

# **Periodic Review Report**

June 27, 2019

***Submitted for:***

Former Union Wire Die Corp.  
39-40 30<sup>th</sup> Street  
Long Island City, New York 11101  
BCP Site No. C241163

***Submitted to:***

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, New York 12233-7016

***IEC Project Number:***

12930



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# **1 EXECUTIVE SUMMARY**

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The site is located at 39-40 30<sup>th</sup> Street, Long Island City, Queens County, NY (herein referred to as the “Site”). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) which is administered by New York State Department of Environmental Conservation (NYSDEC). After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as “remaining contamination”. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. A Site Management Plan (SMP) is a required element of the remedial program for the Site. This report is a summary of recent compliance activities under the scope of the SMP.

## **1.1 NATURE AND EXTENT OF CONTAMINATION**

### **1.1.1 Source of Contamination in Soil**

The historical use of the subject Site as a wire die manufacturer combined with the shallow TCE detections in soil is evidence that this contamination is related to an on-site release and historic use. TCE is known to have been commonly and extensively used to clean and degrease metals and would be expected to be used in a die manufacturing operation. The soil boring program successfully delineated the extent of TCE contamination identified in the shallow soil samples to a depth of 6 feet. Elevated levels of SVOCs and metals reported in shallow soil throughout the site are characteristic of the historic fill materials present at the site and throughout the area.

### **1.1.2 Groundwater Impacts**

CVOCs (PCE, TCE and/or cis-DCE) were reported above standards in a majority of the ground water samples. The highest PCE and TCE concentrations reported during the 2013 sampling were in wells MW2 (PCE-730 ug/L) and MW3 (TCE 100 ug/L), respectively, which are located in upgradient positions. PCE and TCE were also reported in relatively high concentrations in MW4 in 2013 (PCE – 200 ug/L, TCE-63 ug/L) and in 2014 (PCE-670 ug/L, TCE, 150 ug/L). PCE and TCE were reported at significantly lower concentrations in downgradient wells MW5 in 2013 and in MW5, MW6 and MW7 during the 2014 sampling round. Petroleum VOCs were also reported in MW3 during the 2013 sampling event including trimethylbenzenes (total- 234 ug/L), ethylbenzene (130 ug/L), isopropylbenzene (39 ug/L) and total xylenes (1,090 ug/L). These are very similar parameters, concentrations and component ratios to those reported in the SCR in 2012.

### **1.1.3 Soil-Vapor Impacts**

Chlorinated VOCs (CVOCs); TCE and PCE were reported in all soil vapor samples, at concentrations ranging from 11.5 µg/m<sup>3</sup> in SG17 the north west side of the site to 27,000 µg/m<sup>3</sup> in SG11 in the west side of the property. TCE was reported above the maximum sub-slab value of 2 µg/m<sup>3</sup> in all locations, during all sampling events. PCE was reported at a maximum sub-slab value of 30 µg/m<sup>3</sup> (above which monitoring is recommended) in two of the perimeter locations only (SG1 and SG6) and in two interior locations (SG3 and SG2) for the 2013 and 2014 samples and at seven sub-slab locations collected in August 2015. The highest concentration (by an order of magnitude) of PCE in soil vapor was the SG2 location along the north side of the Site. The TCE distribution in soil vapor appears to correlate with the TCE distribution in soil across the Site. The PCE distribution in soil vapor appears to correlate with the PCE distribution within the groundwater.

## **1.2 REMEDIAL HISTORY**

Cover system consists of the existing building slab and asphalt parking lots. Annual inspection required. A soil vapor extraction (SVE) system was installed to remediate sub-surface soils impacted with chlorinated volatile organic compounds. The system consists of 4 vapor extraction points, a 7.5 hp blower and 2 GAC units in parallel prior to discharge to atmosphere. Monitoring is performed in accordance with the SMP (quarterly field monitoring of system performance, annual groundwater monitoring, annual indoor air monitoring, and annual system monitoring pre-carbon using lab analysis.)

## **1.3 EFFECTIVENESS OF REMEDIAL PROGRAM**

The Engineering and Institutional controls implemented for this site are performing as designed and is achieving the remedial objectives for this site.

## **1.4 COMPLIANCE**

No areas of non-compliance exist for the components of the Site Management Plan, which include the Institutional/Engineering Control Plan, the Monitoring Plan and Operation and Maintenance (O&M) Plan.

## **1.5 RECOMMENDATIONS**

No changes to the frequency for submittal of PRRs.

## 1.6 SCHEDULE OF IC/EC ACTIVITIES FOR 2019

An IC/EC project schedule of activities is provided in Appendix A. This is presented as a Gantt chart and includes all Monitoring, OM&M and Reporting required under the Site Management Plan (SMP). The Site will be undergoing development into a 10-story mixed-use residential apartment building with commercial space on the ground floor. The existing building is slated for demolition in August/September 2019. Given the demolition and development plans, the indoor air sampling that is completed annually, which is typically done in November during the heating season will be suspended for 2019 and resume after the proposed building structure is completed. Groundwater sampling which is completed annually in November will be conducted in the 3<sup>rd</sup> quarter of 2019 prior to the existing building demolition. A full soil vapor intrusion evaluation will be conducted in the heating season post building construction in 2020. Long term monitoring of groundwater and indoor air will resume on its regular annual schedule subsequent to the building construction completion. The SVE system will continue to be operated during the demolition of the existing building. The SVE system OM&M plan will continue on a quarterly basis in accordance with the SMP until the foundation excavation work for the proposed building. Alternate plans for engineering controls within the proposed building structure will be developed in consultation with NYSDEC in separate plans prior to the start of development.

## 2 BACKGROUND

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The site is located at 39-40 30<sup>th</sup> Street, Long Island City, Queens County NY, and is identified as Block 399, Lot 34 on the DOF Digital Tax Map. It consists of a single tax parcel with 133 feet of street frontage on 30th Street and 100 feet of street frontage on 40th Avenue for a total of 14,000 square feet (0.325 acres). The Site features include a 2- story building on site. The first floor is primarily storage and the second floor is used as an office space. The site is zoned M1-3/R7X. M1 indicated light industrial use while RX7 is a higher density residential district (apartments). The building was most currently occupied by a wireless communications distributor up until the recent transfer of the property to LIC Owner, LLC on March 18, 2018. The Site is intended for redevelopment and future use is anticipated to be a combination of commercial and restricted residential use.

The surrounding land use includes commercial properties and a NYSBCP site to the north, an apartment building and a hotel to the east, a commercial warehouse office building and a hotel to the south, and a church and commercial building to the west. Following a steady decline of manufacturing in the area from the late 1960's through the 1980's, many of the industrial properties were vacated leaving the buildings to be vandalized and become derelict. Conditions continued to decline throughout the 1980's and 1990's.

The location of the Site is referenced in **Figure 1: Site Location Map**. The boundaries, existing structures, features are presented in **Figure 2: Site Plan**.

### 2.1 SITE HISTORY AND USES

A review of Sanborn maps showed that the property was occupied by a gas station in 1936. The property was redeveloped by 1947 into a 2-story warehouse utilized by Optical Products Corporation for manufacturing, shipping, and as an office. The building has remained since, with several other occupants including Union Wire Die Corp. (1960s), National Tea Packaging Co. Inc (1962-1991), and a warehouse (1991-2006).

### 2.2 ENVIRONMENTAL HISTORY

- Contamination was first identified at the site in December 2013.
- Site entered the New York State Brownfield Cleanup Program in 2014 (Application Approval 6/11/14 and BCP Agreement Execution 7/1/14)
- A Remedial Investigation was conducted between 2013 and 2014. The field work portion of the RI was conducted by EBC from December 9 to December 20, 2013 and December 15, 2014, December 17, 2014, December 26, 2014 in accordance with the protocols and methods as established in the approved Remedial Investigation Work Plan (EBC September 24, 2014).
- Contaminants were identified in soil, groundwater, soil vapor and indoor air. The primary contaminant was (TCE). The report was finalized in January 2016.

- Immediate actions to reduce soil vapor intrusion were taken in October 2015, after results from August 2015 indoor air sampling found that TCE exceeded 20 ug/m3 in indoor air.
- The Remedial Action Workplan was approved in August 2016.
- The SVE system was constructed in accordance with the RAWP and began operation in November 2016.
- The Certificate of Completion was issued in December 2017, after submittal and approval of the Site Management Plan and Final Engineering Report.

### **2.3 REMEDIAL PROGRAM FEATURES**

The Site was remediated in accordance with the remedy selected by the NYSDEC in the Decision Document dated August 2016. The approved RAWP was dated August 2016 and the approved Soil Vapor Extraction Design Document dated September 2016.

The factors considered during the selection of the remedy are those listed in the 6NYCRR 3751.8. After consideration, the Track 4 alternative (Alternative 2) was selected. The following are components of the selected remedy:

1. Installation of a Soil Vapor Extraction (SVE) system on the first floor of the facility
2. The cover system is comprised of concrete-covered sidewalks, parking areas and concrete building slabs. The concrete building slabs are approximately 6 inches thick; the paved parking areas are approximately 6-8 inches thick. The paved parking area cover is considered equivalent to 1 foot of clean soil cover.
3. Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operations and maintenance, and (4) reporting.
4. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination on site
5. Periodic certification of the institutional and engineering controls listed above.



### 3 INSTITUTIONAL CONTROL /ENGINEERING CONTROL PLAN

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The IC and ECs used at the Site require certification to document performance and effectiveness in compliance with the SMP. The periodic certifications are used to ensure that: 1) the controls are unchanged since they were put in place; 2) the controls are effective and performing as designed; 3) nothing has occurred to impede the IC/ECs ability to protect human health and the environment; and 4) nothing has occurred that constitutes a violation or failure to comply with the operation and maintenance (O&M) plan and/or monitoring for said controls. The following tables provide a summary of the IC/ECs.

<b>Summary of Institutional Controls</b> Former Union Wire Die Corp. 39-40 30 <sup>th</sup> Street, Queens NY 11101 BCP Site No.: C241163	
1. The property may be used for restricted residential, commercial, and industrial uses;	
2. Listed ICs include:	
	<ul style="list-style-type: none"><li>i. The Controlled Property may be used for: Restricted Residential as described in 6 NYCRR Part 375- 1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)</li><li>ii. All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP)</li><li>iii. All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP</li><li>iv. The use of groundwater underlying the property is prohibited without necessary water quality treatment (as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department</li><li>v. Groundwater and other environmental or public health monitoring must be performed as defined in the SMP</li><li>vi. 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</li><li>vii. All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP</li></ul>

<b>Summary of Institutional Controls</b> Former Union Wire Die Corp. 39-40 30 <sup>th</sup> Street, Queens NY 11101 BCP Site No.: C241163	
viii.	Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP
ix.	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>Summary of Engineering Controls</b> Former Union Wire Die Corp. 39-40 30 <sup>th</sup> Street, Queens NY 11101 BCP Site No.: C241163	
1.	Cover System
2.	Soil Vapor Extraction System

### 3.1 IC/EC COMPLIANCE

The following is a brief description of the IC/ECs, the applicable objectives, how the control performance is evaluated:

- The controlled property use is limited to restricted residential, commercial or industrial use. The objective of the controlled use is to manage exposure to contamination remaining at the Site with a goal to protect human health and the environment. The current use of the Site complies with the environmental easement IC.
- The use of groundwater beneath the Site is prohibited. The applicable environmental and health regulatory agencies require approval for groundwater use with obligatory treatment. The limitation on groundwater use is to manage exposure to contamination remaining at a site with a goal to protect human health and the environment. Groundwater from beneath the Site is not used, and the Site is connected to the City of New York potable water system which complies with the control. Groundwater from two monitoring wells is collected on an annual basis for evaluation which is in compliance with the monitoring plan and SMP.

