Steel Allen Air, LLC

# Site Management Plan

AK Allen IHWDS Site No. 1-30-100
Order on Consent and Administrative Settlement
Index No. CI 1-20220106-6

225-255 E 2nd Street
Mineola, New York

22 May 2024

Project No.: 0560708.30.01

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## Signature Page

22 May 2024

# Site Management Plan

AK Allen IHWDS Site No. 1-30-100

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## CERTIFICATION STATEMENT

I, Chris Wenczel, certify that I am currently a Qualified Environmental Professional (QEP) as in defined in 6 New York Codes, Rules and Regulations (NYCRR) Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

P.G.

22 May 2024 Date

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## Acronyms and Abbreviations

| Name | Description |
|---|---|
| 1,1,1-TCA | 1,1,1-Trichloroethane |
| 1,1-DCA | 1,1-Dichloroethane |
| 1,1-DCE | 1,1-Dichloroethene |
| 1,2-DCA | 1,2-Dichloroethane |
| 1,4-D | 1,4-Dioxane |
| AOC | Area of Concern |
| AST | Above Ground Storage Tank |
| bgs | Below Ground Surface |
| CA Rich | CA Rich Consultants, Inc. |
| CAMP | Community Air Monitoring Plan |
| CFM | Cubic Feet per Minute |
| CMCCR | Corrective Measures Construction Completion Report |
| CMP | Corrective Measures Plan |
| CMWP | Corrective Measures Work Plan |
| COC | Certificate of Completion |
| CP | Commissioner Policy |
| CPP | Citizen Participation Plan |
| DER | Division of Environmental Remediation |
| DUSR | Data Usability Summary Report |
| EC | Engineering Controls |
| ECL | Environmental Conservation Law |
| EDR | Environmental Data Resources Inc. |
| EE | Environmental Easement |
| EMP | Excavation Management Plan |
| ERM | ERM Consulting & Engineering, Inc. |
| ERP | Environmental Restoration Program |
| EWP | Excavation Work Plan |
| FEMA | Federal Emergency Management Agency |
| FER | Final Engineering Report |
| FS | Feasibility Study |
| $FT^2$ | Square Foot/Feet |
| GAC | Granular Activated Carbon |
| HASP | Health and Safety Plan |
| HVAC | Heating Ventilation and Cooling |
| IC | Institutional Controls |
| IHWDS | Inactive Hazardous Waste Disposal Site |
| IRM | Interim Remedial Measures |
| LIRR | Long Island Rail Road |
| LQG | Large Quantity Generator |
| MEK | Methyl Ethyl Ketone (2-butanone) |

| Name | Description |
|---|---|
| mg/kg | Milligrams per Kilogram |
| MTA | Metropolitan Transit Authority |
| MTBE | Methyl Tertiary Butyl Ether |
| NCDH | Nassau County Department of Health |
| NCSSS | Nassau County Sanitary Sewer System |
| ng/l | Nanograms Per Liter |
| NWI | National Wetland Inventory |
| NYCRR | New York Codes, Rules, and Regulations |
| NYS | New York State |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York Department of Health |
| OM&M | Operations, Maintenance, and Monitoring |
| OSHA | Occupational Safety and Health Administration |
| P.E. or PE | Professional Engineer |
| PCB | Polychlorinated Biphenyl |
| PCE | Tetrachloroethene |
| PELs | Permissible Exposure Limits |
| PFAS | Per- and Polyfluoroalkyl Substances |
| PFOA | Perfluorooctanoic Acid |
| PFOS | Perfluorooctane Sulfonic Acid |
| PRR | Periodic Review Report |
| QEP | Qualified Environmental Professional |
| RAO | Remedial Action Objective |
| RCRA | Resource Conservation and Recovery Act |
| ROD | Record of Decision |
| ROI | Radius of Influence |
| RSR | Records Search Report |
| SCG | Standards, Criteria, and Guidance Values |
| SCO | Soil Cleanup Objective |
| SIR | Site Inspection Report |
| SMP | Site Management Plan |
| SOP | Standard Operating Procedures |
| SQG | Small Quantity Generator |
| SSDS | Sub-Slab Depressurization System |
| SVs | Soil Vapor |
| SVE | Soil Vapor Extraction |
| SVI | Soil Vapor Intrusion |
| SVOC | Semi-Volatile Organic Compound |
| TAGM | Technical Administrative Guidance Memorandum |
| TCE | Trichloroethene |
| TCLP | Toxic Characteristic Leaching Procedure |
| µg/l | Micrograms Per Liter |
| µg/$m^3$ | Micrograms Per Cubic Meter |
| UIC | Underground Injection Control |
| USA | United States of America |
| USEPA | United States Environmental Protection Agency |
| USGS | United States Geologic Survey |

| Name | Description |
|---|---|
| UST | Underground Storage Tank |
| VOC | Volatile Organic Compound |

# ES. EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan (SMP):

| | |
|---|---|
| **Site Identification:** | NYSDEC Site Number: 130100<br>A.K. Allen Site, 255 E 2nd Street, Mineola, NY 11501 |
| **Institutional Controls:** | 1. The Site ("Controlled Property") may be used for Commercial purposes as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial purposes as described in 6 NYCRR Part 375-1.8(g)(2)(iv); |
| | 2. All ECs must be operated and maintained as specified in the SMP; |
| | 3. All ECs 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 NCHD to render it safe for use as drinking water or for industrial purposes, and the user must notify and obtain written approval to do so from NYSDEC; |
| | 5. Groundwater and other environmental 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 the manner defined in the SMP; |
| | 7. All future activities on the property that will disturb remaining contaminated materials must be conducted in a manner defined in the SMP; |
| | 8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP; |
| | 9. Operation, maintenance, inspection, and reporting of any mechanical and 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 in the EE; and |
| | 11. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6 NYCRR Part 375-1.8(g)(2)(i) and (ii), and the above-stated ECs may not be discontinued without amendment or extinguishment of the EE. |
| **Engineering Controls:** | 1. Maintenance of the asphalt cover in the area of the residual on-Site PCB soil contamination. |
| | 2. Operation of the building-wide sub-slab depressurization system. |
| **Inspections:** | Frequency |
| • Asphalt Cover | Annually |
| • Soil Vapor Extraction System | Monthly |
| • Sub-Slab Depressurization System | Quarterly |
| **Monitoring:** | Frequency |
| • Asphalt Cover | Annual Site Inspection |
| • Soil Vapor Extraction System | To Be Determined based on current evaluation pursuant to SVE Site Management Corrective Measures Plan |
| • Sub-Slab Depressurization System | Annually |
| **Maintenance:** | Frequency |
| • Asphalt Cover | As needed |
| • Soil Vapor Extraction System | As needed |
| • Sub-Slab Depressurization System | As needed |
| **Reporting:** | Frequency |
| | Annual Site Inspection/Periodic Review Reports |

Further descriptions of the above requirements are provided in detail in the latter sections of this SMP.

# 1. INTRODUCTION

## 1.1 General

This Site Management Plan (SMP) is for the 4.15-acre property of the former AK Allen Company Incorporated (Allen) property located on the southern side of E 2nd Street (225-255 E 2nd Street), in Mineola, Nassau County, New York (the "Site"). The Site is currently in the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, Site No. 1-30-100, which is administered by New York State Department of Environmental Conservation (NYSDEC). The location of the Site and the physiographic features of the surrounding area are depicted on **Figure 1**.

The SMP has been prepared pursuant the requirements of the March 2023 Order on Consent and Administrative Settlement (2023 Order)[1] between the New York State Department of Environmental Conservation (NYSDEC) and Alkier Steel, LLC and Steel Mineola Second Street, LLC (collectively "Alkier Steel" or "Respondent"). Note that as of 1 January 2024, there was a Deed transfer from Alkier Steel to the newly formed affiliate named Steel Allen Air, LLC [2] (Steel Allen Air).

This SMP was prepared by ERM Consulting & Engineering, Inc. (ERM), on behalf of Steel Allen Air in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2023, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the EE for the Site.

A figure showing the location and boundaries of this Site is provided in **Figure 2**. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the 2021 Environmental Easement (EE) [3] provided in **Appendix A** and shown on the NYS-licensed land surveyor signed and property 8survey presented in **Figure 3**.

After completion of the remedial work performed during 2003 - 2009, 2019 - 2020 and in 2024,some residual soil contamination remains at this Site, which is hereafter referred to as "remaining contamination". Consequently, institutional controls (ICs)[4] and engineering controls (ECs)[5] have been incorporated into the Site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. The EE granted to the NYSDEC, and recorded with the Nassau County Clerk, requires compliance with this SMP and all ICs and ECs placed on the Site.

The objective of this 2024 SMP is to provide for the Site management of residual on-Site soil contamination and all associated ICs and ECs, and any associated monitoring and reporting (including the recently installed Sub-slab Depressurization System ("SSDS") system as well as any necessary monitoring and/or operation and maintenance of the remedy. This SMP will remain in force was prepared to manage remaining contamination at the Site until the EE is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the EE and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the EE. Failure to properly implement the SMP is a violation of the EE, which is grounds for revocation of the Certificate of Completion (COC); and
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the Order on Consent (Index #CO 1-20220106-6; Site #1-30-100) for the Site, and thereby subject to applicable penalties.

1 Order on Consent Index # Index No. CI 1-20220106-6., Site #1-30-100 between the NYSDEC, and AK Steel LLC and Steel Mineola Second Street, LLC (Respondent), effective date 8 April 2023. RSR requirements are set forth in VII. Miscellaneous, Appendix A II. Initial Submittal & Exhibit B.

2 As of 1 January 2024, there was a Deed transfer from Alkier Steel, LLC and Steel Mineola Second Street, LLC to a newly formed affiliated "Steel Allen Air, LLC".

3 On 20 May 2021, NYSDEC granted by full execution the EE for the Site that was recorded with the Nassau County Clerk. The EE requires compliance with the most current SMP and all protective ECs and ICs placed on the Site. The EE will be maintained as part of the conveyance of the property to the present tenant in-common fee owners. Recorded on July 13, 2021 in Book D, Volume 14106, Page 696 (of the land records of Nassau County, New York (.Nassau County Recording Identifier /Instrument Number 2021-91436.)

4 An institutional control is a non-physical restriction on use of the Site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the Site suitable for some, but not all uses.

5 An engineering control is a physical barrier or method to manage contamination. Examples include caps, covers, barriers, fences, and treatment of water supplies.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the Site is provided in **Appendix B** of this SMP.

## 1.2 Revisions and Alterations

Revisions and alterations to this plan will be proposed in writing to the NYSDEC's Project Manager. The NYSDEC can also update the SMP or request revisions from the remedial party. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. All approved alterations must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations. For example, any changes to as-built drawings must be stamped by a New York State Professional Engineer (PE). In accordance with the EE for the Site, the NYSDEC project manager will provide a notice of any approved changes to the SMP and append these notices to the SMP that is retained in its files.

## 1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

1. 60-day advance notice of any proposed changes in Site use that are required under the terms of the 2023 Order on Consent, 6 NYCRR Part 375 and/or Environmental Conservation Law.
2. 7-day advance notice of any field activity associated with the remedial program.
3. 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan. If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
4. Notice within 48 hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
5. Notice within 48 hours of any non-routine maintenance activities.
6. 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.
7. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting 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:

8. At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the Order on Consent, and all approved work plans and reports, including this SMP.
9. 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 to the NYSDEC.

**Table 1** below includes contact information for the above notifications. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in **Appendix B**.

**Table 1: Notifications***

| Name | Contact Information | Required Notification** |
|---|---|---|
| Alexander Klein | alexander.klein@dec.ny.gov | All Notifications |
| Robert Decandia | rob.decandia@dec.ny.gov | All Notifications |
| Alali M. Tamuno, Esq. | alali.tamuno@dec.ny.gov | Notifications 1 and 8 |
| Mark S. Sergott, P.G. | mark.sergott@health.ny.gov | Notifications 4, 6, and 7 |
| Marlon Ramlogan | ramlogan.marlon@epa.gov | Notifications concerning activities affecting PCB-impacted media |

* Note: Notifications are subject to change and will be updated, as necessary.
** Note: Numbers in this column reference the numbered bullets in the notification list in this section.

# 2. SUMMARY OF SITE HISTORICAL SUMMARY, PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Sections 2.1 and 2.2 present the Site summary background information including a physical description of the Site, an overview of the physical setting including topography, hydrology, geology and hydrogeology, and description of current use.

Section 2.3 presents a summary of information concerning Site development/ownership and the nature of Site manufacturing operations.

Section 2.4 presents a detailed historical summary of environmental administrative actions, investigations, studies, remedial activities, and the results thereof.

Section 2.5 presents the established Remedial Action Objectives for the Site.

Section 2.6 presents a summary of remaining Site contamination.

## 2.1 Site Location and Description

The Site is an approximately 4.15-acre area located at 225-255 East 2nd Street in Mineola, Nassau County, New York and is identified as Section 9 Block 437 and Lots 466 and 467 and Section 9, Block 663, and Lots 4A, 4B, and 5 on the Nassau County Tax Map (**Figure 3**).

The Site is bounded by East 2nd Street to the north, the Long Island Railroad (LIRR) track system to the south, an industrial building/developed property to the east, and an industrial building/developed property to the west (see **Figure 2** – Site Layout Map). The boundaries of the Site are more fully described in **Appendix A** – Environmental Easement.

The owners of the Site at the time of issuance of this SMP are:

- Alkier Steel, LLC and Steel Mineola Second Street, LLC (collectively “Alkier Steel” or “Respondent”).

The Site is fully occupied with tenants (operators) of the Site. At the time of issuance of this SMP the eastern portion of the building is currently occupied by two (2) tenants;

- Vantec Hitachi Transport System (USA) Inc. who distribute products such as car parts, electronics and other dry uses as well as have office space; and
- Standard Tinsmith & Roofer Supply Corp who manufactures authentic decorative metal walls and ceilings.

The western portion of the building is occupied at the time of issuance of this SMP by:

- LaserShip, a last-mile delivery service. LaserShip uses their space as a package sorting and shipping facility.

## 2.2 Physical Setting

### *2.2.1 Land Use*

The Site building comprises one single-story, 120,000-squarefoot ($ft^2$) industrial building and is located south of E 2nd Street. The building was constructed in sections over a period of years between 1945 and 1982 to its current configuration. Historic aerial photographs (1938-1951) indicate the eastern one-third of this building was constructed over part of a former sand mine which was subsequently filled in with unknown materials (1953-1966).

Paved driveways are located to the east and west of the building and paved parking is situated along the northern side of the building as well as to the rear (south of the building). A small area at the building’s main entrance is landscaped with grass and trees. Surface elevations in the area of the Site exhibit a slight slope to the south and west. Access to the LIRR is restricted by a heavy-duty fence and retaining wall located along the southern boundary of the Site. The property is posted as private property.

The Site is bounded by East 2nd Street and commercial properties immediately to the north, the LIRR track system and residential properties immediately to the south, an industrial building/developed property

immediately to the east, and an industrial building/developed property immediately to the west (**Figure 2**)**.**

The Site is connected to Nassau County Sanitary Sewer System (NCSSS) and is serviced with public well water provided by the Village of Mineola (Town of North Hempstead) in Nassau County. Mineola Building Department records indicate that original portion of the Site building structure was constructed in 1945 and originally included three cesspools. One of the cesspools was connected to a series of bathrooms and the other two cesspools were connected to water fountains. The building was connected to the municipal sewer system in 1953, approximately eight years after its construction. Historical groundwater investigations did not identify the former cesspools as impacted areas of concern/historical groundwater contaminant sources.

### *2.2.2 Topography and Hydrology*

The Site is located at an elevation of approximately 110 feet above mean sea level, is generally flat, and slopes slightly to the southeast. Surface water at the Site drains via sheet/overland flow to storm water drywells located in the paved parking lot south of the 255 E 2nd Street building.

The overall topographic trend of the surrounding area also slopes to the southeast (**Figure 1**). Stormwater recharge basins with intermittent standing water are the only surface water bodies within one mile and in various directions of the Site. More distant surface water bodies include Hempstead Lake, located approximately 3.5 miles south of the Site, and Lake Success, located approximately 4.30 miles northwest of the Site.

According to flood zone and National Wetland Inventory (NWI) data presented in the EDR® Radius Map™ Report reviewed by ERM, the Site is not located within wetland delineated areas or the 100 or 500-year flood plains. Flood zone and NWI data was obtained by EDR from the Federal Emergency Management Agency (FEMA) and U.S. Fish and Wildlife Services, respectively.

### *2.2.3 Geology/Hydrogeology*

A hydrogeologic cross section of Long Island is shown in **Figure 4**. Site-specific boring and well construction logs, a Site well location map, a Site-specific 2003 groundwater contour map, and a regional 2016 United States Geologic Survey (USGS) groundwater surface contour map provided in **Appendix C**.

The soils at the Site are characterized as unconsolidated coastal plain deposits of Cretaceous to Quaternary age. The uppermost subsurface soils at the Site are Quaternary age unconsolidated glacial outwash sediments consisting of medium to coarse-grained sands and interbedded fine-grained sands, silts, and clays that underlie the area to a depth of approximately 50 feet below ground surface (bgs). The water table surface occurs within these deposits at 45-55 feet[6] forming the Upper Glacial Aquifer is underlain by approximately 500 feet of fully saturated unconsolidated sands and gravels comprising the Cretaceous age Magothy Formation. The Magothy Aquifer is the principal public water supply for Nassau County and is considered a “sole-source aquifer” by the NYSDEC and USEPA. The Magothy Formation is underlain by the Raritan Formation, comprising approximately 150 feet of clay that serves as a regional confining layer. Below this is approximately 250 feet of fully saturated sand (Lloyd Sand), beneath which are Precambrian age igneous and metamorphic rocks.

Based on the Site-specific 2003 groundwater contour map, and the regional 2016 USGS groundwater surface contour map[7] groundwater flow is generally to the southwest.

The regional horizontal groundwater flow rate in the Upper Glacial Aquifer is approximately 1-foot per day. The Site is situated within Long Island’s Hydrogeologic Zone 1 – one of several hydrogeologic zones that have been mapped on Long Island to define and delineate the Island’s specific aquifer recharge and discharge areas. Zone 1 delineates the deep flow, sole source Magothy Aquifer drinking water recharge area.

According to the Environmental Data Resources Inc. (EDR) commercial environmental data report obtained during Alkier Steel’s pre-purchase due diligence activities, there are 139 federal wells, one federal public water supply well, and three state groundwater wells located within a one-mile radius of the Site. There are not any known current nor former potable water wells at the facility.

[6] https://ny.water.usgs.gov/maps/li-dtw/?year=2016

[7] https://ny.water.usgs.gov/maps/li-gc/

## 2.3 Site Development and Historical Operations

The Site was undeveloped land prior to the 1930s. The existing Site building was built in stages between 1945 and 1982. The original tenant, the Manhasset Machine Company, occupied the building from 1947 to 1957. No information was available regarding this tenant's operations or hazardous waste storage practices. A large pond associated with historic sand mining activities was located east of the Manhasset Machine Company building in the 1940s. The pond was dry by the 1950s and was filled in by the 1960s. The area was used for vehicle parking in the 1960s and 1970s, and the eastern portion of the existing Site building was constructed over the former pond area in the early 1980s.

Allen, a manufacturer of precision-machined metal cylinders and valves, began operations at the Site in 1957 and continued through 2017. According to an Interim Remedial Measures (IRM) Report completed in 2004, at that time Allen had four separate hazardous waste streams:

- Waste alcohol (2 drums and 15 gallons in grinders);
- Waste blackening/caustic bottoms (15 gallons in pails and 150 gallons in 3 tanks);
- Waste Brite Dip/chromic acid (1 drum and 100 gallons in 4 tanks); and
- Waste Alodine (1 drum and 475 gallons in 5 tanks).

Rinse water from three of the hazardous waste streams (excluding waste alcohol) was discharged to the municipal sewer under an industrial discharge permit. Allen had formerly used low-flash point mineral spirits for parts cleaning which created another hazardous waste stream (10 drums of waste mineral spirits); however, by 2004 Allen had switched to a high-flash point product that did not produce hazardous waste. Instead, spent mineral spirits were distilled on-Site and reused.

Non-hazardous waste streams identified in 2004 included

- Waste mineral spirits/petroleum;
- Cutting oil (15 drums);
- Metal shavings (15 drums);
- Stainless steel;
- Plain steel;
- Aluminum; and
- Brass.

