-05-206 Sampler: W  
Orangeburg, New York NYSDEC Site #: C344066 Weather: Overcast 55°

## 2. MONITORING WELL DATA:

Depth to Water: 36.87 Depth to Bottom (last round): \_\_\_\_\_  
 Casing Diameter: 2 Calculated Purge Amount: 4.5 gallons

Purge Volume Calculation:

(DTB - DTW)\*X = \_\_\_\_\_ (1well volume in gallons)

X	0.041	0.163	0.367	0.653
Well Diameter	1"	2"	3"	4"

\*Remove at least 3 well volumes\*

## 3. PURGE DATA

Purge Method: Dedicated Teflon Bailers Did well recharge? Yes  No   
 Did well purge dry? Yes  No  Depth to Water after purge: 37.29  
 Actual Purge Amount: 4.5 gallons Depth to Water after recharge: 37.29  
 Water Quality Meter Model: YSI 650MDS Time elapsed for recharge: NA

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume	6.47	15.83	1.355	1.67	421.4	25.2	
Second Volume	6.28	15.39	1.621	1.85	493.4	106.7	
Third Volume*	6.36	15.28	1.717	2.08	495.8	311.6	

\* - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.

## 4. SAMPLE DATA

Sample ID: MW 4 Depth to Water at time of Sampling: 37.29  
 Sample Time: 1030 Number of Containers: \_\_\_\_\_  
 Analyses: See COC Duplicate Sample Collected? Yes  No   
 MS/MSD Sample Collected? Yes  No   
 Was there enough sample volume to fill all sample jars? Yes  No  explain: \_\_\_\_\_  
 Depth to Bottom of Well (measure after sampling): 46.75 Depth to DNAPL: NTD

## 5. COMMENTS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: MW-5

## 1. PROJECT INFORMATION:

Site: Orangetown Shopping Center Client: UB Orangeburg, LLC Date: 3-10-20  
 Address: 1-45 Orangetown Shopping Ctr. Project #: 1102323-05-206 Sampler: LM  
Orangeburg, New York NYSDEC Site #: C344066 Weather: OVERCAST 55°

## 2. MONITORING WELL DATA:

Depth to Water: 38.08 Depth to Bottom (last round): \_\_\_\_\_  
 Casing Diameter: 2 Calculated Purge Amount: 3.5 gallons

Purge Volume Calculation:

(DTB - DTW)\*X = \_\_\_\_\_ (1 well volume in gallons)

X	0.041	0.163	0.367	0.653
Well Diameter	1"	2"	3"	4"

\*Remove at least 3 well volumes\*

## 3. PURGE DATA

Purge Method: Dedicated Teflon Bailers Did well recharge? Yes  No   
 Did well purge dry? Yes  No  Depth to Water after purge: 39.12  
 Actual Purge Amount: 3.5 gallons Depth to Water after recharge: 39.12  
 Water Quality Meter Model: YSI 650 MDS Time elapsed for recharge: NA

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume	6.63	15.78	4.297	1.95	8.9	11.5	
Second Volume	6.57	15.48	7.536	2.15	26	20.3	
Third Volume*	6.51	15.45	11.58	1.86	18.9	49.7	

\* - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.

## 4. SAMPLE DATA

Sample ID: MW5 Depth to Water at time of Sampling: 39.12  
 Sample Time: 1300 Number of Containers: 12  
 Analyses: See col Duplicate Sample Collected? Yes  No   
 MS/MSD Sample Collected? Yes  No   
 Was there enough sample volume to fill all sample jars? Yes  No  explain: \_\_\_\_\_  
 Depth to Bottom of Well (measure after sampling): 45.30 Depth to DNAPL: ND

## 5. COMMENTS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: MW-8A

## 1. PROJECT INFORMATION:

Site: Orangetown Shopping Center Client: UB Orangeburg, LLC Date: 3-10-20  
 Address: 1-45 Orangetown Shopping Ctr. Project #: 1102323-05-206 Sampler: LM  
Orangeburg, New York NYSDEC Site #: C344066 Weather: Overcast SS

## 2. MONITORING WELL DATA:

Depth to Water: 38.31 Depth to Bottom (last round): 43.20  
 Casing Diameter: 1 Calculated Purge Amount: .5 gallons

