

# Target Rock Site Site Management Plan

Suffolk County, New York  
NYSDEC Site No. 1-52-119

## PREPARED FOR

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### **Curtiss-Wright Flow Control Corporation**

Target Rock Division  
1966 E Broadhollow Road  
East Farmingdale, New York

## PREPARED BY

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## REVISIONS TO FINAL APPROVED SITE MANAGEMENT PLAN

Revision #	Submitted Date	Summary of Revision	NYSDEC Approval Date

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## 1.0 INTRODUCTION

This document is required as an element of the remedial program at the Target Rock site (hereinafter referred to as the “Site”) under the New York State (NYS) Superfund Site administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Order of Consent Index #W1-1031-04-10, Site #152119, which was executed on July 31, 2008. General

Curtiss-Wright Flow Control Corporation (CW Target Rock), a subsidiary of Curtiss-Wright Corporation, entered into an Order of Consent with the NYSDEC to remediate the site, an 11-acre property located in East Farmingdale, Suffolk County, New York. This Order of Consent required the Remedial Party, Curtiss-Wright Corporation (Curtiss-Wright) to investigate and remediate contaminated media at the site. A U.S. Geologic Survey (USGS) map depicting the site location is provided as Figure 1. A figure showing the site location and boundaries of this 11-acre site is provided in Figure 2.

After the remedial work described in the NYSDEC February 2011 Proposed Remedial Action Work Plan (RAWP) was completed, minimal contamination remains in the subsurface soil at this site, which is hereafter referred to as “remaining contamination.” This contamination consists of localized tetrachloroethene (PCE)-impacted soil in the former underground storage tank (UST) area. This Site Management Plan (SMP) has been prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. All reports associated with the site can be viewed by contacting NYSDEC or its successor agency managing environmental issues in New York State.

Tetra Tech prepared this SMP on behalf of Curtiss-Wright in accordance with the requirements presented in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the institutional controls (IC) and engineering controls (EC) that are required by the Environmental Easement for the site.

## 2.0 PURPOSE

The site contains subsurface soil contamination left after completion of the remedial action addressing soils at the site. ECs have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted by the NYSDEC, and recorded with the Suffolk County Clerk, will require compliance with this SMP and all ECs and ICs placed on the site. The IC will place a restriction on site use. Additionally, the ICs mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including:

1. Implementation and management of all Engineering and Institutional Controls;
2. media monitoring; and
3. performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

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

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

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion.
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York (6NYCRR) Part 375 and the Order of Consent; Site #152119 for the site, and thereby subject to applicable penalties.

## 2.1 REVISIONS

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

## 2.2 SITE BACKGROUND

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### 2.2.1 Site Location and Description

The site is located in East Farmingdale, County of Suffolk New York and is identified as Section 17, Block 14, Lots 11 and 12 on the East Farmingdale Tax Map. The site encompasses an approximately 11-acre area bounded by commercial properties and parking lots to the north and east, a residential neighborhood to the south, the closest street being Alexander Avenue, and an apartment building on Melville Road to the west.

### 2.2.2 Site History

The site was originally used as a sand and gravel bank. In 1972, the east building was constructed and housed a J.C. Penney warehouse until Target Rock Corp. moved into the building in 1981. The exact date of construction of the west building is unknown. It was leased as office space by Target Rock then purchased and expanded by 40,000 ft<sup>2</sup> in 1975.

Target Rock manufactures valves for nuclear submarine power operations. Manufacturing includes machining and testing of the valves. Valve testing is conducted using a non-destructive technique. Operations began in 1981 and continue to the present day.

The site contains two manufacturing buildings designated as “east” and “west”. The west building is 400 feet x 250 feet and is used for manufacturing and office space; the east building is 350 feet x 300 feet and is used for shipping and receiving, valve testing, and contains additional manufacturing and office space.

### 2.2.3 Discharge History

The discharge history is described in detail in Section 3.1 of the March 2011 NYSDEC Record of Decision (ROD).

### 2.2.4 Geologic Conditions

Site elevation ranges from 73 feet to 67 feet above sea level. The site is relatively flat, gradually sloping downward to the east and southeast. Because the site is part of a former sand and gravel mine, a sharp rise in elevation, approximately 30 feet, occurs at the southern and western property boundaries. Bedrock is approximately 1,200 feet below sea level. Soils around the site consist of minor amounts of fill, sand and gravel in the medium to fine range, getting finer with depth. The groundwater table beneath the site historically varies from 10-15 feet below ground surface (bgs) and flows generally to the south south-east, consistent with regional flow (Figure 3). The geology and hydrogeology are described in detail in the March 2011 NYSDEC ROD.

## 2.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

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There has been substantial investigative and remedial work undertaken at the site over many years which has had a positive impact on soil and groundwater contamination. Figures 4, 5, 5a, 5b, 6, 7, 7a, and 7b show the most recent soil, groundwater, and sub/slab and soil vapor data collected at the site. Chemical concentrations are reported in



parts per billion (ppb) for water, parts per million (ppm) for waste, soil, and sediment. Air samples are reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

The remedial history of the site is documented in the March 2011 NYSDEC ROD. This section presents a brief summary of the remedial history for soil, groundwater, site-related soil vapor intrusion, and underground storage tank (UST) area.

Generally, the remedial investigations performed throughout the years have determined that there are no current or future environmental exposure pathways that require active remediation. Some residual contamination remains in the deeper soil in the former UST removal area. This residual soil contamination is located 12 feet below grade and is overlain by asphalt. The residual soil contamination is not an environmental concern.

The most recent groundwater sampling event for volatile organic compounds (VOC) occurred in August 2012. During this sampling event, Langan collected groundwater samples from the seven on-site monitoring wells (TRMW-1 through TRMW-7). The results of the August 2012 groundwater sampling event revealed no VOCs detected above their respective NYSDEC groundwater standard.

### **2.3.1 Soil**

The following provides a timeline for the soil investigations performed at the site.

#### **1983**

Soil within an on-site dry well was sampled. 11 organic compounds were detected, including 1,1,1-TCA (43 milligrams per kilogram [mg/kg]) and tetrachloroethene (PCE) (2.3 mg/kg).

#### **1992-1994**

A state-funded Phase 2 investigation was completed in 1992 with a report issued in 1993. During the Phase 2 investigation, soil samples were analyzed for VOCs, semi-volatile organic compounds (SVOC), metals, pesticides, and polychlorinated biphenyls (PCB). Following this Phase 2 investigation, the site was included in the database of hazardous substance waste disposal sites pursuant to the ECL.

#### **2003-2004**

Target Rock discovered and removed a 550-gallon UST and associated piping located outside the northwest corner of the west building. The tank was found to be leaking and was a confirmed source of chlorinated volatile organic compounds (CVOC). During the tank removal process, two underground leaching structures were discovered and removed.

Soil sampling indicated the presence of soil contaminated with CVOCs and metals. Soil removal actions were initiated and approximately 275 tons of impacted soil was removed from the excavation. The excavation proceeded to 12 feet below grade, at which point the structural integrity of the building footings became a concern. There were twelve post-excavation soil samples collected by CA RICH Consultants (CA RICH) in 2004; one soil sample taken

at 12 feet below grade had a PCE concentration slightly above the NYSDEC unrestricted Soil Cleanup Objectives (SCO). Table 1 summarizes the subsurface soil exceedance of the NYSDEC SCO.

Following the soil remedial actions, the excavation was backfilled and capped with asphalt.

### **2009**

Target Rock initiated a remedial investigation in 2009 which consisted of the advancement of three soil borings and the collection of five soil samples. Two soil borings (AGW-9 and AGW-10) were advanced in the former UST area. Soil boring AGW-9 was advanced in the same location as the 2004 CA RICH soil sampling location, which contained a PCE exceedance of the NYSDEC unrestricted SCO. Soil samples were collected from boring AGW-9 at depths of 7.5 to 9.5 feet below grade and 13 to 15 feet below grade. Two samples were also collected from boring AGW-10 at depths of 8 to 10 feet below grade and 13 to 15 feet below grade.

The analytical results from the two samples collected from boring AGW-10 indicated no exceedances of NYSDEC SCOs. The sample collected from 7.5 to 9.5 feet below grade in boring AGW-9 contained no exceedances of the NYSDEC unrestricted SCO and the sample collected from 13 to 15 feet below grade in boring AGW-9 contained a marginal exceedance of PCE above the NYSDEC unrestricted SCO. The analytical results from the samples collected from AGW-9 and AGW-10 are summarized on Tables 1 and 6.

Target Rock also performed a groundwater investigation during this same 2009 event which converted soil borings AGW-9 and AGW-10 into temporary groundwater well points. This investigation is discussed in Section 1.3.2

### **2.3.2 Groundwater**

The following provides a timeline for the groundwater investigations performed at the site.

#### **1992-1994**

A state-funded Phase 2 investigation was completed in 1992 with a report issued in 1993. During the Phase 2 investigation, four permanent monitoring wells (TRMW-1 through TRMW-4) were installed. Groundwater samples were analyzed for VOCs, SVOCs, metals, pesticides, and PCBs. VOCs were the primary contaminants of concern (COC). 1,1,1-TCA was detected at 66 micrograms per liter (µg/L), above the NYSDEC groundwater standard of 5 µg/L. Following this Phase 2 investigation, the site was included in the database of hazardous substance waste disposal sites pursuant to the ECL.

#### **1996**

Target Rock conducted a hydrogeological investigation to characterize groundwater quality at the site, to evaluate potential downgradient migration of contamination, and identify potential downgradient receptors. A fifth monitoring well, TRMW-5, was installed upgradient at the site.

#### **2008-2009**

Target Rock conducted a remedial investigation, which included groundwater sampling of the on-site wells.

Soil borings AGW-9 and AGW-10, advanced in the former UST area, were converted to temporary well points and sampled at varying depths. No exceedances of NYSDEC groundwater standards were detected in groundwater sampled from AGW-10. In the three of the four groundwater samples collected from AGW-9, no exceedances were detected. The groundwater sample collected from 10 to 11 feet below grade from AGW-9 contained several VOC concentrations, specifically, 1,1-dichloroethane, ethylbenzene, PCE, toluene, 1,1,1-trichloroethane, and total xylenes, above their respective NYSDEC groundwater standards.

### **2010**

Based on the results of the 2009 remedial investigation, Target Rock installed two additional monitoring wells (TRMW-6 and TRMW-7) on site. Well TRMW-6 was installed immediately downgradient of temporary well AGW-9. All seven on-site wells were sampled during 2010. Table 2 summarizes the degree of VOC contamination found in groundwater samples collected during 2010 and compares the data to NYSDEC groundwater standards. Figure 5 shows the locations where groundwater contamination exceeded NYSDEC groundwater standards.

Only one well had a VOC detection above the groundwater standards: chloroform was detected at 7.9 µg/L in well TRMW-2, marginally higher than the 7 µg/L groundwater standard.

### **2011**

The groundwater data collected during 2010, in conjunction with previous investigation data and soil data, indicate that there are no source strength groundwater impacts or “source areas” and suggests that there is no groundwater plume. Furthermore, the remediation of former soil impacts has had a beneficial effect on groundwater quality. Due to the isolated and low level detections of VOC in the groundwater, no active remediation is required.

### **2012**

The groundwater data collected in 2012 for VOCs during two sampling events revealed no exceedances of NYSDEC groundwater standards (Table 2a and 2b). Consequently, no groundwater use restrictions are necessary for the site.

## **2.3.3 Site-Related Soil Vapor Intrusion**

The following provides a timeline for the vapor investigations performed at the site.

### **2008-2009**

Target Rock conducted a remedial investigation, which included soil vapor, sub-slab vapor, and indoor air sampling at the site. Additionally, the NYSDEC requested the collection of additional air samples in the west building in conjunction with an evaluation of the buildings heating, ventilation, and air condition (HVAC) system. This evaluation was performed to determine the HVAC system's ability to maintain a positive pressure environment within the building.

Tables 3 and 4 summarize the analytical results for soil vapor and sub-slab samples, respectively. As shown on these tables, VOC concentrations were detected in sub-slab and soil vapor samples. There were no exceedances

of applicable NYSDOH standards at that time in the indoor air samples. Figure 6 shows the locations where soil vapor and sub-slab soil vapor contamination exceeded standards.

## **2010**

In 2010, Langan conducted an indoor air quality (IAQ) assessment in the west building. This IAQ assessment consisted of four indoor air quality samples collected at the locations where sub-slab samples had previously been taken. Additionally, a HVAC Inspection Report was performed by C.P. Channing, P.E., of Mannorville, New York.

The IAQ results did not identify VOC compounds in the indoor air samples (Table 5) and the HVAC system was demonstrated to be operating at positive pressure.

## **2012**

In 2012, Langan conducted a comprehensive soil vapor assessment in March and a confirmatory round of indoor air, sub-slab and perimeter soil gas vapor sampling again in August 2012 per NYSDEC's direction. This soil vapor assessment consisted of five perimeter soil vapor samples along with eight sub-slab samples and eight indoor air quality samples that were collected from the two site buildings. Soil vapor samples were collected from five permanent soil gas vapor monitoring points that were installed along the west property line and the southern boundary of the site. Sub-slab samples were collected from six permanent sampling points in the western building and two permanent sampling points in the eastern building. The confirmatory round of indoor air, sub-slab and perimeter soil gas vapor sampling consisted of sampling all the same points as the soil vapor assessment.

Laboratory analysis of the perimeter soil vapor samples identified 1,1,1- trichloroethane, tetrachloroethylene and trichloroethylene compounds at relatively low concentrations (Table 5a and 5b).

Laboratory results also identified 1,1,1-trichloroethane, tetrachloroethylene and trichloroethylene compounds in the several of the sub-slab and indoor air samples. There was no exceedance of the applicable NYSDOH standards at that time, however, when compared to the revised August 2015 NYSDOH standards, the results would have exceeded them.

Comparison of the 2012 soil gas vapor data against the 2009 soil gas vapor data collected by Arcadis revealed that on-site contaminants of concern are still present but exist at concentrations lower than those previously encountered at the site.

The primary VOCs of concern at the site (1,1,1-trichloroethane, tetrachloroethylene and trichloroethylene) were below the applicable New York State Department of Health (NYSDOH) criteria in affect in 2012 in the eight indoor air samples collected during both 2012 investigations. However, when compared to the revised August 2015 NYSDOH standards, these results would have exceeded the new standards.

## **2018**

In 2018, Tetra Tech performed additional indoor air monitoring. A total of 12 samples were collected using SUMMA canisters with flow controllers calibrated to collect a sample over the course of 8 hours. Four (4) samples were collected in the east building and eight (8) samples were collected in the west building. Each sample was submitted

under proper chain of custody to SGS Galson in Syracuse, NY for analysis of volatile organic compounds using EPA Method TO-15. Figure 8 presents the locations of indoor air quality samples collected in 2018.

The results of this monitoring event are presented in Table 6. The compounds of interest were not detected above the laboratory reporting limits, however, in some cases, detection limits were above the applicable NYSDOH standards.

Additionally, in November 2018, the HVAC system was inspected to determine whether the building was under positive pressure. The HVAC inspection was performed by C.P. Channing, P.E., of Mannorville, New York and results verified that the building was under positive pressure at the time of the inspection.

Sub-slab vapor monitoring and/or indoor air quality monitoring may be required based on inspection of this engineering control.

### 2.3.4 Underground Storage Tanks

In 2003, Target Rock discovered and proactively removed a 550-gallon UST. The impacted soils and groundwater from the UST and surrounding areas were previously discussed in Sections 1.3.1 through 1.3.3.

## 2.4 SUMMARY OF PROPOSED REMEDIAL ACTION

The site will be remediated in accordance with the NYSDEC March 2011 ROD, which approved the Proposed Remedial Action Work Plan dated February 2011.

The following is a summary of the proposed remedial actions to be performed at the site:

1. Imposition of an IC in the form of an environmental easement that would require (1) limiting the use and development of the property to restricted residential use, which would also permit commercial or industrial uses; (2) compliance with the approved site management plan; and (3) the property owner to complete and submit to NYSDEC a periodic certification of engineering and institutional controls (EC/IC).

Development of this site management plan which would include the following EC/IC: (1) subsequent evaluation of the potential for vapor intrusion for any buildings developed on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion; (2) monitoring of groundwater, soil vapor, sub-slab vapors, and indoor air; (3) identification of any use restrictions on the site; and (4) provisions for the continued proper operation and maintenance of the components of the remedy.

2. The property owner would provide a periodic certification of EC/IC, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal would (1) contain certification that the EC/ICs put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (2) allow the Department access to the site; and (3) state that nothing has occurred that would impair the ability of the control to protect public

health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

3. The operation of the components of the remedy would continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

#### **2.4.1 Remaining Contamination**

As previously discussed in Sections 1.3.1 through 1.3.3, minimal soil contamination was detected above the NYSDEC unrestricted SCO in one 2004 post-excavation sample and one sample collected from boring AGW-9 in 2009. Soil boring AGW-9 was advanced in the same location as the CA RICH 2004 post-excavation sample that contained the PCE exceedance of NYSDEC unrestricted SCO. The residual soil contamination is present between 12 and 15 feet below grade. A summary of remaining soil contamination above the unrestricted levels is presented in Table 7.

Groundwater sampling was conducted in August 2012 and represented the second of two sampling events that year; the initial event occurred in February 2012. During both sampling events, Langan collected groundwater samples from the seven on-site monitoring wells (TRMW-1 through TRMW-7). The results of both 2012 events revealed that VOCs were not detected above their respective NYSDEC groundwater standard. Subsequently, no further groundwater sampling will be conducted at the site.

Based on the potential presence of VOCs beneath the buildings, continued operation, maintenance and monitoring of the building HVAC system will be necessary. Operation of the HVAC system, in conjunction with the building's competent concrete floor slab, mitigates the potential for indoor air to be impacted from sub-slab vapor intrusion.

## 3.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

### 3.1 INTRODUCTION

#### 3.1.1 General

Based on the potential presence of VOCs beneath the buildings, continued operation, maintenance and monitoring of the building HVAC system will be necessary. Operation of the HVAC system, in conjunction with the building's competent concrete floor slab, mitigates the potential for indoor air to be contaminated from sub-slab vapor intrusion. Engineering and Institutional Control Plan

As previously discussed, isolated and marginal exceedances of soil remain at the site. Therefore, EC/ICs are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

#### 3.1.2 Purpose

This plan provides:

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

### 3.2 ENGINEERING CONTROLS

#### 3.2.1 Engineering Control Systems

##### 3.2.1.1 Soil Cap

Localized residual contamination remains beneath the former UST area, located in the northwest section of the site. This residual contamination in the former UST area is present at a depth of 12 to 15 feet below grade. This area is overlain by an asphalt cap system thus eliminating any potential for exposure. This cap system consists of the asphalt pavement, gravel sub-base and on-site soils. Procedures for the inspection and maintenance of this cap are provided in the Monitoring Plan included in Section 4 of this SMP.