- The Site is subject to the requirements of the approved SMP document which details the ICs and ECs required as well as the associated physical components required for the operation and maintenance (O&M) and monitoring of the controls to ensure continued effectiveness for the management of exposure to contamination remaining at the Site. The SMP provides for the periodic inspection of the controls, O&M of a soil vapor extraction (SVE) system, the monitoring of indoor air and groundwater through sample collection and analysis. The Site is in compliance with the SMP required inspections, O&M, and monitoring requirements.
- The monitoring plan details the periodic sampling and analysis procedures of media with comparison of data to applicable standards and field data collection to assess the performance and effectiveness of the remedy. The monitoring plan for the Site, as detailed in the SMP, includes the quarterly collection of SVE system field data (i.e., vacuum, PID), and carbon breakthrough data, and annual collection and laboratory analysis of SVE system pre-carbon recovered vapor, annual indoor air sample collection and analysis during the heating season and annual collection and analysis of groundwater from two monitoring wells. The Site monitoring was performed in compliance with the monitoring plan requirements.
- An O&M Plan provides details for the operation, monitoring and maintenance for mechanical ECs present at a Site. The SVE system operation at the Site is operated 24-hours per day/7days per week and is monitored on a quarterly basis during an inspection to assess function. Field vacuum and PID measurements are collected quarterly, and SVE system and indoor air samples are collected and analyzed annually to evaluate system effectiveness. The carbon filters are replaced when breakthrough has occurred as indicated by a color indicator. The Site O&M plan was implemented at the Site in compliance with the SMP and monitoring plan requirements.
- A cap or cover system on a Site prevents exposure to contaminants remaining in soil beneath the Site. At the Site, the cover system is comprised of concrete-covered sidewalks, parking areas and the building concrete slab, as well as asphalt paved areas. The Site cover system is inspected annually. The inspections have indicated that the cover system has not been breached and is in compliance with the SMP.
- The operation of the SVE system at a Site is to address soil vapor migration into a building and to remediate soil. The SVE system at the Site is operable and consists of four (4), 2-inch diameter soil vapor extraction wells installed within the source area at depths 2.5 to 12.5 feet below the building slab. The extraction wells are connected via 4-inch and 6-inch diameter Schedule 40 PVC pipe to a 7.5HP regenerative blower with a particulate filter. After air is removed from the soil vapor extraction well by a blower, it passes through two, 180-pound vapor-phase granular activated carbon units arranged in parallel before discharge to the atmosphere through a 2-inch diameter emission line. The

SVE system continues to be operated in compliance with the SMP, the monitoring plan and O&M requirements.

### 3.2 IC/EC CERTIFICATION

The IE/EC certification is provided as an attachment to this report in **Appendix B**.

## 4 MONITORING PLAN COMPLIANCE

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### 4.1 COMPONENTS OF MONITORING PLAN

This Monitoring Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. The Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Site Identification:	Site No.: C241163 – Former Union Wire Die Corp. 39-40 30 <sup>th</sup> Street, Queens NY 11101
Inspections:	Frequency
Cover System Inspection SVE system	Annually Quarterly
Monitoring:	
PID Measurements at SVE Wells 1, 2, 3, and 4	Quarterly
PID measurements at system influent and after GAC units.	Quarterly
Air sample collected at the pre- carbon canister location and analyzed for VOCs via TO15; 1 liter tedlar bag	Annually

Groundwater samples collected from MW3 And MW4 and analyzed for VOCs	Annually
Indoor Air Locations (IA1, IA2, IA3, IA4, IA5, IA6 and OA1)	Annually during heating season

#### 4.2 SUMMARY OF MONITORING COMPLETED DURING REPORTING PERIOD

The following provides a summary of the controls implemented at the site, as well as monitoring, and reporting activities required by the Site Management Plan.

- November 10, 2016 – Quarterly PID measurements of SVE wells
- November 30, 2016 – Quarterly PID measurements of SVE wells.
- December 21, 2016 – Quarterly PID measurements of SVE wells.
- January 11, 2017 – Quarterly PID measurements of SVE wells.
- March 15, 2017 – Quarterly PID measurements of SVE wells.
- June 16, 2017 – Quarterly PID measurements of SVE wells.
- September 25, 2017 – Quarterly PID measurements of SVE wells.
- December 14, 2017 – Annual groundwater sampling, annual indoor air sampling, annual air sample for pre-carbon location and quarterly PID measurements of SVE wells, influent and after GSC units.
- March 19, 2018 – Quarterly PID measurements of SVE wells, influent and after GSC units.
- June 15, 2018 – Quarterly PID measurements of SVE wells, influent and after GSC units. Carbon drums were changed out.
- September 19, 2018 and October 3, 2018 – Quarterly PID measurements of SVE wells, influent and after GSC units.
- December 13, 2018 – Quarterly PID measurements of SVE wells, influent and after GSC units, annual groundwater sampling, annual air sample for pre-carbon location and ambient indoor air samples were collected.
- March 7, 2019 – Quarterly PID measurements of SVE wells, influent and after GSC units. Discovered carbon filter drums were spent.

- March 8, 2019 – Replaced carbon filter drums. Performed a second round of Quarterly PID measurements of SVE wells, influent and after GSC units.

#### 4.3 COMPARISONS WITH REMEDIAL OBJECTIVES

The annual groundwater sample collection from MW-3 and MW-4 was completed using low flow groundwater sample collection procedures as outlined in the SMP. See **Figure 3: Groundwater Sampling Plan**. The groundwater samples were analyzed for VOCs using USEPA method 8260. The results of the 2017 and 2018 annual groundwater sampling events are summarized below:

##### *Monitoring Well MW3:*

2017 – VOCs including, cis-1,2-Dichloroethene (25 µg/L), Tetrachloroethene (170 µg/L) and Trichloroethene (79 µg/L), were reported above NYSDEC Groundwater Quality Standards (GQS). A total VOC concentration of 279.26 µg/L was reported.

2018 – VOCs including, cis-1,2-dichloroethene (230 µg/L), tetrachloroethene (82 µg/L), trans-1,2-dichloroethene (5.4 µg/L), and trichloroethene (130 µg/L), were reported above NYSDEC GQS. A total VOC concentration of 458.45 µg/L was detected.

##### *Monitoring Well MW4:*

2017 – VOCs including, cis-1,2-Dichloroethene (20 µg/L), Tetrachloroethene (94 µg/L) and Trichloroethene (13 µg/L), were reported above NYSDEC GQS. A total VOC concentration of 129.07 µg/L was reported.

2018 – VOCs including, cis-1,2-dichloroethene (420 µg/L), tetrachloroethene (100 µg/L) and trichloroethene (22 µg/L), were reported above NYSDEC GQS. A total VOC concentration of 546.23 µg/L was reported during the fourth quarter 2018 sampling event.

The groundwater data shows an increase in total VOCs beneath the Site; however, it should be noted that the increase is primarily related to an increase in the cis-1,2-dichloroethene a degradant of chlorinated VOCs. This indicates that dichlorination (natural attenuation) is occurring in the groundwater beneath the Site. The overall performance monitoring indicates the effectiveness of the Site Controls. See **Table 3: Groundwater Monitoring Data and Graph (MW-3 & MW-4) from Pre and Post- SVE System**.

#### 4.4 EVALUATION OF REMEDIAL SYSTEMS

Indoor and outdoor ambient air samples were collected in 6 Liter summa canisters fitted with 8 hr laboratory calibrated regulators. The sampling events consisted of the collection and laboratory analysis of six indoor air samples (IA1 through IA6) and one outdoor air sample (OA1) throughout the first and second floor of the building for analytical method TO-15. **Figure 5: Indoor Air Sampling Plan.** In 2017, the total volatile organic compounds (VOCs) detected ranged from 162.89 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) in sample location IA2 to 560  $\mu\text{g}/\text{m}^3$  in sample location IA5. In 2018, the total VOCs detected ranged from 62.23  $\mu\text{g}/\text{m}^3$  in sample location IA2 to 246.97  $\mu\text{g}/\text{m}^3$  in sample location IA5. The concentration of trichloroethene (TCE), which is the main COC ranged from 4.52  $\mu\text{g}/\text{m}^3$  to 47.6  $\mu\text{g}/\text{m}^3$  between 2015 and 2016 prior to the activation of the SVE System and from Non-Detect (ND) to 0.7 post SVE System activation in 2016 to 2018. The latest sampling of indoor air for TCE in 2018 was ND. The indoor air samples demonstrate a decreasing trend in total VOCs and TCE, which demonstrates the effectiveness of the controls Implemented at the Site. See **Table 1, 2 and Table 4: Indoor Air Data and Graph (Pre and Post SVE System).**

The SVE pre-carbon influent sample was collected with a 1 L tedlar bag using a peristaltic pump. These samples were submitted for laboratory analysis of VOCs via Method TO-15. The pre-carbon SVE influent sample collected in 2017 had a total VOC concentration of 578.97  $\mu\text{g}/\text{m}^3$  and the 2018 pre-carbon SVE influent sample had a total VOC concentration of 232.69  $\mu\text{g}/\text{m}^3$ . The influent sample has demonstrated a decrease in the recovery; however, asymptotic conditions have not been reached. See **Table 5: Total Pre-Carbon VOC Concentrations – SVE System.**

A photoionization detector (PID) was used to field measure VOCs in the SVE system wellheads. The 2017 PID measurements at the wellheads indicate readings of 1.0 ppm in VE-4 to 4.5 ppm in VE-1. The 2018 PID measurements at the wellheads indicate readings of 0.720 parts per million (ppm) in VE-4 to 2.11 ppm in VE-3. The wellhead PID measurements indicate a similar decrease in VOCs as were noted in the SVE pre-carbon influent samples. VOC recovery is still indicated for the SVE system. **Table 5: Total Pre-Carbon VOC Concentrations – SVE System.**

Based on the above-referenced data collected from the SVE System, the operational components of the system are functioning as designed and do not required modification.



#### **4.5 MONITORING DEFICIENCIES**

No monitoring deficiencies were noted during the reporting period.

#### **4.6 CONCLUSIONS AND RECOMMENDATIONS FOR CHANGES**

No changes are recommended to the monitoring compliance plan.

## 5 OPERATION AND MAINTENANCE PLAN COMPLIANCE

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The Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. The Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the Soil Vapor Extraction systems;
- Will be updated periodically to reflect changes in site conditions or the manner in which the Soil Vapor Extraction systems are operated and maintained.

### 5.1 COMPONENTS OF O&M PLAN

Site Identification:	Site No.: C241163 – Former Union Wire Die Corp. 39-40 30 <sup>th</sup> Street, Queens NY 11101
<b>Maintenance:</b>	
SVE system	Replace GAC units and breakthrough meter as needed

A breakthrough meter, with color indicator was installed in the SVE system after the carbon drums. The breakthrough meter is initially purple and turns brown when breakthrough occurs. Breakthrough was noted in June 2017 and the carbon drums and breakthrough meter were replaced. Based on this, breakthrough is anticipated every nine months. The SVE system was started on October 31, 2016. However, the SVE system did not run continuously until November 10, 2016. The SVE system was monitored quarterly from November 10, 2016 to the present. From each well head, a representative sample was obtained in a tedlar bag, which was then screened with a photoionization detector (PID, MiniRAE 3000) and PID readings were collected directly from the sampling ports. The SVE System and Sampling Locations are referenced in **Figure 4**.

### 5.2 SUMMARY OF O&M COMPLETED DURING REPORTING PERIOD

- June 15, 2017 –Carbon drums were changed out.
- June 15, 2018 –Carbon drums were changed out.
- March 7, 2019 –Discovered carbon filter drums were spent.
- March 8, 2019 – Replaced carbon filter drums

### **5.3 O&M DEFICIENCIES**

No O&M deficiencies were noted during this reporting period.

### **5.4 CONCLUSIONS AND RECOMMENDATIONS**

No changes are recommended to the O&M compliance plan.

## 6 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

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Based on the results of the Remedial Investigation, the following Remedial Action Objectives were identified for this site.

### Soil

#### RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure to, contaminants volatilizing from contaminated soil.

#### RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater, surface water, or sediment contamination.

### Soil Vapor

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the site.

#### Groundwater RAOs for Public Health Protection

- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.
- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards

#### RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

## 6.1 COMPLIANCE WITH SMP

All requirements of the SMP; including the IC/EC Plan, Monitoring Plan and OM&M Plan were in compliance during the reporting period.

## 6.2 PERFORMANCE AND EFFECTIVENESS OF REMEDY

Indoor and outdoor ambient air samples were collected in 6 Liter summa canisters fitted with 8 hr laboratory calibrated regulators. The sampling events consisted of the collection and laboratory analysis of six indoor air samples (IA1 through IA6) and one outdoor air sample (OA1) throughout the first and second floor of the building for analytical method TO-15. In 2017, the total volatile organic compounds (VOCs) detected ranged from 162.89 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) in sample location IA2 to 560  $\mu\text{g}/\text{m}^3$  in sample location IA5. In 2018, the total VOCs detected ranged from 62.23  $\mu\text{g}/\text{m}^3$  in sample location IA2 to 246.97  $\mu\text{g}/\text{m}^3$  in sample location IA5. The indoor air samples demonstrate a decreasing trend in total VOCs and demonstrates the effectiveness of the controls Implemented at the Site. See **Table 1, 2** and **Table 4: Indoor Air Data and Graph (Pre and Post SVE System)**.