Purge Volume Calculation:

(DTB - DTW)\*X = (1well volume in gallons)

X	0.041	0.163	0.367	0.653
Well Diameter	1"	2"	3"	4"

\*Remove at least 3 well volumes\*

## 3. PURGE DATA

Purge Method: Dedicated Teflon Bailers Did well recharge? Yes  No   
 Did well purge dry? Yes  No  Depth to Water after purge: 38.70  
 Actual Purge Amount: .5 gallons Depth to Water after recharge: 38.70  
 Water Quality Meter Model: YSI 650 MOS Time elapsed for recharge: NA

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume	<u>6.79</u>	<u>14.99</u>	<u>1.406</u>	<u>3.75</u>	<u>265.5</u>	<u>43.5</u>	
Second Volume	<u>6.58</u>	<u>15.11</u>	<u>1.489</u>	<u>2.68</u>	<u>265.1</u>	<u>123.4</u>	
Third Volume*	<u>6.55</u>	<u>15.27</u>	<u>1.501</u>	<u>2.55</u>	<u>279.2</u>	<u>161.7</u>	

\* - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.

## 4. SAMPLE DATA

Sample ID: MW8A Depth to Water at time of Sampling: 38.70  
 Sample Time: 0945 Number of Containers: 12  
 Analyses: See to C Duplicate Sample Collected? Yes  No   
 MS/MSD Sample Collected? Yes  No   
 Was there enough sample volume to fill all sample jars? Yes  No  explain:  
 Depth to Bottom of Well (measure after sampling): 43.20 Depth to DNAPL: ND

## 5. COMMENTS

# GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: MW-E

## 1. PROJECT INFORMATION:

Site: Orangetown Shopping Center Client: UB Orangeburg, LLC Date: 3-10-20  
 Address: 1-45 Orangetown Shopping Ctr. Project #: 1102323-05-206 Sampler: W  
Orangeburg, New York NYSDEC Site #: C344066 Weather: OVERCAST 55°

## 2. MONITORING WELL DATA:

Depth to Water: 32.70 Depth to Bottom (last round): \_\_\_\_\_  
 Casing Diameter: 2 Calculated Purge Amount: 1.1 gallons

Purge Volume Calculation:

(DTB - DTW)\*X = \_\_\_\_\_ (1well volume in gallons)

X	0.041	0.163	0.367	0.653
Well Diameter	1"	2"	3"	4"

\*Remove at least 3 well volumes\*

## 3. PURGE DATA

Purge Method: Dedicated Teflon Bailers Did well recharge? Yes  No   
 Did well purge dry? Yes  No  Depth to Water after purge: 33.21  
 Actual Purge Amount: 1.1 gallons Depth to Water after recharge: 33.21  
 Water Quality Meter Model: YSI 650 MOS Time elapsed for recharge: 20

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume	6.09	15.53	7.094	1.36	492.9	40	
Second Volume	6.10	15.41	.883	1.87	422.9	386.4	
Third Volume*	6.15	15.30	.292	2.10	382.4	927	

\* - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.

## 4. SAMPLE DATA

Sample ID: MW E Depth to Water at time of Sampling: 33.21  
 Sample Time: 1130 Number of Containers: 12  
 Analyses: See COE Duplicate Sample Collected? Yes  No   
 MS/MSD Sample Collected? Yes  No   
 Was there enough sample volume to fill all sample jars? Yes  No  explain: \_\_\_\_\_  
 Depth to Bottom of Well (measure after sampling): 35.10 Depth to DNAPL: NO

## 5. COMMENTS





## Appendix E – EC/IC Form

---



Enclosure 2  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
Site No.	C344066		
<b>Site Name</b> Orangetown (Orangetown) Shopping Center			
Site Address: 1-45 Orangetown Shopping Center    Zip Code: 10962			
City/Town: Orangetown			
County: Rockland			
Site Acreage: 1.330			
Reporting Period: June 17, 2019 to June 17, 2020			
		YES	NO
1.	Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	If NO, include handwritten above or on a separate sheet.		
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>		
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<b>Box 2</b>	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C344066

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

74.10-1-67

UB Orangeburg, LLC

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Monitoring Plan  
Site Management Plan  
O&M Plan  
IC/EC Plan

The Controlled Property may be used for: 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).