### 3.2.1.2 Building HVAC System

The HVAC system keeps the building under positive pressure. Operation of the HVAC, in conjunction with the building's competent concrete floor slab, mitigates the potential for indoor air to be contaminated from sub-slab vapor intrusion. Accordingly, continued operation and maintenance of the building HVAC system will be necessary until such time that residual VOCs in the subsurface are no longer present at a level that may cause an exceedance of the NYSDOH air quality criteria in the building.

### 3.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

#### 3.2.2.1 Groundwater Monitoring

Groundwater monitoring was performed during two separate events in 2012 in the months of February and August to address the one marginal exceedance of chloroform that had been detected in one monitoring well (TRMW-2) during the 2010 sampling events. Both the February 2012 and the August 2012 sampling event revealed no VOC exceedances of NYSDEC groundwater standards. CW Target Rock has thus reaffirmed that levels of contamination do not exceed applicable standards. Based on the confirmatory February and August 2012 groundwater analytical results, no further groundwater sampling will be conducted at the site. The existing groundwater monitoring wells will be properly abandoned by a licensed driller in accordance with applicable regulations.

## 3.3 INSTITUTIONAL CONTROLS

A series of ICs is required by the ROD to: (1) implement, maintain, and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the use and development of the site to commercial, industrial, and restricted residential uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. These ICs are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns must be met.
- All ECs must be operated and maintained as specified in this SMP.
- All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Operation of the HVAC system in the West Building must be performed as defined in this SMP.
- Data and information pertinent to site management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

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



The site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for commercial, industrial, or restricted residential use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated.
- Vegetable gardens and farming on the property are prohibited.
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

### **3.3.1 Future Construction**

#### **3.3.1.1 Soil Vapor Intrusion Evaluation**

No future construction is currently planned for the site. If this should change and the site were to propose construction of enclosed structures in areas that contain residual contamination (and therein the potential for soil vapor intrusion (SVI) is identified), an soil vapor intrusion evaluation will be performed to determine whether mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. In the case of future development, the site will evaluate the potential for vapor intrusion in proposed buildings/structures; this will include provisions for recommended actions to address exposures related to vapor intrusion.

#### **3.3.1.2 Soil Management Plan**

If future construction is planned and soils in the former UST area and beneath the asphalt cover were to be disturbed by construction activities, Curtiss-Wright will notify NYSDEC. Curtiss-Wright will prepare and submit a soil management plan for NYSDEC approval prior to excavation activities. The soil management plan will describe procedures for managing, handling and disposing soils safely.

### 3.3.1.3 HVAC Evaluation

If significant building modifications are planned and could affect the positive pressure maintained by the HVAC system, Curtiss-Wright will modify the system to maintain positive pressure. Curtiss-Wright will confirm that the HVAC system maintains positive pressure after the construction is completed.

## 3.4 INPSECTION NOTIFICATIONS

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### 3.4.1 Inspections

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

- Whether ECs continue to perform as designed
- If these controls continue to be protective of human health and the environment
- Compliance with requirements of this SMP and the Environmental Easement
- Achievement of remedial performance criteria
- Sampling and analysis of appropriate media during monitoring events
- If site records are complete and up to date
- Changes, or needed changes, to the remedial or monitoring system

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

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

### 3.4.2 Notifications

Notifications will be submitted by CW Target Rock to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Order of Consent, 6NYCRR Part 375, and/or Environmental Conservation Law.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other ECs and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation

within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.
- Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:
  - At least 60 days prior to the ownership change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Order of Consent and all approved work plans and reports, including this SMP
  - Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing

### 3.5 CONTINGENCY PLAN

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

#### 3.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list in Table 10. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the qualified environmental professional. These emergency contact lists must be maintained in an easily accessible location at the site. See Table 10 for a list of emergency contact numbers.

In the event of any environmentally related situation or unplanned occurrence, the Curtiss-Wright Target Rock Division Emergency Action Plan will dictate the proper course of action.

## 4.0 SITE MONITORING PLAN

### 4.1 INTRODUCTION

#### 4.1.1 General

This Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cap system, and all affected site media identified below. This Monitoring Plan may only be revised with the approval of NYSDEC.

#### 4.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, soil vapor, sub-slab, and indoor air)
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil
- Assessing that Engineering Controls are in place and properly maintained (i.e., the asphalt cap is in good repair and the HVAC system is operating properly to maintain positive pressure within the building)
- Assessing compliance with applicable NYSDOH vapor decision matrices
- Assessing achievement of the remedial performance criteria
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment
- Preparing the necessary reports for the various monitoring activities

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

- Sampling locations, protocol, and frequency
- Information on all designed monitoring systems (e.g., well logs)
- Analytical sampling program requirements
- Reporting requirements
- Quality assurance/quality control (QA/QC) requirements
- Inspection and maintenance requirements for monitoring wells
- Monitoring well decommissioning procedures
- Annual inspection and periodic certification

## 4.2 SOIL CAP SYSTEM MONITORING

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The asphalt cap above the former UST area will be inspected twice each year. One event will occur in the Fall, between September and December, and the other in the Spring, between April and June. These inspections will ensure that the integrity of the cap has not been compromised. The asphalt in the area identified in Appendix G will be inspected. If repairs are necessary such as pot holes or repaving, the repair will be in accordance with the Asphalt Cover System Drawing in Appendix G. The inspection form and checklist are provided as Appendix F and Appendix H, respectively.

## 4.3 MEDIA MONITORING PROGRAM

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### 4.3.1 Groundwater Monitoring

As previously discussed in Section 3.1.2, CW Target Rock conducted an additional round of confirmatory groundwater sampling in August 2012 to reaffirm that groundwater concentrations remain below NYSDEC standards. The analytical sampling results indicate that there is no longer a need for additional sampling of groundwater. All analytical data and reports have been submitted to the NYSDEC for review and approval.

The network of monitoring wells has been installed to monitor both up-gradient and down-gradient groundwater conditions at the site. The network of on-site wells is provided on Figure 10.

Wells TRMW-1 through TRMW-4, TRMW-6, and TRMW-7 are screened in the shallow aquifer. Well TRMW-5 is screened in a deeper aquifer. Monitoring well construction details are provided in Appendix C.

Groundwater at the site flows to the southeast, as shown on Figure 3. The groundwater data from the most recent groundwater sampling events (June/August 2010 and February/August 2012) are shown on Figures 5, 5a, and 5b.

During all groundwater sampling events, wells TRMW-1 through TRMW-7 were sampled for EPA Method 8260 (VOCs).

Deliverables for the groundwater monitoring program, if necessary, are specified below.

#### 4.3.1.1 Sampling Protocol

All monitoring well sampling activities were recorded in a field book and a groundwater-sampling log presented in Appendix D. Other observations (e.g., well integrity, etc.) were noted on the well sampling log. The well sampling log served as the inspection form for the groundwater monitoring well network.

All sampling and analyses will continue to be performed in accordance with the requirements listed in the Quality Assurance Project Plan (QAPP) prepared for the site (Appendix E).

#### 4.3.1.2 Monitoring Well Repairs, Replacement, and Decommissioning

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

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

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

#### **4.3.2 Soil Vapor Monitoring**

During the 2009 remedial investigation, VOC concentrations were detected in soil vapor samples collected from the site. The greatest concentrations of VOCs found in the 2009 investigation in the soil vapor were located along the southern and western site boundaries.

In 2012, Langan conducted two rounds of soil vapor monitoring to establish trends in vapor levels at the property boundary adjacent to residential properties. Five soil vapor samples were collected during the 2012 events. Two soil vapor samples were collected along the western boundary of the property and three soil vapor samples were collected from the southern boundary of the property, biased towards the west building. Based on the historical analytical sampling results, no further action or investigation regarding soil vapor will be conducted at the site unless there is a change of use in the current buildings or new buildings are developed. All analytical data and reports have been submitted to the NYSDEC for review and approval.

#### **4.3.3 Sub-Slab Vapor Monitoring**

During the 2009 remedial investigation, VOC concentrations were detected in sub-slab vapor samples collected from beneath the west and east buildings. The concentrations were highest in the northwest part of the west building. Two rounds of sub-slab vapor monitoring were performed in 2012 to establish trends in vapor levels beneath the two buildings during the appropriate sampling season. The samples were paired with indoor air samples and an ambient (outdoor) sample.

Six sub-slab soil vapor samples were collected per sampling event in the west building and two sub-slab soil vapor samples were collected per sampling event in the east building. All analytical data and reports have been submitted to the NYSDEC for review and approval.

Periodic sub-slab monitoring may be required in the future. Prior to monitoring, the condition of the sub-slab sampling points should be evaluated.

#### **4.3.4 Indoor Air Quality Monitoring**

Although the 2010 IAQ sampling event identified no exceedances in any of the samples, CW Target Rock nonetheless conducted two additional rounds of indoor air sampling in 2012 along with the soil vapor and sub-slab sampling to confirm the earlier findings, which revealed no IAQ exceedances. During all indoor air sampling events,

all samples were analyzed for USEPA TO-15. All analytical data and reports have been submitted to the NYSDEC for review and approval.

Indoor air monitoring results indicated that the primary VOCs of concern (i.e., PCE, TCE and 1,1,1-TCA) were below the applicable NYSDOH criteria in all eight of the indoor air samples collected during investigative activities.

Indoor air quality monitoring will be performed during the 2019-2020 heating season. Sampling locations will be the same/proximate to those locations sampled in 2018. The analytical method will be TO-15 SIM for specific site-related compounds (PCE and TEC). No other additional monitoring is planned at this time.

#### **4.3.4.1 Sampling Protocol**

All indoor air sampling activities and observations were recorded in a field book.

All sampling and analyses were performed in accordance with the requirements of the QAPP prepared for the site (Appendix E).

#### **4.3.5 HVAC Monitoring**

The building's HVAC pressure differential has been monitored during the IAQ sampling events to ensure that the HVAC system continues to maintain positive pressure.

##### **4.3.5.1 HVAC Monitoring Protocol**

All HVAC monitoring activities and observations will be documented in the annual Periodic Review Report. Monitoring will be performed by measuring pressure relationships between the inside of the building and sub-slab air pressure to verify the building is under positive pressure.

The HVAC system will be inspected annually during the heating season (October to May) to verify that the building is under positive pressure.

#### **4.4 INSPECTION OF ENGINEERING CONTROLS (EC)**

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An inspection of the ECs for the former UST area will be performed biannually. During these inspections, an inspection form will be completed (Appendix F). The form will compile sufficient information to assess the following:

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

An inspection of the HVAC system will be performed annually during the heating season (October to May) and will include:

- Evaluation of the differential pressure at four (4) interior locations in the western building and two (2) interior locations in the eastern building measured against the exterior air pressure (collected from a sub-slab vapor pressure point located in each building).
- Assessment of the effectiveness of the HVAC system to maintain positive pressure will be as sufficient when the differential pressure is positive.

#### 4.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

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All sampling and analyses are to be performed in accordance with the requirements of the QAPP prepared for the site (Appendix E). Main components of the QAPP include:

- QA/QC Objectives for Data Measurement
- Sampling Program:
  - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
  - Sample holding times will be in accordance with the NYSDEC Analytical Services Protocol requirements.
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody
- Calibration Procedures:
  - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
  - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages; sample preservation and chain-of-custody procedures; and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method
- Internal QC and Checks
- QA Performance and System Audits
- Preventative Maintenance Procedures and Schedules



- Corrective Action Measures

#### 4.6 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC following each sampling event in a Periodic Review Report. A letter report will be also prepared, if required by NYSDEC, following each sampling event. Letter reports will include, at a minimum:

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

Data will be reported in hard copy or digital format as determined by NYSDEC.

Site management activities will be reported and the required IC/EC certifications will be provided in a Periodic Review Report (PRR). Periodic reviews are addressed in Section 6.1 and 6.3 of DER-10.

## 5.0 OPERATION AND MAINTENANCE PLAN

### 5.1 INTRODUCTION

The site remedy includes a cap over the former UST area and operation of the HVAC system in a manner that maintains positive pressure on the building. Both of these controls will potentially require operations and maintenance activities, as described below.

#### 5.1.1 UST Cap Area

The cap over the former UST area is intended to minimize infiltration of water into the subsurface and subsequent migration of residual VOCs to groundwater. This EC may require the following operation and maintenance activities:

- Biannual inspection to observe the integrity of the asphalt to shed water
- Periodic sealing of the asphalt
- Periodic sealing of cracks in the asphalt
- Period patching of potholes in the asphalt

Maintenance will be performed on an as-needed basis based on biannual inspections.

#### 5.1.2 HVAC System

Operation of the HVAC system is a mechanical control intended to maintain positive pressure in the building to mitigate the migration of soil vapors into the building. This EC may require the following operation and maintenance activities:

- Annual verification of the positive pressure within the building
- Evaluation and or modification of HVAC system components (air handlers, conveyance system, etc.) should the inspection indicate the positive pressure is not being maintained
- Evaluation of sub-slab soil gas and/or indoor air quality should the inspection indicate the positive pressure is not being maintained
- Evaluation of changes to the building structure that may affect air flow

Maintenance will be performed on an as-needed basis based on annual inspections.

## 6.0 INSPECTIONS, REPORTING, AND CERTIFICATIONS

### 6.1 SITE INSPECTIONS

#### 6.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 (Site Monitoring Plan). At a minimum, an inspection of ECs will be conducted biannually as specified in Table 8.

#### 6.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms for their respective system which are contained in Appendix F and Appendix H. Additionally, a general site-wide inspection form will be completed during the site-wide inspection (see Appendix F). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

#### 6.1.3 Evaluation of Records and Reporting

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

- EC/ICs are in place, are performing properly, and remain effective
- Monitoring Plan is being implemented
- Site remedy continues to be protective of public health and the environment

### 6.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a qualified environmental professional will prepare the following certification:

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

- The inspection of the site to confirm the effectiveness of the institutional and ECs required by the remedial program was performed under my direction.
- The IC and/or EC employed at this site is unchanged from the date the control was put in place, or last approved by the Department.
- Nothing has occurred that would impair the ability of the control to protect the public health and environment.
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control.
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.

- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document.
- Use of the site is compliant with the environmental easement.
- The EC systems are performing as designed and are effective.
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program.
- The information presented in this report is accurate and complete.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, *[insert name of authorized representative]* of Curtiss-Wright Corporation, am certifying as Owner’s Designated Site Representative that I have been authorized and designated by all site owners to sign this certification for the site.

The signed certification will be included in the Periodic Review Report described below.

### 6.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to NYSDEC annually following inspection of the HVAC system. The report will be prepared in accordance with NYSDEC DER-10. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment, and certification of all ECs/ICs required by the remedy for the site
- Results of the site inspections and severe condition inspections, if applicable
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions
- Data summary tables and graphical representations of contaminants of concern by media (groundwater and vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted (These will include a presentation of past data as part of an evaluation of contaminant concentration trends.)
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format
- A site evaluation, which includes the following:
  - Compliance with the requirements of the site-specific RAWP and ROD

- Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored
- Recommendations regarding any necessary changes to the Monitoring Plan
- The overall performance and effectiveness of the ECs

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

The overall schedule of monitoring/inspection reports is presented in Table 9.

## 6.4 CORRECTIVE MEASURES PLAN

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

## TABLES

# Site Management Plan

Table 1

Remedial Investigation Soil Contamination Summary June 2004*			
Detected Compounds (VOCs)	Concentration Range Detected (ppm) <sup>a</sup>	Protection of Groundwater (mg/kg)	Unrestricted Use SCG <sup>b</sup> (mg/kg)
Tetrachloroethene (PCE)	ND <sup>c</sup> - 8.2	1.3	1.3

a - ppm: parts per million, which is equivalent to milligrams per kilogram (mg/kg), in soil.

b - SCG: standards, criteria, and guidance values.

c - ND: Compound was not detected above laboratory detection limits.

\* - Note: 12 post-excavation soil samples were collected by CA RICH Consultants in June 2004. The only compound detected above criteria was PCE, which was detected at 8.2 mg/kg at 12 feet below grade. PCE was found above the NYSDEC unrestricted use soil cleanup objectives (SCO) in only one of the 12 samples collected. This localized area of impacted soil could not be excavated due to building foundation concerns.

Remedial Investigation Soil Contamination Summary March 2009*						
	NYSDEC SCO		2009 Sample Locations			
Compound	Protection of Groundwater (mg/kg)	Unrestricted Use SCG (mg/kg)	AGW-9 (7.5-9.5')	AGW-9 (13-15')	AGW-10 (8-10')	AGW-10 (13-15')
PCE	1.3	1.3	1.7 J	10	ND	ND

\* Notes: No other volatile organic compounds were detected above NYSDEC unrestricted SCO during the 2009 remedial investigation.

**Site Management Plan**

**Table 2 - Remedial Investigation Groundwater Contamination Summary**

**Arcadis 2009 Groundwater Analytical Results**

CLIENT ID:	NYSDEC	TRMW-1		TRMW-2		TRMW-3		TRMW-4		TRMW-5		TRMW-6		TRMW-7	
LAB ID:	TOGS	AC53497-004		AC53497-003		AC53497-005		AC53497-001		AC53497-002		AC52177-001		AC52177-002	
COLLECTION DATE:	Groundwater	8/6/2010		8/6/2010		8/6/2010		8/6/2010		8/6/2010		6/4/2010		6/4/2010	
SAMPLE MATRIX:	Standard/ Guidance	Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous	
SAMPLE UNITS:	Value	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Analyte	ug/L	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles															
Chloroform	7	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
Tetrachloroethene	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5

**Langan 2010 Groundwater Analytical Results**

CLIENT ID:	NYSDEC	TRMW-1		TRMW-2		TRMW-3		TRMW-4		TRMW-5		TRMW-6		TRMW-7	
LAB ID:	TOGS	AC53497-004		AC53497-003		AC53497-005		AC53497-001		AC53497-002		AC52177-001		AC52177-002	
COLLECTION DATE:	Groundwater	8/6/2010		8/6/2010		8/6/2010		8/6/2010		8/6/2010		6/4/2010		6/4/2010	
SAMPLE MATRIX:	Standard/ Guidance	Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous	
SAMPLE UNITS:	Value	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Analyte	ug/L	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles															
Chloroform	7	ND	1	7.9	1	ND	1	1.2	1	ND	1	ND	1	1.9	1
Tetrachloroethene	5	ND	1	ND	1	ND	1	ND	1	ND	1	ND	1	3.7	1

ND = Detected Below Method Detection Limits

RL = Reporting Limit



**TABLE 2a**  
**FEBRUARY 2012 GROUNDWATER ANALYTICAL RESULTS**  
**TARGET ROCK SITE**  
**EAST FARMINGDALE, NEW YORK**

CLIENT ID:	NY TOGS Water Quality Standards (ug/L)	TRMW-1 AC64139-003 2/7/2012 Aqueous ug/L		TRMW-2 AC64139-006 2/7/2012 Aqueous ug/L		TRMW-3 AC64139-002 2/7/2012 Aqueous ug/L		TRMW-4 AC64139-005 2/7/2012 Aqueous ug/L		TRMW-5 AC64139-001 2/7/2012 Aqueous ug/L	
LAB ID:											
COLLECTION DATE:											
SAMPLE MATRIX:											
SAMPLE UNITS:											
Analyte		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
<b>Volatiles</b>											
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1	ND	1	ND	1	ND	1	ND	1
Chloroform	7	ND	1	ND	1	ND	1	3.7	1	1.1	1
Methyl-t-butyl ether	10	5.9	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Tetrachloroethene	5	ND	1	ND	1	ND	1	ND	1	ND	1

CLIENT ID:	NY TOGS Water Quality Standards (ug/L)	TRMW-6 AC64139-004 2/7/2012 Aqueous ug/L		TRMW-7 AC64139-007 2/7/2012 Aqueous ug/L		FB AC64139-008 2/7/2012 Aqueous ug/L		TB AC64139-009 2/6/2012 Aqueous ug/L	
LAB ID:									
COLLECTION DATE:									
SAMPLE MATRIX:									
SAMPLE UNITS:									
Analyte		Result	RL	Result	RL	Result	RL	Result	RL
<b>Volatiles</b>									
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1	1	1	ND	1	ND	1
Chloroform	7	ND	1	2	1	ND	1	ND	1
Methyl-t-butyl ether	10	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Tetrachloroethene	5	ND	1	2.9	1	ND	1	ND	1

**NOTES:**

"—" indicates no standard set for that compound

ND - "Non Detect"

Note: Any compounds not shown were not detected above reporting limits in any of the wells in the February 2012 sampling event.