The annual groundwater sample collection from MW-3 and MW-4 was completed using low flow groundwater sample collection procedures as outlined in the SMP. The groundwater samples were analyzed for VOCs using USEPA method 8260. The results of the 2017 and 2018 annual groundwater sampling events are summarized below:

### *Monitoring Well MW3:*

2017 – VOCs including, cis-1,2-Dichloroethene (25  $\mu\text{g}/\text{L}$ ), Tetrachloroethene (170  $\mu\text{g}/\text{L}$ ) and Trichloroethene (79  $\mu\text{g}/\text{L}$ ), were reported above NYSDEC Groundwater Quality Standards (GQS). A total VOC concentration of 279.26  $\mu\text{g}/\text{L}$  was reported.

2018 – VOCs including, cis-1,2-dichloroethene (230  $\mu\text{g}/\text{L}$ ), tetrachloroethene (82  $\mu\text{g}/\text{L}$ ), trans-1,2-dichloroethene (5.4  $\mu\text{g}/\text{L}$ ), and trichloroethene (130  $\mu\text{g}/\text{L}$ ), were reported above NYSDEC GQS. A total VOC concentration of 458.45  $\mu\text{g}/\text{L}$  was detected.

### *Monitoring Well MW4:*

2017 – VOCs including, cis-1,2-Dichloroethene (20  $\mu\text{g}/\text{L}$ ), Tetrachloroethene (94  $\mu\text{g}/\text{L}$ ) and Trichloroethene (13  $\mu\text{g}/\text{L}$ ), were reported above NYSDEC GQS. A total VOC concentration of 129.07  $\mu\text{g}/\text{L}$  was reported.

2018 – VOCs including, cis-1,2-dichloroethene (420 µg/L), tetrachloroethene (100 µg/L) and trichloroethene (22 µg/L), were reported above NYSDEC GQS. A total VOC concentration of 546.23 µg/L was reported during the fourth quarter 2018 sampling event.

The groundwater data shows an increase in total VOCs beneath the Site; however, it should be noted that the increase is primarily related to an increase in the cis-1,2-dichloroethene a degradant of chlorinated VOCs. This indicates that dichlorination (natural attenuation) is occurring in the groundwater beneath the Site. The overall performance monitoring indicates the effectiveness of the Site Controls.

### **6.3 FUTURE PRR SUBMITTALS**

No changes to the frequency of PRR are recommended at this time.

# FIGURES

**Former Union Wire Die Corp.**

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**Figure 1:** Site Location

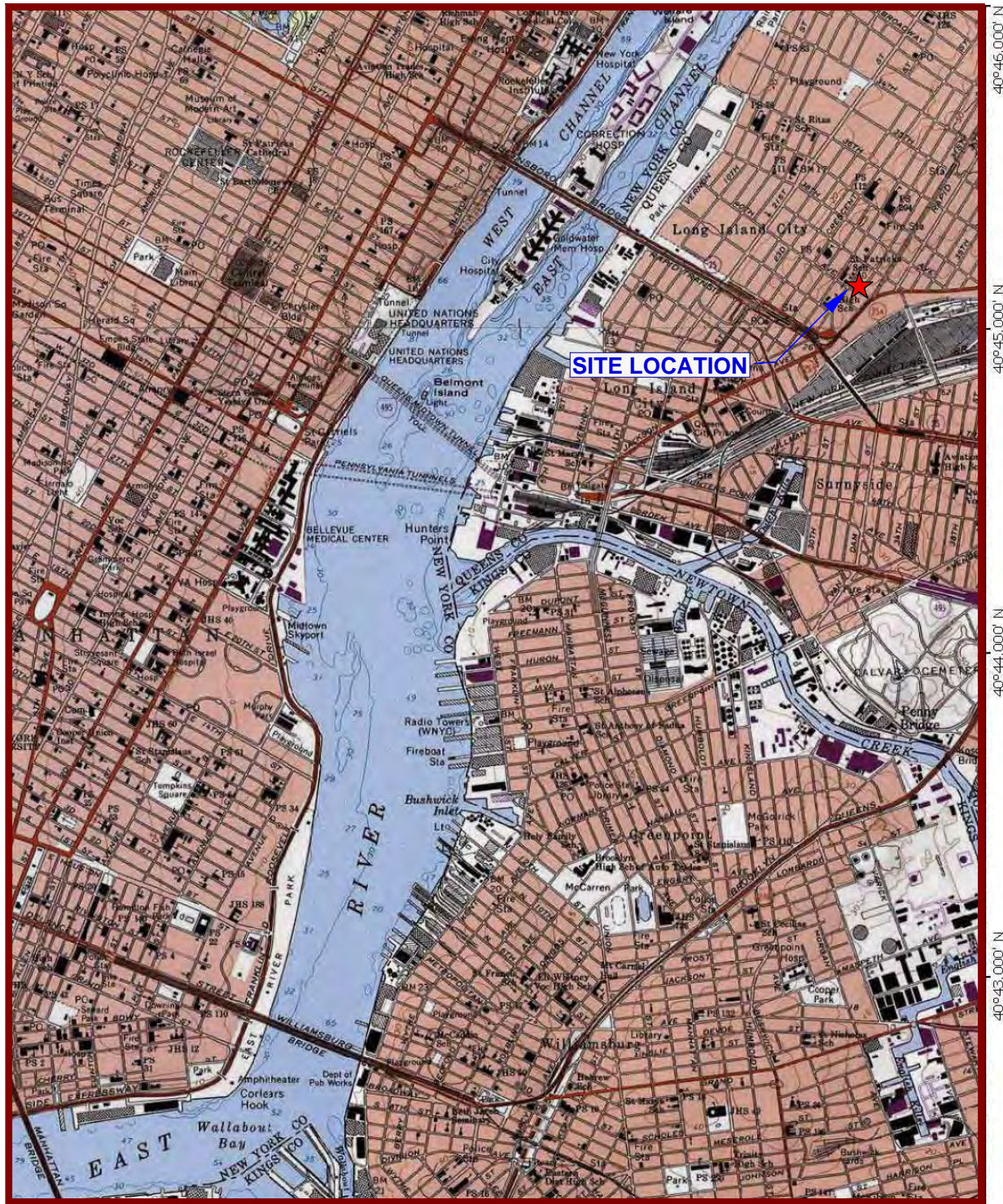
**Figure 2:** Site Plan

**Figure 3:** Groundwater Sampling Plan

**Figure 4:** SVE System

**Figure 5:** Indoor Air Sampling Plan



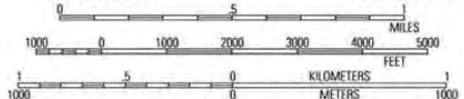


73°59.000' W

73°58.000' W

73°57.000' W

WGS84 73°56.000' W



MN 13°

05/04/11

USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet



**ENVIRONMENTAL BUSINESS CONSULTANTS**

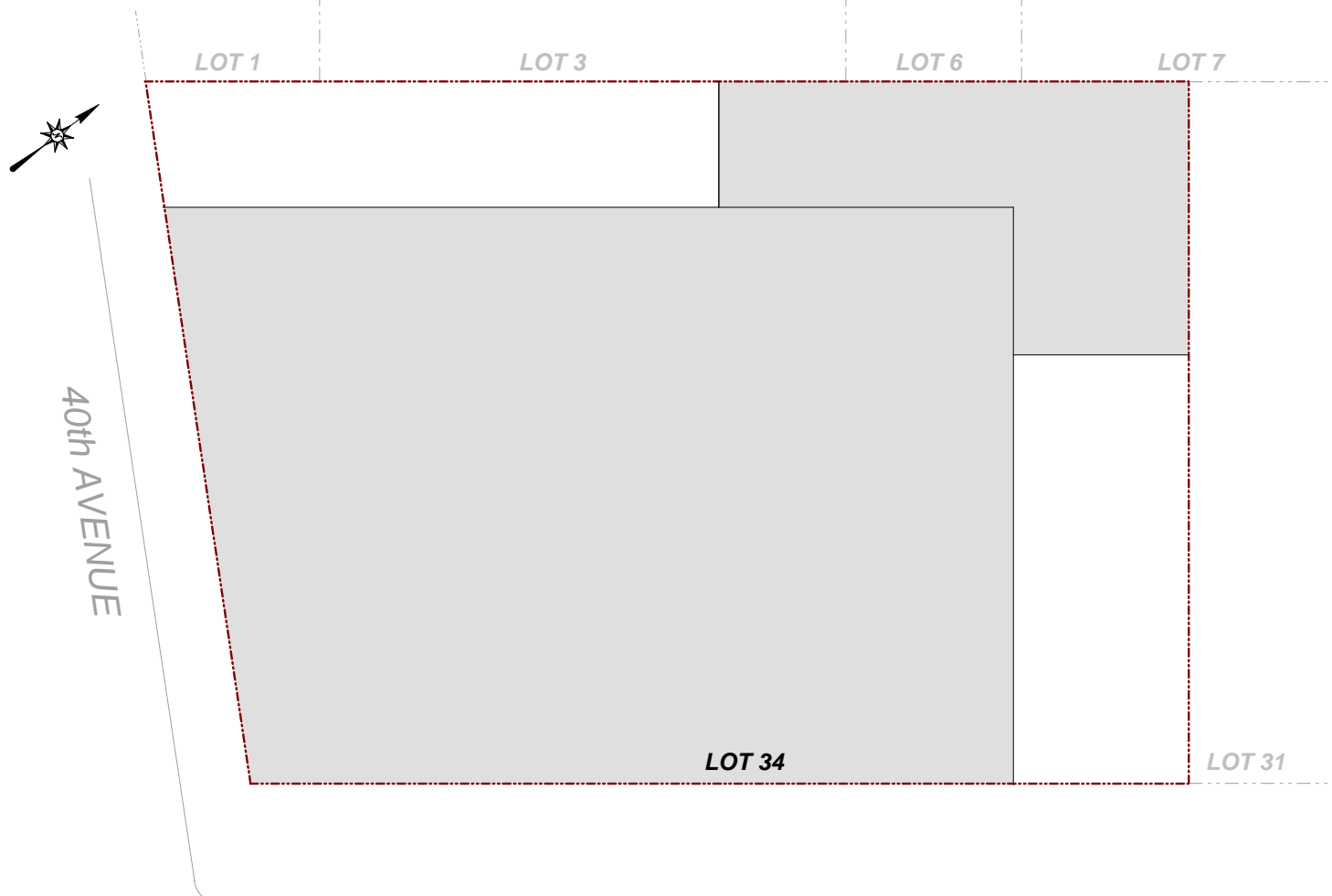
Phone 631.504.6000  
Fax 631.924.2870

**39-40 30TH AVENUE  
LONG ISLAND CITY, NY 11101**

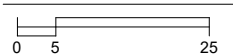
**FIGURE 1**

**SITE LOCATION MAP**





SCALE:



1 Inch = 25 feet

KEY:

- Property Boundary
- Existing 2-Story Building

30th STREET



**ENVIRONMENTAL BUSINESS CONSULTANTS**

1808 MIDDLE COUNTRY ROAD, RIDGE, NY 11961

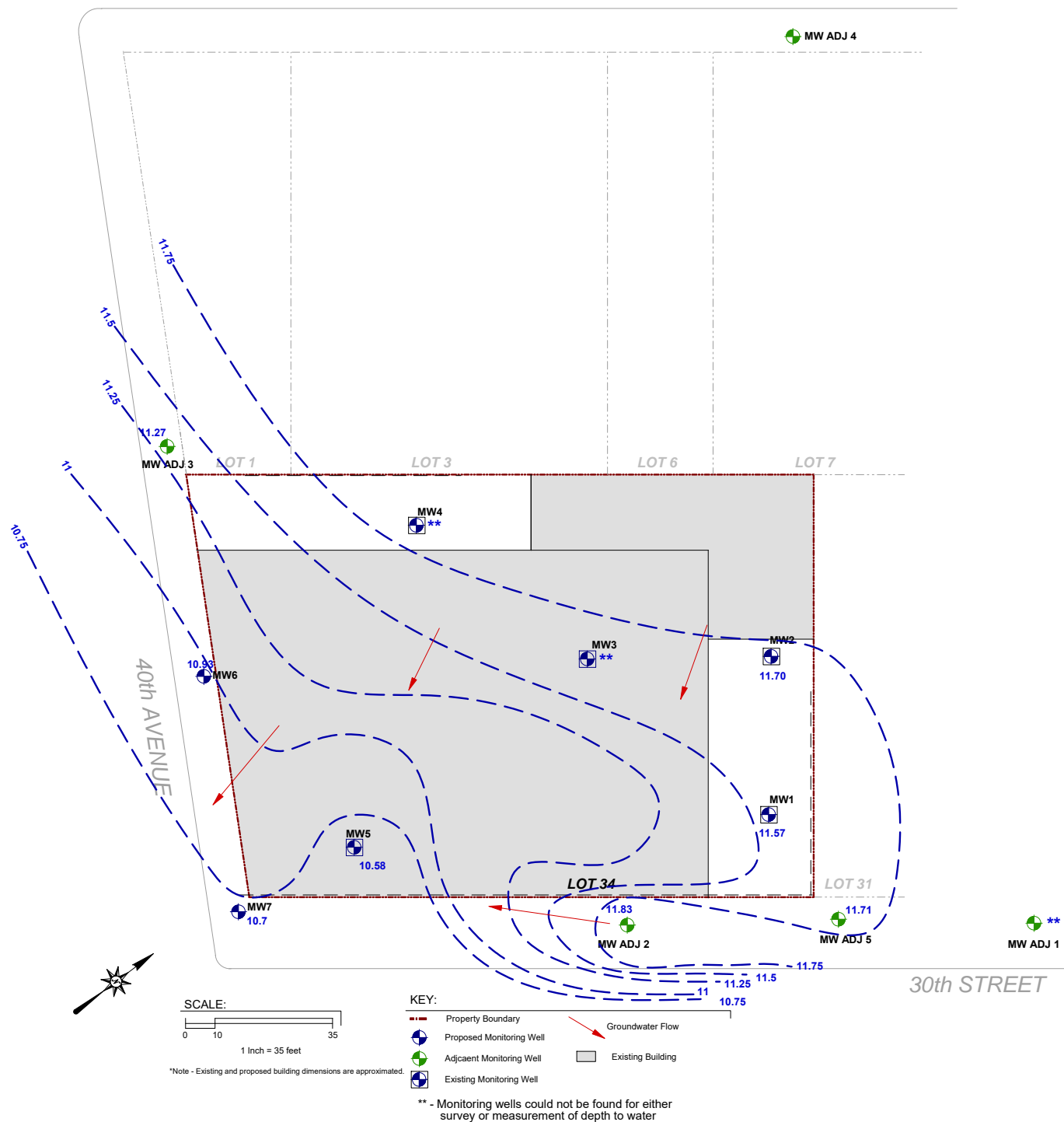
Phone 631.504.6000

Fax 631.924.2780

**39-40 30TH STREET  
LONG ISLAND CITY, NY**

**FIGURE 2**

**SITE PLAN**

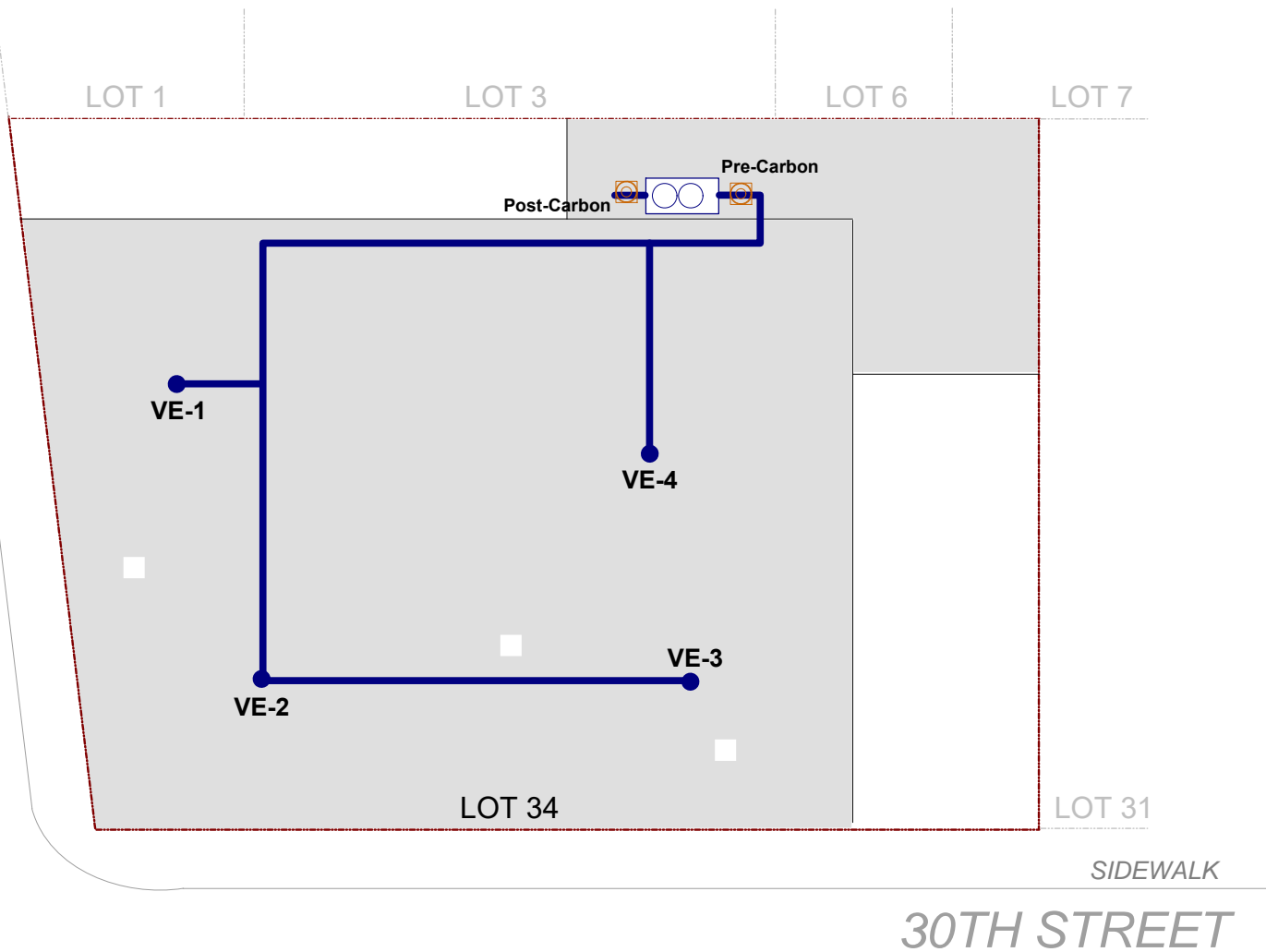


**Figure No.**  
**3**

Site Name: **FORMER UNION WIRE DYE SITE**  
 Site Address: **39-40 30TH STREET, LONG ISLAND CITY, NY**  
 Drawing Title: **GROUNDWATER ELEVATION MAP**



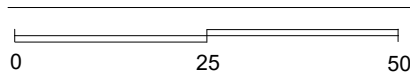
40TH STREET  
SIDEWALK



**KEY:**

  Property Boundary

**SCALE:**



Scale: 1 inch = 25 feet



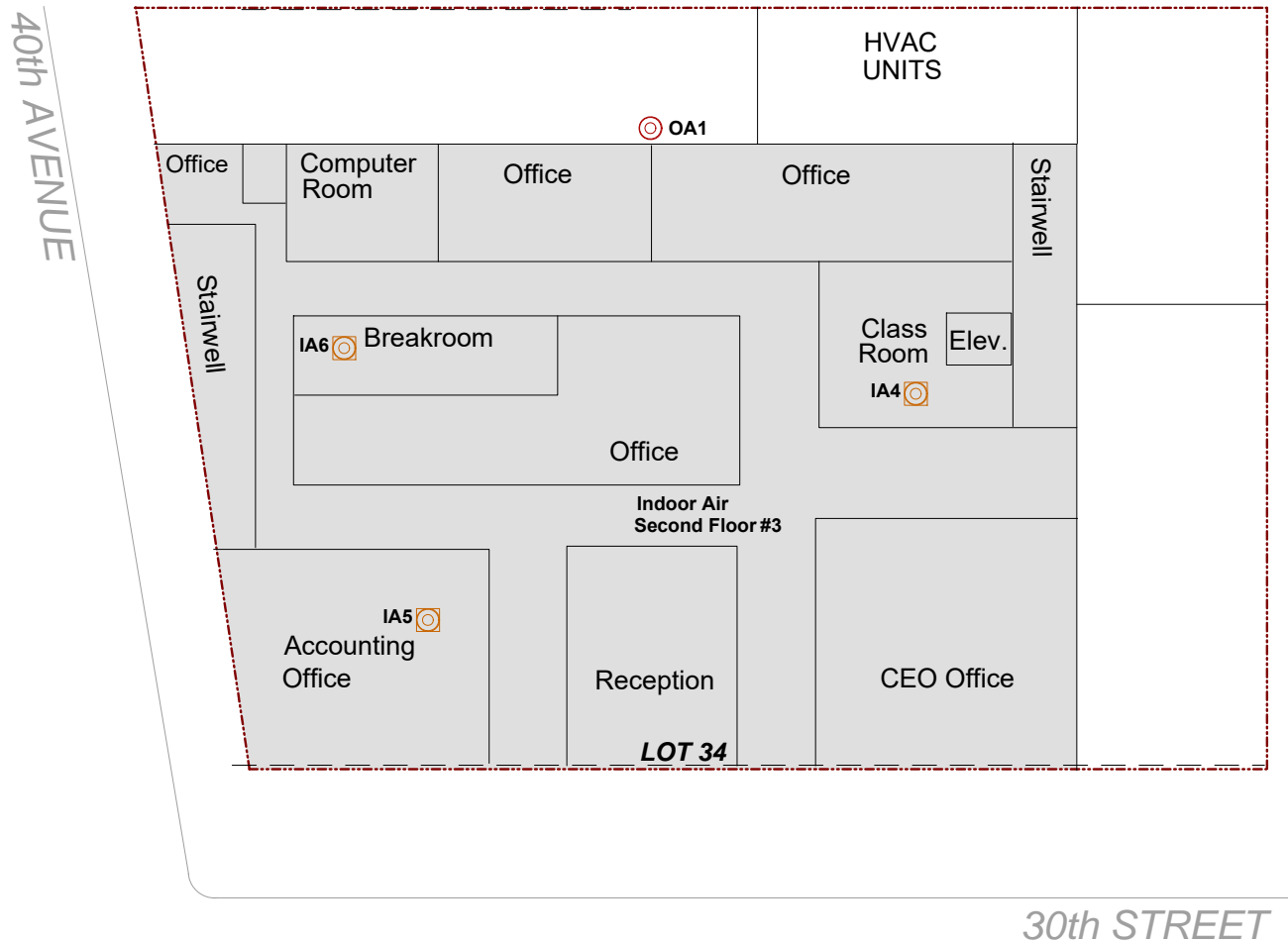
ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000  
Fax 631.924.2870

**Figure  
4**

Site Name:	REDEVELOPMENT PROJECT
Site Address:	39-40 30TH STREET, QUEENS, NY
Drawing Title:	SVE SYSTEM SAMPLING LOCATIONS

# Second Floor

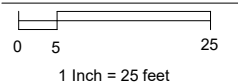


## KEY:

- Property Boundary
- Existing Building
- IAx** Indoor Air Sampling Location
- OAx** Outdoor Air Sampling Location

\*Note - Existing building dimensions are approximated.

## SCALE:



**ENVIRONMENTAL BUSINESS CONSULTANTS**

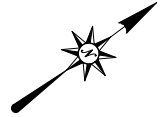
1808 MIDDLE COUNTRY ROAD, RIDGE, NY 11961

Phone 631.504.6000

Fax 631.924.2780

FORMER UNION WIRE DIE SITE  
39-40 30TH STREET, LONG ISLAND CITY, NY

**FIGURE 5 SECOND FLOOR  
INDOOR/OUTDOOR LOCATIONS**



40th AVENUE

LOT 1

LOT 3

LOT 6

LOT 7

IA1

Office

IA2

Office

Main  
Entrance

Bathrooms

IA3  
  
Office

LOT 31

SCALE:



1 Inch = 25 feet

\*Note - Existing and proposed building  
dimensions are approximated.