The use of groundwater underlying the site is restricted as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH, or County DOH.

Box 4

Description of Engineering Controls

Parcel

Engineering Control

74.10-1-67

Groundwater Treatment System  
Vapor Mitigation  
Cover System

The site owner will be responsible for the operation and maintenance of the sub-slab depressurization systems as discussed in the Site Management Plan.

The SSDS at 1 space (former Deli Spot) was decommissioned.

All three SSDSs are temporarily shut-down. ~~The SSDSs at two of the three tenant spaces, which were formerly occupied by Sparkle Cleaners and the Deli Spot and are currently vacant, will be decommissioned.~~ Sub-slab and indoor air samples will be collected yearly at the three tenant spaces for at least two more heating seasons (i.e., 2017-2018 and 2018-2019). If potential impacts are not observed during the sampling events then the sampling can be discontinued and no further action is needed. However, if any potential impacts are identified then monitoring must continue and/or the SSDS must be re-installed at the former Sparkle Cleaners and former Deli Spot.

The site owner will be responsible for the operation and maintenance of the composite cover system as discussed in the Site Management Plan.

annually as necessary/determined in the PRR from the former Sparkle Cleaners (location VP-5 and VP-6)

**Periodic Review Report (PRR) Certification Statements**

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

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

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

YES      NO

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

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

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

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

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES      NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C344066

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 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 Michael DeGloria at GES: 63 E Main Street, Unit 3, Pawling, NY 12564,  
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Michael DeGloria On behalf of UB Orangeburg, LLC 7/17/2020  
Signature of Owner, Remedial Party, or Designated Representative Date

Rendering Certification

IC/EC CERTIFICATIONS

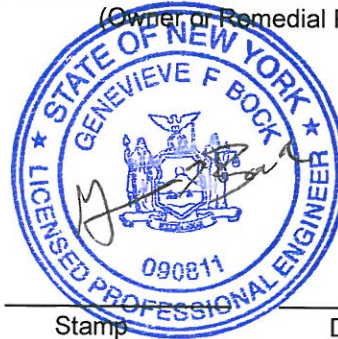
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Genevieve F. Bock at GES: 89 Cabot Court, Suite A, Hauppauge, NY 11788,  
print name print business address

am certifying as a Professional Engineer for the Remedial Party  
(Owner, or Remedial Party)



[Handwritten Signature]  
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp  
(Required for PE)

7/17/2020  
Date



## Appendix F – Photograph Log

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## PHOTOGRAPH LOG

**UB Orangeburg, LLC**  
Orangetown Shopping Center  
NYSDEC Site # C344066

Photo Number:

1

Date:

June 2, 2020

Description:

View of the asphalt parking lot and well manways located behind the on-site building. The asphalt patch for the sinkhole previously identified in 2019 is also shown.





Photo Number:

2

Date:

June 2, 2020

Description:

View of the asphalt parking lot and well manways located behind the on-site building.



Photo Number:

3

Date:

June 2, 2020

Description:

View of the asphalt parking lot and well manways located behind the on-site building.



Photo Number:

4

Date:

June 2, 2020

Description:

View of the asphalt parking lot and well manways located behind the on-site building.



Photo Number:

5

Date:

June 2, 2020

Description:

View of the asphalt parking lot and well manways located behind the on-site building. The sub-slab depressurization system (SSDS) piping connect to the back of the on-site building is also shown.



Photo Number:

6

Date:

June 2, 2020

Description:

View of the asphalt parking lot and well manways located behind the on-site building.



Photo Number:

7

Date:

June 2, 2020

Description:

View of the asphalt parking lot and abandoned borings and/or wells located behind the on-site building.



Photo Number:

8

Date:

June 2, 2020

Description:

View of the asphalt parking lot and abandoned borings and/or wells located behind the on-site building.



Photo Number:

9

Date:

June 2, 2020

Description:

View of the asphalt parking lot and abandoned borings and/or wells located behind the on-site building.



Photo Number:  
10

Date:  
June 2, 2020

Description:  
View of the former  
and/or inactive SSDS  
piping and discharge  
stacks.



Photo Number:  
11

Date:  
June 2, 2020

Description:  
View of the asphalt  
parking lot and  
abandoned borings  
and/or wells located  
behind the on-site  
building.