The 2004 IRM Report indicated that the current cleaning and lubricating products used at the facility did not contain chlorinated solvents or PCBs. However, according to Resource Conservation and Recovery Act (RCRA) listings, the Site was a Large Quantity Generator (LQG) of hazardous wastes in 1981 and a Small Quantity Generator (SQG) in 1999, 2004, and 2006, of wastes that included spent chlorinated solvents used in degreasing. NY and NJ Manifests provided by EDR identified shipments of spent halogenated solvents used in degreasing (chlorinated solvents) from the facility in 1982-1993, and in 1996, 2000, 2003, 2005, 2007, and 2015. Allen ceased operations and vacated the building in 2017.

## 2.4 Investigation and Remedial History

This section presents a detailed historical summary of information concerning Site development/ownership, the nature of Site manufacturing operations, environmental administrative actions, investigations, studies, remedial activities, and the results thereof. The historical summary is presented in chronological order starting when the Site was undeveloped summarizing development, historical operations, available key documents and activities prepared/completed between the 1930s and 2024.

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References.

### *2.4.1 Initial Environmental Investigations*

During the 1990s, initial investigations undertaken by the Nassau County Department of Health (NCDH) and then Allen determined that soils beneath the parking lot south of the building were contaminated with

petroleum constituents, chlorinated volatile organic compounds (VOCs), semi-VOCs (SVOCs), PCBs (Aroclor 1254), and metals. Soil vapor was also found to be impacted by chlorinated VOCs.

In 1992, the NCDH collected three soil samples from the parking lot south of the Site building. NCDH representatives collected an additional 13 soil samples in June and July 1993 from the drum storage area and the LIRR right-of-way. Four additional samples were collected in November 1993. Drums of liquid wastes and metal shavings from machining operations were staged in the drum storage area, and cutting oils and fluids were present on the metal shavings. The drums did not have secondary containment, and cuttings oils and fluids were discharged to the ground from leaking drums. These fluids migrated south onto the LIRR embankment.

Analytical results from the soil samples indicated several halogenated VOCs above NYSDEC clean-up standards, including 1,1-dichloroethane (1,1-DCA), 1,1,1-trichloroethane (1,1,1-TCA), 1,1,-dichloroethene (1,1-DCE), tetrachloroethylene (PCE), and trichloroethylene (TCE). Non-halogenated VOCs detected above NYSDEC clean-up standards included toluene, ethylbenzene, o-xylene, and naphthalene. The VOCs N-propyl benzene, isopropyl benzene, 1,2,4-trimethylbenzene, 1,3,5-trimelthylbenzene, and n-butylbenzene were detected at significant levels; however, no NYSDEC clean-up standard existed for these compounds. Metal analysis using the Toxic Characteristic Leaching Procedure (TCLP) sampling method identified cadmium above NYSDEC clean-up levels.

The source of the contamination in the area east of the drums is not known; however, it is likely that drums were historically staged in that area as well. The storm drain was most likely impacted by surface run-off from the drum storage area, and the source of contamination of the interior floor drain was undetermined.

### *2.4.2 1996 Remedial Investigation & Report*

A RI Work Plan was prepared and implemented in November 1995 by CA Rich Consultants, Inc. (CA Rich), and included the collection and analysis of soil samples in order to delineate the horizontal and vertical extent of contamination within the AOCs. Additionally, two groundwater samples were collected from the drum storage area and the area approximately 100 feet east of the drum storage. PCE was detected in groundwater at 6 parts per billion (ppb), which is 1 ppb above the NYDSEC TOGS of 5 ppb. Historically, PCE had been detected at upgradient off-Site wells at concentrations ranging from 0.4 to 5 ppb.

The 1996 RI Report was completed in 1996. Figures and tables from the 1996 RI Report are presented in **Appendix D.** Based on the RI soil sampling activities, four Areas of Concern (AOCs)/source areas/zones of zones of soil contamination were identified:

- The metal shavings drum storage area located in the rear parking lot and the adjacent LIRR embankment;
- An area approximately 100 feet east of the drum storage area and the adjacent LIRR embankment;
- Storm drain SD-1 (along the southern exterior of 255 E 2nd Street near the centerline of the building); and
- Interior floor drain FD-1 (western section of 255 E 2nd Street building).

The RI Report recommended the following IRMs: excavation of shallow oily soil; vapor extraction of deeper soil containing VOCs; and excavation of soils from storm drain SD-1 and floor drain FD-1.

### *2.4.3 Site Listing On Registry of Inactive Hazardous Waste Disposal Sites*

According to a Site Investigation Form, dated 20 July 1999, wastes from past and present operations at the Site had contaminated the soil with VOCs, metals, and petroleum products. Drums (some of which were leaking) containing liquid wastes from the facility had been historically stored outside south of the building, adjacent to an embankment leading to an LIRR right-of-way. Contaminants have migrated through the soil onto the LIRR property. Groundwater flow direction was to the southwest, and groundwater depth was typically 55-60 feet below ground level.

According to a letter from the New York Department of Health (NYSDOH), dated 5 January 2000, the NYSDOH supported the NYSDEC's subsequent classification of the Site on the New York State (NYS) Registry of Inactive Hazardous Waste Disposal Sites (IHWDS)/Remedial Program administered by NYSDEC

as a Class 2[8] (Priority III) site.

### 2.4.4 2003 Order On Consent

In November 2002, Allen entered into an Order on Consent, Index #W1-0932-02-08, Site #130100 with NYSDEC that was fully executed on 02 January 2003 and became effective 10-days thereafter on 12 January 2003 (2003 Order), in which Allen agreed to further investigate and remediate the Site.

Consistent with the NYSDEC IHWDS/Remedial Program, investigative and remedial requirements under the 2003 Order included preparation, NYSDEC approval and implementation of the following:

- Site Characterization Work Plan;
- Remedial Investigation/Feasibility Work Plan;
- IRM Work Plan;
- Remedial Design/Remedial Action Work Plan;
- Operations, Maintenance, And Monitoring (OM&M) Work Plan; and
- Progress Reporting.

### 2.4.5 2003 Interim Remedial Measures & 2004 Report

The IRM was completed in 2003 and the corresponding IRM Report was completed in 2004. Figures and tables from the 2004 IRM Report are presented in **Appendix E.**

The IRM included the excavation of the former drum storage area (western excavation) and the area approximately 100 feet to the east (eastern excavation). Pre-excavation soil borings indicated that sediments in a storm drain were impacted with SVOCs. A network of five on-Site and off-Site groundwater monitoring wells had also been installed prior to the IRM.

An extensive exploratory survey and remedial subsurface excavation effort through the parking lot and surrounding areas was conducted in the western portion of the Site, and a similar excavation was conducted in the eastern portion of the Site. The western excavation extended from the southern portion of the parking lot down along the embankment of the LIRR, and an LIRR representative ordered the excavation to be terminated approximately 4 to 5 feet from the railroad ties of the active LIRR track line. End-point samples from the southern sidewall exceeded NYSDEC clean-up objectives for VOCs, SVOCs, metals, and PCBs remained in place in the LIRR right-of-way. The Western Excavation area was backfilled with recycled concrete aggregate (RCA) obtained from Con-Strux in Westbury NY which is a NYSDEC permitted facility to handle this material. Records documenting the exact volume of backfill material are not available but it is reasonable to conclude the volume is commensurate with the volume of soil removed from the Western Excavation.

The eastern excavation extended from the southern portion of the parking lot down along the embankment of the LIRR, and this excavation was permitted to continue until it reached a clean endpoint, and post-excavation end-point soil samples confirmed that contaminated soil had been successfully removed from the eastern excavation. The Eastern Excavation area was backfilled using RCA obtained from Con-Strux in Westbury NY which is a NYSDEC permitted facility to handle this material. Records documenting the exact volume of backfill material are not available but is reasonable to conclude the volume is commensurate with the volume of soil removed from the Eastern Excavation.

In addition, the bottoms of five storm drains and one interior floor drain were cleaned out in accordance with the NYSDEC's Technical Administrative Guidance Memorandum (TAGM) Cleanup Objectives and the USEPA Underground Injection Control (UIC) Program. All impacted soil and sediment removed from the bottoms of storm water drains was replaced with clean imported sand backfill obtained from 110 Sand and Gravel Company in Melville, NY which is a NYSDEC permitted facility to handle this material. Two of the storm drains and the floor drain were permanently closed, and the remaining three storm drains remain active parking lot storm drains.

8 Classification Code: 2: This classification is assigned to a site at which the disposal of hazardous waste has been confirmed and the presence of such hazardous waste or its components or breakdown products represents a significant threat to public health or the environment.

A total of approximately 770 tons of contaminated soils were removed from the Site.

The IRM Report recommended that a Supplemental RI should be performed, which would include sampling and analysis of the groundwater monitoring wells and installation of a series of off-Site soil borings to define the lateral and vertical extent of impacted soil south of the western excavation. In addition, an off-Site Qualitative Exposure Assessment should be included in the Supplemental RI to address any off-Site concerns. Once the Supplemental RI is completed, a Feasibility Study (FS) should be completed for the Site.

### *2.4.6 2003 Supplemental Remedial Investigation & 2004 Report*

The 2003 Supplemental RI included groundwater monitoring well sampling and soil vapor sampling. In addition, the horizontal and vertical extent of the soil contamination in the LIRR right-of-way was defined. On-Site groundwater from one of the upgradient wells contained low levels of VOCs suggesting an upgradient, off-Site source. Limited soil vapor sampling indicated that VOC vapors were present in the soils beneath the parking lot on-Site, but VOCs were not present in the soil beneath the LIRR tracks and therefore were not migrating south towards the southern adjacent residential neighborhood. Figures and tables from the 2004 Supplemental RI Report are presented in **Appendix F.**

A Qualitative Exposure Assessment was performed and determined that the only potentially complete risk exposure pathway at the Site is to either on-Site or off-Site construction works. Those receptors (construction workers) could be protected by the use of an applicable Health & Safety Plan.

The 2004 Supplemental RI Report concluded that the relatively impermeable soil cover (building, pavement, railroad), Site security measures, LIRR right-of-way restrictive land use, and preservation and continued testing of the groundwater monitoring well network provide the necessary means to serve as long-term management control.

The 2004 Supplemental RI Report recommended a Feasibility Study be performed to determine the most cost-effective, long-term approach to address the impacted soils remaining beneath the LIRR right-of-way, and the soil gas detections below the parking lot.

### *2.4.7 2005 On-Site and Off-Site Feasibility Studies*

On-Site and Off-Site FSs were completed in 2005 and are summarized below.

#### *2.4.7.1 2005 On-Site Feasibility Study*

The on-Site FS analyzed initial and supplemental Remedial Investigation results, identifies the overall goals of remediation, evaluates options available for remedial action on the Site based upon review of environmental data collected, reduced, and analyzed, and ascertains the preferred remedial objective.

The heavy metals, SVOCs, and PCBs identified on-Site were effectively remediated during the IRM in 2004, and so the FS only addresses the remaining residual VOCs. The On-Site FS specifically addresses the area of VOC soil gas in the subsurface soils below the rear parking lot.

Three remedial alternatives were developed and analyzed, and the most cost-effective response that met the remedial goals and objectives was selected – design, installation, and operation of an on-Site soil vapor extraction (SVE) system plus ECs and ICs. The system would be designed to capture soil vapor from two separate depth zones beneath the area of concern in the rear of the Site. The SVE system would create a radius-of-influence that draws the flow of soil vapor down the pressure gradient toward and into extraction points and away from the building and paved parking area.

The selected alternative (SVE system plus EC/ICs) was expected to achieve Remedial Action Objectives (RAOs) by mechanically removing VOCs from the soil vapor under the Site, and by controlling soil vapor migration and creating a vapor flow divide between the Site and any potential receptors to the west and south.

#### *2.4.7.2 2005 Off-Site Feasibility Study*

The off-Site (the portion of Site-related activities within the LIRR right-of-way) FS identifies and evaluates options available for Site-related, off-Site remedial action. It identifies the overall goal of the remediation

based upon review of environmental data collected, reduced, and analyzed, and ascertains the preferred remedial objective. The intent of the off-Site FS was to serve as a basis for remedy selection decision-making processes.

The Off-Site FS addressed two concerns:

- An area of soil containing VOCs, PCBs, and metals below and adjacent to an active LIRR line that runs along the southern boundary of the Site, and
- The underlying uppermost groundwater beneath this area. The remediation of the soils would require the cooperation of the LIRR and/or its parent agency, the Metropolitan Transit Authority (MTA). The remedial goal is to ensure the area of impacted soil on the LIRR property is protective of human health and the environmental, and to preserve groundwater quality beneath the impacted soil.

The impacted soil in the LIRR right-of-way was estimated as an area approximately 70 feet by 15 feet with a thickness of approximately 2.5 to 3 feet, with an approximate volume of 3,000 cubic feet or 110 cubic yards. The soil is within the LIRR property and is covered with one foot or more of soil and crushed-rock gravel material ("ballast"). The contaminants of concern for this area were Aroclor 1254 (a PCB isomer), and the chlorinated VOCs PCE, TCE, and 1,1,1-TCA. Arsenic, cadmium, and chromium were detected at high levels but at concentrations typical of railroad rights-of-way.

Any excavation and disposal of the soil would require a temporary LIRR service interruption and shut down of the main line.

The chosen remedy was the removal of impacted soil below the LIRR tracks during future maintenance activities and post-remediation groundwater monitoring. The extent of soil removal would depend on the amount of time allotted by the LIRR for the remedial activities. The work would be coupled with a planned track outage by the LIRR and so the service interruption would not be the result of the Site remediation.

### *2.4.8 2006 Record of Decision*

In March 2006, NYSDEC the 2006 Record of Decision (ROD) for the Site that established Remedial Goals and a Selected Remedy for the Site. Allen subsequently became the responsible Remedial Party and performed certain required investigations, remedial actions, monitoring, reporting and management of the Site in accordance with a 2003 Order, ROD and a SMP. Remediation goals and the Selected Remedy set forth in the 2006 ROD are listed below.

**ROD Remediation Goals:** The remediation goals for this Site are to eliminate or reduce to the extent possible:

- Exposures of persons at or around the Site to VOCs in soil vapor on-Site, VOCs in groundwater, PCBs in on-Site soil, and VOCs, PCBs and metals in off-Site soil;
- The release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards; and
- The release of contaminants from subsurface soil into indoor air through soil vapor.

Further, the remediation goals for the Site include attaining to the extent practicable:

- Ambient groundwater quality; and
- Recommended soil cleanup objectives for soil.[9]

According to the 2006 ROD, low levels of five VOCs were detected in groundwater at concentrations only marginally exceeding their respective standards, criteria, and guidance values (SCGs), and it was determined that groundwater would not require active remediation due to the low levels of VOCs and the removal of the on-Site source soil.

The NYSDEC selected excavation, soil vapor extraction, engineering and institutional controls, and monitoring as the remedy for the Site. The NYSDOH concurred that the remedy is protective of human health.

**ROD Selected Remedy:** The Selected Remedy intended to address the above remedial goals included:

- An IRM that involved excavation of contaminated soils from two areas of the Site and the adjacent LIRR

9 https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf

right-of-way area located to the south of the Property;

- Design, construction and operation of a SVE system plus engineering controls/institutional controls to remediate the residual VOCs in the unsaturated soil at the IRM excavation, and to minimize the potential impacts to indoor air, i.e., controlling and/or eliminating the soil vapor exposure pathway;
- Excavation and off-Site disposal of impacted soils;
- Maintenance of the asphalt cover in the area of the residual on-Site PCB soil contamination;
- Groundwater profiling and construction of a monitoring well, depending upon profiling results, at one additional off-Site location;
- Development of a Site management plan to address residual contamination and any use restrictions;
- Imposition of an EE which would include restriction of the Site to commercial or industrial use and a restriction on the use of groundwater;
- Periodic certification of the institutional and engineering controls;
- Operation, monitoring, and maintenance of the remedy; and
- Monitoring of groundwater quality.

### 2.4.9 March 2008 Off-Site Remedial Action Report – Soil Removal

Figures, tables and photographs from the 2008 Off-Site Remedial Action Report are presented in **Appendix G.**

Perimeter soil borings were installed as part of the Supplemental RI following the 2003 IRM soil excavation activities. This investigation identified the presence of PCBs at 91 milligrams per kilogram (mg/kg) at an off-Site location. The concentrations of PCBs detected in the subsurface soils exceeded the SCGs of 1 mg/kg for less than 1 foot below ground surface and 10 mg/kg for greater than one foot below ground surface. VOC contamination was also confirmed in the subsurface soils located to the south and off-Site. Concentrations of VOCs exceeding the SCGs were documented at least 20 feet below ground surface. This raised the possibility of potential dermal exposures from off-Site contamination at the LIRR right-of-way (PCBs, VOCs, SVOCs and metals) in soils.

Removal of soil adjacent to and beneath the LIRR's main line tracks was conducted in August 2007 and witnessed by NYSDEC's Remedial Project Manager (Ms. Kerry Maloney) at that time. The excavated area was approximately 70 feet by 10 feet and 3 to 4 feet deep. A total of 145 tons of materials were excavated and disposed of at the CWM Chemical Services facility in Model City, New York. End point samples were taken in accordance with the NYSDEC-approved off-Site work plan and were analyzed for VOCs and PCBs. The samples contained VOCs and PCBs in concentrations that were either non-detect or below the applicable restricted residential Part 375 criteria that the NYSDEC used as the SCGs for this project. The excavation was backfilled with clean imported sand backfill material **(Appendix G).** The source of the clean sand backfill is unknown but the entire day's activities including the backfilling was witnessed by the NYSDEC Remedial Project Manager and that material was obviously acceptable to NYSDEC.

### 2.4.10 July 2008 Off-Site Deep Groundwater Sample Results

In April 2008, a deep soil boring was installed south of the Site. Groundwater samples were secured from ten foot intervals beginning at a sample depth of 50 feet down to 90 feet below the surface. The samples were analyzed for VOCs. All compound concentrations detected in the samples were below the applicable NYSDEC groundwater drinking standards.

### 2.4.11 2009 Final Engineering Report

The soil IRM, and design and construction the SVE system was completed during 2004 - 2007. The SVE system began operation on-Site in January 2008. A Final Engineering Report (FER) was prepared by Allen and submitted to NYSDEC in February 2009. Figures and tables from the 2009 FER Off-Site Remedial Action Report are presented in **Appendix H.**

The document presented a Site overview and history, summary of RI and IRM activities and results, remedial design of the SVE system and monitoring points, documentation concerning the as-built condition and startup information for the SVE system and monitoring points, maintenance, monitoring and termination criteria.

### 2.4.12 January 2009 Groundwater Sampling Results

In April 2009, the analytical results of groundwater samples collected by CA Rich on 21 January 2009 and analyzed for VOCs were reported to NYSDEC. All detections were below NYSDOH groundwater drinking standards[10]. The only contaminant detected was tetrachloroethylene at 4.3 micrograms per liter (µg/l) in one monitoring well, which is below the NYS drinking water standard of 5.0 µg/l. Based on the sampling results, CA Rich requested that no further groundwater sampling be required by the NYSDEC and the groundwater sampling portion of the 2006 ROD be deemed completed.

The July 2009 letter from the NYSDEC stated that the NYSDEC and the NYSDOH had reviewed the groundwater sampling results and had concluded that groundwater sampling could be discontinued at the Site. The NYSDEC noted that on-going monitoring and sampling of the SVE system was still required at the Site.

### 2.4.13 2015 Site Management Plan

In 2015, Allen submitted a 2015 Site Management Plan (2015 SMP) to manage residual contamination in soil on the south side of building that requires both ECs and ICs that:

- Restrict the Site to commercial or industrial use;
- Require adherence to an Excavation Management Plan (EMP) for intrusive work in covered former remedial areas,
- Requires vapor intrusion investigations for any new construction in former remedial areas,
- Restricts the use of groundwater,
- Requires annual inspections/periodic certification of the institutional and engineering controls, reporting, and notifications.

An updated 2024 SMP (this document) is required by the 2023 Order on Consent (Section 2.4.20) has been prepared using applicable sections and in conformance with the most recent NYSDEC SMP template and reflects the outcomes for remedial actions undertaken submitted to NYSDEC for review and approval. The objective of the 2023 SMP is to provide for the Site management of all ICs and ECs and any associated monitoring and reporting (including the recently installed SSDS system) as well as any necessary monitoring and/or operation and maintenance of the remedy.

### 2.4.14 SVE System Operations/Shutdown Requests

The SVE system was designed, installed and operated to fulfill the ROD remediation goals for this Site to eliminate or reduce to the extent possible exposures of persons at or around the Site to VOCs in soil vapor on-Site, and attain to the extent practicable soil cleanup objectives for soil. The COCs with respect to potential on-Site impacts were PCE, TCE and 1,1,1-TCA.