KEY:

- Property Boundary
- Indoor Air Sampling Location

30th STREET

**IBC**

**ENVIRONMENTAL BUSINESS CONSULTANTS**

1808 MIDDLE COUNTRY ROAD, RIDGE, NY 11961

Phone 631.504.6000

Fax 631.924.2780

FORMER UNION WIRE DIE SITE  
39-40 30TH STREET, LONG ISLAND CITY, NY

**FIGURE 5**

1ST FLOOR  
INDOOR AIR SAMPLING LOCATIONS

# TABLES

## Former Union Wire Die Corp.

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**Table 1:** Groundwater and Indoor Air Analysis Table, Q4 2017

**Table 2:** Groundwater and Indoor Air Analysis Table, Q4 2018

**Table 3:** Groundwater Monitoring Data and Graph (MW-3 & MW-4) from Pre and Post- SVE System

**Table 4:** Indoor Air Data and Graph (Pre and Post SVE System)

**Table 5:** Total Pre-Carbon VOC Concentrations – SVE System

Table 1  
Former Union Wire Die Corp.  
39-40 30th Street,  
Long Island City, New York  
Ground Water Analytical Results  
Volatile Organic Compounds  
Decemberr 2017

Compound	NYSDEC Groundwater Quality Standards µg/L	MW3		MW4		MW Duplicate	
		12/14/2017		12/14/2017		12/14/2017	
		µg/L		µg/L		µg/L	
		Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,1-Trichloroethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1,2,2-Tetrachloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,2-Trichloroethane	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloroethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1-Dichloroethene	5	<b>0.3</b>	1.0	< 1.0	1.0	<b>0.45</b>	1.0
1,1-Dichloropropene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichloropropane	0.04	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
1,2,4-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trimethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dibromo-3-chloropropane	0.04	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
1,2-Dibromoethane		< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
1,2-Dichlorobenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dichloroethane	0.6	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60
1,2-Dichloropropane	0.94	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3,5-Trimethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichlorobenzene		<b>0.4</b>	1.0	<b>0.75</b>	1.0	< 1.0	1.0
1,3-Dichloropropane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,4-Dichlorobenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,2-Dichloropropane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Chlorotoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Hexanone (Methyl Butyl Ketone)		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
2-Isopropyltoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Chlorotoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Methyl-2-Pentanone		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Acetone	50	< 5.0	5.0	< 5.0	5.0	<b>4.1</b>	5.0
Acrolein		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Acrylonitrile	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Benzene	1	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70
Bromobenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromochloromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromodichloromethane		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromoform		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bromomethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Carbon Disulfide	60	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Carbon tetrachloride	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chlorobenzene	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroform	7	< 5.0	5.0	<b>1</b>	5.0	<b>0.89</b>	5.0
Chloromethane	60	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
cis-1,2-Dichloroethene	5	<b>25</b>	1.0	<b>20</b>	1.0	<b>160</b>	20
cis-1,3-Dichloropropene		< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Dibromochloromethane		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dibromomethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dichlorodifluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Ethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Hexachlorobutadiene	0.5	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
Isopropylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
m&p-Xylenes	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methyl Ethyl Ketone (2-Butanone)	50	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Methyl t-butyl ether (MTBE)	10	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methylene chloride	5	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0
Naphthalene	10	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Butylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Propylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
o-Xylene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
p-Isopropyltoluene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
sec-Butylbenzene	5	<b>1.9</b>	1.0	< 1.0	1.0	< 1.0	1.0
Styrene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
tert-Butylbenzene	5	<b>2.1</b>	1.0	< 1.0	1.0	<b>0.53</b>	1.0
Tetrachloroethene	5	<b>170</b>	20	<b>94</b>	10	<b>79</b>	20
Tetrahydrofuran (THF)		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Toluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
trans-1,2-Dichloroethene	5	<b>0.56</b>	5.0	<b>0.32</b>	5.0	<b>3.6</b>	5.0
trans-1,3-Dichloropropene	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
trans-1,4-dichloro-2-butene	5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Trichloroethene	5	<b>79</b>	20	<b>13</b>	1.0	<b>29</b>	20
Trichlorofluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorotrifluoroethane		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Vinyl Chloride	2	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
BTEX		<b>0.00</b>		<b>0.00</b>		<b>0.00</b>	
Total PVOCs		<b>&lt; 1.0</b>		<b>&lt; 1.0</b>		<b>&lt; 1.0</b>	
Total VOCs		<b>279.26</b>		<b>129.07</b>		<b>277.57</b>	

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 1  
Former Union Wire Die Corp.  
39-40 30th Street,  
Long Island City, New York  
Soil Gas Analytical Results  
Volatile Organic Compounds  
December 2017

COMPOUNDS	NYSDOH Maximum Sub-Slab Value  (µg/m <sup>3</sup> ) <sup>(A)</sup>	NYSDOH Soil Outdoor Background Levels  (µg/m <sup>3</sup> ) <sup>(B)</sup>	IA1		IA2		IA3		IA4		IA5		IA6		OA1	
			12/14/2017		12/14/2017		12/14/2017		12/14/2017		12/14/2017		12/14/2017		12/14/2017	
			(µg/m3)		(µg/m3)		(µg/m3)		(µg/m3)		(µg/m3)		(µg/m3)		(µg/m3)	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,1-Trichloroethane	100	<2.0 - 2.8	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2-Trichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethene		<1.0	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
1,2,4-Trichlorobenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2,4-Trimethylbenzene		<1.0	1.37	1.00	1.24	1.00	1.3	1.00	1.41	1.00	1.41	1.00	1.33	1.00	< 1.00	1.00
1,2-Dibromoethane		<1.5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorobenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloropropane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorotetrafluoroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3,5-Trimethylbenzene		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3-Butadiene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3-Dichlorobenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,4-Dichlorobenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,4-Dioxane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
2-Hexanone			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Ethyltoluene		NA	1.37	1.00	1.33	1.00	1.41	1.00	1.39	1.00	1.32	1.00	1.37	1.00	< 1.00	1.00
4-Isopropyltoluene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Methyl-2-pentanone			1.31	1.00	1.01	1.00	< 1.00	1.00	1.06	1.00	2.25	1.00	1.83	1.00	< 1.00	1.00
Acetone		NA	21	1.00	18.3	1.00	18.8	1.00	21.4	1.00	28.3	1.00	26.8	1.00	5.58	1.00
Acrylonitrile			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Benzene		<1.6 - 4.7	1.31	1.00	1.21	1.00	1.22	1.00	1.33	1.00	1.33	1.00	1.28	1.00	< 1.00	1.00
Benzyl chloride			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromodichloromethane		<5.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromoform		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromomethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Disulfide		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Tetrachloride	5	<3.1	0.47	0.20	0.48	0.20	0.47	0.20	0.52	0.20	0.49	0.20	0.5	0.20	0.49	0.20
Chlorobenzene		<2.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroethane		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroform		<2.4	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloromethane		<1.0 - 1.4	1.15	1.00	1.34	1.00	1.36	1.00	1.29	1.00	1.35	1.00	1.7	1.00	1.22	1.00
cis-1,2-Dichloroethene		<1.0	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
cis-1,3-Dichloropropene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Cyclohexane		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Dibromochloromethane		<5.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Dichlorodifluoromethane		NA	2.49	1.00	2.51	1.00	2.39	1.00	2.66	1.00	2.55	1.00	2.55	1.00	2.47	1.00
Ethanol			198	1.00	75.5	1.00	114	1.00	348	1.00	443	1.00	410	1.00	13.4	1.00
Ethyl Acetate		NA	2.61	1.00	2.07	1.00	1.88	1.00	2.15	1.00	3.48	1.00	3.42	1.00	< 1.00	1.00
Ethylbenzene		<4.3	1.57	1.00	1.64	1.00	1.59	1.00	1.55	1.00	1.48	1.00	1.52	1.00	< 1.00	1.00
Heptane		NA	2.24	1.00	1.56	1.00	1.61	1.00	2.23	1.00	2.94	1.00	2.8	1.00	1.53	1.00
Hexachlorobutadiene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Hexane		<1.5	1.75	1.00	1.93	1.00	1.98	1.00	1.86	1.00	1.81	1.00	1.85	1.00	1.24	1.00
Isopropylalcohol		NA	13.3	1.00	5.58	1.00	5.92	1.00	14.8	1.00	28.5	1.00	26.3	1.00	2.03	1.00
Isopropylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Xylene (m&p)		<4.3	5.51	1.00	5.51	1.00	5.21	1.00	5.12	1.00	5.03	1.00	5.08	1.00	2.39	1.00
Methyl Ethyl Ketone			3.98	1.00	4.16	1.00	3.86	1.00	4.01	1.00	3.68	1.00	3.63	1.00	1.89	1.00
MTBE		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Methylene Chloride		<3.4	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00
n-Butylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Xylene (o)		<4.3	1.93	1.00	1.97	1.00	1.91	1.00	1.86	1.00	1.72	1.00	1.77	1.00	< 1.00	1.00
Propylene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	4.13	1.00	< 1.00	1.00	< 1.00	1.00
sec-Butylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Styrene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Tetrachloroethene	100		2.35	0.25	2.41	0.25	2.34	0.25	2.32	0.25	2.14	0.25	2.24	0.25	0.76	0.25
Tetrahydrofuran		NA	2	1.00	2.48	1.00	2.76	1.00	2.27	1.00	1.67	1.00	1.72	1.00	< 1.00	1.00
Toluene		1.0 - 6.1	28	1.00	29.3	1.00	27	1.00	24.6	1.00	20.3	1.0				



Table 1  
Former Union Wire Die Corp.  
39-40 30th Street,  
Long Island City, New York  
Soil Gas Analytical Results  
Volatile Organic Compounds  
December 2017

COMPOUNDS	NYSDOH Maximum Sub-Slab Value ( $\mu\text{g}/\text{m}^3$ ) <sup>(a)</sup>	NYSDOH Soil Outdoor Background Levels ( $\mu\text{g}/\text{m}^3$ ) <sup>(b)</sup>	Pre Carbon		Post Carbon	
			12/14/2017 ( $\mu\text{g}/\text{m}^3$ )		12/14/2017 ( $\mu\text{g}/\text{m}^3$ )	
			Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1.00	< 1.00	1.00
1,1,1-Trichloroethane	100	<2.0 - 2.8	< 1.00	1.00	< 1.00	1.00
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1.00	< 1.00	1.00
1,1,2-Trichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethene		<1.0	< 1.00	1.00	< 1.00	1.00
1,2,4-Trimethylbenzene		<1.0	< 1.00	1.00	<b>1.09</b>	1.00
1,2-Dibromoethane		<1.5	< 1.00	1.00	< 1.00	1.00
1,2-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00
1,2-Dichloropropane			< 1.00	1.00	< 1.00	1.00
1,2-Dichlorotetrafluoroethane			< 1.00	1.00	< 1.00	1.00
1,3,5-Trimethylbenzene		<1.0	< 1.00	1.00	< 1.00	1.00
1,3-Butadiene		NA	< 1.00	1.00	< 1.00	1.00
1,4-Dioxane			< 1.00	1.00	< 1.00	1.00
2-Hexanone			< 1.00	1.00	< 1.00	1.00
4-Ethyltoluene		NA	< 1.00	1.00	< 1.00	1.00
4-Isopropyltoluene			< 1.00	1.00	< 1.00	1.00
4-Methyl-2-pentanone			< 1.00	1.00	< 1.00	1.00
Acetone		NA	<b>6.91</b>	1.00	<b>7.86</b>	1.00
Acrylonitrile			< 1.00	1.00	< 1.00	1.00
Benzene		<1.6 - 4.7	< 1.00	1.00	< 1.00	1.00
Bromodichloromethane		<5.0	<b>2.36</b>	1.00	< 1.00	1.00
Bromoform		<1.0	< 1.00	1.00	< 1.00	1.00
Bromomethane		<1.0	< 1.00	1.00	< 1.00	1.00
Carbon Disulfide		NA	< 1.00	1.00	< 1.00	1.00
Carbon Tetrachloride	5	<3.1	<b>0.52</b>	0.25	< 0.25	0.25
Chlorobenzene		<2.0	< 1.00	1.00	< 1.00	1.00
Chloroethane		NA	< 1.00	1.00	< 1.00	1.00
Chloroform		<2.4	<b>2.15</b>	1.00	<b>2.52</b>	1.00
Chloromethane		<1.0 - 1.4	< 1.00	1.00	< 1.00	1.00
cis-1,2-Dichloroethene		<1.0	< 1.00	1.00	< 1.00	1.00
cis-1,3-Dichloropropene		NA	< 1.00	1.00	< 1.00	1.00
Cyclohexane		NA	< 1.00	1.00	< 1.00	1.00
Dibromochloromethane		<5.0	< 1.00	1.00	< 1.00	1.00
Dichlorodifluoromethane		NA	<b>2.3</b>	1.00	<b>2.45</b>	1.00
Ethanol			<b>17.7</b>	1.00	<b>19</b>	1.00
Ethyl Acetate		NA	< 1.00	1.00	<b>1.9</b>	1.00
Ethylbenzene		<4.3	< 1.00	1.00	< 1.00	1.00
Heptane		NA	< 1.00	1.00	< 1.00	1.00
Hexachlorobutadiene		NA	< 1.00	1.00	< 1.00	1.00
Hexane		<1.5	< 1.00	1.00	< 1.00	1.00
Isopropylalcohol		NA	< 1.00	1.00	<b>3.59</b>	1.00
Isopropylbenzene			< 1.00	1.00	< 1.00	1.00
Xylene (m&p)		<4.3	<b>1.84</b>	1.00	<b>2.04</b>	1.00
Methyl Ethyl Ketone			< 1.00	1.00	< 1.00	1.00
MTBE		NA	< 1.00	1.00	< 1.00	1.00
Methylene Chloride		<3.4	<b>5.83</b>	1.00	<b>4.58</b>	1.00
n-Butylbenzene			< 1.00	1.00	< 1.00	1.00
Xylene (o)		<4.3	< 1.00	1.00	< 1.00	1.00
Propylene		NA	< 1.00	1.00	< 1.00	1.00
sec-Butylbenzene			< 1.00	1.00	< 1.00	1.00
Tetrachloroethene	100		<b>264</b>	0.25	<b>0.57</b>	0.25
Tetrahydrofuran		NA	< 1.00	1.00	< 1.00	1.00
Toluene		1.0 - 6.1	<b>7.01</b>	1.00	<b>4.26</b>	1.00
trans-1,2-Dichloroethene		NA	< 1.00	1.00	< 1.00	1.00
Trichloroethene	5	<1.7	<b>262</b>	1.25	<b>4.29</b>	0.25
Trichlorofluoromethane		NA	<b>1.35</b>	1.00	<b>1.33</b>	1.00
Trichlorotrifluoroethane			< 1.00	1.00	< 1.00	1.00
Vinyl Chloride		<1.0	< 0.25	0.25	< 0.25	0.25
<b>BTEX</b>			<b>8.85</b>		<b>6.30</b>	
<b>Total VOCs</b>			<b>573.97</b>		<b>55.48</b>	

Notes:

NA No guidance value or standard available

(a) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, New York State Department of Health.