**TABLE 2b**  
**AUGUST 2012 GROUNDWATER ANALYTICAL RESULTS**  
**TARGET ROCK SITE**  
**EAST FARMINGDALE, NEW YORK**

<b>CLIENT ID:</b>		<b>TRMW-1</b>	<b>TRMW-2</b>	<b>TRMW-3</b>	<b>TRMW-4</b>	<b>TRMW-5</b>
<b>LAB ID:</b>	<b>NY TOGS</b>	AC67689-001	AC67689-002	AC67689-003	AC67689-004	AC67689-005
<b>COLLECTION DATE:</b>	<b>Water Quality</b>	8/15/2012	8/15/2012	8/15/2012	8/15/2012	8/15/2012
<b>SAMPLE MATRIX:</b>	<b>Standards</b>	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
<b>SAMPLE UNITS:</b>		ug/L	ug/L	ug/L	ug/L	ug/L
<b>Analyte</b>	<b>(ug/L)</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>
<b>Volatiles</b>						
Chloroform	7	ND 1	ND 1	ND 1	3.6 1	ND 1
Tetrachloroethene	5	ND 1	ND 1	ND 1	ND 1	ND 1

<b>CLIENT ID:</b>		<b>TRMW-6</b>	<b>TRMW-7</b>	<b>FB-1</b>	<b>TB</b>
<b>LAB ID:</b>	<b>NY TOGS</b>	AC67689-006	AC67689-007	AC67689-008	AC67689-009
<b>COLLECTION DATE:</b>	<b>Water Quality</b>	8/15/2012	8/15/2012	8/15/2012	8/14/2012
<b>SAMPLE MATRIX:</b>	<b>Standards</b>	Aqueous	Aqueous	Aqueous	Aqueous
<b>SAMPLE UNITS:</b>		ug/L	ug/L	ug/L	ug/L
<b>Analyte</b>	<b>(ug/L)</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>	<b>Result</b> <b>RL</b>
<b>Volatiles</b>					
Chloroform	7	ND 1	1.2 1	ND 1	ND 1
Tetrachloroethene	5	ND 1	2.6 1	ND 1	ND 1

**NOTES:**

ND - "Non Detect"

Note: Any compounds not shown were not detected above reporting limits in any of the wells in the August 2012 sampling event.

**Site Management Plan**  
**Table 3 - Remedial Investigation Soil Vapor Data**

<b>Sample Location:</b>	SV-1	SV-2	SV-3	SV-4	SV-5	SV-6	SV-7	SV-8	SV-9
<b>Date:</b>	Mar-09	Mar-09	Mar-09	Mar-09	Mar-09	Mar-09	Mar-09	Mar-09	Mar-09
<b>Sample Units:</b>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Analyte</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>
Tetrachloroethene (PCE)	82	41 J	330	17 J	590	340 J	36	68 J	110
Trichloroethene (TCE)	1.4	2.3 J	ND	0.98 J	42	26 J	ND	ND	3.9
Trichloroethane (TCA)	260	22 J	5.7	2.8 J	11	18 J	110	5.7	3.7
Freon-113	ND	58 J	ND	11 J	150	180 J	ND	ND	310

J - Indicates an estimated value.

NA - Not Applicable.

ND - Analyte not detected above laboratory detection limit.

Notes: Soil vapor samples collected from outside of building area.

**Site Management Plan**  
**Table 4 - Remedial Investigation Sub-Slab Data**

<b>Sample Location:</b>	<b>NYSDOH</b>	<b>SS-1</b>	<b>SS-2</b>	<b>SS-3</b>	<b>SS-4</b>	<b>SS-5</b>	<b>SS-6</b>	<b>SS-7</b>	<b>SS-8</b>
<b>Date:</b>	<b>SV/IA</b>	<b>Mar-09</b>	<b>Mar-09</b>	<b>Mar-09</b>	<b>Mar-09</b>	<b>Mar-09</b>	<b>Mar-09</b>	<b>Mar-09</b>	<b>Mar-09</b>
<b>Sample Units:</b>	<b>Matrices**</b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>
<b>Analyte</b>	<b>µg/m<sup>3</sup></b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>	<b>Result</b>
Vinyl Chloride	250	ND	ND	ND	ND	1.6	ND	ND	ND
1,1-Dichloroethene	1,000	140	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1,000	620	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1,000	50,000	910	1,900	3,400	25	10	180	4.1
Carbon Tetrachloride	250	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	250	32,000	340	1,000	580	31	ND	ND	5.5
Tetrachloroethene	1,000	51,000	19,000	9,200	8,800	870	120	140	150

\*\* - Values from NYSDOH guidance document for sub-slab vapor concentrations, titled Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

ND - Analyte not detected above laboratory detection limit.

Only compounds with NYSDOH criteria are listed.

Notes: Samples SS-1 through SS-4 were collected beneath west building. Samples SS-5 through SS-8 were collected beneath east building.

Compounds found in exceedance in sub-slab samples were not detected in indoor air samples. These compounds will be monitored by indoor air sampling events.

**Site Management Plan**

**Table 5**

<b>Remedial Investigation: Indoor Air Quality Data</b> <b>(as per NYSDOH's Guidelines for Volatile Chemicals in Air)</b>					
Sample Location	Chemical	June 2010 Sample Result (µg/m <sup>3</sup> )	March 2012 Sample Result (µg/m <sup>3</sup> )	August 2012 Sample Result (µg/m <sup>3</sup> )	NYSDOH Criteria (µg/m <sup>3</sup> )
IA-1	Tetrachloroethene	ND	0.54	0.64	100
	Trichloroethene	ND	ND	4.3	5
	1,1,1-TCA	ND	ND	ND	NA
IA-2	Tetrachloroethene	ND	0.39	0.51	100
	Trichloroethene	ND	ND	0.4	5
	1,1,1-TCA	ND	ND	ND	NA
IA-3	Tetrachloroethene	ND	1.4	0.42	100
	Trichloroethene	ND	0.43	0.32	5
	1,1,1-TCA	ND	0.65	ND	NA
IA-4	Tetrachloroethene	ND	0.88	0.35	100
	Trichloroethene	ND	ND	0.59	5
	1,1,1-TCA	ND	0.33	ND	NA
IA-5	Tetrachloroethene	-	0.81	0.59	100
	Trichloroethene	-	ND	0.91	5
	1,1,1-TCA	-	ND	ND	NA
IA-6	Tetrachloroethene	-	ND	0.6	100
	Trichloroethene	-	ND	0.59	5
	1,1,1-TCA	-	ND	ND	NA
IA-7	Tetrachloroethene	-	0.49	ND	100
	Trichloroethene	-	0.28	0.25	5
	1,1,1-TCA	-	ND	ND	NA
IA-8	Tetrachloroethene	-	ND	0.33	100
	Trichloroethene	-	ND	0.38	5
	1,1,1-TCA	-	ND	ND	NA

ND - Analyte not detected above laboratory detection limit

NA - Not Applicable as there is no criterion established for this compound.

**TABLE 5a**  
**MARCH 2012 SOIL VAPOR AND SUB-SLAB SAMPLING ANALYTICAL RESULTS**  
**TARGET ROCK**  
**EAST FARMINGDALE, NEW YORK**

Sample Type		Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab
<b>Client Sample ID:</b>		<b>SS-1</b>	<b>SS-2</b>	<b>SS-3</b>	<b>SS-4</b>	<b>SS-5</b>	<b>SS-6</b>	<b>SS-7</b>	<b>SS-8</b>
Lab Sample ID:	NYSDOH Matrix	JB2262-9	JB2261-1	JB2262-7	JB2262-5	JB2262-3	JB2262-1	JB2262-10	JB2262-12
Date Sampled:	Comparison Table	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Units:		ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
<b>Volatile Organic Compounds</b>									
Carbon tetrachloride	Matrix 1	13 U	1.0 U	1.0 U	1.0 U	0.25 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	Matrix 2	15,900	655	982	50	14	6.5	296	8.7
Tetrachloroethylene	Matrix 2	1,930	262	102	15	35	3.5	4.5	20
Trichloroethylene	Matrix 1	4,790	139	197	4.0	4.6	0.70 U	0.70 U	5.4

Sample Type		Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Outdoor
<b>Client Sample ID:</b>		<b>SV-1</b>	<b>SV-4</b>	<b>SV-5</b>	<b>SV-6</b>	<b>SV-9</b>	<b>Background</b>
Lab Sample ID:	NYSDOH Matrix	JB2262-14	JB2261-7	JB2261-6	JB2261-5	JB2262-13	JB2261-8
Date Sampled:	Comparison Table	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012	3/21/2012
Units:		ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
<b>Volatile Organic Compounds</b>							
Carbon tetrachloride	Matrix 1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 U
1,1,1-Trichloroethane	Matrix 2	16	15	3.7 J	7.6	0.48 U	0.52 J
Tetrachloroethylene	Matrix 2	0.75 U	2.2	1.6	61	2.0	0.29
Trichloroethylene	Matrix 1	0.70 U	3.5	0.70 U	19	0.70 U	0.54

U: Not detected above laboratory reporting limit

J: Value is an estimated concentration, analyte found below the method detection limit

SS-1: Sub-Slab Sample Location

SV-1: Soil Vapor Sample Location

NYSDOH matrix comparison tables referenced from NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006.

Note: As per the 7 August 2012 NYSDEC letter the sample names have been changed from the field identifications to align with the March 2011 Record of Decision.



**TABLE 5b**  
**AUGUST 2012 SOIL VAPOR AND SUB-SLAB SAMPLING ANALYTICAL RESULTS**  
**TARGET ROCK**  
**EAST FARMINGDALE, NEW YORK**

Client Sample ID: Lab Sample ID: Date Sampled: Units:	NYSDOH Matrix Comparison Table	SS-1 JB14102-11 8/16/2012 ug/m3		SS-2 JB14102-9 8/16/2012 ug/m3		SS-3 JB14102-7 8/16/2012 ug/m3		SS-4 JB14102-5 8/16/2012 ug/m3		SS-5 JB14102-3 8/16/2012 ug/m3		SS-6 JB14102-1 8/16/2012 ug/m3		SS-7 JB14102-13 8/16/2012 ug/m3		SS-8 JB14102-15 8/16/2012 ug/m3	
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
<b>Volatile Organic Compounds</b>																	
Carbon tetrachloride	Matrix 1	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,1-Trichloroethane	Matrix 2	12,500		540		715		526		10		5.5		101		19	
Tetrachloroethylene	Matrix 2	453		105		155		104		157		2		ND	0.75	59	
Trichloroethylene	Matrix 1	3,180		87.6		188		34		8.1		ND	0.70	ND	0.70	13	

Client Sample ID: Lab Sample ID: Date Sampled: Units:	NYSDOH Matrix Comparison Table	SV-1 JB14102-22 8/16/2012 ug/m3		SV-4 JB14102-20 8/16/2012 ug/m3		SV-5 JB14102-19 8/16/2012 ug/m3		SV-6 JB14102-18 8/16/2012 ug/m3		SV-9 JB14102-21 8/16/2012 ug/m3		BACKGROUND JB14102-17 8/16/2012 ug/m3	
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
<b>Volatile Organic Compounds</b>													
Carbon tetrachloride	Matrix 1	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	0.25
1,1,1-Trichloroethane	Matrix 2	7.1		7.6		ND	0.48	13		ND	0.48	ND	0.12
Tetrachloroethylene	Matrix 2	ND	0.75	27		5.1		3		1.8		0.45	
Trichloroethylene	Matrix 1	ND	0.70	5.9		1.5		5.4		ND	0.70	0.21 J	

ND: Not detected above laboratory reporting limit.

J: Value is an estimated value, analyte found below the method detection limit.

SS-1: Sub-Slab Sample Location

SV-1: Soil Vapor Sample Location

Note: As per the 7 August 2012 NYSDEC letter the sample names have been changed from the field identifications to align with the March 2011 Record of Decision.

TABLE 6 – 2018 Indoor Air Sampling Results

Sample ID	Building	Compound	Sample Result (ug/m3)	NYSDOH AGV* (ug/m3)
CW-IA-1	West Building	Tetrachloroethene	< 6.8	30
		Trichloroethene	< 5.4	2
		1,1,1-Trichloroethane	< 5.4	N/A
CW-IA-2		Tetrachloroethene	< 14	30
		Trichloroethene	< 11	2
		1,1,1-Trichloroethane	< 11	N/A
CW-IA-3		Tetrachloroethene	< 6.8	30
		Trichloroethene	< 5.4	2
		1,1,1-Trichloroethane	< 5.4	N/A
CW-IA-4		Tetrachloroethene	< 2.7	30
		Trichloroethene	<2.1	2
		1,1,1-Trichloroethane	< 2.2	N/A
CW-IA-5		Tetrachloroethene	< 14	30
		Trichloroethene	< 11	2
		1,1,1-Trichloroethane	< 11	N/A
CW-IA-6		Tetrachloroethene	< 5.4	30
		Trichloroethene	< 5.4	2
		1,1,1-Trichloroethane	< 6.8	N/A
CW-IA-7		Tetrachloroethene	< 5.4	30
		Trichloroethene	< 5.4	2
		1,1,1-Trichloroethane	< 6.8	N/A
CW-IA-8		Tetrachloroethene	< 5.4	30
		Trichloroethene	< 5.4	2
		1,1,1-Trichloroethane	< 6.8	N/A



Sample ID	Building	Compound	Sample Result (ug/m3)	NYSDOH AGV* (ug/m3)
CW-IA-9	East Building	Tetrachloroethene	< 1.4	30
		Trichloroethene	< 1.1	2
		1,1,1-Trichloroethane	< 1.1	N/A
CW-IA-10		Tetrachloroethene	< 1.4	30
		Trichloroethene	< 1.1	2
		1,1,1-Trichloroethane	< 1.1	N/A
CW-IA-11		Tetrachloroethene	< 1.4	30
		Trichloroethene	< 1.1	2
		1,1,1-Trichloroethane	< 1.1	N/A
CW-IA-12		Tetrachloroethene	< 2.7	30
		Trichloroethene	< 2.1	2
		1,1,1-Trichloroethane	< 2.2	N/A

**Site Management Plan**  
**Table 7**

Summary of Remaining Soil Contamination above Unrestricted Levels June 2004 and March 2009 Samples						
Detected Compounds (VOCs)	Sample Date	Concentration Exceedance Detected (mg/kg)	Protection of Groundwater (mg/kg)	Unrestricted Use SCG (mg/kg)	Depth Below Grade (feet)	Sampling Location
Tetrachloroethene (PCE)	June 2004	8.2	1.3	1.3	12	Former UST Area in NW corner of western building
PCE	March 2009	10	1.3	1.3	13-15	Former UST Area in NW corner of western building

**TABLE 8 MONITORING / INSPECTION SCHEDULE**

<b>Monitoring/Inspection Program</b>	<b>Frequency</b>	<b>Matrix</b>	<b>Analysis</b>
Groundwater	To be determined (TBD)	Groundwater	VOCs
Soil	TBD, Sampling may be required if site conditions change.	Soil	
Sub-Slab Soil Vapor	TBD, Sampling may be required if EC are not operating as required or if site conditions change,	Soil Vapor	VOCs
Indoor Air Quality	2019-2020 Heating Season, Sampling may be required if EC are not operating as required or if site conditions change,	Indoor Air	VOCs
HVAC Inspection	Annually (between November and May)	Not Applicable (NA)	NA
Cap Inspection	Biannually; in the Fall (September to December) and in the Spring (March to June)	NA	NA