In particular, the SVE system was intended to mitigate residual VOC-impacted soil and control associated VOC-laden soil vapor below the existing parking lot in the area of the western excavation to ensure that the vapor migration pathway to the Allen building was protective of human health and the environment.

As stated earlier, two expansive excavations were completed on-Site, removal of sediments from on-Site drywells were performed, and an off-Site excavation was completed to remove impacted soils and sediments in furtherance of the remedial goals set forth in the ROD. Residual impacts that could not feasibly be removed were addressed through the installation and operation of the SVE system.

In the alternatives selection portion of the ROD, the NYSDEC provided that a SVE system would be designed, constructed, and operated to remediate the residual VOCs in the unsaturated soil column from the depth of the bottom of the IRM excavation to the water table and to control the contaminated soil vapor associated with such residual impacts in the remedial excavations. The installation and operation of the SVE system serves the final objective of the ROD by precluding soil vapor intrusion emanating from the former remedial excavation areas where the residual contamination resides to the indoor air inside of the buildings at the Site.

[10] https://www.health.ny.gov/environmental/water/drinking/regulations/

The SVE system was intended to be operated until the reduction of residual impacts in the former remedial excavations reached a point of diminishing returns as evidenced by achieving asymptotic concentrations of the contaminants of concern.

In the summary of the proposed remedy in the ROD, the NYSDEC stated the following: *"Alternative 3 (i.e., Design, Installation, and Operation on an on-site Soil Vapor Extraction [SVE] System plus EC/ICs[2]) was selected for on-site because, as described below, it satisfies the threshold criteria and provides the best balance of the primary balancing criteria described in Section 7.2. It will achieve the remediation goals for the site by reducing the volume and mobility of the residual VOC contamination in the unsaturated soil. This will reduce or eliminate the threat to public health from the VOCs by permanently removing the VOCs which could potentially cause soil vapor and/or indoor air and groundwater contamination….."*. Accordingly, so long as there is no significant rebound of VOC impacts associated with the former remedial excavation at SG-3 and SG-4(R) when the SVE system is shutdown, then the operation of the SVE system would no longer be required and the SVE system may be permanently shut down and removed from the Site.

The SVE system was installed in 2007. A pilot test was completed to determine a radius of influence which extended to the building foundation and beyond the areas of impacted soil. The pilot test confirmed that the capture radius was greater than 65 feet. The results of the pilot test determined a vacuum blower able to move approximately 58 cubic feet per minute (CFM) of air at each of the 4 SVE wells (232 CFM total flow rate) at 20 inches WC was required. A system was designed and installed in which the SVE wells were connected to a buried 4-inch diameter PVC header line that extended to an equipment shed. This shed housed the SVE system equipment which included a moisture knock-out drum, a 7-horsepower blower and a series of two vapor-phase, 400-pound carbon units. There was also an alarm unit which turned the system off if there was an equipment failure.

The SVE system commenced operation in January 2008. Several of the contaminants of concern at the Site were detected in the influent sample at relatively low concentrations in June 2013. Asymptotic conditions were reached in 2013. More than 961 pounds of VOCs were recovered by this system and PCE concentrations (the compound detected at the highest concentration in the soil vapor samples) decreased from 34,604 micrograms per cubic meter (µg/m$^3$) to 190 µg/m$^3$. Similarly, TCE decreased from 166 µg/m$^3$ to 31 µg/m$^3$, and 1,1,1-TCA decreased from 4,476 µg/m$^3$ to 72 µg/m$^3$. Overall, the total VOCs decreased from 39,436 µg/m$^3$ to 315 µg/m$^3$. Based on the results of the June 2013 sampling event, it was determined the SVE system had reached its goal and met asymptotic conditions. The data comparison of compound concentrations from 2008 to 2013 confirmed the downward concentration trend for all contaminants of concern. It was calculated that greater than 99% total VOCs were removed.

In 2015, Allen requested NYSDEC approval to shut down the SVE system based on monitoring data that indicated the SVE system:

- Achieved asymptotic levels of the contaminants of concern at the Site;
- Proven efficient in removing VOCs from the unsaturated soils at the Site and has removed an estimated 1,189.50 pounds of materials from the underlying unsaturated soils;
- Achieved its remedial objectives/maximum potential to remove the contaminants of concern; and,
- That continued operation of the SVE system was no longer beneficial.

NYSDEC acknowledged the data and request in November 2015 indicating a work plan for SVE shutdown could be submitted for review and approval.

In February 2016, Allen submitted to NYSDEC an SVE Shutdown Work Plan that was approved by NYSDEC in May of 2016. Sampling to evaluate post-shut down soil vapor VOC concentration rebound as per the approved work plan was completed during May – September 2016. Based on initial sampling results, NYSDEC extended the evaluation program and additional sampling was performed in January 2017, April 2017, and February 2018.

In 2017, Allen concluded operations at the Site and listed the Site for sale.

In June 2018, the NYSDEC issued a letter indicating concern that the February 2018 monitoring data indicated some soil vapor VOC concentration rebound but granted permission to turn off the SVE system with

the understanding that the building was currently unoccupied, and therefore there was no need to address potential vapor intrusion at that time. As such, the SVE system and subsequent monitoring could be discontinued with the understanding that future vapor evaluation would need to be conducted in accordance with NYSDOH soil vapor intrusion (SVI) guidance should the building be sold or reoccupied.

In March 2019, Allen performed one additional SVE sampling event and submitted the results to NYSDEC in a letter dated 19 April 2019 prepared by VERTEX Engineering, PC requesting that the SVE system be terminated (i.e., need for restart of the SVE be terminated) without further sampling. That request was not approved and the expectation for SVE system restart prior to building occupancy and the need for further evaluation remained in force.

In the fall of 2019, Alkier Steel restored the SVE system to full operation prior to installation of the SSDS and occupancy of the building. Vacuum and air flow measurements were obtained at the system on July 18, 2020. The blower vacuum was -30.0 inches WC and the air flow rate was 236 CFM. Based on the blower size, the SVE was operating at greater than the design vacuum and flow rate. The mass removal of VOCs was calculated. The SVE was estimated to remove only 0.79 pounds per year of 1,1,1-TCA, based on the soil gas concentration at the SVE well SG-3 (approximately 400 ug/m$^3$) where 1,1,1-TCA rebound was observed in 2019.

The SVE system suffered a shutdown in 2022 due to an apparent blower main bearing failure. The SVE system was repaired and restored to operation in late May 2023 to enable implementation of the 2023 SVE Site Management Corrective Measures Plan (Section 2.4.24) required by the 2023 Order on Consent (Section 2.4.20). The document identifies the steps to be undertaken to restore the SVE to operation, confirm proper operation, and collect soil vapor baseline sampling since the system has not been operating for approximately six months, and then conduct the soil rebound evaluation pulsed operation and monitoring phase. The results were evaluated and presented in the SVE System Corrective Measures Report (Section 2.4.27) with a request for permanent shutdown of the system that was approved by NYSDEC.

### *2.4.15 March 2019 Groundwater Sampling Results*

In March of 2019, Allen performed additional groundwater sampling where groundwater samples were collected from upgradient groundwater monitoring well IRM-MW-1 and downgradient well IRM-MW-3 were sampled for VOCs, 1,4-dioxane (1,4-D), and per- and polyfluoroalkyl substances (PFAS). The results were submitted to NYSDEC in a letter report dated 30 May 2019 prepared by VERTEX Engineering, PC.

No VOCs were detected in the groundwater samples except very low concentrations of acetone, a common lab contaminant.

On 15 March 2023, the NYSDEC issued of final water quality guidance values to regulate 1,4-D, Perfluorooctanoic acid (PFOA), and Perfluorooctane sulfonic acid (PFOS)[11].

1,4-D was detected in the groundwater sample collected from upgradient groundwater monitoring well IRM-MW-1 at a concentration of 0.924 µg/l just below the current NYSDOH drinking water standard of 1.0 µg/l[12] and above the current NYSDEC groundwater guidance value of 0.35 µg/l. 1,4-D was not detected in the groundwater sample collected from downgradient well IRM-MW-3.

The laboratory reported results for 22 PFAS. Thirteen (13) PFAS were detected at similar concentrations in groundwater samples collected from both upgradient monitoring well IRM-MW-1 and downgradient monitoring well IRM-MW-3.

PFOA and PFOS were detected in both samples from IRM-MW-1 and IRM-MW-3.

PFOA was detected at 24.8 nanograms per liter (ng/l) in sample IRMMW-1 and 31.1 ng/l in sample IRM-MW-3, which exceed the NYSDOH drinking water standard of 10 ng/L[13] and the NYSDEC groundwater guidance value of 6.7 ng/l.

[11] https://www.dec.ny.gov/chemical/122803.html

[12] https://www.health.ny.gov/environmental/water/drinking/emerging_pfas_publicwater.htm

[13] https://www.health.ny.gov/environmental/water/drinking/emerging_pfas_publicwater.htm

PFOS was detected at a concentration of 97.1 ng/l in sample IRM-MW-1 and 146 ng/l in sample IRM-MW-3, which exceed the NYSDOH drinking water standard of 10 ng/L and the NYSDEC groundwater guidance value of 2.7 ng/l.

The suite of PFAS detected in both the upgradient and downgradient groundwater monitoring well samples were consistent and at similar concentrations, which is typical of shallow groundwater in urban commercial environments. 1,4-D was only detected in the upgradient groundwater monitoring well sample. The sources of PFAS and 1,4-D in groundwater are likely from upgradient/off-Site.

### *2.4.16 Alkier Steel Acquisition of the Site*

In 2019, Alkier Steel acquired the Site from Allair Holdings, Inc. (f/k/a Allenair Corporation), A.L. Allen Co., Inc., and 255 East Second St. Realty Corp (collectively "Allen"). Upon learning that NYSDEC did not receive notification of the change in ownership of the Site as required by the Order, Alkier Steel's consultant notified NYSDEC of Alkier Steel's acquisition of the Site. Under the Purchase and Sale Agreement between the Allen and Alkier Steel, Allen retained the financial obligations to ensure that the remedial and administrative obligations set forth in the Order, ROD, and SMP are met. However, Alkier Steel agreed to implement Allen's obligations under the ROD to ensure all remedial activities occur efficiently, effectively, and cooperatively with NYSDEC, and in coordination with Alkier Steel's development plans.

#### *2.4.16.1 Phase I and Phase II Environmental Site Assessments/Screening*

As part of the real estate transaction, Alkier Steel conducted Phase I and Phase II environmental assessment/screening activities at the Site in 2019. The Phase I and II screening activities identified potential AOCs and previously unknown historic contamination in certain areas of the Site that were primarily beneath the building. Those potential AOCs included:

- Boiler Blowdown Pit – Northwest End of Building;
- Trench Drain – Hard Coating (Plating) Room;
- Oily Trench Drain/Adjacent Floor Surfaces - Potting Room;
- Floor Drain/Pit - Central Boiler Room;
- Boiler Blowdown Pit – Central Boiler Room;
- Floor Drain/Pit – Tumbling Room;
- Floor Drain/Pit – Tumbling Room;
- Floor Drain/Pit – Hardening Room;
- Hazardous Waste Storage Area – West End of Building;
- Spray Booths;
- Oily Floor Surfaces In Drill Press Area;
- Solvent Storage Area – Northeast Corner of Building;
- Broaching Room;
- Eastern Portion of Building Constructed Over Backfilled Former Sand Mine;
- Former Storm Water Drywell Beneath Hard Coating (Plating Room);
- Former Storm Water Drywell Beneath Car Detailing Shop – Southwest Corner of Building;
- Four potential USTs reported to have contained kerosene, mineral spirits, 1,1,1-TCA and waste oil; and
- 17 Parking Lot Storm Water Drywells.

Based on the Phase II screening, a number of the above AOCs were identified as having historically discharged compounds and metals in Site media (soils, soil vapor and indoor air) detected at concentrations exceeding NY State SCGs in contravention of the ROD. A Corrective Measures Plan with recommendations to address each AOC was submitted to the NYSDEC in the 2020 Site Inspection Report/Periodic Review Report (Section 4.19.1). Recommendations included:

- Continued design/build/installation of the SSDS, and development of a supplemental Engineering Control Plan to meet the remediation goals applicable to historic VOCs in soil vapor and indoor air quality, and conform with current NYSDOH guidance to control VOCs in soil vapor beneath the building and mitigate unacceptable VOC impacts to indoor air quality;

- Continued operation of the SVE system until it can be confirmed that operation as a protective measure is no longer required per the requirements of the ROD;
- Typical storm water structure maintenance be performed at all but one storm water drywell location (DW-05 below) to remove impacted sediments/soils.
- Cleaning and/or removal and replacement of PCB-impacted concrete;
- Concrete slab removal and soil excavation with end-point sampling at eight AOCs within the Site building;
- Disposal of all impacted concrete, soil, and wash waters at appropriately permitted waste disposal facilities; and
- "*No Further Action"* for some AOCs based on the:
  - Limited number of compounds exceeding a respective Part 375 Commercial and Protection of Groundwater Soil Cleanup Objectives (SCOs);
  - Exceedances are very minor; and
  - Soils are covered by the building concrete slab and not readily accessible to tenant occupants or precipitation that would result in leaching to groundwater.

The above listed recommended actions, except at stormwater drywell DW-05 were completed during 2020 and full details are presented in the Site Management Corrective Measures Construction Completion Report New Owner Modifications (Section 2.4.26) required by the 2023 Order on Consent (Section 2.4.20). Relevant details are presented herein as related to certain components of this SMP.

#### *2.4.16.2 Stormwater Drywell DW-05*

Soils in one of the stormwater drywells known as DW-05 were found to contain PCB impacts in soil associated exceeding the New York State Part 375-6 Industrial and Protection of Groundwater SCOs for PCBs to a depth of 26 to 27 feet bgs, and to a lesser degree and shallower impacts from copper, lead and nickel.

Between October 2019 and February 2021, four subsequent phases of soil borings were performed to delineate the horizontal and vertical extents of PCBs, copper, lead and nickel in soil exceeding their respective NYS Part 375 Protection of Groundwater SCOs.

A groundwater monitoring well (DW-05) was also installed immediately adjacent to DW-05 with its screen set from 45 – 55 feet bgs intended to straddle the water table surface. Groundwater samples were collected in November 2020 and January 2021.

PCBs, copper, lead and nickel impacts in soil associated with this structure have been fully vertically and horizontally delineated to the Part 375 Protection of Groundwater SCOs, and the absence of PCB impacts to groundwater beneath DW-05 has been confirmed.

Remediation of PCBs at DW-05 was the focus of the 2023 Site Management Corrective Measures Work Plan for the PCBs near "DW-5" required by the 2023 Order on Consent (Section 2.4.20) and final Site Management Corrective Measures Construction Completion Report for the PCBs near "DW-05" (Section 2.4.28).

### *2.4.17 2020 Order On Consent*

In 2020, Alkier Steel voluntarily entered into an Order on Consent, Index # CO 1-20200730-128, Site #130100 with NYSDEC that was fully executed on 15 September 2020 and became effective 10-days thereafter on 25 September 2020 (2020 Order), in which Alkier Steel agreed to implement Site management required in the SMP including corrective measures as required by Section 7.6 of the SMP and the obligations under a forthcoming EE.

The 2020 Order established an administrative mechanism for NYSDEC to oversee Alkier Steel's implementation the Site management activities, and corrective measures including continued operation of the SVE system, and to address previously unknown residual historic contamination identified at the Site during Alkier Steel's due diligence environmental screening activities. Alkier Steel's election to perform this work is not an admission of liability for the historic contamination, nor did Alkier Steel, except to the extent set forth in the 2020 Order, assume any of Allen's obligations or liability under the 2003 Order.

### 2.4.18 2021 Environmental Easement

On 20 May 2021, NYSDEC granted by full execution the EE for the Site that was recorded with the Nassau County Clerk. The EE requires compliance with the most current SMP and all ECs and ICs placed on the Site. The EE will be maintained as part of the conveyance of the property to the present tenant in-common fee owners.

Components of the EE include:

- The Site ("Controlled Property") may be used for Commercial purposes as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial purposes as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or NCHD to render it safe for use as drinking water or for industrial purposes, and the user must notify and obtain written approval to do so from NYSDEC;
- Groundwater and other environmental monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in the manner defined in the SMP;
- All future activities on the property that will disturb remaining contaminated materials must be conducted in a manner defined in the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, inspection, and reporting of any mechanical and physical components of the remedy shall be performed as defined in the SMP;
- 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 in the EE; and
- The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6 NYCRR Part 375-1.8(g)(2)(i) and (ii), and the above-stated ECs may not be discontinued without amendment or extinguishment of the EE.

### 2.4.19 Site Inspection Report/Periodic Review Reports 2020 - 2022

#### 2.4.19.1 2020 Site Inspection Report/Periodic Review Report

In August 2020, Alkier Steel submitted a Site Inspection Report/Periodic Review Report (SIR/PRR) and Corrective Measures Plan (CMP) intended to:

- Fulfill the annual Site inspection reporting and certification for the existing ICs and the ECs under the SMP;
- Document protective measures undertaken within the building prior to occupancies by the current tenants that included:
  - Restoration of the SVE system to full operation in the fall of 2019;
  - Installation and operation of a SSDS beneath the eastern, only occupied portion of the building to vent soil vapor to the atmosphere at the rooftop away from heating ventilation and cooling (HVAC) equipment air intakes and building openings within that eastern tenant space in early 2020, and present an SSDS OM&M plan; and
  - Decommissioning (empty, clean, dismantle and dispose of) nine (9) above ground storage tanks (AST) within the building associated Allen's former manufacturing operations in early 2020. The ASTs were registered with the NCDH who inspected the tank decommissioning/cleaning/closure activities.
- Convey the scope and findings of the environmental screening activities undertaken by Alkier Steel pursuant to the real estate transaction that identified previously unknown residual historic contamination in Site media (soils, soil vapor, and indoor air) at concentrations exceeding NY State SCGs at certain AOCs; and
- Present a proposed CMP to address the AOCs containing previously unknown residual historic contamination consistent with the remedial goals of the selected remedy in the ROD intended to be protective of human health and the environment.

In the fall of 2020, Alkier Steel completed corrective measures prior to building space occupancies by the current tenants that addressed residual historic contamination which included:

- Multi-phase concrete floor slab removal/soil excavation, sampling, backfill, and concrete floor slab restoration at multiple areas of concern within and beneath the building;
- Parking lot stormwater drywell cleanouts (except DW-05 to be addressed separately under another work plan per the 2023 Order which is discussed below; and
- Completed installation of the building wide SSDS that generates a vacuum field beneath the entire 120,000 $ft^2$ building footprint and vents sub-slab soil vapor to the atmosphere at the rooftop away from HVAC equipment air intakes and building openings.

The results of the corrective measures actions were reported in the Site Management Corrective Measures Construction Completion Report New Owner Modifications (Section 4.2.26) required by the 2023 Order on Consent (Section 2.4.20).

#### *2.4.19.2 2021 Site Inspection Report/Periodic Review Report*

In August 2021, Alkier Steel submitted a SIR/PRR intended to:

- Fulfill the annual Site inspection reporting and certification for the existing ICs and the ECs under the SMP; and
- Document protective measures undertaken within the building prior to occupancies by the current tenants that included:
  - Continued operation of the SVE system; and
  - Completion of installation of the aforementioned building wide SSDS in late 2020 and present an updated SSDS OM&M plan.

#### *2.4.19.3 2022 Site Inspection Report/Periodic Review Report*

In August 2022, Alkier Steel submitted a SIR/PRR intended to:

- Fulfill the annual Site inspection reporting and certification for the existing ICs and the ECs under the SMP, and
- Document continued operation of the SVE system and the building wide SSDS.

### *2.4.20 March 2023 Order on Consent and Administrative Settlement*

In March 2023, Alkier Steel entered into the 2023 Order, Index No. CO 1-20220106-6, Site #130100 that was fully executed on 29 March 2023 and became effective 10-days thereafter on 8 April 2023 (2023 Order). The 2023 Order specifies that it supersedes and replaces the prior 2020 Order with respect to Alkier Steel's obligations thereunder while the original 2003 Order remains in full force and effect. This SMP is one of several deliverables required by the 2023 Order. The full list of deliverables required by the 2023 Order include:

- Citizen Participation Plan (CPP);
- Records Search Report (RSR);
- SVE Site Management Corrective Measures Plan (SVE CMP);
- Site Management Corrective Measures Work Plan for the PCBs near “DW-5”;
- Updated Site Management Plan (SMP); and
- Site Management Corrective Measures Construction Completion Report New Owner Modifications (CMCCR).