(b) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005, Summary of Background Levels for Selected Compounds (NYSDOH Database, Outdoor values)

TABLE 2  
39-40 3th St.  
Queens, NY  
Ground Water Analytical Results  
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	MW 3		MW 4		Duplicate		Trip Blank	
		12/13/2018		12/13/2018		12/13/2018		12/13/2018	
		µg/L		µg/L		µg/L		µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1,1,2-Tetrachloroethane	5	< 1.0	1.0	< 2.0	2.0	< 1.0	1.0	< 1.0	1.0
1,1,2,2-Tetrachloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,2-Trichloroethane	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloroethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1-Dichloroethene	5	0.59	1.0	0.39	1.0	0.43	1.0	< 1.0	1.0
1,1-Dichloropropene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichloropropane	0.04	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
1,2,4-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trimethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dibromo-3-chloropropane	0.04	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
1,2-Dibromoethane	0.0006	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
1,2-Dichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dichloroethane	0.6	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60
1,2-Dichloropropane	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3,5-Trimethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichlorobenzene	3	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichloropropane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,4-Dichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,4-dioxane		< 100	100	< 200	200	< 100	100	< 100	100
2,2-Dichloropropane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Chlorotoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Hexanone	50	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
2-Isopropyltoluene	5	0.56	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Chlorotoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Methyl-2-pentanone		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Acetone	50	2.9	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Acrolein	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Acrylonitrile	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Benzene	1	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70
Bromobenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromochloromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromodichloromethane	50	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromoform	50	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bromomethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Carbon Disulfide		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Carbon tetrachloride	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chlorobenzene	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroform	7	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloromethane	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
cis-1,2-Dichloroethene	5	230	20	420	20	390	20	< 1.0	1.0
cis-1,3-Dichloropropene	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Dibromochloromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dibromomethane	50	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dichlorodifluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Ethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Hexachlorobutadiene	0.5	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
Isopropylbenzene	5	1.4	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
m&p-Xylene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methyl ethyl ketone	50	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Methyl t-butyl ether (MTBE)		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methylene chloride	5	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0
Naphthalene	10	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Butylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Propylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
o-Xylene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
p-Isopropyltoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
sec-Butylbenzene	5	3	1.0	0.39	1.0	0.4	1.0	< 1.0	1.0
Styrene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Tert-butyl alcohol		< 50	50	< 100	100	< 50	50	< 50	50
tert-Butylbenzene	5	2.6	1.0	0.95	1.0	1	1.0	< 1.0	1.0
Tetrachloroethene	5	82	20	100	20	85	20	< 1.0	1.0
Tetrahydrofuran (THF)	50	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Toluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
trans-1,2-Dichloroethene	5	5.4	5.0	2.5	5.0	3.2	5.0	< 5.0	5.0
trans-1,3-Dichloropropene	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
trans-1,4-dichloro-2-butene	5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Trichloroethene	5	130	20	22	1.0	24	1.0	< 1.0	1.0
Trichlorofluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorotrifluoroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Vinyl chloride	2	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Total VOCs		458.45		546.23		504.03		0	

TABLE 2  
39-40 3th St.  
Queens, NY  
Indoor and Outdoor Air Samples - Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value (µg/m <sup>3</sup> ) <sup>(a)</sup>	NYSDOH Soil Outdoor Background Levels (µg/m <sup>3</sup> ) <sup>(b)</sup>	IA1 12/13/2018 (µg/m3)		IA2 12/13/2018 (µg/m3)		IA3 12/13/2018 (µg/m3)		IA4 12/13/2018 (µg/m3)		IA5 12/13/2018 (µg/m3)		IA6 12/13/2018 (µg/m3)		OA 12/13/2018 (µg/m3)	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1,1-Trichloroethane	100	<2.0 - 2.8	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1,2,2-Tetrachloroethane		<1.5	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1,2-Trichloroethane		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1-Dichloroethane		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1-Dichloroethene		<1.0	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20
1,2,4-Trichlorobenzene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2,4-Trimethylbenzene		<1.0	<b>1.2</b>	1.00	<b>1.11</b>	1.00	<1.00	1.00	<b>1.18</b>	1.00	<b>1.2</b>	1.00	<b>1.14</b>	1.00	<b>6.14</b>	1.00
1,2-Dibromoethane		<1.5	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2-Dichlorobenzene		<2.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2-Dichloroethane		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2-Dichloropropane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2-Dichlorotetrafluoroethane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,3,5-Trimethylbenzene		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>1.69</b>	1.00
1,3-Butadiene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,3-Dichlorobenzene		<2.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,4-Dichlorobenzene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,4-Dioxane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
2-Hexanone			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
4-Ethyltoluene		NA	<b>1.16</b>	1.00	<b>1.13</b>	1.00	<1.00	1.00	<b>1.19</b>	1.00	<b>1.09</b>	1.00	<b>1.07</b>	1.00	<b>5.21</b>	1.00
4-Isopropyltoluene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
4-Methyl-2-pentanone			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>2.69</b>	1.00
Acetone		NA	<b>9.85</b>	1.00	<b>7.79</b>	1.00	<b>8.21</b>	1.00	<b>9.52</b>	1.00	<b>20.3</b>	1.00	<b>12.5</b>	1.00	<b>59.3</b>	1.00
Acrylonitrile			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Benzene		<1.6 - 4.7	<b>1.55</b>	1.00	<b>1.46</b>	1.00	<b>1.58</b>	1.00	<b>1.48</b>	1.00	<b>1.48</b>	1.00	<b>1.43</b>	1.00	<b>3.54</b>	1.00
Benzyl Chloride		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Bromodichloromethane		<5.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Bromoform		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Bromomethane		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Carbon Disulfide		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Carbon Tetrachloride	5	<3.1	<b>0.43</b>	0.20	<b>0.41</b>	0.20	<b>0.45</b>	0.20	<b>0.4</b>	0.20	<b>0.46</b>	0.20	<b>0.43</b>	0.20	<b>0.45</b>	0.20
Chlorobenzene		<2.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Chloroethane		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Chloroform		<2.4	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Chloromethane		<1.0 - 1.4	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>1.39</b>	1.00	<b>1.06</b>	1.00	<b>1.13</b>	1.00
cis-1,2-Dichloroethene		<1.0	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20
cis-1,3-Dichloropropene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Cyclohexane		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>1.55</b>	1.00
Dibromochloromethane		<5.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Dichlorodifluoromethane		NA	<b>1.84</b>	1.00	<b>1.78</b>	1.00	<b>1.73</b>	1.00	<b>1.75</b>	1.00	<b>1.74</b>	1.00	<b>1.67</b>	1.00	<b>2.05</b>	1.00
Ethanol			<b>45</b>	1.00	<b>29</b>	1.00	<b>45.6</b>	1.00	<b>81.9</b>	1.00	<b>175</b>	1.00	<b>147</b>	1.00	<b>69.1</b>	1.00
Ethyl Acetate		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>2.41</b>	1.00
Ethylbenzene		<4.3	<b>1.05</b>	1.00	<1.00	1.00	<1.00	1.00	<b>1.02</b>	1.00	<b>1.01</b>	1.00	<1.00	1.00	<b>3.35</b>	1.00
Heptane		NA	<b>1.05</b>	1.00	<b>1.02</b>	1.00	<b>1.11</b>	1.00	<b>1.2</b>	1.00	<b>1.18</b>	1.00	<b>1.14</b>	1.00	<b>4.14</b>	1.00
Hexachlorobutadiene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Hexane		<1.5	<b>1.77</b>	1.00	<b>1.7</b>	1.00	<b>2.01</b>	1.00	<b>1.86</b>	1.00	<b>1.42</b>	1.00	<b>1.57</b>	1.00	<b>4.68</b>	1.00
Isopropylalcohol		NA	<b>6.09</b>	1.00	<b>3.41</b>	1.00	<b>4.18</b>	1.00	<b>9.14</b>	1.00	<b>25.1</b>	1.00	<b>14.1</b>	1.00	<b>3.29</b>	1.00
Isopropylbenzene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Xylene (m&p)		<4.3	<b>3.48</b>	1.00	<b>3.43</b>	1.00	<b>3.29</b>	1.00	<b>3.33</b>	1.00	<b>3.48</b>	1.00	<b>3.51</b>	1.00	<b>10.7</b>	1.00
Methyl Ethyl Ketone			<b>1.64</b>	1.00	<b>1.16</b>	1.00	<b>1.31</b>	1.00	<b>1.34</b>	1.00	<b>1.77</b>	1.00	<b>1.41</b>	1.00	<b>10.8</b>	1.00
MTBE		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Methylene Chloride		<3.4	<3.00	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00
n-Butylbenzene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Xylene (o)		<4.3	<b>1.15</b>	1.00	<1.00	1.00	<1.00	1.00	<b>1.03</b>	1.00	<b>1.02</b>	1.00	<b>1.12</b>	1.00	<b>4.69</b>	1.00
Propylene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
sec-Butylbenzene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Styrene		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>2.5</b>	1.00
Tetrachloroethene	30		<b>2.01</b>	0.25	<b>1.78</b>	0.25	<b>1.78</b>	0.25	<b>1.61</b>	0.25	<b>2.24</b>	0.25	<b>2.02</b>	0.25	<b>1.71</b>	0.25
Tetrahydrofuran		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<b>10.9</b>	1.00
Toluene		1.0 - 6.1	<b>5.54</b>	1.00	<b>5.76</b>	1.00	<b>6.14</b>	1.00	<b>5.76</b>	1.00	<b>5.5</b>	1.00	<b>5.16</b>	1.00	<b>17.2</b>	1.00
trans-1,2-Dichloroethene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
trans-1,3-Dichloropropene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Trichloroethene	2	<1.7	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20
Trichlorofluoromethane		NA	<b>1.4</b>	1.00	<b>1.29</b>	1.00	<b>1.32</b>	1.00	<b>1.31</b>	1.00	<b>1.59</b>	1.00	<b>1.36</b>	1.00	<b>1.47</b>	1.00
Trichlorotrifluoroethane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
Vinyl Chloride		<1.0	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20
<b>BTEX</b>			<b>12.77</b>		<b>10.65</b>		<b>11.01</b>		<b>12.62</b>		<b>12.49</b>		<b>11.22</b>		<b>39.48</b>	
<b>CVOCs</b>			<b>5.25</b>		<b>4.85</b>		<b>4.83</b>		<b>4.67</b>		<b>6.96</b>		<b>6.11</b>		<b>6.36</b>	
<b>Total VOCs</b>			<b>86.21</b>		<b>62.23</b>											