**TABLE 9 SCHEDULE OF MONITORING / INSPECTION REPORTING**

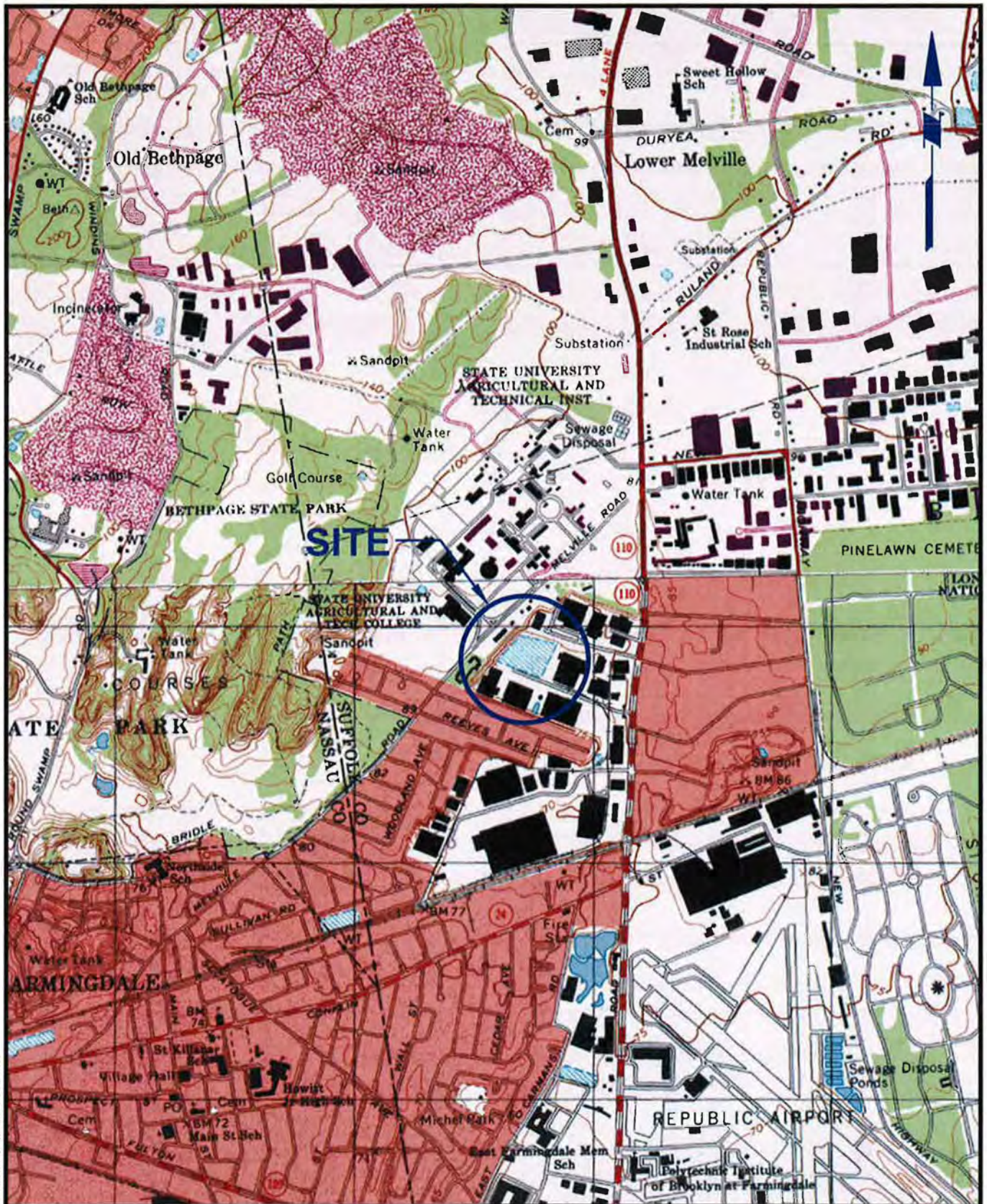
<b>Monitoring/Inspection Program</b>	<b>Frequency</b>	<b>Reporting Schedule</b>
Groundwater	To be determined (TBD)	To be included in annual report as needed
Soil	TBD, Sampling may be required if site conditions change.	To be included in annual report as needed
Sub-Slab Soil Vapor	TBD, Sampling may be required if EC are not operating as required or if site conditions change,	To be included in annual report as needed
Indoor Air Quality	2019-2020 Heating Season, Sampling may be required if EC are not operating as required or if site conditions change,	To be included in annual report as needed
HVAC Inspection	Annually (between November and May)	Annual
Cap Inspection	Biannually; in the Fall (September to December) and in the Spring (March to June)	Annual

**TABLE 10 EMERGENCY CONTACT NUMBERS**

Emergency Contact Numbers	
Medical, Fire and Police	911
One Call Center	(800)272-4480, 3-day notice required for utility mark out
Poison Control Center	(800) 222-1222
Pollution Toxic Chemical Oil Spills	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362
Jared Donaldson – NYSDEC Project Manager	(518) 402-9176
Tom Gianni – Curtiss Wright, Target Rock	(631) 293-3800
Carolyn Straton - Curtiss Wright, Corporate	(973) 541-3758

## FIGURES





MAP REFERENCE: AMITYVILLE, NY USGS QUAD MAP (1994) & HUNTINGTON, NY USGS QUAD MAP (1967, PHOTOREVISED 1979)



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TARGET ROCK CORPORATION

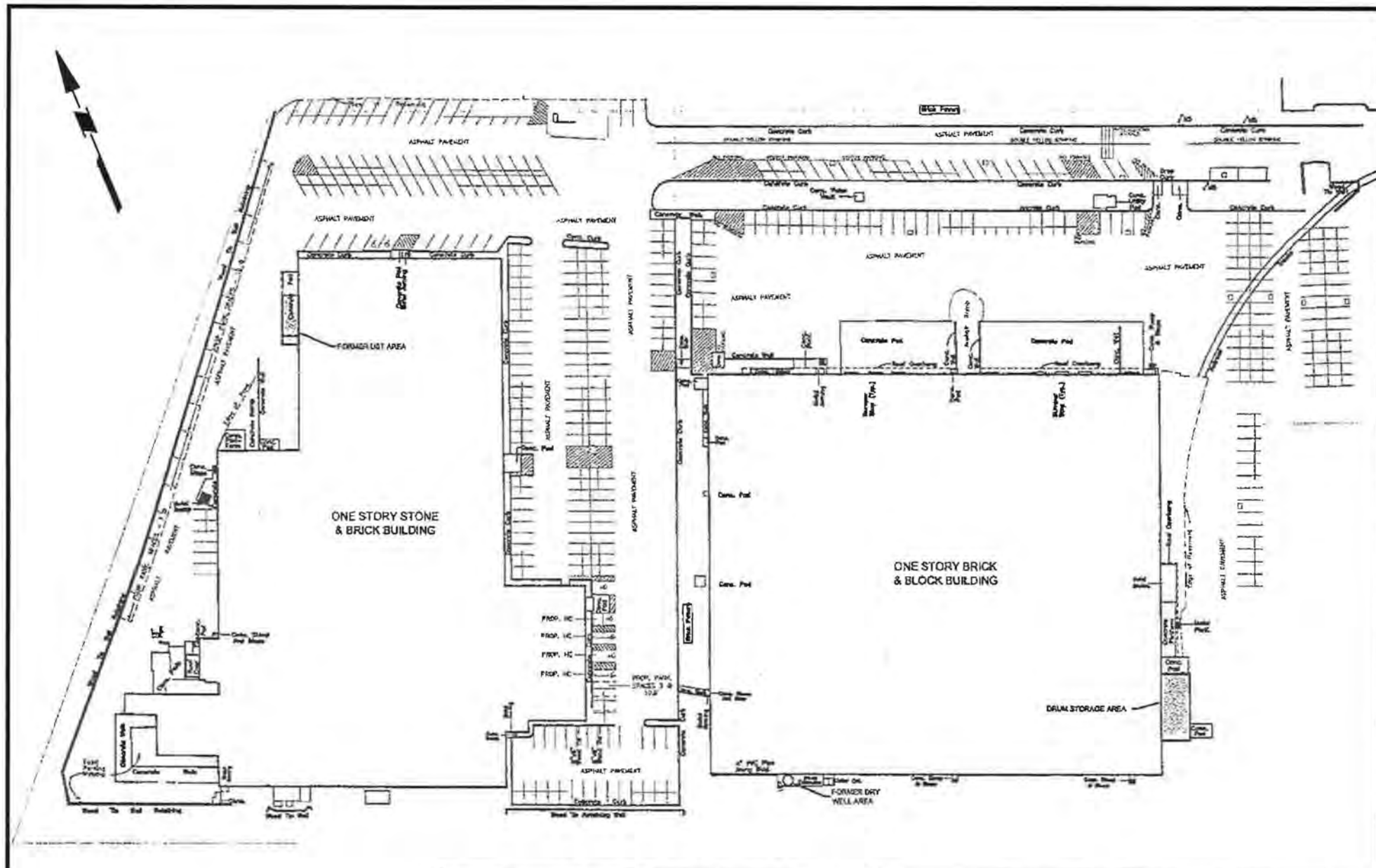
## SITE LOCATION MAP

EAST FARMINGDALE

NEW YORK

Project No.	Date	Scale	Figure No.
100179501	09/17/12	1"=2000'	1





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TARGET ROCK CORPORATION

## FIGURE OF SITE AND SITE BOUNDARIES

EAST FARMINGDALE

NEW YORK

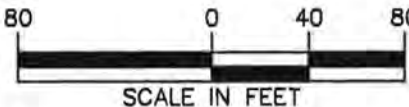
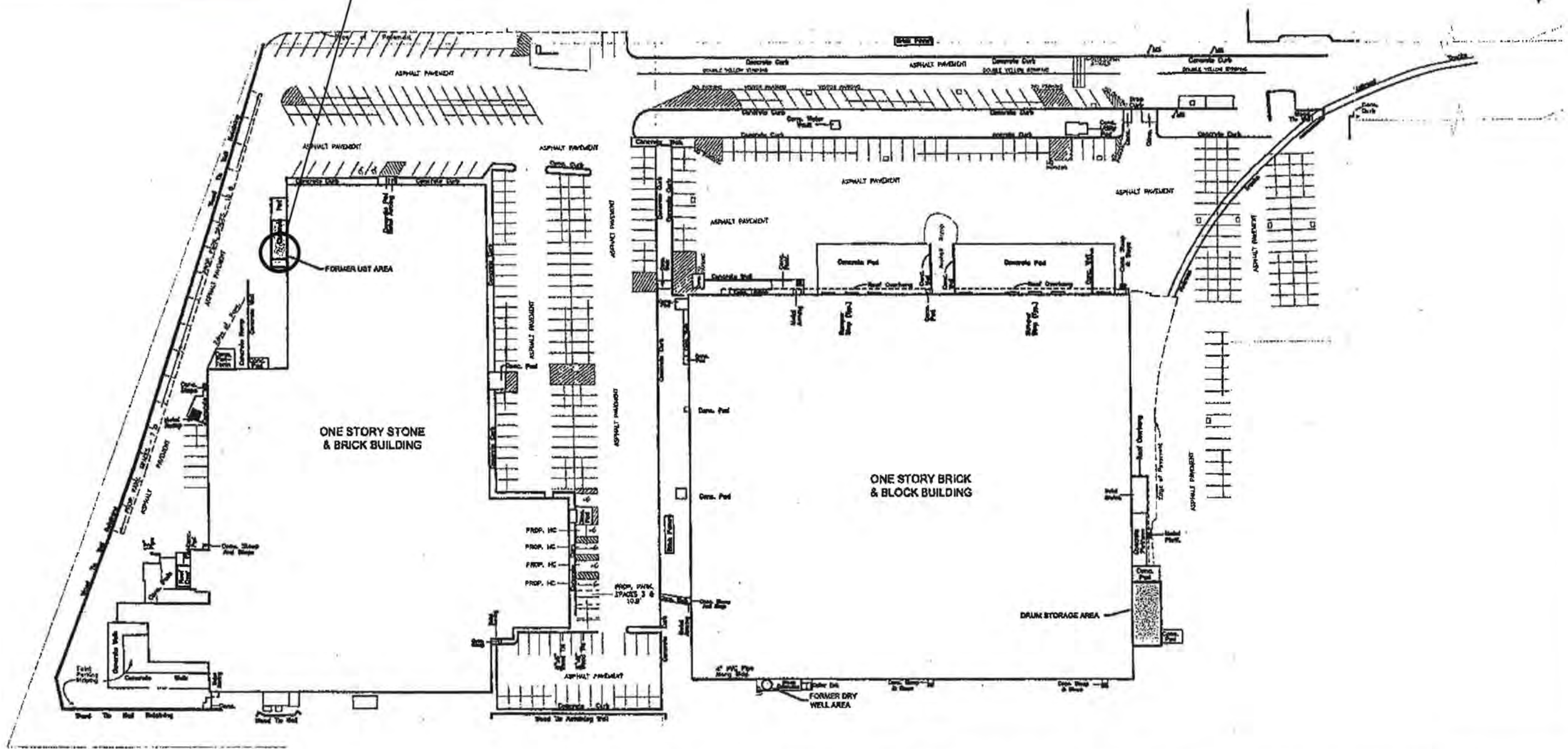
Project No.	Date	Scale	Figure No.
100179501	07/11/11	1"=100'	2





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Summary of Remaining Soil Contamination above Unrestricted Levels June 2004 and March 2009 Samples					
Detected Compounds (VOCs)	Sample Date	Concentration Exceedance Detected (mg/kg)	Protection of Groundwater (mg/kg)	Unrestricted Use SCG (mg/kg)	Depth Below Grade (feet)
Tetrachloroethene (PCE)	June 2004	8.2	1.3	1.3	12
PCE	March 2009	10	1.3	1.3	13-15





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TARGET ROCK CORPORATION

**REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY**

EAST FARMINGDALE      NEW YORK

Project No.	Date	Scale	Figure No.
100179501	07/11/11	1"=80'	4





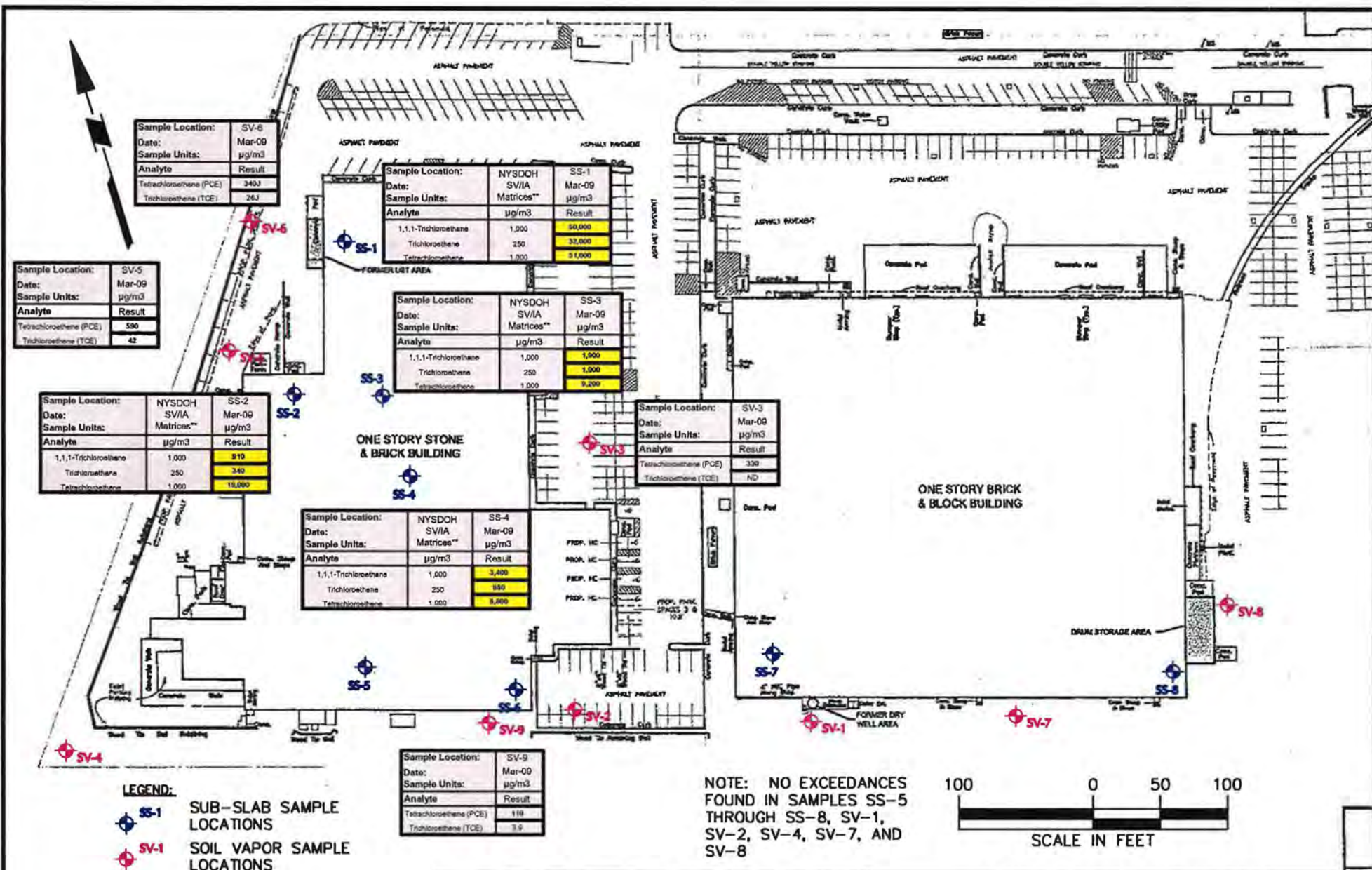












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## TARGET ROCK CORPORATION REMEDIAL INVESTIGATION SOIL VAPOR AND SUB-SLAB DATA

EAST FARMINGDALE

NEW YORK

Project No.	Date	Scale	Dwg. No.
100179501	07/11/11	1" = 100'	6



Sample Location	Chemical	Sample Result ( $\mu\text{g}/\text{m}^3$ )	NYSDOH Criteria ( $\mu\text{g}/\text{m}^3$ )
IA-1	Tetrachloroethene	ND	100
	Trichloroethene	ND	5
	1,1,1-TCA	ND	NA

Sample Location	Chemical	Sample Result ( $\mu\text{g}/\text{m}^3$ )	NYSDOH Criteria ( $\mu\text{g}/\text{m}^3$ )
IA-3	Tetrachloroethene	ND	100
	Trichloroethene	ND	5
	1,1,1-TCA	ND	NA

Sample Location	Chemical	Sample Result ( $\mu\text{g}/\text{m}^3$ )	NYSDOH Criteria ( $\mu\text{g}/\text{m}^3$ )
IA-4	Tetrachloroethene	ND	100
	Trichloroethene	ND	5
	1,1,1-TCA	ND	NA

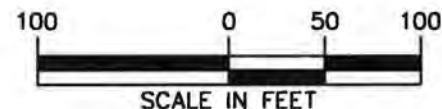
Sample Location	Chemical	Sample Result ( $\mu\text{g}/\text{m}^3$ )	NYSDOH Criteria ( $\mu\text{g}/\text{m}^3$ )
IA-2	Tetrachloroethene	ND	100
	Trichloroethene	ND	5
	1,1,1-TCA	ND	NA

# LEGEND:



JUNE 2010 AIR SAMPLE  
LOCATIONS

NOTE: NO EXCEEDANCES  
OF CRITERIA FOUND IN  
ANY OF THE FOUR INDOOR  
AIR SAMPLES



Warning: It is a violation of the NYS Education Law Article 145 for any person, unless he is acting under the direction of a licensed Professional Engineer, to alter this item in any way.



River Drive Center 1 Elmwood Park, NJ 07407  
P: 201.794.6900 F: 201.794.0366  
www.langan.com

NEW JERSEY PENNSYLVANIA NEW YORK CONNECTICUT FLORIDA  
NEVADA VIRGINIA CALIFORNIA

NJ Certificate of Authorization No: 24GA27996400

## TARGET ROCK CORPORATION REMEDIAL INVESTIGATION INDOOR AIR QUALITY DATA

EAST FARMINGDALE

NEW YORK

Project No.

Date

Scale

Dwg. No.