### *2.4.21 Citizen Participation Plan (CPP)*

NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social well-being. NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions. Involving citizens affected and interested in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public

health and the environment;

- Improving public access to, and understanding of, issues and information related to a particular site and that site's remedial process;
- Providing citizens with early and continuing opportunities to participate in NYSDEC's site investigation and cleanup process;
- Ensuring that NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community; and
- Encouraging dialogue to promote the exchange of information among the affected/interested public, State agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision making.

The Citizen Participation Plan (CPP) was prepared using the NYSDEC's standard template and provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the Site above. The public information and involvement program will be carried out with assistance, as appropriate, from the responsible parties. Topics and information provided in the CPP include:

- What is New York's State Superfund Program
- Citizen Participation Activities
- Major Issues of Public Concern
- Site Information
- Site Management and Cleanup Process
- Project Contacts and Locations of Reports and Information
- Site Contact List
- Site Location and Layout Maps
- State Superfund Program Process

The CPP was submitted to NYSDEC on 28 April 2023 and accepted by NYSDEC on 5 May 2023.

### *2.4.22 Records Search Report*

The RSR was prepared pursuant the requirements of the 2023 Order to provide the NYSDEC with a single document that:

- Details all environmental data and information within Respondent's or Respondent's agents' or consultants' possession or control regarding environmental conditions at or emanating from the Site.
- A comprehensive list of all existing relevant reports with titles, authors, and subject matter, as well as a description of the results of all previous investigations of the Site and of areas immediately surrounding the Site which are or might be affected by contamination at the Site, including all available topographic and property surveys, engineering studies, and aerial photographs.
- A concise summary of information (as available), held by Respondent and Respondent's attorneys and consultants with respect to:
  - (i) a history and description of the Site, including the nature of operations;
  - (ii) the types, quantities, physical state, locations, methods, and dates of disposal or release of hazardous waste at or emanating from the Site;
  - (iii) a description of current Site security (i.e., fencing, posting, etc.); and
  - (iv) the names and addresses of all persons responsible for disposal of hazardous waste, including the dates of such disposal and any proof linking each such person responsible with the hazardous wastes identified.

The RSR is organized to present a summary Site description, overview of the physical setting, and current use, and details all environmental data and information within Respondent's or Respondent's agents' or consultants' possession or control regarding environmental conditions at or emanating from the Site.

Sections 2 presents the Site summary background information including a physical description of the Site, overview of the physical setting including topography, hydrology, geology and hydrogeology and current use.

Section 3 presents a comprehensive list of all existing relevant reports with titles, authors, and subject matter, including all available topographic and property surveys, engineering studies, and aerial photographs. Note that the information collectively in the "Respondent's or Respondent's agents' or consultants' possession" is

that which was provided by the Seller (Allen), generated by the Respondent and its consultants, and/or available from the NYSDEC websites/databases such as historical administrative documents, waste manifest records and petroleum spills.

Section 4 presents a historical summary of Site development, manufacturing operations, environmental administrative actions, investigations, remedial activities and the results thereof. The Respondent does not represent the accuracy of all information concerning Allen's operations prior to taking ownership of the Site, which is anecdotal from prior Site reports and administrative documents such as the 2003 Order, the 2006 Record of Decision (2006 ROD) and various investigative and remedial reports submitted by Allen that are part of the Administrative Record for the Site.

The RSR was submitted to NYSDEC on 9 May 2023 and accepted by NYSDEC on 11 May 2023.

### *2.4.23 SVE Site Management Corrective Measures Work Plan (SVE CMWP)*

The SVE CMWP was prepared pursuant the requirements of the 2023 Order. The SVE CMWP presented a plan of activities and a schedule for repair, restart, operation and evaluation of the existing SVE system that presented:

- A historical SVE data summary evaluation of the existing system;
- Identified operational needs and repairs;
- A project schedule;
- Sampling and testing protocols to demonstrate system performance and confirm that significant rebound of chlorinated volatile organic compounds (VOCs) in soil vapor is not occurring at the Site.

The goal of this SVE CMWP was to implement a field study to demonstrate that continued operation of the SVE system is:

- No longer providing beneficial residual chlorinated volatile organic compound (VOC) mass removal; and
- Redundant and unwarranted because the building-wide SSDS installed in 2019-2020 mitigates the potential for soil vapor intrusion into the building more efficiently and effectively than the SVE system. The SSDS affects a vacuum field beneath the entire 120,000-squarefoot ($ft^2$) building footprint venting the sub-slab soil vapor to the rooftop away from HVAC equipment air intakes.

The SVE CMWP was submitted to NYSDEC on 9 May 2023 and approved by the NYSDEC and the NYS Department of Health (NYSDOH) on 17 August 2023.

### *2.4.24 Site Management Corrective Measures Work Plan for the PCBs near "DW-05"*

The DW-5 Corrective Measures Work Plan (DW-05 CMWP) was prepared pursuant the requirements of the 2023 Order and was intended to address soils impacted within, adjacent to, and beneath a stormwater drywell identified as DW-05 at the Site. The DW-05 CMWP :

- Summarizes the scope and findings of the environmental investigations undertaken during 2020-2021 to successfully delineate the extent of PCBs in soil at DW-05 exceeding the 3,200 microgram per kilogram (µg/kg) Part 375 Protection of Groundwater Soil Cleanup Objective (SCO)[14], and confirm the absence of PCB impacts to groundwater beneath DW-05.
- Presents an evaluation of practical remedial approaches/technologies that were considered to mitigate PCB impacts in soil within, adjacent to, and beneath DW-05 exceeding the 10 mg/kg PCB presumptive remedy subsurface soil cleanup level allowed by CP-51/Soil Cleanup Guidance[15] for non-Brownfield Cleanup Program (BCP) sites where neither the unrestricted SCOs nor the ecological SCOs (ESCOs) are applied in the remedial program. The evaluation is summarized in a matrix-form using Threshold and Balancing Criteria specified in Chapter 4.3 of DER-10 / Technical Guidance for Site Investigation and Remediation (DER-10)[16], and considers the physical and logistical encumbrances present at, and in close proximity to DW-05, e.g., depth of impacts to be remediated, Long Island Railroad (LIRR) main line tracks, overhead high-voltage electrical lines, seismic/vibration issues for both the LIRR main line tracks, retaining wall, and the building foundation, etc.

14 https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf
15 https://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf, Commissioner's Policy–51 Section V, I., effective 12/03/2010.
16 https://www.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf

- Proposes the recommended remedial approach to mitigate PCB impacts in soil exceeding the10 mg/kg cleanup level within, adjacent to, and beneath DW-05.
- Serves as a Self-Implementing On-Site Cleanup and Disposal Plan (SIP) in accordance with requirements set forth in Subpart D, Chapter 61 of the Toxic Substances Control Act (TSCA: 40 CFR § 761)[17] and satisfies the basic notification requirements to the United States Environmental Protection Agency (USEPA) under 40 CFR 761.61(a)(3).

  PCBs are regulated under TSCA that is administered by the USEPA. PCBs have been detected at concentrations above 50 mg/kg in the affected soils at DW-05 and because the date, source(s) nor original concentration of PCBs are unknown, the presence of PCBs at any concentration in soil are considered a TSCA-regulated remediation waste[18] subject to applicable parts of the TSCA regulation including 40CFR § 761.125 – Requirements for PCB Spill Cleanup[19].
- Was submitted to both NYSDEC (lead agency for the Site) and USEPA and assumed that NYSDEC will remain lead oversight agency.

The original DW-05 CMWP was submitted to NYSDEC on 28 April 2023 and the final document was approved by NYSDEC and NYSDOH on 7 November 2023.

### *2.4.25 Updated Site Management Plan (SMP)*

This updated SMP was prepared pursuant the requirements of the 2023 Order. The objective of the 2024 SMP is to provide for the Site management of residual on-Site soil contamination and all associated ICs and ECs, and any associated monitoring and reporting (including the recently installed SSDS system) as well as any necessary monitoring and/or operation and maintenance of the remedy.

Further details concerning the purpose and requirements of this document are described in Section 1 and Sections 3 through 7.

Section 2 presents:

- The Site summary background information including a physical description of the Site, an overview of the physical setting including topography, hydrology, geology and hydrogeology, and description of current use.
- A summary of information concerning Site development/ownership and the nature of Site manufacturing operations.
- A detailed historical summary of environmental administrative actions, investigations, studies, remedial activities, and the results thereof.
- The established Remedial Action Objectives for the Site.
- A summary of remaining Site contamination.

### *2.4.26 Site Management Corrective Measures Construction Completion Report New Owner Modifications*

Site Management Corrective Measures Construction Completion Report New Owner Modifications (CMCCR) was prepared pursuant the requirements of the 2023 Order.

The 2023 Order states that the objective of this document is to detail the investigations and remedial activities conducted at the Site since March 22, 2006[20]. This includes investigations and remedial actions undertaken by Allen and their consultants/engineers between March 2006 and 2019, and then by Alkier Steel (current

17 https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol34/xml/CFR-2019-title40-vol34-part761.xml

18 As defined in 40 CFR §761.3: PCB remediation waste means waste containing PCBs as a result of a spill, release, or other unauthorized disposal, at the following concentrations: Materials disposed of prior to April 18, 1978, that are currently at concentrations >50 ppm PCBs, regardless of the concentration of the original spill; materials which are currently at any volume or concentration where the original source was >500 ppm PCBs beginning on April 18, 1978, or >50 ppm PCBs beginning on July 2, 1979; and materials which are currently at any concentration if the PCBs are spilled or released from a source not authorized for use under this part. PCB remediation waste means soil, rags, and other debris generated as a result of any PCB spill cleanup, including, but not limited to: 1) Environmental media containing PCBs, such as soil and gravel; dredged materials, such as sediments, settled sediment fines, and aqueous decantate from sediment; 2) Sewage sludge containing <50 ppm PCBs and not in use according to §761.20(a)(4); PCB sewage sludge; commercial or industrial sludge contaminated as the result of a spill of PCBs including sludges located in or removed from any pollution control device; aqueous decantate from an industrial sludge; and 3) Buildings and other man-made structures (such as concrete floors, wood floors, or walls contaminated from a leaking PCB or PCB-Contaminated Transformer), porous surfaces, and non-porous surfaces.

19 https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol34/xml/CFR-2019-title40-vol34-part761.xml#seqnum761.125

20 Effective data of the NYSDEC Record of Decision which set forth Remediation Goals and the Selected Remedy for the Site.

owner(s) of the Site who purchased the Site in 2019) during 2019 – 2021. Accordingly, the CMCCR:

- Presents summaries of those investigations and remedial actions completed by Allen and their consultants/engineers between March 2006 and 2019 are presented herein based upon available information as neither Alkier Steel nor ERM designed nor implemented any of those actions;
- Details the scope and findings of the environmental screening activities completed by Alkier Steel pursuant to the real estate transaction that identified historic compounds and metals in Site media (soils, soil vapor and indoor air) at concentrations exceeding NY State standards, criteria, and guidance (SCGs) at certain areas of concern (AOCs); and
- Documents measures completed in accordance with the Corrective Measures Plan (CMP) presented as part of the Site Inspection Report/Periodic Review Report and Corrective Measures Plan submitted to NYSDEC on 27 August 2020 to address a series of AOCs containing historic contamination that were not previously identified in the during earlier investigative and remedial actions.

A summary of the remedial actions successfully completed by Alkier Steel during 2020-2021 is presented in the following subsections.

### *2.4.26.1 Stormwater Drywells*

### *DWs 01, 02, 03, 06, 07, 10, 11 & 12*

One or more VOCs, SVOCs or metals were detected in soil samples collected from the eight (8) parking lot stormwater drywells (drywells DWs 01, 02, 03, 06, 07, 10, 11 & 12) at concentrations exceeding their respective Part 375 Groundwater Protection SCOs.

The post-cleanout sample results confirm successful removal of impacted soils where compounds or metal concentrations are below their respective SCOs except at DW-03 where the concentration of chrysene slightly increased from 1.31 mg/kg to 1.93 mg/kg still exceeding its respective SCO of 1 mg/kg. No further action was taken because the concentrations only modestly exceed the SCO for chrysene (a PAH associated with the tar in asphalt and/or vehicle motor oil), semi-VOCs have limited mobility and tend to bind to soil particles and organic materials, and it can be expected that the soils in the drywells will be re-contaminated with PAHs over time as a result of stormwater runoff from the asphalt parking lot surface.

### *Dry Wells DW-15 & DW-20*

Soils withing dry Well DW-15 and drywell DW-20 were impacted by a limited number of metals where concentrations exceeded their respective Part 375 Groundwater Protection SCOs as follow: DW-15 (nickel and hexavalent chromium), and DW-20 (arsenic, copper, and nickel).

Based on the soil boring data, soil impacts above SCOs were limited in vertical extent within each drywell and did not extend horizontally. Consequently, excavation outside each structure was not required, and one to three feet of impacted soils were removed from within each drywell using a vactor/guzzler truck to the depth of the bottom of the first clean sample interval, i.e., ~six feet bgs in DW-15 and ~18.5 in DW-20 taking care not to undermine the bottom leaching ring of each structure.

### *2.4.26.2 Drill Press and Potting Room Concrete Slab/Trench Drain PCB Impacts*

Concrete slab surfaces in the Potting Room and Drill Press Area including the Potting Room Trench Drain were oil-stained/coated or covered with dust, dirt, and grime. PCB concentrations in six of the seven (7) samples were ranged 12.7 µg/100 cm² - 106 µg/100 cm².

Future use of these areas would likely be considered “high occupancy” and the concrete slab is considered a “non-impervious” solid surface defined in 40 CFR § 761.

### *Drill Press Area*

The extents of the affected concrete floor slab area were clearly visible as indicated by dark staining of the floor surface measuring 50 feet by 101 feet (5,050 ft$^2$). Shallow soil screening samples collected from directly beneath the floor slab in this area indicated PCB concentrations of <0.034 mg/kg to 0.115 mg/kg, far below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg.

Cleaning/scarification of the concrete surface was considered but rejected due to the uncertainty of its effectiveness, and removal and replacement of the impacted concrete floor slab was the selected remedial approach. The entire 50-foot by 101-foot concrete floor slab area was sawcut and removed for disposal as PCB remediation waste.

An additional eight (8) shallow soil samples were collected once the floor slab was removed to supplement the initial four (4) soil samples for a total of 12 soil samples or one sample per 420 $ft^2$. PCB concentrations ranged from <0.032 mg/kg to 0.115 mg/kg with six of the locations being non-detect, and far below even the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg. Soil excavation and disposal was not warranted nor performed. The floor was subsequently replaced with a new reinforced concrete floor slab. The concrete was disposed of as PCB remediation waste.

### *Potting Room Concrete Slab/Trench Drain*

PCBs (Aroclor 1254) were detected in the three wipe samples collected from the Potting Room concrete floor slab at concentrations that ranged 7.8 µg/100 $cm^2$ - 22.6 µg/100 $cm^2$.

Shallow soil screening samples collected directly from beneath the concrete floor slab of the Potting Room indicated PCBs (Aroclor 1254) only at concentrations of 0.0588 mg/kg, 0.0247 mg/kg and 0.125 mg/kg, respectively which are far below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg.

Shallow soil screening samples collected directly beneath the concrete base of the trench drain in the former Potting Room indicated PCBs (Aroclor 1254) at concentrations of 0.161 mg/kg and 4.31 mg/kg, respectively. Subsequent soil borings/soil sampling successfully delineated PCB impacts in soil at the Potting Room Trench Drain. PCB concentrations in the deepest sample at each delineation soil boring location were below the New York State Part 375-6 Industrial and Protection of Groundwater SCOs for PCBs.

Nickel was also detected in a shallow soil screening soil sample at a concentration of 189 mg/kg exceeding its respective New York State Part 375 Protection of Groundwater SCO of 130 mg/kg.

Removal and replacement of the Potting Room concrete floor slab, the concrete trench, and remedial excavation and disposal of PCB and nickel-impacted soils beneath the Potting Room Trench Drain were completed in three phases of excavation and post-excavation sidewall and bottom soil sampling for PCBs and nickel during October – November 2020. An electrical line in conduit was encountered on the south end of the excavation. Care was taken during excavation activities not to significantly undermine the concrete footer for the adjacent east and north concrete block bearing walls or contact the electrical conduit. Soil was removed up to the eastern and northern concrete block wall footers.

Post-excavation soil sample PCB and nickel analytical results were compared to their respective New York State Part 375-6 Industrial Use and Protection of Groundwater SCOs. Final excavation extent PCB concentrations ranged from <0.040 mg/kg to 0.487 mg/kg, all below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg. All final excavation extent nickel concentrations ranged from 4.3 mg/kg to 57.4 mg/kg, all below the New York State Part 375 Protection of Groundwater SCO of 130 mg/kg.

The excavation was backfilled with clean sand, the remainder of the room concrete floor slab removed, and the floor was subsequently replaced with a new reinforced concrete floor slab. The concrete and excavated soils were disposed of as PCB remediation waste.

## *2.4.26.3 Other Areas*

A number of VOCs, SVOCs and metals were detected above their respective Part 375 Industrial and Protection of Groundwater SCOs in shallow sub-slab soil samples.

These locations were not sampled during the RI. Further delineation and/or remedial actions were completed to address each AOC, attain SCOs, and meet the remedial goals.

A summary of exceedances by location is presented below along with color shading indicating recommendations for "*No Further Action*" or "*Remedial Excavation and Post-Excavation Sampling*".

Recommendations for "*No Further Action"* were based on the:

- Limited number of compounds exceeding a respective Part 375 SCO;
- Exceedances are very minor; and
- Soils are covered by the building concrete slab and not readily accessible to Property occupants or precipitation that would result in leaching to groundwater.

It was recommended that:

- Shallow soil excavations be performed at the locations identified in the table below as "*Remedial Excavation and Post-Excavation Sampling Recommended*".
- The concrete slab/structure be removed, shallow excavations performed and post-excavation sidewall and bottom soil samples are recommended at each location to confirm the efficacy of the excavation, i.e., any remaining detected compound concentrations are less than their respective Part 375 Groundwater Protection SCOs.
- The post-excavation samples be analyzed for the analytical fraction, i.e., VOCs, SVOCs, PCBs or metals that were exceeded at that location.
- Removed concrete and soils be profiled and disposed of at an appropriate, permitted facility.