TABLE 2  
39-40 3th St Queens, NY  
Pre Carbon Air Sample- Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub- Slab Value  ( $\mu\text{g}/\text{m}^3$ ) <sup>(a)</sup>	NYSDOH Soil Outdoor Background Levels  ( $\mu\text{g}/\text{m}^3$ ) <sup>(b)</sup>	PRE CARBON 12/13/2018 Tedlar Bag ( $\mu\text{g}/\text{m}^3$ )	
			Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1.00
1,1,1,1-Trichloroethane	100	<2.0 - 2.8	< 1.00	1.00
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1.00
1,1,2-Trichloroethane		<1.0	< 1.00	1.00
1,1-Dichloroethane		<1.0	< 1.00	1.00
1,1-Dichloroethene		<1.0	< 1.00	1.00
1,2,4-Trichlorobenzene		NA	-	-
1,2,4-Trimethylbenzene		<1.0	<b>3.96</b>	1.00
1,2-Dibromoethane		<1.5	< 1.00	1.00
1,2-Dichlorobenzene		<2.0	-	-
1,2-Dichloroethane		<1.0	< 1.00	1.00
1,2-Dichloropropane			< 1.00	1.00
1,2-Dichlorotetrafluoroethane			< 1.00	1.00
1,3,5-Trimethylbenzene		<1.0	<b>1.04</b>	1.00
1,3-Butadiene		NA	< 1.00	1.00
1,3-Dichlorobenzene		<2.0	-	-
1,4-Dichlorobenzene		NA	-	-
1,4-Dioxane			< 1.00	1.00
2-Hexanone			< 1.00	1.00
4-Ethyltoluene		NA	<b>3.31</b>	1.00
4-Isopropyltoluene			< 1.00	1.00
4-Methyl-2-pentanone			< 1.00	1.00
Acetone		NA	<b>23.1</b>	1.00
Acrylonitrile			< 1.00	1.00
Benzene		<1.6 - 4.7	< 1.00	1.00
Benzyl Chloride		NA	-	-
Bromodichloromethane		<5.0	< 1.00	1.00
Bromoform		<1.0	< 1.00	1.00
Bromomethane		<1.0	< 1.00	1.00
Carbon Disulfide		NA	< 1.00	1.00
Carbon Tetrachloride	5	<3.1	<b>0.41</b>	0.25
Chlorobenzene		<2.0	< 1.00	1.00
Chloroethane		NA	< 1.00	1.00
Chloroform		<2.4	<b>1.83</b>	1.00
Chloromethane		<1.0 - 1.4	< 1.00	1.00
cis-1,2-Dichloroethene		<1.0	< 1.00	1.00
cis-1,3-Dichloropropene		NA	< 1.00	1.00
Cyclohexane		NA	< 1.00	1.00
Dibromochloromethane		<5.0	< 1.00	1.00
Dichlorodifluoromethane		NA	<b>1.73</b>	1.00
Ethanol			<b>38.6</b>	1.00
Ethyl Acetate		NA	< 1.00	1.00
Ethylbenzene		<4.3	<b>1.92</b>	1.00
Heptane		NA	< 1.00	1.00
Hexachlorobutadiene		NA	< 1.00	1.00
Hexane		<1.5	< 1.00	1.00
Isopropylalcohol		NA	<b>4.03</b>	1.00
Isopropylbenzene			< 1.00	1.00
Xylene (m&p)		<4.3	<b>6.21</b>	1.00
Methyl Ethyl Ketone			<b>1.72</b>	1.00
MTBE		NA	< 1.00	1.00
Methylene Chloride		<3.4	<b>2.01</b>	1.00
n-Butylbenzene			< 1.00	1.00
Xylene (o)		<4.3	<b>2.39</b>	1.00
Propylene		NA	< 1.00	1.00
sec-Butylbenzene			< 1.00	1.00
Styrene		<1.0	-	-
Tetrachloroethene	30		<b>44.7</b>	0.25
Tetrahydrofuran		NA	<b>3.07</b>	1.00
Toluene		1.0 - 6.1	<b>7.53</b>	1.00
trans-1,2-Dichloroethene		NA	< 1.00	1.00
trans-1,3-Dichloropropene		NA	-	-
Trichloroethene	2	<1.7	<b>85.4</b>	0.25
Trichlorofluoromethane		NA	<b>1.65</b>	1.00
Trichlorotrifluoroethane			< 1.00	1.00
Vinyl Chloride		<1.0	< 0.25	0.25
<b>BTEX</b>			<b>18.05</b>	
<b>CVOCs</b>			<b>135.72</b>	
<b>Total VOCs</b>			<b>232.69</b>	

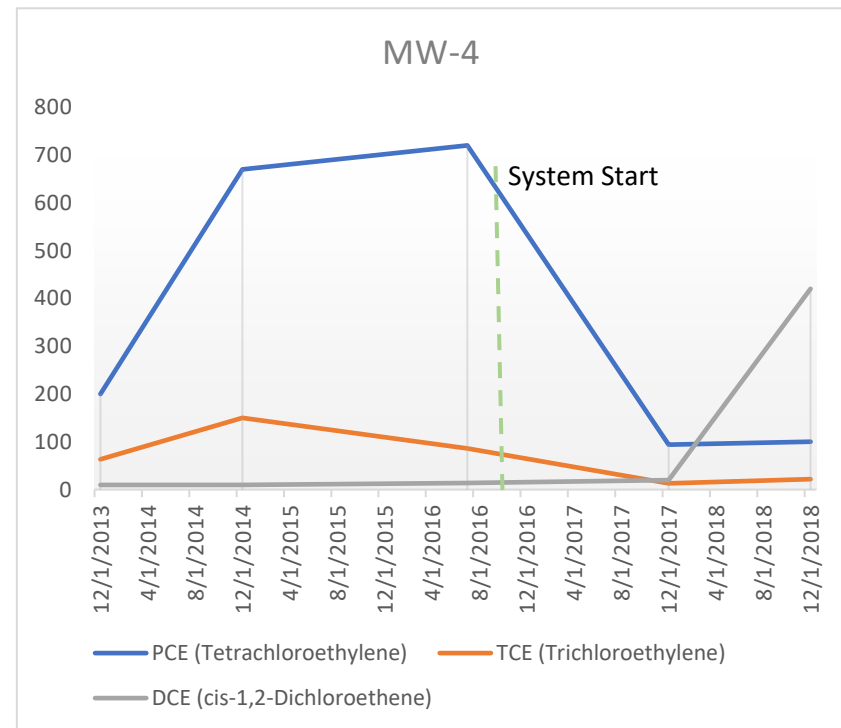
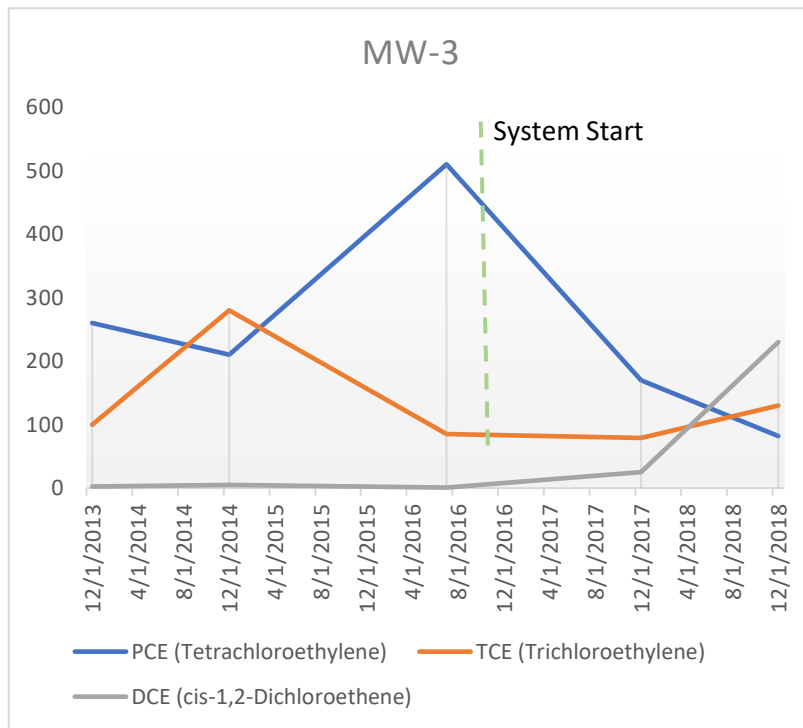
**Table 3: Groundwater Monitoring Data and Graph (MW3 and MW4) From Pre and Post- SVE System**

39-40 30th Street, Long Island City, NY

Well	COC ID	12/20/2013	12/26/2014	7/6/2016	SYSTEM START	12/14/2017	12/13/2018
		Pre-Remedial Data				Post-Remedial Data	
MW-3	PCE (Tetrachloroethylene)	260	210	510		170	82
	TCE (Trichloroethylene)	100	280	85		NS	130
	DCE (cis-1,2-Dichloroethene)	2.6	5.1	0.82		25	230
MW-4	PCE (Tetrachloroethylene)	200	670	720		94	100
	TCE (Trichloroethylene)	63	150	86		13	22
	DCE (cis-1,2-Dichloroethene)	9.7	10	14	20	420	

**Notes:**

All units in µg/L



**Table 4: Indoor Air Data and Graph (Pre and Post SVE System)**

39-40 30th Street, Long Island City, NY

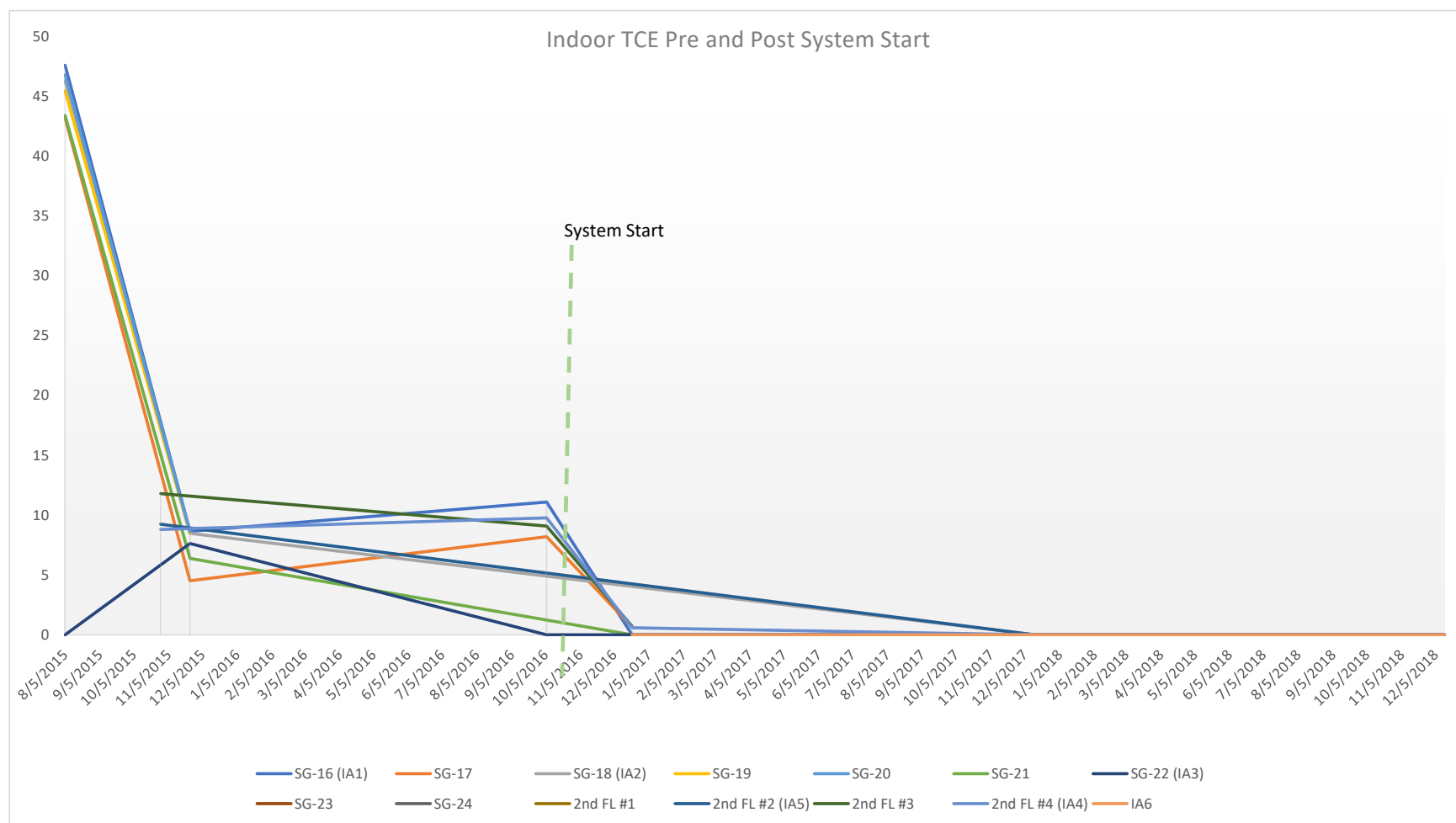
Indoor Air Sample	8/5/2015	10/29/2015	11/24/2015	10/6/2016		12/21/2016	12/14/2017	12/13/2018
	Indoor Air TCE Concentrations (µg/m3)							
SG-16 (IA1)	47.6	NS	8.65	11.1	SYSTEM START	0.54	ND	ND
SG-17	43.2	NS	4.52	8.2		NS	-	-
SG-18 (IA2)	46.3	NS	8.49	NS		NS	ND	ND
SG-19	45.47	NS	8.49	NS		NS	-	-
SG-20	46.8	NS	8.06	NS		NS	-	-
SG-21	43.4	NS	6.39	NS		NS	-	-
SG-22 (IA3)	NS	NS	7.63	NS		NS	ND	ND
SG-23	-	-	-	-		0.61	NS	NS
SG-24	-	-	-	-		0.76	NS	NS
2nd FL #1	-	9.45	NS	NS		NS	-	-
2nd FL #2 (IA5)	-	9.24	NS	NS		NS	ND	ND
2nd FL #3	-	11.8	NS	9.08		0.7	-	-
2nd FL #4 (IA4)	-	8.81	NS	9.77		0.58	ND	ND
IA6	-	-	-	-		-	ND	ND