100179501

07/11/11

1" = 100'

7



LEGEND:

- SV-1 Soil Vapor Sample Location  
 SS-1 Sub-Slab Sample Location  
 IA-1 Indoor Air Sample Location

Soil Vapor	
Client Sample ID:	SV-1
Lab Sample ID:	JB2261-5
Date Sampled:	3/21/2012
Units:	ug/m3
Volatile Organic Compounds	
Carbon tetrachloride	1.0 U
1,1,1-Trichloroethane	7.6
Tetrachloroethylene	61
Trichloroethylene	19

Soil Vapor	
Client Sample ID:	SV-2
Lab Sample ID:	JB2261-6
Date Sampled:	3/21/2012
Units:	ug/m3
Volatile Organic Compounds	
Carbon tetrachloride	1.0 U
1,1,1-Trichloroethane	3.7 J
Tetrachloroethylene	1.6
Trichloroethylene	0.70 U

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2261-1	JB2261-2
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	1.0 U	0.25 U
1,1,1-Trichloroethane	655	0.12 U
Tetrachloroethylene	262	0.39 U
Trichloroethylene	139	0.18 U

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-3	JB2262-4
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	0.25 U	0.60 J
1,1,1-Trichloroethane	14	0.12 U
Tetrachloroethylene	35	0.81
Trichloroethylene	4.6	0.19 J

Soil Vapor	
Client Sample ID:	SV-3
Lab Sample ID:	JB2261-7
Date Sampled:	3/21/2012
Units:	ug/m3
Volatile Organic Compounds	
Carbon tetrachloride	1.0 U
1,1,1-Trichloroethane	15
Tetrachloroethylene	2.2
Trichloroethylene	3.5

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-1	JB2262-2
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	1.0 U	1.5 U
1,1,1-Trichloroethane	6.5	0.76 U
Tetrachloroethylene	3.5	1.2 U
Trichloroethylene	0.70 U	1.1 U

Soil Vapor	
Client Sample ID:	SV-4
Lab Sample ID:	JB2262-13
Date Sampled:	3/21/2012
Units:	ug/m3
Volatile Organic Compounds	
Carbon tetrachloride	1.0 U
1,1,1-Trichloroethane	0.48 U
Tetrachloroethylene	2.0
Trichloroethylene	0.70 U

Soil Vapor	
Client Sample ID:	SV-5
Lab Sample ID:	JB2262-14
Date Sampled:	3/21/2012
Units:	ug/m3
Volatile Organic Compounds	
Carbon tetrachloride	1.0 U
1,1,1-Trichloroethane	16
Tetrachloroethylene	0.75 U
Trichloroethylene	0.70 U

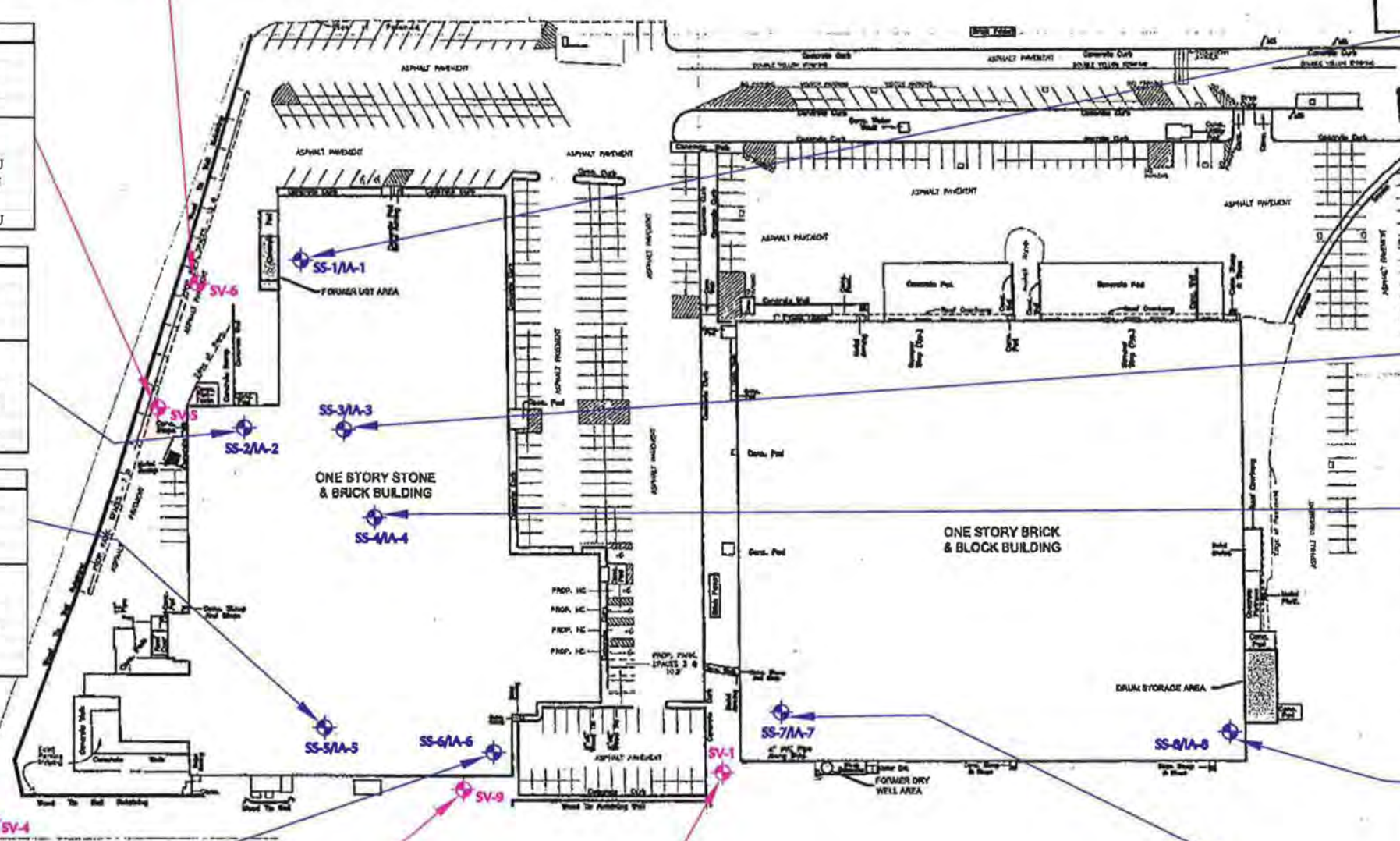
Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-9	JB2261-3
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	13 U	0.25 U
1,1,1-Trichloroethane	15,900	0.12 U
Tetrachloroethylene	1,930	0.54
Trichloroethylene	4,790	0.18 U

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-7	JB2262-8
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	1.0 U	0.61 J
1,1,1-Trichloroethane	982	0.65 J
Tetrachloroethylene	102	1.4
Trichloroethylene	197	0.43

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-5	JB2262-6
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	1.0 U	0.69 J
1,1,1-Trichloroethane	50	0.33 J
Tetrachloroethylene	15	0.88
Trichloroethylene	4.0	0.18 U

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-12	JB2261-4
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	1.0 U	2.7 U
1,1,1-Trichloroethane	8.7	1.3 U
Tetrachloroethylene	20	2.1 U
Trichloroethylene	5.4	1.9 U

Client Sample ID:	Sub-Slab	Indoor Air
Lab Sample ID:	JB2262-10	JB2262-11
Date Sampled:	3/21/2012	3/21/2012
Units:	ug/m3	ug/m3
Volatile Organic Compounds		
Carbon tetrachloride	1.0 U	0.75 J
1,1,1-Trichloroethane	296	2.5
Tetrachloroethylene	4.5	0.49
Trichloroethylene	0.70 U	0.28



**LANGAN**  
 ENGINEERING & ENVIRONMENTAL SERVICES

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NEW JERSEY PENNSYLVANIA NEW YORK CONNECTICUT FLORIDA NEVADA VIRGINIA CALIFORNIA

NJ Certificate of Authorization No: 24GA27996400

Project  
**MARCH 2012 VAPOR SAMPLE LOCATIONS AND RESULTS**  
 EAST FARMINGDALE

NASSAU NEW YORK

Project No. 100179501 Date 4/4/2012 Scale 1"=100' Dwg. No. 7a



LEGEND:

- SV-1 Soil Vapor Sample Location  
 SS-1 Sub-Slab Sample Location  
 IA-1 Indoor Air Sample Location

Client Sample ID:	SV-5
Sample Type:	Soil Vapor
Lab Sample ID:	JB14102-19
Date Sampled:	8/16/2012
Units:	ug/m3
Result	RL
Volatile Organic Compounds	
Carbon tetrachloride	ND 1.0
1,1,1-Trichloroethane	ND 0.48
Tetrachloroethylene	5.1
Trichloroethylene	1.5

Client Sample ID:	SV-6
Sample Type:	Soil Vapor
Lab Sample ID:	JB14102-18
Date Sampled:	8/16/2012
Units:	ug/m3
Result	RL
Volatile Organic Compounds	
Carbon tetrachloride	ND 1.0
1,1,1-Trichloroethane	13
Tetrachloroethylene	3
Trichloroethylene	5.4

Client Sample ID:	SS-1	IA-1
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-11	JB14102-12
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	ND 0.25
1,1,1-Trichloroethane	12,500	ND 0.12
Tetrachloroethylene	453	0.64
Trichloroethylene	3,180	4.3

Client Sample ID:	SS-3	IA-3
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-7	JB14102-8
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	ND 0.25
1,1,1-Trichloroethane	715	ND 0.12
Tetrachloroethylene	155	0.42
Trichloroethylene	188	0.32

Client Sample ID:	SS-2	IA-2
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-9	JB14102-10
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	0.60 J
1,1,1-Trichloroethane	540	ND 0.12
Tetrachloroethylene	105	0.51
Trichloroethylene	87.6	0.4

Client Sample ID:	SV-9
Sample Type:	Soil Vapor
Lab Sample ID:	JB14102-21
Date Sampled:	8/16/2012
Units:	ug/m3
Result	RL
Volatile Organic Compounds	
Carbon tetrachloride	ND 1.0
1,1,1-Trichloroethane	ND 0.48
Tetrachloroethylene	1.8
Trichloroethylene	ND 0.70

Client Sample ID:	SV-4
Sample Type:	Soil Vapor
Lab Sample ID:	JB14102-20
Date Sampled:	8/16/2012
Units:	ug/m3
Result	RL
Volatile Organic Compounds	
Carbon tetrachloride	ND 1.0
1,1,1-Trichloroethane	7.6
Tetrachloroethylene	27
Trichloroethylene	5.9

Client Sample ID:	SS-5	IA-5
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-3	JB14102-4
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	ND 0.25
1,1,1-Trichloroethane	10	ND 0.12
Tetrachloroethylene	157	0.59
Trichloroethylene	8.1	0.91

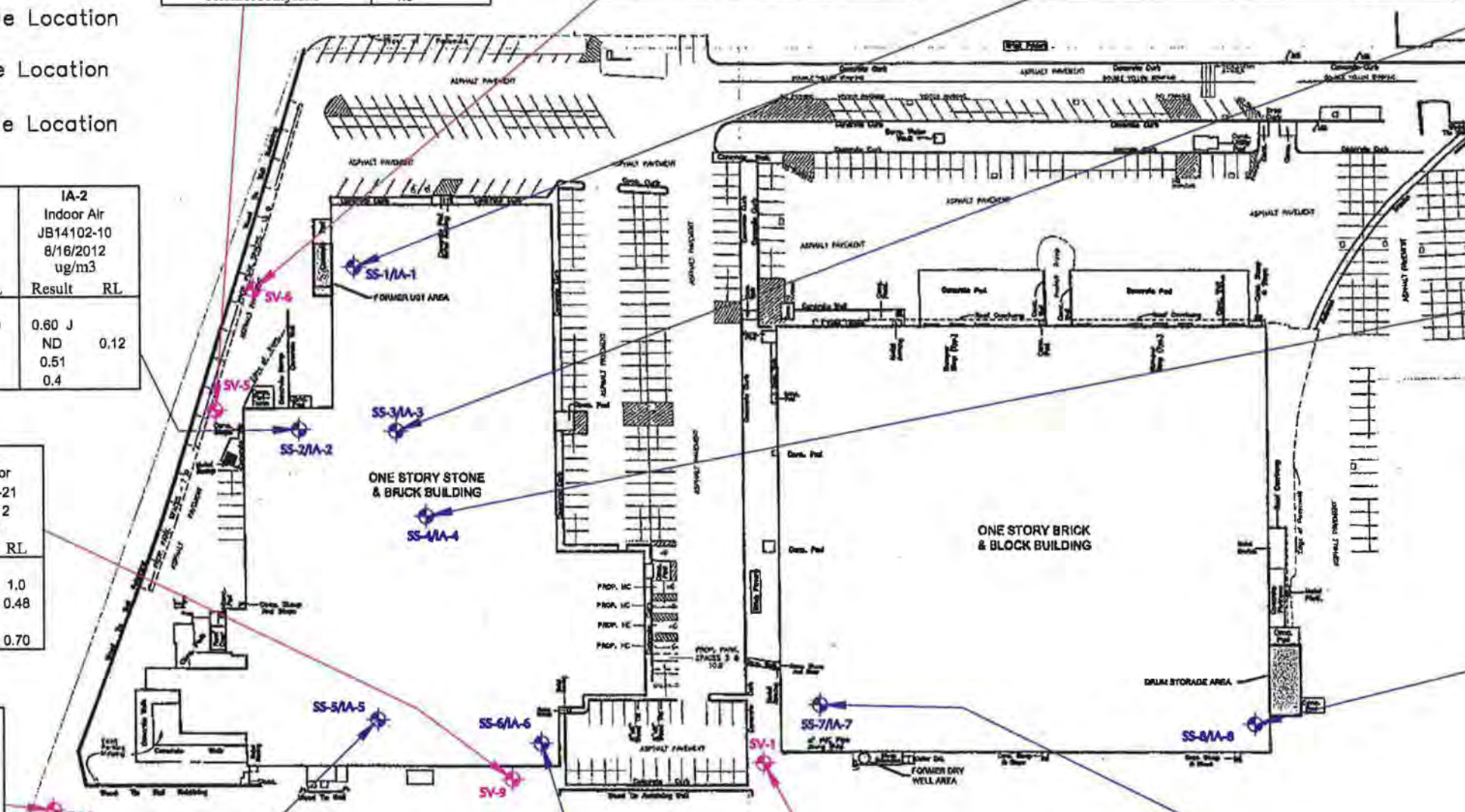
Client Sample ID:	SS-6	IA-6
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-1	JB14102-2
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	ND 0.25
1,1,1-Trichloroethane	5.5	ND 0.12
Tetrachloroethylene	2	0.6
Trichloroethylene	ND 0.70	0.59

Client Sample ID:	SV-1
Sample Type:	Soil Vapor
Lab Sample ID:	JB14102-22
Date Sampled:	8/16/2012
Units:	ug/m3
Result	RL
Volatile Organic Compounds	
Carbon tetrachloride	ND 1.0
1,1,1-Trichloroethane	7.1
Tetrachloroethylene	ND 0.75
Trichloroethylene	ND 0.70

Client Sample ID:	SS-7	IA-7
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-13	JB14102-14
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	ND 0.25
1,1,1-Trichloroethane	101	ND 0.12
Tetrachloroethylene	ND 0.75	ND
Trichloroethylene	ND 0.70	0.25

Client Sample ID:	SS-4	IA-4
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-5	JB14102-6
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	0.62 J
1,1,1-Trichloroethane	526	ND 0.12
Tetrachloroethylene	104	0.35
Trichloroethylene	34	0.59

Client Sample ID:	SS-8	IA-8
Sample Type:	Sub-Slab	Indoor Air
Lab Sample ID:	JB14102-15	JB14102-16
Date Sampled:	8/16/2012	8/16/2012
Units:	ug/m3	ug/m3
Result	RL	Result RL
Volatile Organic Compounds		
Carbon tetrachloride	ND 1.0	ND 0.25
1,1,1-Trichloroethane	19	ND 0.12
Tetrachloroethylene	59	0.33
Trichloroethylene	13	0.38



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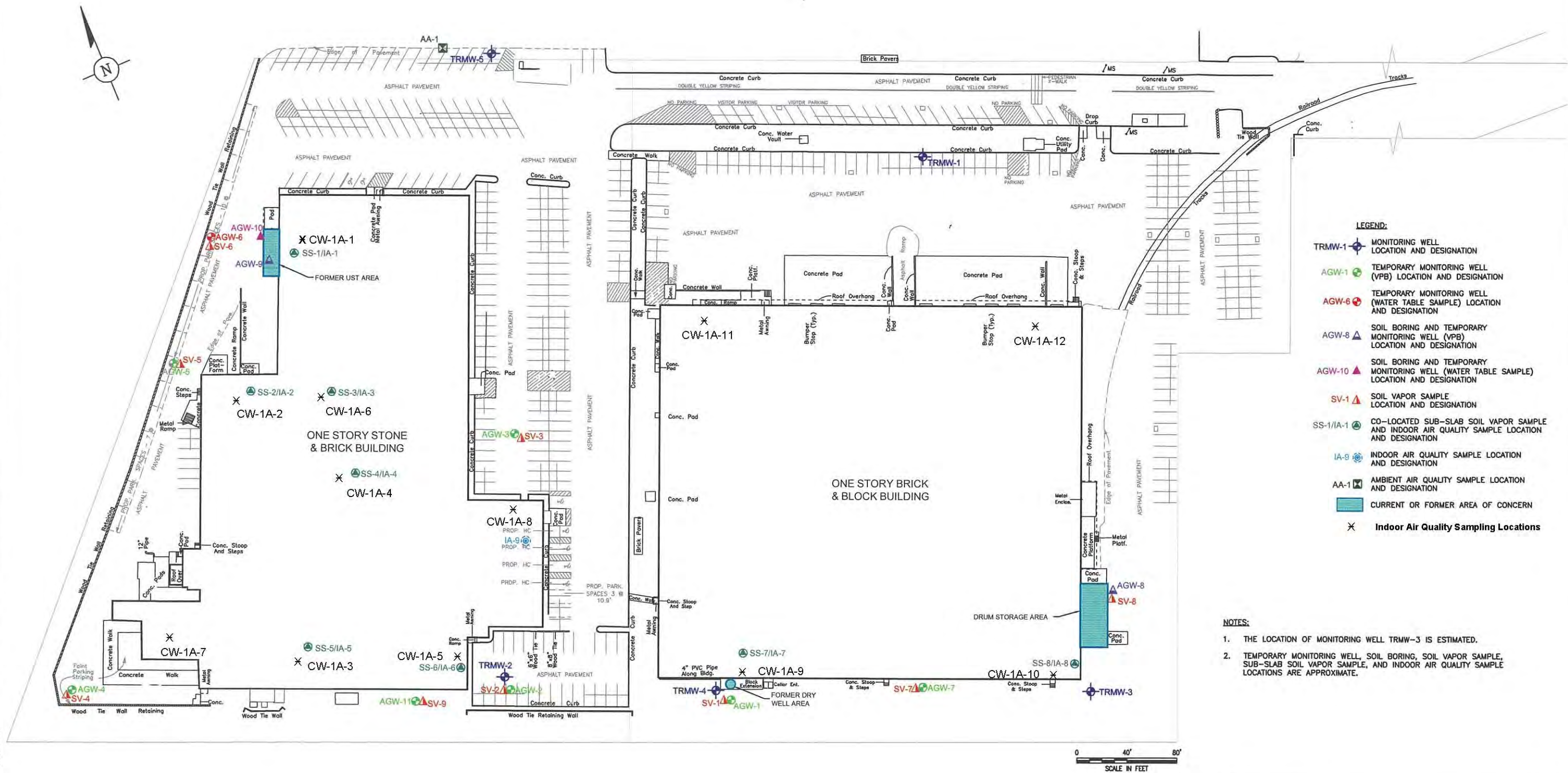
NEW JERSEY PENNSYLVANIA NEW YORK CONNECTICUT FLORIDA NEVADA VIRGINIA CALIFORNIA  
 NJ Certificate of Authorization No: 24GA27996400

Project  
**AUGUST 2012 VAPOR SAMPLE LOCATIONS AND RESULTS**  
 EAST FARMINGDALE

NASSAU NEW YORK  
 Project No. 100179501 Date 9/26/2012 Scale 1"=100' Dwg. No. 7b

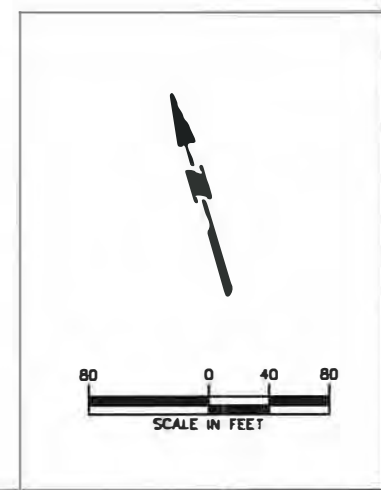
As per the 7 August 2012 NYSDEC letter the sample names have been changed from the field identifications to align with the March 2011 Record of Decision.