Green Shading = No Further Action Warranted Nor Recommended

Yellow Shading = Remedial Excavation and Post-Excavation Sampling Recommended

| Area of Concern/(#) | Sample Identification | Analyte | Detected Concentration | NYS PART 375 SCOs |
|---|---|---|---|---|
| Eastern Building Area | SB-01 (2-3) | Acetone | 0.0731 mg/kg | Protection of Groundwater 0.05 mg/kg |
| | SB-01 (2-3) | Mercury | 2.2 mg/kg | Protection of Groundwater 0.73 mg/kg |
| Eastern Building Area | SB-02 (2-3) | Acetone | 51.3 mg/kg | Protection of Groundwater 0.05 mg/kg |
| | SB-02 (20-22) | Acetone | 53.4 mg/kg | Protection of Groundwater 0.05 mg/kg |
| Eastern Building Area | SB-04 (2-3) | Benzo(a)anthracene | 1.040 mg/kg | Protection of Groundwater 1 mg/kg |
| | SB-04 (2-3) | Chrysene | 1.160 mg/kg | Protection of Groundwater 1 mg/kg |
| | SB-04 (18-20) | Benzo(a)anthracene | 1.580 mg/kg | Protection of Groundwater 1 mg/kg |
| | SB-04 (18-20) | Chrysene | 1.560 mg/kg | Protection of Groundwater 1 mg/kg |
| Broaching Room | SB-12 (2-3) | Acetone | 0.0533 mg/kg | Protection of Groundwater 0.05 mg/kg |
| Broaching Room | SB-14 (2-3) | Acetone | 0.0695 mg/kg | Protection of Groundwater 0.05 mg/kg |
| Tumbling Room South Floor Drain | SB-09 (2) | Cadmium | 34.7 mg/kg | Protection of Groundwater 7.5 mg/kg |
| | SB-09 (2) | Copper | 3,120 mg/kg | Protection of Groundwater 1,720 mg/kg |
| | SB-09 (2) | Lead | 964 mg/kg | Protection of Groundwater 450 mg/kg |
| | SB-09 (2) | Nickel | 675 mg/kg | Protection of Groundwater 130 mg/kg |
| Central Boiler Room Boiler Blowdown Pit | SB-10 (3) | PCBs (Aroclor 1254) | 10.3 mg/kg | Protection of Groundwater 3.2 mg/kg |
| Central Boiler Room Floor Drain | SB-21 (1-2) | Cadmium | 11.7 mg/kg | Protection of Groundwater 7.5 mg/kg |
| | SB-21 (1-2) | Lead | 520 mg/kg | Protection of Groundwater 450 mg/kg |
| | SB-21 (1-2) | Mercury | 1.2 mg/kg | Protection of Groundwater 0.73 mg/kg |
| | SB-21 (1-2) | Nickel | 408 mg/kg | Protection of Groundwater 130 mg/kg |
| Tumbling Room North Floor Drain | SB-22 (1-2) | Acetone | 0.154 mg/kg | Protection of Groundwater 0.05 mg/kg |
| | SB-22 (1-2) | PCBs (Aroclor 1254) | 6.06 mg/kg | Protection of Groundwater 3.2 mg/kg |
| | SB-22 (1-2) | Mercury | 1.1 mg/kg | Protection of Groundwater 0.73 mg/kg |
| | SB-22 (1-2) | Nickel | 152 mg/kg | Protection of Groundwater 130 mg/kg |
| Spray Booth | SB-35 | Benzo(a)anthracene | 1.03 mg/kg | Protection of Groundwater 1 mg/kg |
| | SB-35 | PCBs (Aroclor 1254) | 9.43 mg/kg | Protection of Groundwater 3.2 mg/kg |
| | SB-35 | Nickel | 253 mg/kg | Protection of Groundwater 130 mg/kg |

| Area of Concern/(#) | Sample Identification | Analyte | Detected Concentration | NYS PART 375 SCOs |
|---|---|---|---|---|
| Blackening Room Floor Drain | SB-36 | Mercury | 1.9 mg/kg | Protection of Groundwater 0.73 mg/kg |
| | SB-36 | Hexavalent Chromium | 30.3 mg/kg | Protection of Groundwater 19 mg/kg |

### *Tumbling Room South Floor Drain*

A shallow soil screening sample was collected from the soil in the Tumbling Room South Floor Drain and copper, cadmium, lead, and nickel were detected at concentrations exceeding their respective New York State Part 375-6 Protection of Groundwater SCOs.

Remedial excavation that included opening the concrete floor slab, excavation and disposal of metals-impacted soils was recommended. The work was completed in three phases of excavation and post-excavation sidewall and bottom soil sampling for PCBs and nickel during October 2020. Stained soils with a solvent odor and elevated PID readings were encountered during the initial excavation, and the analytical suite for post-excavation soil samples was expanded from TAL metals to TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, TAL metals, cyanide, and hexavalent chromium with redox potential. Care was taken during excavation activities not to significantly undermine the concrete footer for the adjacent western concrete block bearing wall but the excavation was expanded westward to the other side of the wall during the second phase excavation to access and remove all visibly stained and odorous soils.

Analytical results of the first and second phase post-excavation bottom and sidewall samples indicated concentrations of 1,1-dichloroethane (1,1-DCA), 1,1,1-trichloroethane (1,1,1-TCA), SVOCs (PAHs), heptachlor epoxide, PCBs, copper, lead, and nickel at concentrations exceeding their respective New York State Part 375 Protection of Groundwater SCOs, and in two separate samples, for the Industrial SCOs for PCBs and benzo(a) pyrene. A third phase of expanded excavation was required to complete the remediation at this location.

Detected compound concentrations were compared to their respective New York State Part 375-6 Industrial Use and Protection of Groundwater SCOs. Final post-excavation soil sampling results indicated successful remediation where all analyte concentrations were less than their respective Protection of Groundwater and Industrial SCOs including PCBs concentrations that were below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg.

The excavation was backfilled with clean sand and the floor was subsequently repaired with new reinforced concrete. The concrete and excavated soils were disposed of as PCB remediation waste.

### *Central Boiler Room Boiler Blowdown Pit and Floor Drain*

Shallow soil screening samples were collected from the soil in the Central Boiler Room Boiler Blowdown Pit and the Floor Drain, respectively. PCBs were detected in the soil sample collected from Blowdown pit at concentrations exceeding New York State Part 375-6 Protection of Groundwater SCO of 3.2 mg/kg. Cadmium, lead, mercury, and nickel were detected in the soil sample collected from the Floor Drain at concentrations exceeding their respective New York State Part 375-6 Protection of Groundwater SCOs.

Remedial excavation that included opening the concrete floor slab, excavation and disposal of PCBs and metals-impacted soils was recommended. The work was completed in two phases of excavation and post-excavation sidewall and bottom soil sampling for PCBs and nickel during October 2020. Because the Blowdown Pit and Floor Drain were in close proximity to one another, the work was addressed with one excavation.

Post-excavation soil sample analytical results were compared to their respective New York State Part 375-6 Industrial Use and Protection of Groundwater SCOs.

Final post-excavation soil sampling results indicated successful remediation where all analyte concentrations were less than their respective Protection of Groundwater and Industrial SCOs including PCBs concentrations that were far below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg.

The excavation was backfilled with clean sand and the floor was subsequently repaired with a new reinforced concrete. The concrete and excavated soils were disposed of as PCB remediation waste.

### *Tumbling Room North Floor Drain*

A shallow soil screening sample was collected from the soil in the Tumbling Room South Floor Drain and acetone, PCBs, and nickel were detected at concentrations exceeding their respective New York State Part 375-6 Protection of Groundwater SCOs.

Remedial excavation that included opening the concrete floor slab, excavation and disposal of VOC, PCBs and metals-impacted soils was recommended. The work was completed in two phases of excavation and post-excavation sidewall and bottom soil sampling for VOCs, PCBs, mercury, and nickel during October 2020.

Detected compound concentrations were compared to their respective New York State Part 375-6 Industrial Use and Protection of Groundwater SCOs. Final post-excavation soil sampling results indicated successful remediation where all analyte concentrations were less than their respective Protection of Groundwater and Industrial SCOs including PCBs concentrations that were far below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg.

The excavation was backfilled with clean sand and the floor was subsequently repaired with a new reinforced concrete. The concrete and excavated soils were disposed of as PCB remediation waste.

### *Spray Booth*

A shallow soil screening sample was collected from the soil directly beneath the Spray Booth, and benzo(a)anthracene, PCBs, and nickel were detected at concentrations exceeding their respective New York State Part 375-6 Protection of Groundwater SCOs.

Remedial excavation that included opening the concrete floor slab, excavation, and disposal of SVOC, PCBs and metals-impacted soils was recommended. The work was completed in three phases of excavation and post-excavation sidewall and bottom soil sampling for SVOCs, PCBs, and nickel during October 2020. Care was taken during excavation activities not to significantly undermine the concrete footer for the northern concrete block bearing wall or the adjacent building column footer. Accordingly, the third phase of excavation was terminated at the north wall footer and a post-excavation sample was collected from beneath the footer.

Detected compound concentrations were compared to their respective New York State Part 375-6 Industrial Use and Protection of Groundwater SCOs. Final post-excavation soil sampling results indicated successful horizontal and vertical remediation where all analyte concentrations were less than their respective Protection of Groundwater and Industrial SCOs except for the sample collected beneath the northern bearing wall footer where PCBs concentrations in that sample were 12.7 mg/kg.

No further excavation could be attempted due to concerns of undermining the northern concrete block bearing wall and building column footer and the excavation was backfilled with clean sand and the floor was subsequently repaired with a new reinforced concrete. The concrete and excavated soils were disposed of as PCB remediation waste.

### *Blackening Room Floor Drain*

A shallow soil screening sample was collected from the soil directly beneath the Spray Booth, and mercury and hexavalent chromium were detected at concentrations exceeding their respective New York State Part 375-6 Protection of Groundwater SCOs.

Remedial excavation that included opening the concrete floor slab, excavation, and disposal of metals-impacted soils was recommended. The work was completed in one phase of excavation and post-excavation sidewall and bottom soil sampling for mercury and hexavalent chromium during October 2020.

Detected compound concentrations were compared to their respective New York State Part 375-6 Industrial Use and Protection of Groundwater SCOs. Final post-excavation soil sampling results indicated successful horizontal and vertical remediation where all analyte concentrations were less than their respective Protection of Groundwater and Industrial SCOs.

The excavation was backfilled with clean sand and the floor was subsequently repaired with a new reinforced concrete. The small volume of concrete and excavated soils were bulked with all of the PCB remediation waste from remedial activities at other AOCs.

The CMCCR was submitted to NYSDEC on 23 June 2023. Based on the information presented in the CMCCR New Owner Modifications and subsequent remedial actions discussed below, no further action is warranted nor recommended for the Site beyond the requirements of this SMP.

### *2.4.27 Site Management Corrective Measures Report for the Restart and Evaluation of the Soil Vapor Extraction ("SVE")*

The SVE System Corrective Measures Report (SVE CMR) was to present the results of the implementation of the Site Management Corrective Measures Work Plan for the Restart and Evaluation of the Soil Vapor Extraction (SVE CMWP). The work was implemented between May 2023 and January 2024.

The SVE operated for 99 days (exceeding the minimum anticipated of 30 days), and then shut down marking commencement of the four-month pulsed-mode operation ( i.e., one month of no operation followed by one month of operation for two off-on cycles), and then the soil rebound evaluation phase where samples were collected at 30 days and 60 days following pulse-mode shutdown.

The NYSDEC/NYSDOH's primary intended purpose of the SVE system was to remediate VOC-impacted soils just off of the Site in the LIRR right-of-way and to ensure that the SVE system ROI was sufficient to protect persons working in the on-Site building from exposure to VOC impacts emanating from the residual contamination in the former remedial excavations via the SVI exposure pathway.

The study results confirm that the SVE system is no longer capable of removing meaningful VOC mass from the subsurface because the system achieved asymptotic VOC removal after five years operation, and operation of the system to protect persons working within the building is redundant and unwarranted because the building-wide SSDS installed in 2019-2020 mitigates the potential for SVI into the building more efficiently and effectively than the SVE system.

In addition to the report narrative, supporting information that is presented includes:

- Annual building sub-slab pressure field testing plots for 2021, 2022 & 2023;
- A photolog;
- Soil vapor field sampling logs;
- Soil vapor data deliverable validation/Data Usability Report (DUSR);
- All soil vapor sample laboratory analytical data deliverables;
- Soil Vapor Extraction System - Operational Measurements;
- Soil Vapor Analytical Results By Event;
- Statistical Summary of Soil Vapor Analytical Results;
- Results compared to USEPA Vapor Intrusion Screening Levels (VISLs); and
- Plots of the soil vapor sample analytical results for select VOCs.

The report recommends and therein requests that NYSDEC/NYSDOH confirm concurrence and approve that further operation of the SVE system is not required.

The SVE CMR was submitted to NYSDEC on 23 April 2024 and the final document was approved by NYSDEC and NYSDOH on 15 May 2024.

With the NYSDEC/NYSDOH concurrence and approval that further operation of the SVE system is not required, the following closure/abandonment activities will be conducted:

- The electrical service to the SVE system will be deactivated;
- On-Site GAC will be disposed of offsite in accordance with prevailing regulations;
- All on-Site SVE wells, monitoring wells and SV monitoring points will be abandoned in-place in accordance with NYSDEC protocols;

- All sub-grade piping conveyance systems / vaults will either be removed or cut off below grade and plugged in-place;
- All SVE system components will be removed for reuse or scrap; and,
- The SMP will be revised to reflect that EC/ICs associated with the SVE system are no longer required.

### *2.4.28 Site Management Corrective Measures Construction Completion Report for the PCBs near 'DW-05'*

The Site Management Corrective Measures Construction Completion Report for the PCBs near "DW-05" (DW-05 SMCMCCR) was prepared to document the results of implementation of the DW-05 CMWP. The report documents the excavation and off-site disposal of soils (and residual decontamination waters) impacted by PCBs within, adjacent to, and beneath a stormwater drywell identified as DW-05 at the Site.

While some difficulties were encountered during the excavation phase of the work, the scope of work presented in the NYSDEC-approved DW-05 CMWP was safely and successfully implemented without incident from work site preparation through site restoration. The validated post-excavation composite soil sample PCB analytical results indicate residual concentrations ranging from 0.0365 mg/kg to 5.04 mg/kg. These results confirm residual PCB concentrations are far below the 10 mg/kg presumptive remedy subsurface soil cleanup level allowed by CP-51/Soil Cleanup Guidance[21] for non-Brownfield Cleanup Program (BCP) sites where neither the unrestricted SCOs nor the ecological SCOs are applied in the remedial program.

The document presents all supporting documentation that demonstrates the:

- Stormwater drywells on the Site have been registered under the USEPA Underground Injection Control (UIC) program;
- Slide-rail excavation system shoring design was prepared by a NYS-licensed professional engineer (NYS PE);
- Proper submittals were made to the Long Island Rail Road (LIRR) to ensure compliance with NYS Department of Transportation (DOT) and LIRR requirements and obtain a LIRR letter of no objection to the work;
- Clean sand for backfill of excavations was obtained from a facility permitted by the NYSDEC to handle and provide such materials where project-specific sampling results were submitted with an appropriate application to obtain an advance NYSDEC pre-approval;
- Asphalt subbase recycled concrete aggregate (RCA) backfill was obtained from a facility permitted by the NYSDEC to handle and provide such materials;
- Waste asphalt from pre-excavation work area preparation activities was disposed at a facility permitted by the NYSDEC to handle and receive such materials for recycling;
- Selected waste transporters and waste disposal facilities are authorized/properly permitted to handle/receive PCB remediation waste (excavated soil and water generated from equipment decontamination activities);
- Remediation wastes were delivered to intended disposal facilities by completed waste transport manifests with custody signatures;
- Waste asphalt was disposed of at the intended facility by completed forms with signatures;
- Backfill materials were obtained from approved sources by weight tickets and/or receipts;
- Community Air Monitoring Plan (CAMP) was implemented during all soil intrusive (excavation) or handling (load out into intermodal containers) except when precluded by precipitation events where the data/results do not indicate that VOC or particulate monitoring threshold levels were exceeded;
- Clean sand backfill and post-excavation soil samples were analyzed by a National Environmental Laboratory Accreditation Program (NELAP) and NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified laboratory using appropriate USEPA extraction and analytical methods;
- Associated data packages were reviewed and validated by a qualified and experienced environmental chemist, and all data were deemed valid and usable with only sporadic minor qualifications;

[21] https://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf, Commissioner's Policy–51 Section V, I., effective 12/03/2010. For Non-BCP sites: An acceptable presumptive remedy for soil where neither the unrestricted SCOs nor the ESCOs are applied in the remedial program may include a soil cleanup level for PCBs of 1 ppm in the surface soils and 10 ppm in subsurface soils.

- New as-built property survey prepared by a NYS-licensed land surveyor shows the location of the remediated DW-05 area;
- Owner of the Site recorded a Deed Restriction Notice with the Nassau County Clerk that identifies the presence of residual PCB-impacted soils at concentrations exceeding ; and
- Certification by a NYS PE in presented in Section 5.0 confirms oversight of the implementation of the DW-05 CMWP remedial program activities described herein, and that all construction activities were completed in substantial conformance with the Department-approved CMWP.

Based on the above and contents/appendices of the DW-05 SMCMCCR, no further actions are neither warranted nor recommended beyond maintenance of any ECs and ICs mandated by the existing 2021 EE and the final SMP for the Site.

The DW-05 SMCMCCR therefore requested that a no further action approval be issued for the DW-05 completed work described therein with conditions for maintenance of the ECs and ICs mandated by the existing EE and the final SMP.

The DW-05 SMCMCCR was submitted to NYSDEC on 6 May 2024 and the final document was approved by NYSDEC and NYSDOH on 14 May 2024.

## 2.5 Remedial Action Objectives

In March 2006, NYSDEC the 2006 ROD for the Site that established Remedial Goals and a Selected Remedy for the Site. Allen subsequently became the responsible Remedial Party and performed certain required investigations, remedial actions, monitoring, reporting and management of the Site in accordance with a 2003 Order, ROD and a SMP. Remediation goals and the Selected Remedy set forth in the 2006 ROD are listed below.

**ROD Remediation Goals:** The remediation goals for this Site are to eliminate or reduce to the extent possible:

- Exposures of persons at or around the Site to VOCs in soil vapor on-Site, VOCs in groundwater, PCBs in on-Site soil, and VOCs, PCBs and metals in off-Site soil;
- The release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards; and
- The release of contaminants from subsurface soil into indoor air through soil vapor.

Further, the remediation goals for the Site include attaining to the extent practicable:

- Ambient groundwater quality; and
- Recommended soil cleanup objectives for soil.[22]

According to the 2006 ROD, low levels of five VOCs were detected in groundwater at concentrations only marginally exceeding their respective SCGs, and it was determined that groundwater would not require active remediation due to the low levels of VOCs and the removal of the on-Site source soil.

The NYSDEC selected excavation, soil vapor extraction, engineering and institutional controls, and monitoring as the remedy for the Site. The NYSDOH concurred that the remedy is protective of human health.

**ROD Selected Remedy:** The Selected Remedy intended to address the above remedial goals included:

- An IRM that involved excavation of contaminated soils from two areas of the Site and the adjacent LIRR right-of-way area located to the south of the Property;
- Design, construction, and operation of a SVE system plus engineering controls/institutional controls to remediate the residual VOCs in the unsaturated soil at the IRM excavation, and to minimize the potential impacts to indoor air, i.e., controlling and/or eliminating the soil vapor exposure pathway;
- Excavation and off-Site disposal of impacted soils;
- Maintenance of the asphalt cover in the area of the residual on-Site PCB soil contamination;
- Groundwater profiling and construction of a monitoring well, depending upon profiling results, at one additional off-Site location;
- Development of a Site management plan to address residual contamination and any use restrictions;

22 https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf

- Imposition of an EE which would include restriction of the Site to commercial or industrial use and a restriction on the use of groundwater;
- Periodic certification of the ICs and ECs;
- Operation, monitoring, and maintenance of the remedy; and
- Monitoring of groundwater quality.

## 2.6 Remaining Contamination

### *2.6.1 On-Site Soil Contamination*

The first soil samples were collected in 1992 by NCHD from the area of the former drum storage and along the LIRR right-of-way. Soil was found to contain VOCs at levels above the then applicable NYSDEC cleanup guidance levels. The halogenated VOCs included: 1,1-DCA, ,1,1-TCA, 1,1-DCE, PCE and TCE. Non-halogenated VOCs that exceeded State cleanup guidance levels included: toluene, ethyl benzene, o-xylene and naphthalene. More specifically the compound concentrations exceeded the soil standards, criteria, and guidance levels then in use (soil SCGs – i.e., based on NYSDEC TAGM 4046 – Determination of Soil Cleanup Objectives and Cleanup Levels). Analyses for metals (using a sample preparation method to assess leachability) of the soils revealed only cadmium at concentrations above NYSDEC's cleanup guidance level.

During November 1995, in response to the aforementioned test results, the initial RI was designed and performed under NCDH oversight. This investigation included four data-gathering efforts: 1) a series of exploratory soil test borings advanced into the ground in the rear of the Site; 2) collection and analyses of shallow soil samples from along the LIRR embankment; 3) collection and analyses of sediment samples from inside two storm drains in the rear parking lot area and from inside one interior floor drain; and 4) the collection and analyses of two samples of uppermost groundwater at water table depth beneath the Site. Test results confirmed the presence of the same compounds and constituents first detected in the soil by NCDH.

#### *2.6.1.1 Eastern and Western Soil IRM Excavation Areas, and SVE Remedial Results*

In 2003, an extensive IRM remedial subsurface excavation effort through the parking lot and surrounding areas was conducted in the western portion of the Site, and a similar excavation was conducted in the eastern portion of the Site. The western excavation extended from the southern portion of the parking lot down along the embankment of the LIRR, and an LIRR representative ordered the excavation to be terminated approximately 4 to 5 feet from the railroad ties of the active LIRR track line. Approximately 770 tons of impacted soil was excavated from the two locations. End-point soil sample results from the southern sidewall exceeded NYSDEC clean-up objectives for VOCs, SVOCs, metals, and PCBs remained in place in the LIRR right-of-way. **Appendix E** provides figures and tables from the denoting the location and extents of the excavated areas, end-point sampling locations an associated data summary tables.

As discussed in Section 2.4.14 the SVE system was designed, installed and operated to fulfill the ROD remediation goals for this Site to eliminate or reduce to the extent possible exposures of persons at or around the Site to VOCs in soil vapor on-Site, and attain to the extent practicable soil cleanup objectives for soil. The COCs with respect to potential on-Site impacts were PCE, TCE and 1,1,1-TCA.