**Notes:**

"- " Indicates sample location not installed

NS - Not Sampled

39-40 30th Street, Long Island City, NY



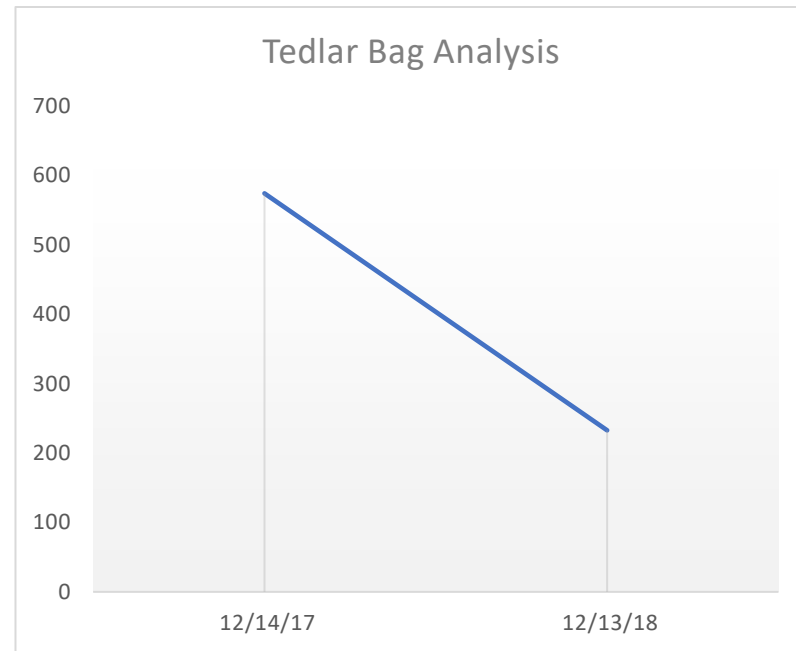
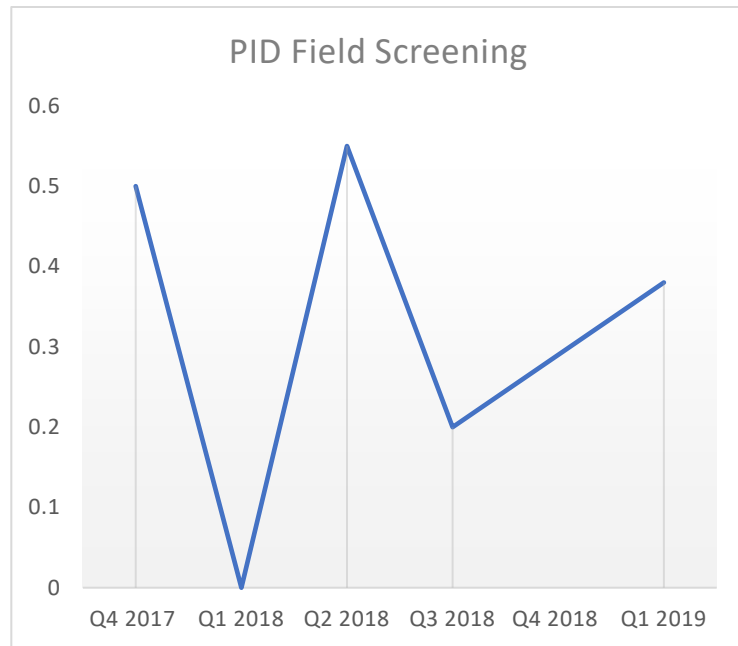
**Table 5: Total Pre-Carbon VOC Concentrations - SVE System**

39-40 30th Street, Long Island City, NY

Analysis Type	Q4 2017 (12/14/17)	Q1 2018	Q2 2018	Q3 2018	Q4 2018 (12/13/18)	Q1 2019
SVE System Pre-carbon Total VOCs						
PID Field Screening	0.5	0	0.55	0.2	NS	0.38
Tedlar Bag Analysis	573.97	NS	NS	NS	232.69	NS

Notes:

PID Units in ppm

Tedlar Bag Analysis Units in  $\mu\text{g}/\text{m}^3$ 



# APPENDICES

**Former Union Wire Die Corp.**

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**Appendix A:** IC/EC Project Schedule 2019

**Appendix B:** IE/EC Certification Form

**Appendix C:** Change of Ownership Form

# 39-40 30th Street BCP Project



Task Name	Q1			Q2			Q3			Q4		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<input type="checkbox"/> Inspections												
Cover System Inspection, SVE System												
Q2 2019												
Q3 2019												
Q4 2019												
<input type="checkbox"/> Monitoring												
PID at SVE Wells, GAC Units												
Q2 2019												
Q3 2019												
Q4 2019												
Air Sample at Pre-Carbon Canister												
Groundwater Sampling												
Indoor Air Sampling												
<input type="checkbox"/> Maintenance												
SVE System												
Q2 2019												
Q3 2019												
Q4 2019												
<input type="checkbox"/> Pre-Construction												
NYSDEC Meeting – Development Plans												
Waste Characterization Sampling and Analysis												
Facility Approvals for Soil Disposal												
<input type="checkbox"/> Reporting												
Inspection Reports												
Q2 2019												
Q3 2019												
Q4 2019												
Periodic Review Report												
<input type="checkbox"/> Notifications												
Change in Ownership												
Proposed Change in Use to NYSDEC												
Field Activity Notice (7 Days Before Field Activity)												
Ground Intrusive Notice per Excavation Plan												



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	
<b>Site No.</b>	C241163		
<b>Site Name</b> Former Union Wire Die Corp.			
Site Address: 39-40 30TH STREET		Zip Code: 11101	
City/Town: Long Island City			
County: Queens			
Site Acreage: 0.325			
Reporting Period: December 20, 2017 to March 20, 2019			
		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 checked="" type="checkbox"/>	<input 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>		change of ownership form	
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? Restricted-Residential, 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	

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

YES NO

☐ ☒

**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. C241163**

**Description of Institutional Controls**

Parcel

Owner

Institutional Control

**4-399-34**

~~Canesh Management, LLC~~  
LIC Owner LLC

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

An Environmental Easement has been placed on the property to:

1. Restrict site use to restricted residential, commercial, and/or industrial use;
2. Restrict use of groundwater at the site
3. Require implementation of a Site Management Plan

**Description of Engineering Controls**

Parcel

Engineering Control

**4-399-34**

Cover System  
Vapor Mitigation

Cover system consists of the existing building slab and asphalt parking lots. Annual inspection required.

A soil vapor extraction (SVE) system was installed to remediate sub-surface soils impacted with chlorinated volatile organic compounds. The system consists of 4 vapor extraction points, a 7.5 hp blower and 2 GAC units in parallel prior to discharge to atmosphere. Monitoring is performed in accordance with the SMP. (quarterly field monitoring of system performance, annual groundwater monitoring, annual indoor air monitoring, and annual system monitoring pre-carbon using lab analysis.)

### 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

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. C241163

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 Joseph Stern at 5-26 46th Ave. Long Island City, NY 11101,  
print name print business address

am certifying as LIC Owner LLC ☒ Owner or Remedial Party)

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



Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

5/2/19  
Date

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 Joel Rogers at 170 Keyland Court, Bohemia, NY 11716,  
print name print business address

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



5/2/19

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

Date

**60-Day Advance Notification of Site Change of Use, Transfer of  
Certificate of Completion, and/or Ownership**

Required by 6NYCRR Part 375-1.11(d) and 375-1.9(f)

To be submitted at least 60 days prior to change of use to:

Chief, Site Control Section  
New York State Department of Environmental Conservation  
Division of Environmental Remediation, 625 Broadway  
Albany NY 12233-7020

**I. Site Name:** Former Union Wire Die Corp. **DEC Site ID No.** C241163

**II. Contact Information of Person Submitting Notification:**

Name: Linda Shaw, Esq.  
Address1: 1400 Crossroads Building  
Address2: 2 State Street  
Phone: (585) 546-8430 E-mail: lshaw@nyenvlaw.com

**III. Type of Change and Date:** Indicate the Type of Change(s) (check all that apply):

- ☒ Change in Ownership or Change in Remedial Party(ies)  
☒ Transfer of Certificate of Completion (CoC)  
☐ Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy): 3-18-19

RECEIVED

JAN 16 2019

BUR. OF TECH. SUPPORT

**IV. Description:** Describe proposed change(s) indicated above and attach maps, drawings, and/or parcel information.

The site is being sold to LIC OWNER LLC, which entity will assume any remaining remedial activities under the Site Management Plan and redevelop the site. The Certificate of Completion will be transferred to the new owner at the Closing.

If "Other," the description must explain and advise the Department how such change may or may not affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

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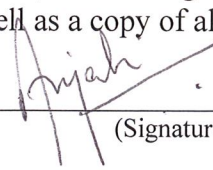
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- V. **Certification Statement:** Where the change of use results in a change in ownership or in responsibility for the proposed, ongoing, or completed remedial program for the site, the following certification must be completed (by owner or designated representative; see §375-1.11(d)(3)(i)):

I hereby certify that the prospective purchaser and/or remedial party has been provided a copy of any order, agreement, Site Management Plan, or State Assistance Contract regarding the Site's remedial program as well as a copy of all approved remedial work plans and reports.

Name:   
(Signature)

11-13-18  
(Date)

Anjali Gopalani

(Print Name) MANAGING MEMBER.

Address1: Ganesh Management, LLC

Address2: 39-40 30th Street, Queens, NY 11101

Phone: 718-764-8300 E-mail: gary@pccwireless.com

- VI. **Contact Information for New Owner, Remedial Party, or CoC Holder:** If the site will be sold or there will be a new remedial party, identify the prospective owner(s) or party(ies) along with contact information. If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/ECs), indicate who will be the certifying party (attach additional sheets if needed).

☒ Prospective Owner ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: LIC OWNER LLC

Address1: 5-26 46th Avenue

Address2: Long Island City, NY 11101

Phone: 845-729-5428 E-mail: js@sbdevelopmentgroup.com

Certifying Party Name: Joseph Stern c/o LIC OWNER LLC

Address1: 5-26 46th Avenue

Address2: Long Island City, NY 11101

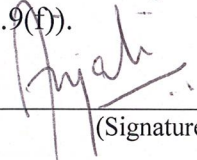
Phone: 845-729-5428 E-mail: js@sbdevelopmentgroup.com

**VII. Agreement to Notify DEC after Transfer:** If Section VI applies, and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of the CoC for the site, the CoC should be transferred to the new owner using DEC's form found at <http://www.dec.ny.gov/chemical/54736.html>. This form has its own filing requirements (see 6NYCRR Part 375-1.9(f)).

Signing below indicates that these notices will be provided to the DEC within the specified time frames. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the notice required by VII.1 below (which normally must be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at <http://www.dec.ny.gov/chemical/54736.html> (see §375-1.9(f)).

Name:   
(Signature)

11-13-18  
(Date)

Anjali Gopalani  
(Print Name) *MANAGING MEMBER*

Address1: Ganesh Management, LLC

Address2: 39-40 30th Street, Queens, NY 11101

Phone: 718-764-8300 E-mail: gary@pccwireless.com