TARGET ROCK SITE  
EAST FARMINGDALE, NEW YORK

## INDOOR AIR QUALITY SAMPLING LOCATIONS 2018

[illegible]

		<b>TARGET ROCK CORPORATION</b> <b>LOCATION OF REMAINING SOIL</b> <b>CONTAMINATION</b> <b>ABOVE UNRESTRICTED LEVELS</b>	
River Drive Center 1 P. 201 794 6900 www.langan.com		Elmwood Park, NJ 07407 F. 201 794 0366	
NJ Certificate of Authorization No. Z4GA27995400		<b>NEW YORK</b>	
Project No. <b>100179501</b>	Date <b>07/11/11</b>	Scale <b>1"=80'</b>	Figure No. <b>9</b>

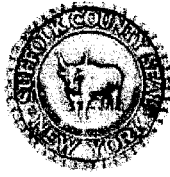






## APPENDIX A

### METES AND BOUNDS



**COUNTY CLERK'S OFFICE**  
**STATE OF NEW YORK**  
**COUNTY OF SUFFOLK**

I, JUDITH A. PASCALE, Clerk of the County of Suffolk and the Court  
of Record thereof do hereby certify that I have compared the annexed with the original  
**CORRECTION / DEED**

recorded in my office on **06/17/2013** under Liber **D00012733** and Page **405** and,  
that the same is a true copy thereof, and of the whole of such original.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said County  
and Court this **06/17/2013**

**SUFFOLK COUNTY CLERK**

*Judith A. Pascale*

JUDITH A. PASCALE

**SEAL**



SUFFOLK COUNTY CLERK  
RECORDS OFFICE  
RECORDING PAGE

Type of Instrument: CORRECTION / DEED  
Number of Pages: 5  
Receipt Number : 13-0072959  
TRANSFER TAX NUMBER: 12-25507

Recorded: 06/17/2013  
At: 12:44:20 PM  
LIBER: D00012733  
PAGE: 405

District: 0100      Section: 031.00      Block: 01.00      Lot: 002.004

EXAMINED AND CHARGED AS FOLLOWS

Deed Amount: \$0.00

Received the Following Fees For Above Instrument

		Exempt			Exempt
Page/Filing	\$25.00	NO	Handling	\$20.00	NO
COE	\$5.00	NO	NYS SRCHG	\$15.00	NO
EA-CTY	\$5.00	NO	EA-STATE	\$250.00	NO
TP-584	\$5.00	NO	Notation	\$0.50	NO
Cert.Copies	\$6.25	NO	RPT	\$180.00	NO
Transfer tax	\$0.00	NO			
			Fees Paid	\$511.75	

TRANSFER TAX NUMBER: 12-25507

THIS PAGE IS A PART OF THE INSTRUMENT  
THIS IS NOT A BILL

JUDITH A. PASCALE  
County Clerk, Suffolk County



Number of pages 5

This document will be public record. Please remove all Social Security Numbers prior to recording.

RECORDED  
2013 Jun 17 12:44:20 PM  
JUDITH A. PASCALE  
CLERK OF  
SUFFOLK COUNTY  
L 000012733  
P 405  
DT# 12-25507

Deed / Mortgage Instrument      Deed / Mortgage Tax Stamp      Recording / Filing Stamps

3 FEES	
Page / Filing Fee <u>25</u>	Mortgage Amt. _____
Handling <u>20.00</u>	1. Basic Tax _____
TP-584 <u>5</u>	2. Additional Tax _____
Notation <u>50</u>	Sub Total _____
EA-52 17 (County) <u>5</u>	Spec./Assit. _____
EA-5217 (State) <u>250</u>	or _____
37 R.P.T.S.A. <u>180-</u>	Spec./Add. _____
Conim. of Ed. <u>5.00</u>	TOT. MTG. TAX _____
Affidavit _____	Dual Town _____ Dual County _____
Certified Copy <u>6.25</u>	Held for Appointment <u>0</u>
NYS Surcharge <u>15.00</u>	Transfer Tax _____
Other _____	Mansion Tax _____
Sub Total <u>555.50</u>	The property covered by this mortgage is or will be improved by a one or two family dwelling only.
Grand Total <u>511.75</u>	YES _____ or NO _____
	If NO, see appropriate tax clause on page # _____ of this instrument.



4 Dist. 0100      13015846      *Please see attached*

Real Property Tax Service Agency Verification

P.T.S. R.D.H.O.A. 14-JUN-13

5 Community Preservation Fund

Consideration Amount \$ \_\_\_\_\_

CPF Tax Due \$ \_\_\_\_\_

6 Satisfaction/Discharges/Releases List Property Owners Mailing Address

RECORD & RETURN TO:

John Braslow Esq.  
846 Deer Park Ave.  
10. Babylon, NY 11703

Improved Commercial

Vacant Land \_\_\_\_\_

TD \_\_\_\_\_

TD \_\_\_\_\_

TD \_\_\_\_\_

Mail to: Judith A. Pascale, Suffolk County Clerk  
310 Center Drive, Riverhead, NY 11901  
www.suffolkcountyny.gov/clerk

7 Title Company Information

Co. Name \_\_\_\_\_

Title # \_\_\_\_\_

8 Suffolk County Recording & Endorsement Page

This page forms part of the attached DEED & CORRECTION made by Curtiss-Wright Flow Control Corporation (SPECIFY TYPE OF INSTRUMENT) DEED

The premises herein is situated in BABYLON In the TOWN of \_\_\_\_\_ In the VILLAGE of \_\_\_\_\_ or HAMLET of \_\_\_\_\_

Town of Babylon Industrial Development Agency

BOXES 6 THRU 8 MUST BE TYPED OR PRINTED IN BLACK INK ONLY PRIOR TO RECORDING OR FILING.

(over)

Doc ID:

13015846



## Tax Maps

District	Secton	Block	Lot	School District	Sub Division Name
0100	03100	0100	002002		
0100	03100	0100	002003		
0100	03100	0100	002004		

CORRECTION DEED

Form 8002 (3/00) - Bargain and Sale Deed, with Covenants against Grantor's Acts - Individual or Corporation. (Single sheet)  
CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT - THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY.

THIS INDENTURE, made the 4<sup>th</sup> day of JUNE, 2013 and  
BETWEEN

CURTISS-WRIGHT FLOW CONTROL CORPORATION  
1966 EAST BROADHOLLOW ROAD  
EAST FARMINGDALE, NY 11735

party of the first part, and

TOWN OF BABYLON INDUSTRIAL DEVELOPMENT AGENCY  
47 WEST MAIN STREET, STE 3  
BABYLON, NY 11702

party of the second part,

**WITNESSETH**, that the party of the first part, in consideration of ten dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

**ALL** that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the

\*\*\*\*\* SEE SCHEDULE "A" ATTACHED \*\*\*\*\*

This is a correction deed given to correct the description in that certain deed between the same parties hereto dated 2/25/03 and recorded 3/18/03 in Liber 12240 cp 774.

**TOGETHER** with all right, title and interest, if any, of the party of the first part, in and to any streets and roads abutting the above-described premises to the center lines thereof; **TOGETHER** with the appurtenances and all the estate and rights of the party of the first part in and to said premises; **TO HAVE AND TO HOLD** the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

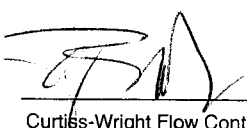
**IN WITNESS WHEREOF**, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

  
Curtiss-Wright Flow Control Corporation by  
George P. McDonald, Assistant Secretary

  
Town of Babylon Industrial Development  
Agency by Robert Stricoff, CEO

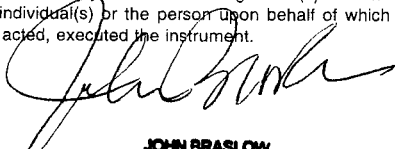
**Acknowledgement taken in New York State**

State of New York, County of Suffolk

, ss:

On the 4th day of JUNE, in the year 2013, before me,  
the undersigned, personally appeared  
Robert Stricoff

personally known to me or proved to me on the basis of  
satisfactory evidence to be the individual(s) whose name(s) 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.

  
**JOHN BRASLOW**  
Notary Public, State of New York  
No. 02BR0386015  
Qualified in Suffolk County  
My Commission Expires 10-31-13

**Acknowledgement by Subscribing Witness taken in New York State**

State of New York, County of

, ss:

On the \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, before me,  
the undersigned, personally appeared \_\_\_\_\_

the subscribing witness to the foregoing instrument, with whom I  
am personally acquainted, who being by me duly sworn, did  
depose and say, that he/she/they reside(s) in \_\_\_\_\_

that he/she/they know(s)  
to be the individual described in and who executed the  
foregoing instrument; that said subscribing witness was  
present and saw said  
execute the same; and that said witness at the same time  
subscribed his/her/their name(s) as a witness thereto.

Title No.: ALP-12956

CURTISS-WRIGHT FLOW CONTROL  
CORPORATION

TO

TOWN OF BABYLON INDUSTRIAL  
DEVELOPMENT AGENCY

Distributed by  
Alpha Abstract, LLC.

120 Remington Boulevard  
Ronkonkoma, New York 11779

**Acknowledgement taken in New York State**

State of New York, County of

, ss:

On the \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, before me,  
the undersigned, personally appeared \_\_\_\_\_

personally known to me or proved to me on the basis of  
satisfactory evidence to be the individual(s) whose name(s) 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.

**Acknowledgement taken outside New York State**

\*State of New Jersey, County of, Morris ss:  
\*(or insert District of Columbia, Territory, Possession or  
Foreign Country)

On the 4th day of June, in the year 2013, before me,  
the undersigned, personally appeared \_\_\_\_\_

George P. McDonald  
personally known to me or proved to me on the basis of  
satisfactory evidence to be the individual(s) whose name(s) 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, and that such individual made  
such appearance before the undersigned in the \_\_\_\_\_

State of New Jersey, County of Morris  
(add the city or political subdivision and the state or country or  
other place the acknowledgement was taken).

  
**RUTH ROCKY**

A Notary Public of New Jersey

My Commission Expires, March 21, 2016

DISTRICT 0100

SECTION 031.00

BLOCK 01.00

LOT 002.002, 002.003 &amp; 002.004

COUNTY OR TOWN

**RETURN BY MAIL TO:**

John Braslow, Esq.  
816 Deer Park Avenue  
North Babylon, NY 11703

Zip No.

RESERVE THIS SPACE FOR USE OF RECORDING OFFICE

# ALPHA ABSTRACT, LLC

Title No. ALP-12956

## SCHEDULE A

Amended 05-14-2013

All that certain plot, piece or parcel of land, situate, lying and being at Farmingdale, in the Town of Babylon, County of Suffolk and State of New York, bounded and described as follows:

BEGINNING at a point lying in the Westerly terminus of the Southwesterly side of the existing 60 foot Right of Way as described in the indenture dated 2/8/61, Liber 4944 cp 359 and 360, said point of beginning also being located 1176.45 feet Westerly from the Westerly side of Broad Hollow Road 130 feet wide as said distance is measured along the Southerly side of the 60 foot Right of Way;

RUNNING THENCE from this point of beginning South 22 degrees 28 minutes 52 seconds West 171.14 feet;

RUNNING THENCE North 67 degrees 45 minutes 18 seconds West 90.00 feet;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds West 310.00 feet;

RUNNING THENCE North 67 degrees 45 minutes 18 seconds West 438.47 feet;

RUNNING THENCE North 22 degrees 28 minutes 52 seconds East 543.62 feet to a point;

RUNNING THENCE South 67 degrees 31 minutes 48 seconds East 528.46 feet to a point;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds West 0.41 feet to a point lying in the Northerly terminus of the Northwesterly end of the existing 60 foot Right of Way as described in the indenture dated 2/8/61, Liber 4944 cp 359 and 360.

RUNNING THENCE along the Westerly side of the existing 60 foot Right of Way, South 22 degrees 28 minutes 52 seconds West 60 feet to the point or place of BEGINNING.

TOGETHER WITH an easement or right of way in common with others over the above mentioned right of way for access to and from Broad Hollow Road and the installation and maintenance of utilities therein.

# ALPHA ABSTRACT, LLC

Title No. ALP-12956

## SCHEDULE A (continued)

ALSO

All that certain plot, piece or parcel of land, situate, lying and being at Farmingdale, Town of Babylon, County of Suffolk and State of New York, bounded and described as follows:

BEGINNING at a point distant the following four courses and distances along the Northerly side of a right of way created by deed recorded in Liber 4944 cp 359 and Declaration recorded in Liber 6736 cp 237 from a point on the Westerly side of Broad Hollow Road distant 1756.90 feet Northerly when measured along the same from the Northerly side of land of Long Island Railroad:

- 1) North 87 degrees 46 minutes 27 seconds West 133.11 feet ;
- 2) North 67 degrees 31 minutes 08 seconds West 1023.66 feet;
- 3) North 22 degrees 28 minutes 52 seconds East 0.41 feet;
- 4) North 67 degrees 31 minutes 48 seconds West 528.46 feet to the true point of beginning;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds West partly along the Westerly side of said right of way 543.62 feet;

RUNNING THENCE North 67 degrees 45 minutes 18 seconds West 497.64 feet;

RUNNING THENCE North 42 degrees 09 minutes 17 seconds East 579.44 feet;

RUNNING THENCE South 67 degrees 31 minutes 48 seconds East 302.56 feet to the Westerly side of said right of way and the point or place of BEGINNING.

TOGETHER WITH an easement or right of way in common with others over the above mentioned right of way for access to and from Broad Hollow Road and the installation and maintenance of utilities therein.

FOR  
CONVEYANCING  
ONLY

The policy to be issued under this report will insure the title to such buildings and improvements erected on the premises which by law constitute real property.

TOGETHER with all the right, title and interest of the party of the first part, of, in and to the land lying in the street in front of and adjoining said premises.

## **APPENDIX B**

### **ENVIRONMENTAL EASEMENT**

**RECEIPT**  
**Suffolk County Clerk**  
**JUDITH A. PASCALE**  
**County Clerk**

Receipt Number : 17-0184070  
Payor Name : BRASLOW

-----  
DESCRIPTION                      TRANS AMOUNT  
-----

Type of Instrument: EASEMENT

Page/Filing	\$60.00
Handling	\$20.00
COE	\$5.00
NYS SRCHG	\$15.00
TP-584	\$5.00
Notation	\$0.00
Cert.Copies	\$15.00
RPT	\$600.00
Transfer tax	\$0.00

Fees Paid	\$720.00
Conveyance Amt:	\$0.00
Transfer Tax Number	17-09607
LIBER	D00012934
PAGE	420
DATE: 10/19/2017	TIME: 10:24:43 AM

-----

RECEIPT TOTAL	\$720.00
CHECK AMT PAID	\$720.00
TOTAL AMOUNT PAID	\$720.00
CHECK REFUND	\$0.00

-----

COMMENTS





**COUNTY CLERK'S OFFICE**  
**STATE OF NEW YORK**  
**COUNTY OF SUFFOLK**

I, JUDITH A. PASCALE, Clerk of the County of Suffolk and the Court of Record thereof do hereby certify that I have compared the annexed with the original **EASEMENT** recorded in my office on **10/19/2017** under Liber **D00012934** and Page **420** and, that the same is a true copy thereof, and of the whole of such original.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said County and Court this **10/19/2017**

**SUFFOLK COUNTY CLERK**

*Judith A. Pascale*

JUDITH A. PASCALE

**SEAL**



SUFFOLK COUNTY CLERK  
RECORDS OFFICE  
RECORDING PAGE

Type of Instrument: EASEMENT  
Number of Pages: 12  
Receipt Number : 17-0184070  
TRANSFER TAX NUMBER: 17-09607

Recorded: 10/19/2017  
At: 10:24:43 AM

LIBER: D00012934  
PAGE: 420

District:	Section:	Block:	Lot:
0100	031.00	01.00	002.002

EXAMINED AND CHARGED AS FOLLOWS

Deed Amount: \$0.00

Received the Following Fees For Above Instrument

		Exempt			Exempt
Page/Filing	\$60.00	NO	Handling	\$20.00	NO
COE	\$5.00	NO	NYS SRCHG	\$15.00	NO
TP-584	\$5.00	NO	Notation	\$0.00	NO
Cert.Copies	\$15.00	NO	RPT	\$600.00	NO
Transfer tax	\$0.00	NO			
			Fees Paid	\$720.00	

TRANSFER TAX NUMBER: 17-09607

THIS PAGE IS A PART OF THE INSTRUMENT  
THIS IS NOT A BILL

JUDITH A. PASCALE  
County Clerk, Suffolk County

Number of pages

12

This document will be public record. Please remove all Social Security Numbers prior to recording.

RECORDED  
2017 Oct 19 10:24:43 AM  
JUDITH A. PASCALE  
CLERK OF  
SUFFOLK COUNTY  
L D00012934  
P 420  
DT# 17-09607

Deed / Mortgage Instrument

Deed / Mortgage Tax Stamp

Recording / Filing Stamps

3

FEES

Page / Filing Fee

Handling

20. 00

TP-584

Notation

EA-52 17 (County)

Sub Total

EA-5217 (State)

R.P.T.S.A.

6.00

00

Comm. of Ed.

5. 00

Affidavit

Certified Copy

15-

NYS Surcharge

15. 00

Other

Sub Total

Grand Total



Mortgage Amt.

1. Basic Tax

2. Additional Tax

Sub Total

Spec./Assit.

or

Spec./Add.

TOT. MTG. TAX

Dual Town

Dual County

Held for Appointment

Transfer Tax

Mansion Tax

The property covered by this mortgage is or will be improved by a one or two family dwelling only.

YES or NO

If NO, see appropriate tax clause on page # of this instrument.

4

Dist.