In particular, the SVE system (Section 2.4.14) was intended to mitigate residual VOC-impacted soil and control associated VOC-laden soil vapor below the existing parking lot in the area of the western excavation to ensure that the vapor migration pathway to the Allen building was protective of human health and the environment.

The SVE system commenced operation in 2008 and thereafter operation of the SVE system ensued through 2023 with a period of non-operation during 2018- 2019 with the Department's approval while the building was unoccupied and testing commenced to determine asymptotic conditions[23] were reached with respect to VOC concentrations. The SVE system was restarted in 2019 when the building was reoccupied and continued until

[23] Allen and its consultant concluded that asymptotic conditions were reached in 2013. More than 961 pounds of VOCs were recovered by the SVE system and PCE concentrations (the compound detected at the highest concentration in the soil vapor samples) decreased from 34,604 µg/m3 to 190 µg/m$^3$. Similarly, TCE decreased from 166 µg/m$^3$ to 31 µg/m$^3$, and 1,1,1-TCA decreased from 4,476 µg/m$^3$ to 72 µg/m$^3$. Overall, the total VOCs decreased from 39,436 µg/m$^3$ to 315 µg/m$^3$.

a shutdown period as part of a new asymptotic evaluation undertaken in 2023 pursuant to the Consent Order.

Based on the SVE operations/VOC removal information presented in Section 2.4.14 and the results of the NYSDEC-approved SVE CMR/shutdown request (Section 2.4.27), residual VOC concentrations in soil and soil vapor are likely to be greatly reduced whereas SVOC, metals and PCB impacts likely remain at concentrations indicated in the figures and tables in **Appendix E.**

### *2.6.1.2 Corrective Measures Completed By New Owner*

Final post-excavation soil sampling results at all but three locations indicated successful remediation of VOC, SVOC, PCB and metals-impacted soils from areas beneath the building completed by Alkier Steel in 2020 where all analyte concentrations were less than their respective Protection of Groundwater and Industrial SCOs including PCBs concentrations that were far below the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg.

There are three de minimus locations where PCBs remain at concentrations exceeding the New York State Part 375-6 Unrestricted Use SCO of 1 mg/kg but these are subsurface locations beneath the building and not readily accessible to building occupants.

The three de minimus locations beneath the building remediated by Alkier Steel in 2020 are:

- The Spray Booth where two sidewall samples were collected; 1) the sidewall sample collected beneath the northern bearing wall footer where PCBs concentrations in that sample were 12.7 mg/kg, and the sidewall sample collected adjacent to the eastern wall where PCBs concentrations in that sample were 1.8 mg/kg. Further excavation was not possible at either location without causing an unsafe condition by undermining a building column footer and/or a bearing wall footing; and
- The third location where PCBs were detected 1.599 mg/kg in the 38'-40' in the footprint of a former historic large sand mine that extended beneath the eastern portion of the Site[24].

### *2.6.1.3 Stormwater Drywell DW-05*

As discussed in Section 2.4.28,the post-excavation composite soil sample PCB analytical results indicate residual concentrations ranging from 0.0365 mg/kg to 5.04 mg/kg. These results confirm residual PCB concentrations are far below the 10 mg/kg presumptive remedy subsurface soil cleanup level allowed by CP-51/Soil Cleanup Guidance[25] for non-Brownfield Cleanup Program (BCP) sites where neither the unrestricted SCOs nor the ecological SCOs are applied in the remedial program.

### *2.6.1.4 Deed Notice of PCBs*

There are seven areas at the Site where PCBs remain in soil at concentrations exceeding 1 mg/kg but all are below 25 mg/kg. A Deed Restriction Notice identifying those areas has been recorded with the Nassau County Clerk's Office pursuant to 40 CFR §761.61(a)(8) – Deed Restriction. A copy of the Deed Restriction Notice is provided in **Appendix I** with an accompanying figure showing the seven locations and associated maximum PCB

Those seven areas include:

- A former floor drain within the western end of the building remediated by Allen as part of an IRM in 2003 where residual PCB concentrations ranged from non-detect to 3,480 mg/kg.
- Two areas on the south side of the Site adjacent LIRR right-of-way remediated by Allen as part of a two-phase IRM in 2003 and continued in 2007 that extended a short distance off-Site into the LIRR right-of-way. Those excavations involved shutting down the main line of the LIRR and successfully removed PCBs to NYSDEC's satisfaction.
- The Spray Booth where two sidewall samples were collected; 1) the sidewall sample collected beneath the northern bearing wall footer where PCBs concentrations in that sample were 12.7 mg/kg and the

[24] Historic aerial photographs (1938-1951) indicate the eastern one-third of this building was constructed over part of a larger former sand mine which was subsequently filled in with unknown materials (1953-1966).

[25] https://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf, Commissioner's Policy–51 Section V, I., effective 12/03/2010. For Non-BCP sites: An acceptable presumptive remedy for soil where neither the unrestricted SCOs nor the ESCOs are applied in the remedial program may include a soil cleanup level for PCBs of 1 ppm in the surface soils and 10 ppm in subsurface soils.

sidewall sample collected adjacent to the eastern wall where PCBs concentrations in that sample were 1.8 mg/kg. Further excavation was not possible at either location without causing an unsafe condition by undermining a building column footer and/or a bearing wall footing; and

- The third location where PCBs were detected 1,599 mg/kg in the 38'-40' in the footprint of a former historic large sand mine that extended beneath the eastern portion of the Site
- DW-05 remediated by Steel Allen Air in 2024 pursuant to the DW-05 CMWP and reported in the NYSDEC-approved DW-05 SMCMCCR (Section 2.4.28) where residual PCB concentrations in soil range from 0.0365 mg/kg to 5.04 mg/kg. These results confirm residual PCB concentrations are far below the 10 mg/kg presumptive remedy subsurface soil cleanup level allowed by CP-51/Soil Cleanup Guidance[26] for non-Brownfield Cleanup Program (BCP) sites where neither the unrestricted SCOs nor the ecological SCOs are applied in the remedial program.

Note that all these areas are covered by asphalt or the building concrete floor slab and are therefore low-occupancy areas that do not present an exposure pathway to building occupants nor the environment due to leaching by precipitation.

The Site is currently in the Site Management phase that include protective administrative mechanisms currently in effect to manage the few areas of residual environmental impacts at the Site. Those protective administrative mechanisms include this SMP and an EE (Section 2.4.18) which specifies certain protective ECs and ICs specified in the SMP be maintained to address residual soil impacts for VOCs, metals, and PCBs.

The EC most relevant for post-remedial protectiveness required under the SMP that applies to the seven residual PCB-impacted soil areas is that the majority of the Site is covered by the building, asphalt pavement or a soil cover (landscaped area along northern portion of the building) which prevent exposure to residual soil contamination at the Site. The building flooring and asphalt pavement are monitored and maintained. At a minimum, an annual evaluation is completed, the results logged, kept on-Site in the building records, and also submitted the NYSDEC with the annual PRR. Maintenance will be conducted as necessary to continually maintain the integrity of building floor and/or asphalt pavement. All cracks, damage or wear will be repaired.

In addition, an Excavation Work Plan (EWP) (Section 3.3.1) is appended to this SMP that establishes requirements, protocols and the procedures required to be implemented in the event the cover system is breached, penetrated, or temporarily removed. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in:

- The CAMP prepared for the Site; and
- A Site-specific Health and Safety Plan (HASP) prepared by the Contractor performing the work and tailored to address the potential hazards and materials that may be encountered during performance of the work activities.

Any breach of the Site's cover system must be overseen by a NYS PE or a qualified person who directly reports to a NYS PE.

### *2.6.2 Off-Site Soil Contamination*

The 2003 Supplemental RI was performed in January 2003 to complete the delineation of the contaminated soils identified by the earlier investigations. Perimeter soil borings were installed following the on-Site excavation activities. This investigation identified the presence of PCBs at 91 mg/kg at an off-Site location. The concentrations of PCBs detected in the subsurface soils exceeded the SCGs of 1 mg/kg for less than 1 foot below ground surface and 10 mg/kg for greater than one foot below ground surface. VOC contamination was also confirmed in the subsurface soils located to the south and off-Site. Concentrations of VOCs exceeding the SCGs were documented at least 20 feet below ground surface. This raised the possibility of potential dermal exposures from off-Site contamination at the LIRR right-of-way (PCBs, VOCs, SVOCs and metals) in soils.

Residual off-Site impacted soils containing PCBs and VOCs were excavated adjacent to and below the LIRR

[26] https://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf, Commissioner's Policy–51 Section V, I., effective 12/03/2010. For Non-BCP sites: An acceptable presumptive remedy for soil where neither the unrestricted SCOs nor the ESCOs are applied in the remedial program may include a soil cleanup level for PCBs of 1 ppm in the surface soils and 10 ppm in subsurface soils.

tracks in August 2007. The excavated area was approximately 70 feet by 10 feet and 3 to 4 feet deep. A total of 145 tons of materials were excavated and disposed of at the CWM Chemical Services facility in Model City, New York. End point samples were taken in accordance with the NYSDEC-approved off-Site work plan and were analyzed for VOCs and PCBs. The samples contained VOCs and PCBs in concentrations that were either non-detect or below the applicable restricted residential Part 375 criteria that the NYSDEC used as the SCGs for this project. **Appendix G** provides figures and tables from the denoting the location and extents of the excavated area, end-point sampling locations an associated data summary tables.

### *2.6.3 Groundwater*

Five groundwater monitoring wells are present at the Site and one well is located off- Site. Groundwater was determined to contain very low concentrations of the sampled- for constituents and did not require remediation. The Site and regional area are serviced by public water systems. There is no exposure pathway associated with the Site's groundwater. Groundwater contamination has never been a significant issue associated with the Site and NYSDEC and the NYSDOH approved discontinuation of groundwater sampling in July 2009. The groundwater monitoring wells are no longer required and will be decommissioned in accordance with NYSDEC well closure requirements. A summary is provided below.

Groundwater samples were initially collected from the water table aquifer in 1995 (estimated 53 feet below ground surface). From this sampling event, it was determined the groundwater did not contain elevated concentrations of the compounds detected by the soil sampling. Additional sampling was completed in 2003 with the installation of five permanent groundwater monitoring wells (identified as IRM-MW-1 through IRM-MW-5).

Data for samples collected from the upgradient well (IRM-MW-1) determined VOCs, metals, PCBs and SVOCs were not present in the groundwater. However, groundwater samples collected sidegradient and downgradient of IRM-MW-1 were found to contain very low concentrations of PCE, TCE, 1,1-DCA and m,p-xylene. The highest detected compound was PCE at 14 µg/L in IRM-MW-4, an on-Site well. All VOCs compounds detected in the downgradient off-Site well (IRM-MW-5) were below the NYSDEC standards, criteria and guidance (SCGs – i.e., NYSDEC Ambient Water Quality Standards and Guidance Values). No PCBs were detected in the groundwater samples. The only inorganic compounds detected above the SCGs were deemed to be naturally occurring and were iron, manganese and sodium. On-Site groundwater is not used for potable purposes and public water systems service the area; thus, groundwater remediation was not required.

In April 2008, a deep soil boring was installed south of the Site. Groundwater samples were secured from ten foot intervals beginning at a sample depth of 50 feet down to 90 feet below the surface. The samples were analyzed for VOCs. All compound concentrations detected in the samples were below the applicable NYSDEC groundwater drinking standards.

As noted in Section 2.4.10, the July 2009 NYSDEC letter stated that the NYSDEC and the NYSDOH had reviewed the January 2009 groundwater sampling results and had concluded that groundwater sampling could be discontinued at the Site.

In March of 2019, Allen performed additional groundwater sampling where groundwater samples were collected from upgradient groundwater monitoring well IRM-MW-1 and downgradient well IRM-MW-3 were sampled for VOCs, 1,4-D, and PFAS. The results were submitted to NYSDEC in a letter report dated 30 May 2019 prepared by VERTEX Engineering, PC.

No VOCs were detected in the groundwater samples except very low concentrations of acetone, a common lab contaminant.

On 15 March 2023, the NYSDEC issued of final water quality guidance values to regulate 1,4-D, PFOA, and PFOS[27].

1,4-D was detected in the groundwater sample collected from upgradient groundwater monitoring well IRM-

[27] https://www.dec.ny.gov/chemical/122803.html

MW-1 at a concentration of 0.924 µg/l just below the current NYSDOH drinking water standard of 1.0 µg/l[28] and above the current NYSDEC groundwater guidance value of 0.35 µg/l. 1,4-D was not detected in the groundwater sample collected from downgradient well IRM-MW-3.

The laboratory reported results for 22 PFAS. Thirteen (13) PFAS were detected at similar concentrations in groundwater samples collected from both upgradient monitoring well IRM-MW-1 and downgradient monitoring well IRM-MW-3.

PFOA and PFOS were detected in both samples from IRM-MW-1 and IRM-MW-3.

PFOA was detected at 24.8 nanograms per liter (ng/l) in sample IRMMW-1 and 31.1 ng/l in sample IRM-MW-3, which exceed the NYSDOH drinking water standard of 10 ng/L[29] and the NYSDEC groundwater guidance value of 6.7 ng/l.

PFOS was detected at a concentration of 97.1 ng/l in sample IRM-MW-1 and 146 ng/l in sample IRM-MW-3, which exceed the NYSDOH drinking water standard of 10 ng/L and the NYSDEC groundwater guidance value of 2.7 ng/l.

The suite of PFAS detected in both the upgradient and downgradient groundwater monitoring well samples were consistent and at similar concentrations, which is typical of shallow groundwater in urban commercial environments. 1,4-D was only detected in the upgradient groundwater monitoring well sample. The sources of PFAS and 1,4-D in groundwater are likely from upgradient/off-Site.

Well decommissioning will be done only with the prior approval of the NYSDEC project manager. The NYSDEC project manager will be notified prior to decommissioning of any monitoring wells and the work will be documented in the subsequent Periodic Review Report. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures."

### *2.6.4 Soil Vapor*

In 2003/2004, as part of the RI and IRM activities, soil vapor samples were collected south of the building (samples SG-3 and SG-4), in the center of the former western excavation area (samples SG-5) and off-Site and parallel to, the southern railroad tracks (samples SG-1 and SG-2). Samples SG-1 and SG-2 were biased towards the residential properties located south of the LIRR right-of-way. No sub-slab, ambient air or indoor air samples were collected at the Site building as the specific VOCs of concern were still used in the A.K. Allen facility and Occupational Safety and Health Administration (OSHA) standards governed the indoor air quality at that facility. The applicable OSHA standard did not require sub-slab monitoring. The NYSDEC agreed that the federal OSHA permissible exposure limits (PELs) for occupational exposure were the appropriate SCGs for the existing on-Site land use. Figures and tables from the 2004 Supplemental RI Report showing the soil vapor sampling locations and associated data summary tables are presented in **Appendix F.**

Methyl tertiary butyl ether (MTBE) was the only compound detected in the soil vapor samples collected from the off-Site locations. It is an additive to gasoline and the detection of MTBE was determined to not be related to the Site. Compounds detected in the samples collected from the on-Site soil vapor locations included acetone, MTBE, 2-butanone (MEK), 1,1-DCA, 1,1,1-TCA, benzene, toluene, PCE, ethyl benzene, xylenes and 1,2,4-trimethylbenzene. MEK, 1,1,1-TCA and PCE were detected at the highest concentrations and, along with 1,1-DCA, were determined to be related to the Site. The remainder of the detected VOCs was determined to be unrelated to Site activities and was suspected to originate from one or more undetermined off-Site sources. The absence of soil vapor impacts beneath the LIRR railroad tracks suggested that soil gas from the Site did not migrate off-Site below the LIRR tracks and did not migrate south of the LIRR tracks to residential areas.

As noted in the 2006 ROD, there were no SCGs for soil vapor. However, the soil vapor concentrations detected at the Site presented a potential pathway for exposure to VOCs at the Site, specifically to acetone, MEK, PCE, TCE and 1,1,1-TCA. The NYSDEC determined remediation by operation of a SVE system was

[28] https://www.health.ny.gov/environmental/water/drinking/emerging_pfas_publicwater.htm
[29] https://www.health.ny.gov/environmental/water/drinking/emerging_pfas_publicwater.htm

required to reduce the potential for completion of an on-Site vapor intrusion pathway.

Environmental screening activities completed by Alkier Steel in 2019 included active and passive sub-slab soil vapor and indoor air sampling that detected the presence of chlorinated VOCs in soil vapor and indoor air at actionable levels beneath and within the building.

TCE was detected in all 2019 Site screening sub-slab soil vapor and indoor air samples except one indoor air sample. Indoor air samples had a maximum of 3.3 ug/$m^3$ which exceeds the NYSDOH Indoor Air Guideline of 2 mg/$m^3$. Comparison of the sub-slab soil vapor and indoor air sample results to the NYSDOH SVI Guidance 2017 matrices indicate a “Mitigate” condition at three of the eight sampling locations, another three locations at a “Monitor” condition, and the remaining two locations at a “No Action” condition.

The active and passive sub-slab soil vapor sampling results confirm a widespread presence of chlorinated and other VOCs beneath the building and based on the NYSDOH SVI Guidance, a SSDS was required beneath the building to control vapor intrusion of the VOCs to the indoor air. Full details are presented in the Site Management Corrective Measures Construction Completion Report New Owner Modifications required by the 2023 Order on Consent (Section 2.4.20).

During 2019 - 2020, NAC Consultants, Inc. conducted SSDS pilot testing, design/build/installation, start-up of a SSDS beneath the entire footprint of the building. The system consists of 37 suction pits and fans. Further details regarding the pilot testing, design/build/installation, start-up and operation of the SSDS are presented in Section 3.3.3.

# 3. INSTITUTIONAL AND ENGINEERING CONTROL PLAN

## 3.1 General

Since remaining contamination exists at the Site, ICs and ECs are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the Site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC project manager.

This plan provides:

- A description of all IC/ECs on the Site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the EE;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the EWP (Section 3.3.1) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the Site remedy, as determined by the NYSDEC project manager.

## 3.2 Institutional Controls

A series of ICs is required by the 2021 EE to: (1) implement, maintain, and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the Site to commercial or industrial uses only. Adherence to these ICs on the Site is required by the EE and will be implemented under this SMP. ICs identified in the EE may not be discontinued without an amendment to or extinguishment of the EE. The IC boundaries are the Site boundaries shown on **Figure 2**. These ICs are:

- The Site ("Controlled Property") may be used for Commercial purposes as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial purposes as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or NCHD to render it safe for use as drinking water or for industrial purposes, and the user must notify and obtain written approval to do so from NYSDEC;
- Groundwater and other environmental monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in the manner defined in the SMP;
- All future activities on the property that will disturb remaining contaminated materials must be conducted in a manner defined in the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, inspection, and reporting of any mechanical and physical components of the remedy shall be performed as defined in the SMP;
- 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 in the EE; and
- The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6 NYCRR Part 375-1.8(g)(2)(i) and (ii), and the above-stated ECs may not be discontinued without amendment or extinguishment of the EE.

## 3.3 Engineering Controls

### *3.3.1 Site Cover*

The majority of the property at the Site is covered by the building, asphalt pavement or a soil cover (landscaped area along northern portion of the building) which prevent exposure to remaining contamination

at the Site. The building flooring and asphalt pavement will be monitored and maintained. At a minimum, an annual evaluation will be completed and the results logged and kept on-Site in the building records. Maintenance will be conducted as necessary to continually maintain the integrity of building floor and/or asphalt pavement. All cracks, damage or wear will be repaired.

The EWP provided in **Appendix J** outlines the procedures required to be implemented in the event the cover system is breached, penetrated, or temporarily removed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of this SMP.

Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in:

- The CAMP prepared for the Site and provided in **Appendix K,** and
- A Site-specific Health and Safety Plan (HASP) prepared by the Contractor performing the work and tailored to address the potential hazards and materials that may be encountered during performance of the work activities.

Any breach of the Site's cover system must be overseen by a PE who is licensed and registered in New York State or a qualified person who directly reports to a PE who is licensed and registered in New York State.

### *3.3.2 Sub-Slab Depressurization/Venting System*

Environmental screening activities completed by Alkier Steel in 2019 included active and passive sub-slab soil vapor and indoor air sampling that detected the presence of chlorinated VOCs in soil vapor and indoor air at actionable levels beneath and within the building. The screening included eight collocated sub-slab soil vapor and indoor air sampling locations and 44 passive soil vapor sampling locations.

TCE was detected in all 2019 screening sub-slab soil vapor and indoor air samples except one indoor air sample. Indoor air samples had a maximum of 3.3 ug/$m^3$ which exceeds the NYSDOH Indoor Air Guideline of 2 mg/$m^3$. Comparison of the eight collocated sub-slab soil vapor and indoor air sample results to the NYSDOH SVI Guidance 2017 matrices indicate a "Mitigate" condition at three of the eight sampling locations, another three locations at a "Monitor" condition, and the remaining two locations at a "No Action" condition.

The active and passive sub-slab soil vapor sampling results confirm a widespread presence of chlorinated and other VOCs beneath the building and based on the NYSDOH SVI Guidance, a SSDS was required beneath the building to control vapor intrusion of the VOCs to the indoor air.

During 2019 - 2021, NAC Consultants, Inc. conducted SSDS pilot testing, design/build/installation, start-up of a SSDS beneath the entire footprint of the building. The system consists of 37 suction pits and fans. SSDS installation included sealing joints, cracks and other penetrations of slabs, floor assemblies and foundation walls below or in contact with the ground surface, were sealed with flexible caulking materials that prevents air leakage as needed. The SSDS was placed into operation in February 2020 prior to tenant occupancy. Subsequent efficacy and indoor air testing indicate that the SSDS meets the design objective to control sub-slab vapor migration to indoor air.

Documentation for the SSDS is presented in a SSDS Pilot Test, Start-up, and Indoor Air Sampling Report, and SSDS Operations and Maintenance Plan prepared by NAC Consultants Inc. which are provided in **Appendix L**.

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

Generally, remedial processes are considered completed when 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 6.4 of NYSDEC DER-10. Unless waived by the NYSDEC, confirmation samples of applicable environmental media are required before terminating any remedial actions at the Site. Confirmation samples require Category B deliverables and a Data Usability Summary Report (DUSR).

As discussed below, the NYSDEC may approve termination of a groundwater monitoring program. When a remedial party receives this approval, the remedial party will decommission all Site-related monitoring,

injection and recovery wells as per the NYSDEC CP-43 policy.

The remedial party will also conduct any needed Site restoration activities, such as asphalt patching and decommissioning treatment system equipment. The remedial party will also ensure that no ongoing erosion is occurring on the Site.

#### *3.3.3.1 Site Cover*

The composite cover system is a permanent control, and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP in perpetuity.

#### *3.3.3.2 Sub-Slab Depressurization System*

The SSDS is considered a permanent control, and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP in perpetuity.

# 4. MONITORING AND SAMPLING PLAN

## 4.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected Site media identified below. Monitoring of other Engineering Controls is described in Section 5, OM&M Plan. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC project manager.

## 4.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Assessing compliance with applicable NYSDEC SCGs, particularly groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

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

- Reporting requirements; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

## 4.3 Site-Wide Inspection

Site-wide inspections will be performed a minimum of once per year. These periodic inspections must be conducted when the ground surface is visible (i.e., no snow cover). Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, or a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State (depending on the need to evaluate engineering controls)]. Modification to the frequency or duration of the inspections will require approval from the NYSDEC project manager. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in **Appendix M** – Site Management Forms. 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;
- Whether stormwater management systems, such as catch basins and drywells are working as designed;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that Site records are up to date.

Inspections of all remedial components installed at the Site will be conducted. A comprehensive Site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the 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 EE;
- Achievement of remedial performance criteria; and
- If Site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness

of ECs in place at the Site, verbal notice to the NYSDEC project manager must be given by noon of the following day. In addition, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional, as defined in 6 NYCCR Part 375. Written confirmation must be provided to the NYSDEC project manager within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public. The remedial party will submit follow-up status reports to the NYSDEC within 45 days of the event on actions taken to respond to any emergency event requiring ongoing responsive action, describing, and documenting actions taken to restore the effectiveness of the ECs.

## 4.4 Monitoring Reporting Requirements

Forms and any other information generated during inspections will be kept on file on- Site. All forms, and other relevant reporting formats used during the inspection events, will be (1) subject to approval by NYSDEC and (2) submitted if requested by NYSDEC.

## 4.5 Treatment System Monitoring and Sampling

### *4.5.1 SSDS Monitoring/Sampling*

Monitoring and sampling requirements of the SSDS are presented the SSDS Pilot Test, Start-up, and Indoor Air Sampling Report, and SSDS Operations and Maintenance Plan prepared by NAC Consultants Inc. which are provided in **Appendix L**.

# 5. OPERATION AND MAINTENANCE PLANS

## 5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the SSDS. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDS system.
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSDS system is operated and maintained.

## 5.2 Treatment System Operations and Maintenance

### *5.2.1 SSDS Monitoring/Sampling*

Operations and maintenance requirements of the SSDS are presented the SSDS Pilot Test, Start-up, and Indoor Air Sampling Report, and SSDS Operations and Maintenance Plan prepared by NAC Consultants Inc. which are provided in **Appendix L.**

# 6. PERIODIC ASSESSMENTS/EVALUATIONS

## 6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the Site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

No Vulnerability Assessments have been conducted for the Site to date. An initial Vulnerability Assessment will be performed within six months of NYSDEC approval of this SMP and presented in the next Annual SIR/PRR. The Vulnerability Assessment will be reviewed (and updated if necessary) annually and submitted as a component of each future SIR/PRR.

The Vulnerability Assessment will briefly summarize the vulnerability of the Site and/or engineering controls to severe storms/weather events and associated flooding. The assessment will include, but not be limited to, a discussion of potential vulnerabilities to be assessed during periodic reviews such as the following:

- Flood Plain: Identify whether the Site is located in a flood plain, low-lying or low-groundwater recharge area.
- Site Drainage and Storm Water Management: Identify areas of the Site which may flood during severe rain events due to insufficient groundwater recharge capabilities or inadequate storm water management systems.
- Erosion: Identify any evidence of erosion at the Site or areas of the Site which may be susceptible to erosion during periods of severe rain events.
- High Wind: Identify areas of the Site and/or remedial system which may be susceptible to damage from the wind itself or falling objects, such as trees or utility structures during periods of high wind.
- Electricity: Identify the susceptibility of the Site/remedial system to power loss and/or dips/surges in voltage during severe weather events, including lightning strikes, and the associated impact on-Site equipment and operations.
- Spill/Contaminant Release: Identify areas of the Site and/or remedial system which may be susceptible to a spill or other contaminant release due to storm- related damage caused by flooding, erosion, high winds, loss of power etc.
- Wildfires: Identify the risk of wildfires in the immediate area and how resulting damage could impact the Site (power and vegetation loss, increased erosion etc.)

Photographs of any vulnerable areas identified at the Site will be provided as part of each assessment.

## 6.2 Green Remediation Assessments

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages Site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology.

No Green Remediation Assessments have been conducted for the Site to date. An initial Green Remediation will be performed within six months of NYSDEC approval of this SMP using the Summary of Green Remediation Metrics for provided in **Appendix M**. This form as well as the Site Inspection form will be included in the next Annual SIR/PRR. The Green Remediation will be reviewed (and updated if necessary) annually and submitted as a component of each future SIR/PRR.

This assessment should include, but not be limited to, a discussion of items listed below, in relation to the implementation and operation and maintenance of the selected remedy. Where appropriate, quantification of these items should be provided:

- Waste Generation (describe the management of waste associated with the Site and any waste reduction projects implemented, including, but not limited to, material reuse and recycling).
- Energy usage (electrical usage for operation of remedial systems, Site lighting, security systems, etc.).
- Emissions (vapor-phase remedial system emissions, fuel usage for transportation to and from the Site for

inspections and/or sampling, operation of gas-powered generators, etc.).

- Water usage (identify sources of decontamination water, irrigation water, etc.). Note that while infiltration systems for runoff may be appropriate green technologies for some Sites, elevated protection of groundwater SCOs may indicate a need to minimize infiltration in certain areas and/or at certain sites.
- Land and/or ecosystems (describe any disturbances and restoration of land and/or ecosystems as part of implementation/operation of the remedy).

Recommended methods to reduce energy consumption, resource usage, waste generation, water usage, etc. will be included in the SIR/PRR.

# 7. REPORTING REQUIREMENTS

## 7.1 Site Management Reports

All Site management inspection, maintenance and monitoring events will be recorded on the appropriate Site management forms provided in **Appendix M**. These forms are subject to NYSDEC revision. All Site management inspection, maintenance, and monitoring events will be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State (depending on the need to evaluate engineering controls).

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format to the NYSDEC with next available Site Inspection/Periodic Review Report. (Section 7.2).

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation);
- 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; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.

## 7.2 Site Inspection/Periodic Review Report

The report will be prepared in accordance with NYSDEC's DER-10 and submitted annually thereafter. Media

sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.
- Results of the required annual Site inspections, fire inspections and severe condition inspections, if applicable.
- Description of any change of use, import of materials, or excavation that occurred during the certifying period.
- All applicable Site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Identification of any wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
- 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, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These tables and figures will include a presentation of past data as part of an evaluation of contaminant concentration trends, including but not limited to:
  - Trend monitoring graphs that present groundwater contaminant levels from before the start of the remedy implementation to the most current sampling data;
  - Trend monitoring graphs depicting system influent analytical data on a per event and cumulative basis;
  - O&M data summary tables;
  - A current plume map for Sites with remaining groundwater contamination; and
  - A groundwater elevation contour map for each gauging event.
- 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 in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Site-specific CMP, ROD or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
  - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
  - An evaluation of trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the CMP, ROD or Decision Document; and
  - The overall performance and effectiveness of the remedy.
- A performance summary for all treatment systems at the Site during the calendar year, including information such as:
  - The number of days the system operated for the reporting period;
  - The average, high, and low flows per day;
  - The contaminant mass removed and the cost per pound of mass removed during the certification period and during the life of the treatment system;
  - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - A description of the resolution of performance problems;
  - Alarm conditions;
  - Trends in equipment failure;
  - A summary of the performance, effluent and/or effectiveness monitoring; and
  - Comments, conclusions, and recommendations based on data evaluation. Recommendations must address how receptors would be impacted. Recommendations can include:
    - Proposals to address efficiency and costs such as: instituting remote operation, system changes to decrease maintenance costs and downtime, and system changes to decrease energy use; and

- Proposals to modify or shut down a treatment system due to remediation completion, system performance or changed conditions. System shutdowns are addressed in Section 6.4 of DER- 10.

### 7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional as defined in 6 NYCRR Part 375 or PE licensed to practice and registered in New York State (depending on the need to evaluate engineering systems) will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

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

- *The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*
- *The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the 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 engineering control 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 [and generally accepted engineering practices]; and*
- *The information presented in this report is accurate and complete.*

*I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] for the Site."*

If NYSDEC DER-10 requires a PE certification, add the following certification:

*"I certify that the New York State Education Department has granted a Certificate of Authorization to provide Professional Engineering services to the firm that prepared this Periodic Review Report."*

## 7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control or failure to conduct Site management activities, a Corrective Measures Work Plan (CMWP) will be submitted to the NYSDEC project manager 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 Work Plan until it has been approved by the NYSDEC project manager.

# 8. REFERENCES

| Document Date | Title/Topic | Prepared By/For | Specific Issue/Area |
|---|---|---|---|
| N/A | RCRA Report | RCRA/USEPA | Summary of biennial reports for 2003, 2005, and 2007. |
| N/A | NYSDEC Site Record | NYSDEC | Record of Site history, location, contaminants of concerns, materials disposed, Site environmental assessment, and Site health assessment. Shows the Site listed as a Class 2 Site on the NYS Registry of Inactive Hazardous Waste Sites. |
| N/A | NYSDEC Hazardous Waste Records | NYSDEC | Hazardous waste manifests 1982 – 2017, annual reports 1986 – 2007, miscellaneous letters. |
| N/A | Topographic Maps | EDR | 1897, 1898, 1899, 1903, 1947, 1954, 1967, 1979, 1994, and 2013 |
| N/A | Sanborn Fire Insurance Maps | EDR | 1937, 1950, 1961, 1963, 1970, 1980 |
| N/A | City Directories | EDR | 1972, 1977, 1982, 1987, 1992, 1995, 2000, 2005, 2010, and 2014 |
| N/A | Aerial Photographs | EDR | 1938, 1947, 1951, 1953, 1962, 1966, 1976, 1980, 1984, 1994, 2006, 2009, 2013, and 2017 |
| 10-1994 | Remedial Investigation Work Plan | CA Rich Consultants, Inc./Allen Company, Inc./NYSDEC | Remedial Investigation Work Plan to address the environmental concerns of the Nassau County Department of Health pertaining to the Allen Site. |
| 02-13-1996 | Remedial Investigation Report | CA Rich Consultants, Inc./Allen Company, Inc./NYSDEC | Remedial Investigation Report addressing the environmental concerns of the Nassau County Department of Health pertaining to the Allen Site. |
| 06-1998/ 01-1999 Errata, and Addenda dated 4-2000, 6-2004 & 02-2023 | Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 | NYSDEC | The primary purpose of this document is to provide a compilation of ambient water quality guidance values and groundwater effluent limitations for use where there are no standards (in 6 NYCRR 703.5) or regulatory effluent limitations (in 703.6). For the convenience of the reader, the standards in 703.5 and groundwater effluent limitations in 703.6 are included in this document. The values in this document (guidance and regulatory) are used in Department programs, including the SPDES permit program. |
| 02-28-2000 | Registry Site Classification Decision | NYSDEC/BHSC | Registry Site Classification Decision package. |
| 2003 | Envirofacts 2003 Biennial Report Summary | RCRA/USEPA | Provides the total quantity, in tons, of hazardous waste generated, managed, shipped, and received for the reporting year specified. Lists the Site as a small quantity generator (SQG) of hazardous waste. |
| 01-02-2003 | Order on Consent<br>Index #W1-0932-02-08<br>Site #130100<br>Effective 01-12-2003 | NYSDEC/A.K. Allen Company, Inc | Allen agreed to further investigate and remediate the Site. Consistent with the NYSDEC IHWDS/Remedial Program, investigative and remedial requirements under the 2003 Order included preparation, NYSDEC approval and implementation of the following:<br>▪ Site Characterization Work Plan;<br>▪ Remedial Investigation/Feasibility Work Plan;<br>▪ IRM Work Plan;<br>▪ Remedial Design/Remedial Action Work Plan;<br>▪ OM&M Work Plan; and<br>▪ Progress Reporting. |
| 02-06-2004 | Interim Remedial Measures Report | CA Rich Consultants, Inc./NYSDEC | Report to address the Site-specific regulatory compliance requirements of the NYSDEC pertaining to the Allen Site. |
| 04-30-2004 | Supplemental Remedial Investigation Report | CA Rich Consultants, Inc./Allen Company, Inc./NYSDEC | Report to address the environmental concerns of the NYSDEC pertaining to the Allen Site. |
| 04-30-2004 | Supplemental Remedial Investigation Report - Attachments | CA Rich Consultants, Inc./Allen Company, Inc./NYSDEC | Attachments and data package for April 2004 Supplemental RI Report. |

| Document Date | Title/Topic | Prepared By/For | Specific Issue/Area |
|---|---|---|---|
| 2005 | Envirofacts 2005 Biennial Report Summary | RCRA/USEPA | Provides the total quantity, in tons, of hazardous waste generated, managed, shipped, and received for the reporting year specified. Lists the Site as a Large Quantity Generator (LQG) of hazardous waste. |
| 06-06-2005 | On-Site Feasibility Study | CA Rich Consultants, Inc./Air Resources Group, LLC/Allen Company, Inc./NYSDEC | The on-Site FS analyzed initial and supplemental Remedial Investigation results, identifies the overall goals of remediation, evaluates options available for remedial action on the Site based upon review of environmental data collected, reduced, and analyzed, and ascertains the preferred remedial objective. |
| 06-29-2005 | Off-Site Feasibility Study | CA Rich Consultants, Inc./Air Resources Group, LLC/Allen Company, Inc./NYSDEC | The off-Site (the portion of Site-related activities within the LIRR right-of-way) FS identifies and evaluates options available for Site-related, off-Site remedial action. It identifies the overall goal of the remediation based upon review of environmental data collected, reduced, and analyzed, and ascertains the preferred remedial objective. The intent of the off-Site FS was to serve as a basis for remedy selection decision-making processes. |
| 03-22-2006 | Record of Decision | NYSDEC | Presents the selected remedy for the Allen Site, a Class 2 inactive hazardous waste disposal Site. |
| 03-22-2006 | Record of Decision – Additional Information | NYSDEC | Additional tables, figures, etc. associated with the 2006 ROD. |
| 12-14-2006 | 6 NYCRR Part 375, Environmental Remediation Programs | NYSDEC | Part 375 Environmental Remediation Regulations |
| 2007 | Envirofacts 2007 Biennial Report Summary | RCRA/USEPA | Provides the total quantity, in tons, of hazardous waste generated, managed, shipped, and received for the reporting year specified. No Generator of hazardous waste status specified |
| 03-27-2008 | Off-Site Remedial Action Report – Soil Removal | CA Rich Consultants, Inc./NYSDEC | Report documenting second interim remedial measure for contaminated soil removal on LIRR property. |
| 07-21-2008 | Off-Site Deep Groundwater Sample Results | CA Rich Consultants, Inc./NYSDEC | In April 2008, a deep soil boring was installed south of the Site. Groundwater samples were secured from ten foot intervals beginning at a sample depth of 50 feet down to 90 feet below the surface. The samples were analyzed for VOCs. All compound concentrations detected in the samples were below the applicable NYSDEC groundwater drinking standards. |
| 02-01-2009 | Final Engineering Report and Operations, Maintenance & Monitoring Plan – On-Site Soil Vapor Extraction System S-Build Design | CA Rich Consultants, Inc./NYSDEC | Overview of the Remedial Investigation results and Interim Remedial Measures completed. Remedial design of the Soi Vapor Extraction System, and an Operations, Maintenance and Monitoring Plan. |
| 04-02-2009 | January 2009 Groundwater Sample Results | CA Rich Consultants, Inc./NYSDEC | Report of the results along with the Data Usability Summary Report for the groundwater samples collected in January 2009. |
| 07-07-2009 | Groundwater Sampling Response | NYSDEC/CA Rich Consultants, Inc. | Letter discontinuing further groundwater sampling at the Allen Site. Air sampling required for the SVE system will continue. |
| 06-18-2010/04-19-2019 Errata | NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation" | NYSDEC | DER-10 provides an overview of the Site investigation and remediation process for DEC's remedial programs administered by the Division of Environmental Remediation (DER). These include the Inactive Hazardous Waste Disposal Site Remedial Program, known as the State Superfund Program (SSF); Brownfield Cleanup Program (BCP); Environmental Restoration Program (ERP); and Voluntary Cleanup Program (VCP); and certain petroleum releases. |
| 03-01-2015 | Site Management Plan | Apex Companies, LLC/Allen Company, Inc./ Charlotte Biblow, Esq./ Farrell Fritz, PC/NYSDEC | Required as an element of the remedial program at the Allen Company Inc. facility under the New York State Inactive Hazardous Waste Disposal Site Remedial Program, administered by New York State Department of Environmental Conservation. |