3501148

See attached

Real Proper  
Tax Servic  
Agency  
Verificatio

PTS  
R LPA A  
19-OCT-17



5 Community Preservation Fund

Consideration Amount \$

CPF Tax Due \$

Improved

Vacant Land

TD

TD

TD

6

Satisfactions/Discharges/Releases List Property Owners Mailing Address

RECORD & RETURN TO:

JOHN BRASLOW.  
816 DEER PARK AVE.  
NO. BABYLON, N.Y 11703

Mail to: Judith A. Pascale, Suffolk County Clerk  
310 Center Drive, Riverhead, NY 11901  
www.suffolkcountyny.gov/clerk

7

Title Company Information

Co. Name

Title #

8

## Suffolk County Recording & Endorsement Page

This page forms part of the attached

EASEMENT

made by:

(SPECIFY TYPE OF INSTRUMENT)

TOWN OF BABYLON INDUSTRIAL  
DEVELOPMENT AGENCY  
CURTIS WRIGHT FLOW CONTROL CORP

The premises herein is situated in  
SUFFOLK COUNTY, NEW YORK.

In the TOWN of

BABYLON

In the VILLAGE

or HAMLET of

The People of the State of NY

BOXES 6 THRU 8 MUST BE TYPED OR PRINTED IN BLACK INK ONLY PRIOR TO RECORDING OR FILING.

Stat ID: 3501148



Tax Maps

District	Secton	Block	Lot	School District
0100	03100	0100	002002	
0100	03100	0100	002003	
0100	03100	0100	002004	

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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

**THIS INDENTURE** made this 6<sup>th</sup> day of October, 2017 between Owner(s) The Town of Babylon Industrial Development Agency ("TBIDA"), having an office at 47 West Main Street, Suite 3, Babylon, NY 11702, County of Suffolk, State of New York (the "Grantor Fee Owner") and Curtiss-Wright Flow Control Corporation ("Curtiss-Wright"), having an office at 1966 East Broad Hollow Road, East Farmingdale, NY 11735 (the "Grantor Beneficial Owner"), (collectively, 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 1966 East Broad Hollow Road (Route 110) in the Town of Babylon, County of Suffolk and State of New York, known and designated on the tax map of the County Clerk of Suffolk as tax map parcel numbers: Section 31.00 Block 1.00 Lot 2.002, 2.003 and 2.004, being the same as that property conveyed to Grantor Fee Owner by deed dated February 25, 2003 and recorded in the Suffolk County Clerk's Office in Liber and Page 12240 cp 744 as corrected by deed dated June 4, 2013 and recorded in the Suffolk County Clerk's Office in Liber and Page 12733 cp 405. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 10.94 +/- acres, and is hereinafter more fully described in the Land Title Survey dated June 12, 2012, last revised May 9, 2017 prepared by Haubenreich, Hess & Shaw, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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as Schedule A; and

**WHEREAS**, solely in accordance with its statutory duties as set forth in Article 18-A of the New York General Municipal Law, TBIDA agreed to provide Payment In Lieu Of Taxes ("PILOT") to Curtiss-Wright with respect to maintaining and improving its facility located on real property in East Farmingdale (the "Property") pursuant to certain findings and determinations in its resolution dated December 17, 2002 (the "Initial PILOT"). The Initial PILOT is expired; and

**WHEREAS**, solely in accordance with its statutory duties as set forth in Article 18-A of the New York General Municipal Law, TBIDA further agreed to provide PILOT #2 to Curtiss-Wright with respect to a new project for maintaining and improving the Property pursuant to certain findings and determinations in its resolution dated November 12, 2014; and

**WHEREAS**, as required by the statutory provisions of Article 18-A of the New York State General Municipal Law, Curtiss-Wright conveyed its title in the Property to TBIDA as security for the Initial PILOT, by deed dated February 25, 2003 recorded March 18, 2003 in Liber 12240 and Page 774. TBIDA continues to hold title in the Property as security for PILOT #2; and

**WHEREAS**, Curtiss-Wright retained the rights of beneficial owner of the Property pursuant to its Lease with Grantor Fee Owner dated February 25, 2003, a Memorandum of Lease recorded March 18, 2003 in Liber 12240 and Page 775, which Lease was amended and restated on December 18, 2014 (the "Amended and Restated Lease"). A Memorandum of Amended and Restated Lease is recorded in Liber 12826 and Page 996; and

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

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: W1-1031-04-10, 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.

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

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

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

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

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

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Suffolk County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

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

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

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

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

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

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

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

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

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

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

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

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

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

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

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

(2) the institutional controls and/or engineering controls employed at such site:  
(i) are in-place;  
(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;



County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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- (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.

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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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: 152119  
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.

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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

TOWN OF BABYLON INDUSTRIAL DEVELOPMENT AGENCY

By: Matthew T. McDonough

Print Name: Matthew T. McDonough

Title: C.E.O. Date: 5-17-2017

**Grantor Fee Owner's Acknowledgment**

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

On the 17<sup>th</sup> day of MAY, in the year 2017, before me, the undersigned, personally appeared MATTHEW T. MCDONOUGH, 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.

Christine Monteforte  
Notary Public - State of New York

CHRISTINE MONTEFORTE  
Notary Public, State of New York  
Qualified in Suffolk County  
Reg. No. 01MO5052177  
My Commission Expires Nov. 20, 2019

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

CURTISS-WRIGHT FLOW CONTROL COPORATION

By: [Signature]

Print Name: George P. McDonald

Title: Assistant Secretary

Date: 5/18/17

**Grantor Beneficial Owner's Acknowledgment**

STATE OF NEW ~~YORK~~ Jersey )

COUNTY OF Morris )

ss:

On the 18<sup>th</sup> day of MAY, in the year 20 17, before me, the undersigned, personally appeared George P. McDonald, 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~~ Jersey

**RUTH ROCKY**  
A Notary Public of New Jersey  
My Commission Expires March 21, 2021

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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

By:

  
Robert W. Schick, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

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

On the 6<sup>th</sup> day of October, in the year 2017, before me, the undersigned, personally appeared Robert Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public State of New York

David J. Chiusano  
Notary Public, State of New York  
No. 01CH5082146  
Qualified in Schenectady County  
Commission Expires August 22, 2018

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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**SCHEDULE "A" PROPERTY DESCRIPTION**

ALL that certain plot, piece or parcel of land, situate, lying and being at Farmingdale, in the Town of Babylon, County of Suffolk and State of New York, bounded and described as follows:

BEGINNING at a point lying in the westerly terminus of the Southwesterly side of the existing 60 foot Right of Way was described in the indenture dated 2/8/61, Liber 4944 cp 359 and 360, said point of beginning also being located 1176.45 feet Westerly from the Westerly side of Broad Hollow Road 130 feet wide as said distance is measured along the southerly side of the 60 foot Right of Way;

RUNNING THENCE from this point of beginning South 22 degrees 28 minutes 52 seconds West 171.14 feet;

RUNNING THENCE North 67 degrees 45 minutes 18 seconds West 90.00 feet;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds West 310.00 feet;

RUNNING THENCE North 67 degrees 45 minutes 18 seconds West 438.47 feet;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds East 543.62 feet to a point;

RUNNING THENCE South 67 degrees 31 minutes 48 seconds East 528.46 feet to a point;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds West 0.41 feet to a point lying in the Northerly terminus of the Northwesternly end of the existing 60 feet Right of Way as described in the indenture dated 2/8/61, Liber 4944 cp 359 and 360;

RUNNING THENCE along the Westerly side of the existing 60 foot Right of Way, South 22 degrees 28 minutes 52 seconds West 60 feet to the point or place of BEGINNING.

TOGETHER WITH an easement or right of way in common with others over the above mentioned right of way for access to and from Broad Hollow Road and the installation and maintenance of utilities therein. TAX LOTS 2.002 & 2.003

Also

All that certain plot, piece or parcel of land, situate, lying and being at Farmingdale, Town of Babylon, County of Suffolk and State of New York, bounded and described as follows:

BEGINNING at a point distant the following four courses and distances along the Northerly side of a right of way created by deed recorded in Liber 4944 cp 359 and Declaration recorded in Liber 6736 cp 237 from a point on the Westerly side of Broad Hollow Road distant 1756.90 feet Northerly when measured along the same from the Northerly side of land of Long Island Railroad:

- 1) North 87 degrees 46 minutes 27 seconds West 133.11 feet ;
- 2) North 67 degrees 31 minutes 08 seconds West 1023.66 feet;
- 3) North 22 degrees 28 minutes 52 seconds East 0.41 feet;
- 4) North 67 degrees 31 minutes 48 seconds West 528.46 feet to the true point of beginning;

RUNNING THENCE South 22 degrees 28 minutes 52 seconds West partly along the Westerly side of said right of way 543.62 feet;

RUNNING THENCE North 67 degrees 45 minutes 18 seconds West 497.64 feet;

County: Suffolk Site No: 152119 Order on Consent Index Number: W1-1031-04-10

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RUNNING THENCE North 42 degrees 09 minutes 17 seconds East 579.44 feet;

RUNNING THENCE South 67 degrees 31 minutes 48 seconds East 302.56 feet to the  
Westerly side of said right of way and the point or place of BEGINNING.

TOGETHER WITH an easement or right of way in common with others over the  
above mentioned right of way for access to and from Broad Hollow Road and the  
installation and maintenance of utilities therein.

TAX LOT 2.004

## **APPENDIX C**

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



## **APPENDIX C**

### **Monitoring Well Boring and Construction Logs**

LOG OF BORING NO: TRMW-6						Sheet 1 of 1	
Project Name			Curtiss-Wright Target Rock			Project No. 100179501	
Boring Location			East Farmingdale, NY			Elevation and Datum	
Drilling Company			Barninger Environmental Inc.			Date Started 5/19/2010	
Drilling Equipment			Track-mounted Geoprobe			Date Finished 5/19/2010	
Size and Type of Bit			Hollow Stem Auger			Completion Depth 18 feet	
Casing						Rock Depth Not Encountered	
Casing Hammer Weight			---			Water Level 6 feet	
Sampler			---			Driller Butch Moyers	
Sampler Hammer Weight			---			Inspector Michael Bator	
Depth (ft)	S	Type	Recov. (ft)	PID ppm	DESCRIPTION	REMARKS	
1					ASPHALT	Air knifed hole to 5-feet	
					GRAVEL		
2				0	FILL (brown f-m sand, tr silt, tr f-gravel, tr asphalt)		
3					Light brown f-m SAND, tr f-m gravel, tr silt		
4							
5				0			
6							
7							
8				0	Light brown f-m SAND, some f-c gravel, tr silt		
9					Brown/orange f-m SAND, some silt, moist		
10					Brown silty f-m SAND, some f-gravel, wet		
11				0			
12							
13							
14				0			
15							
16							
17				0	Light brown silty f-m SAND, some f-m gravel	Well TRMW-6 Installed from 0-18' bgs 2" PVC screen from 3-18' bgs, 2" PVC riser from 0-3' bgs.	
18							
19							
20				0			
21					End boring at 20'		

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LOG OF BORING NO: TRMW-7						Sheet 1 of 1	
Project Name			Curtiss-Wright Target Rock			Project No. 100179501	
Boring Location			East Farmingdale, NY			Elevation and Datum	
Drilling Company			Berninger Environmental Inc.			Date Started	Date Finished
Drilling Equipment			Track-mounted Geoprobe			5/19/2010	5/19/2010
Size and Type of Bit			Hollow Stem Auger			Completion Depth	Rock Depth
						15 feet	Not Encountered
Casing						Water Level	7 feet
Casing Hammer	Weight	...	Drop	...	Driller Butch Meyers		
Sampler						Inspector Michael Bator	
Sampler Hammer Weight			...			Drop ...	
Depth (ft)	S	Type	Recov. (ft)	PID ppm	DESCRIPTION	REMARKS	
1					TOPSOIL	Hand augered to 5-feet	
2				0	Brown f-m SAND, some f-c gravel, tr silt		
3							
4							
5				0	Brown f-m silty SAND, tr f-gravel, moist		
6							
7							
8				0	Brown f-m silty SAND, some f-m gravel, moist		
9							
10							
11				0	Brown/orange f-m sandy SILT, tr f-gravel, wet		
12							
13							
14				0	Brown/orange silty f-m SAND, some f-gravel		
15							
16					End boring at 16'	Well TRMW-7 installed from 0-15' bgs. 2" PVC screen from 5-15' bgs. 2" PVC riser from 0-5' bgs.	
17							
18							
19							
20							
21							

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# WELL CONSTRUCTION SUMMARY

Well No.

1RMW-6

PROJECT: Curtiss-Wright Target Rock		PROJECT NO.: 100179501																							
LOCATION: East Farmingdale, NY		ELEVATION AND DATUM:																							
DRILLING AGENCY: Berninger Environmental, Inc.		DATE STARTED: 5/19/2010	DATE FINISHED: 5/19/2010																						
DRILLING EQUIPMENT: Track-mounted Geoprobe		DRILLER: Bulch Meyers																							
SIZE AND TYPE OF BIT: 6 1/4" Hollow-Stem Auger		INSPECTOR: Michael Hutor																							
METHOD OF INSTALLATION: Borehole was advanced to 20' below grade on 4/12/10. A 15' 0.020 slot, PVC screen and 3' of PVC riser were installed. Silica sand was placed in annular space of well to approximately 1 foot above the screened interval. Above the silica sand, 1' of Bonseal was installed. The annular space was then grouted to grade. A flush mount manhole was installed at grade.																									
METHOD OF WELL DEVELOPMENT: The well was developed using a percussive pump. The well was developed until the nephelometric turbidity units (NTUs) were below 50.0 for 10 minutes. The well was purged for 21 minutes, with approximately 8 gallons being purged from the well.																									
TYPE OF CASING: PVC		DIAMETER: 2-Inch																							
TYPE OF SCREEN: PVC		DIAMETER: 2-Inch																							
BOREHOLE DIAMETER: 6-Inch		TYPE OF BACKFILL MATERIAL: Portland Cement																							
		TYPE OF SEAL MATERIAL: Bonseal																							
		TYPE OF FILTER MATERIAL: Silica Quartz																							
TOP OF CASING	ELEVATION	DEPTH (ft)																							
TOP OF SEAL	ELEVATION	DEPTH (ft)																							
TOP OF FILTER	ELEVATION	DEPTH (ft)																							
TOP OF SCREEN	ELEVATION	DEPTH (ft)																							
BOTTOM OF BORING	ELEVATION	DEPTH (ft)																							
SCREEN LENGTH	15'																								
SLOT SIZE	0.02																								
GROUNDWATER ELEVATIONS			<table border="1"> <thead> <tr> <th colspan="2">SUMMARY SOIL CLASSIFICATION</th> <th rowspan="2">DEPTH #1</th> </tr> <tr> <th colspan="2">Hush moist</th> </tr> </thead> <tbody> <tr> <td>Gravel</td> <td>1' - 1.5'</td> <td rowspan="2">1'</td> </tr> <tr> <td>Fill</td> <td>1.5' - 2'</td> </tr> <tr> <td>Seal</td> <td>Brown SAND (P-10)</td> <td>2' - 3'</td> </tr> <tr> <td colspan="2">SAND</td> <td>3' - 4'</td> </tr> <tr> <td colspan="2">SAND</td> <td>4' - 5'</td> </tr> <tr> <td colspan="2">SAND</td> <td>5' - 6'</td> </tr> </tbody> </table>	SUMMARY SOIL CLASSIFICATION		DEPTH #1	Hush moist		Gravel	1' - 1.5'	1'	Fill	1.5' - 2'	Seal	Brown SAND (P-10)	2' - 3'	SAND		3' - 4'	SAND		4' - 5'	SAND		5' - 6'
SUMMARY SOIL CLASSIFICATION		DEPTH #1																							
Hush moist																									
Gravel	1' - 1.5'	1'																							
Fill	1.5' - 2'																								
Seal	Brown SAND (P-10)	2' - 3'																							
SAND		3' - 4'																							
SAND		4' - 5'																							
SAND		5' - 6'																							
ELEVATION	DATE	DEPTH TO WATER																							
ELEVATION	DATE	DEPTH TO WATER																							
ELEVATION	DATE	DEPTH TO WATER																							
ELEVATION	DATE	DEPTH TO WATER																							
ELEVATION	DATE	DEPTH TO WATER																							
ELEVATION	DATE	DEPTH TO WATER																							

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# WELL CONSTRUCTION SUMMARY

Well No.

TRMW-7

PROJECT: <i>Curry Wright Trench Rock</i>		PROJECT NO: <i>100129501</i>	
LOCATION: <i>East Farmingdale, NY</i>		ELEVATION AND DATUM:	
DRILLING AGENCY: <i>Beninger Environmental, Inc</i>		DATE STARTED: <i>5/19/2010</i>	DATE FINISHED: <i>5/19/2010</i>
DRILLING EQUIPMENT: <i>Track-mounted Geoprobe</i>		DRILLER: <i>Butch Meyers</i>	
SIZE AND TYPE OF BIT: <i>6 1/4" Hollow Stem Auger</i>		INSPECTOR: <i>Michael Bator</i>	
<p><b>METHOD OF INSTALLATION</b>          Borehole was advanced to 15 below grade on 4/12/10. A 10', 0.02G slot, PVC screen and 5' of PVC riser were installed. Silica sand was placed in annular space of well to approximately 1 foot above the screened interval. Above the silica sand, 1' of densest was installed. The annular space was tamped to grade. A flush-mount manhole was installed at grade.</p>			
<p><b>METHOD OF WELL DEVELOPMENT</b>          The well was developed using a peristaltic pump. The well was developed until the nephelometric turbidity units (NTU) were below 50.0 for 10 minutes. The well was purged for 36 minutes, with approximately 15 gallons being pumped from the well.</p>			
TYPE OF CASING: <i>PVC</i>		TYPE OF BACKFILL MATERIAL: <i>Portland Cement</i>	
DIAMETER: <i>2-inch</i>		TYPE OF SEAL MATERIAL: <i>Benscal</i>	
TYPE OF SCREEN: <i>PVC</i>		TYPE OF FILTER MATERIAL: <i>Silica Quartz</i>	
DIAMETER: <i>2-inch</i>			
BOREHOLE DIAMETER: <i>6-inch</i>			
TOP OF CASING	ELEVATION	DEPTH (ft)	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
SCREEN LENGTH			
SLOT SIZE			
<p><b>GROUNDWATER ELEVATIONS</b></p>			
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

**WELL DETAILS**

6-inch casing

2-inch screen

10' screen length

0.02 slot size

Backfill: Portland Cement

Seal: Benscal

Filter: Silica Quartz

**SUMMARY SOIL CLASSIFICATION**

Topsoil (0-1')

Gravelly SAND (1-10')

Gravelly SAND (10-15')

Gravelly SAND (15-15')

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Table 2. Monitoring Well Construction Details, Target Rock Site, East Farmingdale, New York.

Monitoring Well Identification	Well Diameter (inches)	Total Depth (ft bbs)	Screened Interval (ft bbs)
TRMW-1	2	30	20 - 30
TRMW-2	2	30	20 - 30
TRMW-3	2	30	20 - 30
TRMW-4	2	48	35 - 48
TRMW-5	1	40	20 - 40

ft bbs                      Feet below land surface.



Table 3. Water-Level Measurements Collected from Monitoring Wells on March 23, 2009, Target Rock Site, East Farmingdale, New York.

Well Designation	Estimated Elevation of Measuring Point <sup>1, 2, 3</sup> (feet msl)	Depth to Water (feet bmp)	Estimated Water-Level Elevation (feet msl)
TRMW-1	68.50	8.81	69.77
TRMW-2	68.72	10.30	59.42
TRMW-3	68.88	8.35	69.71
TRMW-4	70.33	11.20	59.13
TRMW-5	69.28	9.40	68.88

msl Relative to mean sea level.  
 bmp Below measuring point.

Notes:  
 1 Measuring point elevations are not available for monitoring wells TRMW-1 through TRMW-5.  
 2 Land surface elevation is not available for TRMW-5. Assumed land surface elevation of 68.50 feet msl based on field visual estimate relative to TRMW-1 land surface elevation.  
 3 Measuring point elevations were calculated using known or assumed land surface elevations and measuring the distance between top of the inner PVC casing and land surface.



## APPENDIX D

### GROUNDWATER MONITORING WELL SAMPLING LOG FORM

## **APPENDIX D**

### **Groundwater Monitoring Well Sampling Log Form**

### LOW FLOW SAMPLING FIELD PARAMETER MEASUREMENTS

[illegible]

**Langan Engineering and Environmental Services, Inc.**  
River Drive Center One Elmwood Park, NJ 07407

## **APPENDIX E**

### **QUALITY ASSURANCE PROJECT PLAN**

## 1.0 SCOPE

This Quality Assurance Project Plan (QAPP) applies specifically to the Site Management Plan (SMP) to be implemented at the Curtiss-Wright Target Rock site located in East Farmingdale, New York. The QAPP is directed towards all sections of the SMP as they address groundwater and vapor sampling and analysis.

### 1.1 PURPOSE OF THE QAPP

Tetra Tech has revised this QAPP prepared to establish: 1) sampling and analysis protocols, and 2) quality assurance/quality control (QAQC) procedures for data collection and data analysis activities at the site. These procedures are to be used in conjunction with the implementation of the SMP.

### 1.2 QAPP IMPLEMENTATION

This QAPP has been prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation (DER) *Technical Guidance for Site Investigation and Remediation (DER-10)*, dated 2010, and the New York State Department of Health *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated 2006. The procedures in this QAPP will be implemented to ensure that the precision, accuracy, completeness, and comparability of the data generated by this SMP can be documented. Project objectives, field investigation procedures, and laboratory activities are presented in this QAPP, as well as QA/QC requirements for the groundwater and vapor activities as outlined in the SMP.

## 2.0 DATA QUALITY OBJECTIVES

The data quality objectives are to generate data that is found to be usable and valid. During the implementation of SMP, sampling will be performed to gather the data necessary to adequately monitor vapor and groundwater conditions as discussed in the SMP. Field practices will be implemented as described in the following paragraphs in order to meet the data quality objectives.

Field blanks will be collected on each day of sampling when required by the NYSDEC DER-10. All aqueous samples or blanks requiring chemical preservatives will have those preservatives added to the empty sample containers by the laboratory before delivery to the field. Trip blanks will be collected only on those days for which volatile organics will be analyzed in aqueous samples.

At the site, field screening or analysis using portable instruments such as Photoionization Detectors (PIDs) will be used to monitor site conditions for health and safety during sampling and other investigative activities. These instruments generate immediate results that are not compound-specific, but provide information relating to site and sampling conditions and adequacy of health and safety procedures.

Samples that are sent to the analytical laboratory for analysis will be analyzed for parameters consistent with the SMP and outlined in this QAPP. Based on the data quality objectives discussed previously, analyses will be

performed in accordance with the most current United States Environmental Protection Agency (USEPA) Methods or other recognized methods as appropriate, Satisfactory completion and compliance to the data quality objectives will be assured by performing analyses in accordance with the stated methods and by requesting QA/QC procedures and deliverables to be sufficiently comprehensive so that a data validation assessment may be performed.

### 3.0 LABORATORY TESTING

All groundwater laboratory analyses will be performed by Hampton-Clarke/Veritech (HCV) of Fairfield, New Jersey unless otherwise specified.

Analyses for specific conductance, dissolved oxygen, dissolved carbon dioxide, pH, and other field parameters as necessary will be performed in the field.

All vapor analyses will be performed by Accutest Laboratories (Accutest) of Dayton, New Jersey unless otherwise specified.

### 4.0 ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY

Table 1 of this QAPP summarizes the analytical parameters and methods, as well as the number of quality assurance samples, for each event.

The actual number of field and trip blanks will depend upon the number of days required to complete each sampling event. The number of laboratory quality control samples, sample preservation, container type, container volume and holding time are all as per the specific analytical method or the NYSDEC DER-10, whichever is more stringent.

### 5.0 SAMPLE COLLECTION, STORAGE AND HANDLING

#### 5.1 SAMPLE COLLECTION

All sampling, sample handling and sample equipment decontamination procedures will be as specified by the NYSDEC DER-10.

The sampling team will arrange with the laboratory to have preservatives added to empty jars, as necessary, prior to delivery. Accountability for samples collected during this field investigation will be the responsibility of field personnel from the time samples are collected to the time they are relinquished to the laboratory.

#### 5.2 SAMPLE STORAGE

Samples requiring refrigeration will be promptly chilled to an approximate temperature to 4° C and packaged in an insulated sample shuttle for shipment to the laboratory. Samples will be packed in order to avoid breakage of glassware. The shuttle will be sealed with custody seals, and clear tape will be placed over the seals, completely

encircling the shuttle to allow the receiver to quickly ascertain whether any tampering has taken place during transport.

## 5.3 SAMPLE HANDLING

### 5.3.1 Sample Identification

Each sample will be assigned a unique number that will be recorded on the label affixed to the sample container and the chain-of-custody record. All sampling information will be recorded in the field logbook.

### 5.3.2 Field Custody

The sampling staff is responsible for the care and custody of the samples until they are delivered to the laboratory courier. The sample shuttles for shipment will be sealed on-site by the field sampling crew using tape and custody seals. Sample bottles will be kept in the shipping shuttles except when they are being filled. Sample shipping and handling procedures will be in compliance with the requirements of USEPA SW-846 and the NYSDEC DER-10. The original chain-of-custody form will be dated, signed, and included in the shipping shuttle. The form will be placed in a plastic bag and taped to the underside of the cooler lid.

The shipping shuttles will be relinquished daily to a laboratory courier for immediate transportation to the laboratory facility. Use of the courier of the laboratory will ensure an unbroken chain of sample custody between Langan and the laboratory. Langan will arrange to have samples relinquished to the laboratory courier for transfer to the laboratory.

## 6.0 GROUNDWATER SAMPLING PROGRAM

All groundwater sampling will be conducted in accordance with procedures outlined in the NYSDEC DER-10.

For all groundwater sampling events, samples will be collected using low-flow sampling methodology. The wells will be purged at approximately 100 to 500 milliliters per minute using bladder pumps. The purge water will be placed into sealed 55-gallon steel drums and will be properly disposed of by Curtiss-Wright.

Prior to purging the wells, well headspaces will be screened for volatile organic vapors using a PID. Additionally, depth-to-water readings will be recorded,

During low-flow sampling, the wells will be purged until groundwater chemistry readings (dissolved oxygen, pH, temperature, conductivity, ORP, and turbidity) stabilized. Once stabilization occurred, representative groundwater samples were collected. Low-flow sampling field data sheets for each well are provided in Appendix D of the SMP.

After stabilization of the groundwater chemistry parameters, the purge rate will be lowered to 100 milliliters per minute and groundwater samples will be collected. The samples were transferred to laboratory-supplied glass jars and submitted to a certified laboratory for volatile organic compounds (VO) +10 tentatively identified compounds (TICs) analysis.



## 7.0 VAPOR SAMPLING PROGRAM

All indoor air sampling will be conducted in accordance with procedures outlined in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated 2006.

### 7.1 INDOOR AIR SAMPLING

Indoor air samples will be collected to monitor vapor concentrations within the existing buildings. Indoor air samples will be collected during the heating season, which typically ranges from 15 November to 31 March.

The indoor air samples will be collected over a period of 24 hours. The samples will be collected using a 6-Liter Summa canister set at approximate breathing height. During the collection of sub-slab vapor samples, all pertinent information will be recorded, including but not limited to:

- floor plan sketches showing sample locations;
- whether heating systems are operational during sampling;
- the weather and ventilation systems;
- sample height
- field instrumentation readings; and
- Summa canister vacuum readings before and after sampling

To ensure QA/QC, several procedures will be followed to ensure sampling error is minimized and high-quality data is obtained. Any actions by field staff that may interfere with sampling will be avoided. Additionally, all air monitoring equipment will be properly maintained and calibrated. Samples will meet holding times and temperatures and will be delivered to the laboratory for analysis at the earliest possible time. Field staff will follow sampling protocols such as field documentation and chains of custody. All sampling will be performed using clean sampling devices. One background outdoor air sample will be collected during each indoor air sampling event.

The indoor air samples will be submitted to a laboratory that is certified in the ELAP in New York State. Indoor air samples will be analyzed for the EPA Method T0-15.

**Table 1**  
**Sample Program Summary**

Media	Quantity of Samples	Sample Frequency	Analysis	Quality Assurance / Quality Control
Soil*	None Planned	--	Volatile Organic Compounds (EPA Method 8260)	Equip. Rinsate Blanks (1 sample per event) Field Duplicates (1 sample / 20 samples) Trip Blanks (1 sample per shipment) Matrix Spike / Matrix Spike Duplicate - (1 sample / 20 samples)
Groundwater*	7 Monitoring Wells (TRW-1 – TRW-7)	As Needed	Volatile Organic Compounds (EPA Method 8260)	Equip. Rinsate Blanks (1 sample per event) Field Duplicates (1 / 20 samples) Trip Blanks (1 sample per shipment) Matrix Spike / Matrix Spike Duplicate - (1 sample / 20 samples)
Indoor Air*	As Required	As Needed	Toxic Organics (EPA Method TO-15)	None

Media		Quantity of Samples	Sample Frequency	Analysis	Quality Assurance / Quality Control
Sub-Slab	Soil	None Planned	As Needed	Toxic Organics (EPA Method TO-15)	None
Vapor*					
* No further action or investigation will be conducted unless there is a change of use in the current buildings or new buildings are developed on the site.					

## APPENDIX F

### SITE-WIDE INSPECTION FORM

## **ANNUAL SITE-WIDE INSPECTION FORM**

Note: This document will be used to complete the annual certification of the Engineering Control (EC) at the site. The completed site inspection form will be provided in any Periodic Review Reports (PRR).

### **I. Background Site Information**

#### **A. Facility Name and Location:**

Business Name: *Curtiss-Wright Corporation*

Name of the current operator at the site (if different than above):

Property Street Address: *1966 E Broadhollow Road*

Municipality (-ies): *East Farmingdale* County (-ies): *Suffolk*

State: *New York*

Blocks: *Section 17 Block 14*

Lots: *11 and 12*

Year of Tax map from which this information is obtained:

#### **B. Person responsible for submitting the biennial certification monitoring report for a Deed Notice & Engineering Control (Self Explanatory)**

Person's Name: *John Pluta*

Person's Title: *Corporate Director Environmental Health & Safety*

Business Name: *Curtiss-Wright Corporation*

Relationship to the Site (check as appropriate): *Owner and Operator*

Street Address: *1966 E Broadhollow Road*

City: *East Farmingdale* State: *New York*

Telephone Number: *931-396-3800*

FAX Number:

E-mail Address: *jpluta@curtisswright.com*

#### **C. Case Specific Information (Complete all that apply)**

- Program Interest Name: *Curtiss-Wright Corporation*
- Site #: *152119*
- Order of Consent #: *WI-1031-04-10*
- Date of Record of Decision (ROD) for No Further Action for the site: *31 March 2011*

## Appendix F

- Name and Bureau of assigned Case Manager: Robert Corcoran, Division of Environmental Remediation

### D. Existing Site Conditions (Complete below or include as Attachment 1: Existing Site Conditions)

- Describe the physical characteristics of the Site:  
*The site is approximately 11 acres, located in the south-west corner of a commercial/industrial area off of Broad Hollow Road. The site is bounded to the north and east by large, widely-spaced commercial buildings and parking lots; to the south by a residential neighborhood, the closest street being Alexander Avenue; and to the west by an apartment building on Melville Road. Across Melville Road lies the SUNY Farmingdale campus. Site elevation ranges from 73 feet to 67 feet above sea level. The site is relatively flat, gradually sloping downward to the east and southeast. Because the site is part of a former sand and gravel mine, a sharp rise in elevation, approximately 30 feet, occurs at the southern and western property boundaries. Bedrock is approximately 1200 feet below sea level. Soils around the site consist of minor amounts of fill, sand and gravel in the medium to fine range, getting finer with depth.*
- Describe the current site operations: *Curtiss-Wright manufactures valves for nuclear submarine power operations. These valves are manufactured and tested at the site.*
- Describe each engineering control that applies to the Restricted Areas: *The remaining on-site soil contamination is fill is capped with asphalt. The majority of the site is capped with asphalt or concrete slab foundations.*

## II. Protectiveness Evaluation

### A. Evaluation of Institutional and Engineering Controls

*(The appropriate box on the left must be checked for each of the following items.)*

#### 1. Zoning or Land Use Change (Complete below or include as Attachment 3: Zoning or Land-Use Changes)

a. Has the land use changed? Yes ☐ No ☐

b. Current land use (check all that apply):

Non-Residential ☐ Residential ☐ Agricultural ☐ Other ☐

## Appendix F

If the current land use is different than the land use at the time the EC/IC was filed, explain how the remedial action, which included the EC/IC, remains protective of public health and safety. Include the Case Manager's name and Bureau that approved this change, if applicable.

c. Has there been an actual or pending zoning or land-use change for the Restricted Area on which the Deed Notice/DER is filed?

Yes \_\_\_\_\_ No \_\_\_\_\_

2. **Inspections** (Complete below or include as Attachment 4: **Inspections: Excavations and Disturbances**)

Have periodic inspections of the site identified any excavation or other disturbance activities that have taken place within the restricted areas?

Yes \_\_\_\_\_ No \_\_\_\_\_ (If Yes, please describe below)

Date(s) of Disturbance:

Duration of Disturbance: Years \_\_\_\_\_ Months \_\_\_\_\_ Days \_\_\_\_\_

Date the NYSDEC was called to report disturbance:

Description of the disturbance and methods to address the disturbance:

Name of Contact Person Relative to the Disturbance:

Title:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number:

Email Address:

Was all soil excavated and returned to the Restricted Area?

Yes \_\_\_\_\_ No \_\_\_\_\_ (If No, provide an explanation)

Quantity of soil generated for disposal (if applicable):

Attach Transportation/disposal documentation.

State precautions taken during the above activities to prevent contaminant exposure:



## Appendix F

Provide an explanation of how the engineering control was replaced following the disturbance?

### **3. Changes to Laws and Regulations** (Complete below or include as Attachment 5: Changes to Laws and Regulations)

- a. Are there any subsequently promulgated or modified environmental laws or regulations (see Table 1), which apply to the site?

Yes \_\_\_\_ No \_\_\_\_ (If No, proceed to #4 below)

- b. If Yes, has the evaluation also determined that each EC/IC, as applicable, meets the requirements of the new laws and regulations?

Yes \_\_\_\_ No \_\_\_\_ (If Yes, proceed to #4 below)

- c. Each EC/IC, as applicable that did not meet the requirements of the new laws and regulations has been addressed in the following manner to bring them into compliance:

### **4. Detailed Maintenance Logs** (Complete below or include as Attachment 6: Detailed Inspection and Maintenance Logs)

Attach a copy of the detailed maintenance log of how the persons responsible for monitoring and ensuring the protectiveness of the remedial action have maintained and evaluated the EC:

The detailed maintenance log must be:

- i. completed each time a site inspection is performed to evaluate ECs at the site and
- ii. a copy of the detailed maintenance log attached to this certification in addition to the following information:

Date(s) of all Inspections: \_\_\_\_\_

Name(s) of Inspectors: \_\_\_\_\_

**III. Certifications**

**A. Certification, Copying and Reporting**

Semi-annual certification monitoring inspection forms will be included in all PRRs. These forms will be available to the NYSDEC case manager upon request.

**B. Person Responsible for the Annual Certification Monitoring Inspections:**

Based upon all of the information that I have provided above, I hereby certify that the remedial action(s) for which this EC/IC was established remain protective of public health and safety and of the environment.

Name (print or Type):

Title:

Signature: \_\_\_\_\_

Name of Company or Corporation: \_\_\_\_\_

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

## APPENDIX G

### EC ASPHALT COVER DRAWING



## APPENDIX H

### EC SYSTEM INSPECTION CHECKLIST

## **APPENDIX H**

### **EC System Inspection Checklist(s)**



## Appendix H

### Engineering Control (EC) Checklist

Site Name: Target Rock

Location: 1966 Broadhollow Road, East Farmingdale, Suffolk County, NY

Site No.: 1966E

Case Manager: Robert Corcoran

The SMP for the aforementioned site includes at a minimum an Institutional Control (IC) and EC as well as provision for the periodic certification of the IC and EC and includes a Site Monitoring Plan. Each of these individual areas of reporting will need to meet the minimum requirements detailed below.

The SMP for the site addresses:

- ☐ The entire site
- ☐ An operable unit of the site identified as: \_\_\_\_\_
- ☐ An IRM for operable unit \_\_\_\_ identified as \_\_\_\_\_
- ☐ A groundwater restriction and IC/EC for the site

A Periodic Report Review (PRR) will be submitted following sampling events.

Institutional Control and Engineering Control (IC/EC) Certification: The applicant or site owner must make a periodic certification of the IC/EC to the Department. The requirements of this periodic IC/EC certification will be described in the SMP and the certification must be included in the PRR, which is prepared and submitted for the Department-approved certification period. The IC/EC certification will clearly identify the periodic review period and certify that:

- ☐ The institutional controls and/or engineering controls employed at such site are:

unchanged from the date the control was put in place, unless otherwise approved by the Department;  
in place and effective;  
performing as designed;  
nothing has occurred that would impair the ability of the controls to protect the public health and environment; and  
nothing has occurred that constitutes a violation or failure to comply with any operation and maintenance plan for such controls.

- ☐ Use of the site complies with the environmental easement;
- ☐ Access to the site will be provided to the Department to evaluate the remedy and verify continued maintenance of such controls.
- ☐ If a financial assurance mechanism is required, the mechanism remains valid and sufficient for the intended purpose.

If the remedy requires only institutional controls, the certification may be made by the property owner. If the remedy includes engineering controls, the certification must be made by a qualified environmental professional or, if engineering evaluations are required, a licensed professional engineer.