| Document Date | Title/Topic | Prepared By/For | Specific Issue/Area |
|---|---|---|---|
| 07-07-2015 | Request to Shutdown SVE System / Initiate Site Closure | Apex Companies, LLC/NYSDEC | Apex seeks approval to shut down operations of the on-Site SVE system and initiate implementation of Site closure based on a summary of recently completed actions. |
| 02-01-2016 | SVE System Shutdown Plan | Apex Companies, LLC/NYSDEC | Work Plan for evaluation/confirmation that the soil vapor extraction system has reached asymptotic conditions indicating continued operation of the system is no longer beneficial. The work plan includes procedures the evaluation including for detecting soil vapor volatile organic compound concentration rebound conditions, system closure and abandonment. |
| 05-12-2016 | SVE System Shutdown Work Plan Conditional Approval Letter | NYSDEC/Apex Companies, LLC | NYSDEC provides conditional approval/comments on the SVE System Shutdown Work Plan. |
| 06-15-2016 | Status Report - SVE System Shutdown | Apex Companies, LLC/NYSDEC | Per the NYSDEC-approved Work Plan, the initial SVE system shutdown procedures and 24-hour soil vapor conditions assessment have been completed. |
| 10-17-2016 | 120-Day Status Report - SVE System Shutdown | Apex Companies, LLC/NYSDEC | Per the NYSDEC-approved Work Plan, the initial SVE system shutdown procedures and 24-hour, 30-day and the 120-day soil vapor conditions assessments have been completed. |
| 06-28-2017 | Second Quarter of 2017 Status Report - SVE System Shutdown | Apex Companies, LLC/NYSDEC | Per the NYSDEC-approved Work Plan and Addendum, the initial SVE system shutdown procedures and 24-hour / 30-day / 120-day / first quarter of 2017 / second quarter of 2017 soil vapor conditions assessments have been completed. |
| 03-05-2018 | February 2018 – Follow-up Sampling Event | Apex Companies, LLC/NYSDEC | Report for April 2017 and February 2018 soil vapor sampling events in accordance with the Soil Vapor Extraction System Shutdown Work Plan. |
| 06-27-2018 | Response Letter to SVE Shutdown | NYSDEC/Apex Companies, LLC | Letter addressing status report for the SVE system at the Allen Site and approving shutdown until the building is sold or reoccupied. |
| 04-19-2019 | Soil vapor Sampling Event – March 2019 | VERTEX Engineering, PC/NYSDEC | Report for March 2019 soil vapor sampling event in accordance with the Soil Vapor Extraction System Shutdown Work Plan. |
| 05-24-2019 | Property Survey | Empire State Land Surveyor, P.C./Alkier Steel | Updated property survey showing typical meets and bounds, distances, lots lines, structures. |
| 05-29-2019 | Phase I Environmental Site Assessment | ERM/Alkier Steel | Pre-purchase Phase I ESA |
| 05-30-2019 | March 2019 Groundwater Sampling Results | VERTEX Engineering, PC/NYSDEC | In March of 2019, Allen performed additional groundwater sampling where groundwater samples were collected from upgradient groundwater monitoring well IRM-MW-1 and downgradient well IRM-MW-3 were sampled for VOCs, 1,4-dioxane (1,4-D), and per- and polyfluoroalkyl substances (PFAS). The results were submitted to NYSDEC in a letter report dated 30 May 2019 prepared by VERTEX Engineering, PC.<br>No VOCs were detected in the groundwater samples except very low concentrations of acetone, a common lab contaminant.<br>1,4-D was detected in the groundwater sample collected from the upgradient well but not in the downgradient well.<br>Low concentrations of PFOA and PFOS were detected in both groundwater samples collected from the upgradient and downgradient wells. The suite of PFAS detected in both the upgradient and downgradient groundwater monitoring well samples were consistent and at similar concentrations, which is typical of shallow groundwater in urban commercial environments. 1,4-D was only detected in the upgradient groundwater monitoring well sample. The sources of PFAS and 1,4-D in groundwater are likely from upgradient/off-Site. |

| Document Date | Title/Topic | Prepared By/For | Specific Issue/Area |
|---|---|---|---|
| 02-05-2020 | Phase II Environmental Site Assessment | ERM/Alkier Steel | Due diligence Phase II environmental screening activities and results. Areas of concern (AOCs) considered and screened included:<br>▪ Boiler Blowdown Pit – Northwest End of Building<br>▪ Trench Drain – Hard Coating (Plating) Room<br>▪ Oily Trench Drain/Adjacent Floor Surfaces - Potting Room<br>▪ Floor Drain/Pit - Central Boiler Room<br>▪ Boiler Blowdown Pit – Central Boiler Room<br>▪ Floor Drain/Pit – Tumbling Room<br>▪ Floor Drain/Pit – Tumbling Room<br>▪ Floor Drain/Pit – Hardening Room<br>▪ Hazardous Waste Storage Area – West End of Building<br>▪ Spray Booths<br>▪ Oily Floor Surfaces In Drill Press Area<br>▪ Solvent Storage Area – Northeast Corner of Building<br>▪ Broaching Room<br>▪ Eastern Portion of Building Constructed Over Backfilled Former Sand Mine<br>▪ Former Storm Water Drywell Beneath Hard Coating (Plating Room)<br>▪ Former Storm Water Drywell Beneath Car Detailing Shop – Southwest Corner of Building<br>▪ Four potential USTs reported to have contained kerosene, mineral spirits, 1,1,1-TCA and waste oil<br>▪ 17 Parking Lot Storm Water Drywells<br>▪ Sub Slab Soil Vapor and Indoor Air Quality |
| 08-26-2020 | Site Inspection Report/Periodic Review Report and Corrective Measures Plan | ERM Consulting & Engineering, Inc. and Nicholas A. Andrianas, P.E./NYSDEC | This document presents:<br>▪ A Site Inspection/Periodic Review Report detailing engineering control systems and institutional controls associated with the Site;<br>▪ Documentation/summary of the due diligence environmental screening activities and results;<br>▪ Documentation for installation of the active sub-slab depressurization/venting system in the eastern portion of the building with an operations, maintenance and monitoring plan;<br>▪ Documentation for restoration of the soil vapor extraction system to full function<br>▪ Documentation for decommissioning/cleaning of the former plating room with Nassau County Department of Health inspection and approval.<br>▪ A Corrective Measures Plan to address impacts to environmental media at the Site identified by the due diligence screening activities. |
| 09-15-2020 | Order on Consent and Administrative Settlement Index # CO 1-20200730-128 Site #130100 Effective 09-25-2020 | NYSDEC/Alkier Steel | Alkier Steel agreed to implement Site management required in the SMP including corrective measures as required by Section 7.6 of the SMP and the obligations under a forthcoming Environmental Easement (“EE”).<br>The 2020 Order established an administrative mechanism for NYSDEC to oversee Alkier Steel’s implementation the Site management activities, and corrective measures including continued operation of the SVE system, and to address previously unknown residual historic contamination identified at the Site during Alkier Steel’s due diligence environmental screening activities. |
| 05-20-2021 | Environmental Easement For Site | NYSDEC/Alkier Steel | Environmental easement granted to the NYSDEC, and recorded with the Nassau County Clerk, requires compliance with the Site Management Plan (SMP) and all ECs and ICs placed on the Site. The environmental easement will be maintained as part of the conveyance of the property to the present tenant in-common fee owners. |

| Document Date | Title/Topic | Prepared By/For | Specific Issue/Area |
|---|---|---|---|
| 08-26-2021 | Periodic Review Report | Nicholas A. Andrianas, P.E./NYSDEC | This document presents:<br>▪ A Site Inspection/Periodic Review Report detailing engineering control systems and institutional controls associated with the Site;<br>▪ Executed Environmental Easement<br>▪ Documentation for installation of the active sub-slab depressurization/venting system in the western portion of the building and with an updated operation, maintenance and monitoring plan,<br>▪ Documentation that that the soil vapor extraction system to continues to operate.<br>▪ Documentation for disposal of stockpiled soils excavated in 2020 from the new loading areas in the central portion of the building. |
| 10-21-2021 | Remedial Action Status Summary | ERM/Alkier Steel LLC and Steel Mineola Second Street LLC | Summary of the of the remedial actions completed to date by Alkier Steel, LLC and Steel Mineola Second Street, LLC. |
| 06-29-2022 | Remedial Delineation Summary | ERM/Alkier Steel LLC and Steel Mineola Second Street LLC | Draft figures showing remedial work completed, delineation and post corrective action results. |
| 08-15-2022 | Periodic Review Report | Nicholas A. Andrianas, P.E./NYSDEC | This document presents:<br>▪ A Site Inspection/Periodic Review Report detailing engineering control systems and institutional controls associated with the Site;<br>▪ Executed Environmental Easement<br>▪ Documentation for installation of the active sub-slab depressurization/venting system in the western portion of the building<br>▪ Verification that the soil vapor extraction system to continues to operate. |
| 12-23-2022 | DRAFT DW-05 Corrective Measures Work Plan | ERM Consulting & Engineering, Inc./NYSDEC | Corrective Measures Work Plan (CMWP) intended to address soils impacted by polychlorinated biphenyls (PCBs) and to a lesser degree copper, nickel and lead within, adjacent to, and beneath a stormwater drywell identified as DW-05. |
| 03-29-2023 | Order on Consent and Administrative Settlement Index No. CO 1-20220106-6 Site #130100 Effective 04-08-2023 | NYSDEC/Alkier Steel | The 2023 Order specifies that it supersedes and replaces the prior 2020 Order with respect to Alkier Steel's obligations thereunder while the original 2003 Order remains in full force and effect. The full list of deliverables required by the 2023 Order include:<br>▪ Records Search Report;<br>▪ Citizen Participation Plan (CPP);<br>▪ SVE Site Management Corrective Measures Plan (SVE CMP);<br>▪ Site Management Corrective Measures Work Plan for the PCBs near "DW-5";<br>▪ Updated Site Management Plan (SMP); and<br>▪ Site Management Corrective Measures Construction Completion Report New Owner Modifications (CMCCR). |
| 04-12-2023 | NYSDEC Comment Letter For DRAFT DW-05 Corrective Measures Work Plan | NYSDEC/ERM Consulting & Engineering, Inc. | Comment letter from NYSDEC requesting minor edits and resubmittal. |
| 05-09-2023 | Final Citizens Participation Plan | ERM Consulting & Engineering, Inc./NYSDEC | |
| 05-09-2023 | Final Records Search Report | ERM Consulting & Engineering, Inc./NYSDEC | |
| 05-09-2023 | Final SVE Site Management Corrective Measures Work Plan | ERM Consulting & Engineering, Inc./NYSDEC | Work Plan to evaluate the SVE system. |
| 09-22-2023 | Final Site Management Corrective Measures Work Plan for the PCBs near "DW-05" | ERM Consulting & Engineering, Inc./NYSDEC | Work Plan to remediate soils within, beneath and adjacent to stormwater drywell DW-05. |

| Document Date | Title/Topic | Prepared By/For | Specific Issue/Area |
|---|---|---|---|
| 06-08-2023 | Updated 2023 Site Management Plan | ERM Consulting & Engineering, Inc./NYSDEC | Update to Apex 03-01-2015 SMP |
| 06-23-2023 | Site Management Corrective Measures Construction Completion Report New Owner Modifications | ERM Consulting & Engineering, Inc./NYSDEC | Report documenting all the remedial work completed by Alkier Steel following purchase of the Site (2019-2023). |
| 04-23-2024 | Site Management Corrective Measures Report for the Restart and Evaluation of the Soil Vapor Extraction ("SVE") | ERM Consulting & Engineering, Inc./NYSDEC | Results of the implementation of the Site Management Corrective Measures Work Plan for the Restart and Evaluation of the Soil Vapor Extraction (SVE CMWP). The work was implemented between May 2023 and January 2024. |
| 05-06-2024 | Site Management Corrective Measures Construction Completion Report for the PCBs near 'DW-05' | ERM Consulting & Engineering, Inc./NYSDEC | Results of implementation of the DW-05 CMWP. The report documents the excavation and off-site disposal of soils (and residual decontamination waters) impacted by PCBs within, adjacent to, and beneath a stormwater drywell identified as DW-05 at the Site. |
| May 2024 | Updated 2009 Final Engineering Report | CA RICH, Inc.& Nicholas A. Andrianas, P.E./NYSDEC | Document was never approved by NYSDEC. Updated to bring document into compliance with 2024 final engineering report requirements. |

## APPENDIX A 2021 ENVIRONMENTAL EASEMENT

# **** Electronically Filed Document ****

**Instrument Number:** 2021-91436
**Recorded As:** EX-D06 - DEED AGREEM
**Recorded On:** July 13, 2021
**Recorded At:** 10:48:09 am **Receipt Number:** 2327371
**Number of Pages:** 11 **Processed By:** 001 DMF
**Book-VI/Pg:** Bk-D VI-14106 Pg-696
**Total Rec Fee(s):** $700.00

** Examined and Charged as Follows **

| | | | | | |
|---|---|---|---|---|---|
| 06 - DEED AGREEMENT | $ 95.00 | EX-Blocks - Deeds - $300 | $ 600.00 | EX-TP-584 Affidavit Fee | $ 5.00 |

| | Tax Amount | Consid Amt | RS#/CS# | | |
|---|---|---|---|---|---|
| Tax-Transfer N. HEMPSTEAD | $ 0 | $ 0 | RE 27970 | Basic | $ 0.00 |
| | | | | Local NY CITY | $ 0.00 |
| | | | | Additional MTA | $ 0.00 |
| | | | | Spec ASST | $ 0.00 |
| | | | | Spec ADDL SONYMA | $ 0.00 |
| | | | | Transfer | $ 0.00 |
| Tax Charge: | $ 0 | | | | |

Property Information:

| Section | Block | Lot | Unit | Town Name |
|---|---|---|---|---|
| 9 | 437 | 466 | | N. HEMPSTEAD |
| 9 | 437 | 467 | | N. HEMPSTEAD |
| 9 | 663 | 4A | | N. HEMPSTEAD |
| 9 | 663 | 4B | | N. HEMPSTEAD |
| 9 | 663 | 5 | | N. HEMPSTEAD |

**********THIS PAGE IS PART OF THE INSTRUMENT **********

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

Maureen O'Connell

County Clerk Maureen O'Connell

# Spano Abstract Service Corp.

**350 Old Country Road, Suite 205, Garden City, NY 11530**
**(516) 294-7037 • Fax # (516) 742-9375 • info@spanoabstract.com**


July 16, 2021

Frisoni & Associates, P.C.
Robert J. Frisoni, Esq.
527 Townline Road
Suite 300
Hauppauge, NY 11788

RE: Title No. : AC19590-N
Premises : 235/255 East 2nd Street, MINEOLA, N.Y. 11501

Dear Sir or Madam:

Regarding the above referenced title, enclosed please find the original Environmental Easement which has been recorded in the County Clerk's Office. Kindly forward same to your client.

Should you have any questions, please do not hesitate to contact me.

Very truly yours,

*Recording Department*
Recording Department

Enc.

# **** Electronically Filed Document ****

**Instrument Number:** 2021-91436
**Recorded As:** EX-D06 - DEED AGREEM
**Recorded On:** July 13, 2021
**Recorded At:** 10:48:09 am **Receipt Number:** 2327371
**Number of Pages:** 11 **Processed By:** 001 DMF
**Book-VI/Pg:** Bk-D VI-14106 Pg-696
**Total Rec Fee(s):** $700.00

** Examined and Charged as Follows **

| | | | | | |
|---|---|---|---|---|---|
| 06 - DEED AGREEMENT | $ 95.00 | EX-Blocks - Deeds - $300 | $ 600.00 | EX-TP-584 Affidavit Fee | $ 5.00 |

| | Tax Amount | Consid Amt | RS#/CS# | | |
|---|---|---|---|---|---|
| Tax-Transfer N. HEMPSTEAD | $ 0 | $ 0 | RE 27970 | Basic | $ 0.00 |
| | | | | Local NY CITY | $ 0.00 |
| | | | | Additional MTA | $ 0.00 |
| | | | | Spec ASST | $ 0.00 |
| | | | | Spec ADDL SONYMA | $ 0.00 |
| | | | | Transfer | $ 0.00 |
| Tax Charge: | $ 0 | | | | |

Property Information:

| Section | Block | Lot | Unit | Town Name |
|---|---|---|---|---|
| 9 | 437 | 466 | | N. HEMPSTEAD |
| 9 | 437 | 467 | | N. HEMPSTEAD |
| 9 | 663 | 4A | | N. HEMPSTEAD |
| 9 | 663 | 4B | | N. HEMPSTEAD |
| 9 | 663 | 5 | | N. HEMPSTEAD |

**********THIS PAGE IS PART OF THE INSTRUMENT **********

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

NASSAU COUNTY STATE OF NEW YORK

Maureen O'Connell

County Clerk Maureen O'Connell

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

**THIS INDENTURE** made this 20th day of May, 2021 between Owner(s) Alkier Steel, LLC, as to an undivided seventy-five (75%) percent interest and Steel Mineola Second Street, LLC, as to an undivided twenty-five (25%) percent interest, as tenants-in-common, having an address at c/o Steel Equities, 999 South Oyster Bay Road, Suite 200, Bethpage, New York 11714, County of Nassau, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

S: 9
B: 437
L: 466
467

**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

S: 9
B: 663
L: 4A
4B
5

**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 235-255 East Second Street in the Town of North Hempstead, County of Nassau and State of New York, known and designated on the tax map of the County Clerk of Nassau as tax map parcel numbers: Section 9 Block 437 Lot 467 and Section 9 Block 663 Lot 5, being the same as that property conveyed to Grantor by deed dated June 4, 2019 and recorded in the Nassau County Clerk's Office in Liber and Page 13815/288.

**WHEREAS,** Grantor, is the owner of real property located at the address of 235-255 East Second Street in the Town of North Hempstead, County of Nassau and State of New York, known and designated on the tax map of the County Clerk of Nassau as tax map parcel numbers: Section 9 Block 437 Lot 466 and Section 9 Block 663 Lots 4A and 4B, being the same as that property conveyed to Grantor by deed dated June 4, 2019 and recorded in the Nassau County Clerk's Office in Liber and Page 13815/281.

**WHEREAS,** the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 4.2 +/- acres, and is hereinafter more fully described in the Land Title Survey dated October 27, 2017 and last revised October 25, 2018 prepared by Barry M. Fahrer, L.L.S., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

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

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: W1-0923-02-08, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

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

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

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

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

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

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

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau 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 or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

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

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

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

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the

property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

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

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

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

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

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

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

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

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

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

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

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

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

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

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

5. Enforcement

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

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

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

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

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

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

Parties shall address correspondence to:

Site Number: 130100
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.

11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

**Remainder of Page Intentionally Left Blank**

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

Alkier Steel, LLC:

By: _____

Print Name: Lee Marie Berkowitz

Title: Managing Member Date: 5/7/21

**Grantor's Acknowledgment**

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

On the 7 day of May, in the year 2021, before me, the undersigned, personally appeared Lee Marie Berkowitz, 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.

Georgia Emanuel
Notary Public - State of New York

GEORGIA EMANUEL
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01EM6396834
Qualified in Nassau County
My Commission Expires 8/26/23

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

Steel Mineola Second Street, LLC:

By: x _____

Print Name: Joseph Lostritto

Title: Managing Member Date: 5/7/21

**Grantor's Acknowledgment**

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

On the 7 day of May, in the year 2021, before me, the undersigned, personally appeared Joseph Lostritto, 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.

Georgia Emanuel
Notary Public - State of New York

GEORGIA EMANUEL
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01EM6396834
Qualified in Nassau County
My Commission Expires 8/26/23

**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: _____
Michael J. Ryan, Director
Division of Environmental Remediation

**Grantee's Acknowledgment**

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

On the 20th day of May, in the year 2021, before me, the undersigned, personally appeared Michael J. Ryan, 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

Dale L. Thiel
Notary Public, State of New York
Qualified in Columbia County
No 01TH6414394
Commission Expires February 22, 2025

## SCHEDULE "A" PROPERTY DESCRIPTION

### 255 East Second Street Environmental Easement Legal Description

BEGINNING at a point on the southerly side of Second Street, distant 2240 feet easterly from the corner formed by the intersection of the southerly side of Second Street and the easterly side of Roslyn Road;

RUNNING THENCE along the southerly side of Second Street, North 82 08'10" east, 644.1 feet;

THENCE south 7 51'50" east 271.98 feet to the northerly side of the land of the Long Island Rail Road;

THENCE along the northerly side of the last mentioned land, south 82 08'10" west 220.61 feet;

THENCE along the last mentioned land, south 2 54'20" east 14.07 feet;

THENCE along said land, south 82 09'10" west 399.59 feet;

THENCE north 7 51'50" west 286 feet to the southerly side of Second Street, at the point or place of beginning.

CONTAINING 4.2 ACRES.

TP-584 (9/19)

Department of Taxation and Finance

# Combined Real Estate Transfer Tax Return, Credit Line Mortgage Certificate, and Certification of Exemption from the Payment of Estimated Personal Income Tax

*Recording office time stamp*

*See Form TP-584-I,* Instructions for Form TP-584, *before completing this form. Print or type.*

## Schedule A – Information relating to conveyance

**Grantor/Transferor**

☐ Individual
☐ Corporation
☐ Partnership
☐ Estate/Trust
☐ Single member LLC
☒ Multi-member LLC
☐ Other

Name *(if individual, last, first, middle initial)* (☒ *mark an X if more than one grantor)*: Steel Mineola Second Street LLC and Alker Steel, LLC

Social Security number (SSN):

Mailing address: C/O Steel Equities, 999 South Oyster Bay Road, Suite 200

SSN:

City: Bethpage | State: NY | ZIP code: 11714

Employer Identification Number (EIN): 84-1912163

Single member's name if grantor is a single member LLC *(see instructions)*:

Single member EIN or SSN:

**Grantee/Transferee**

☐ Individual
☐ Corporation
☐ Partnership
☐ Estate/Trust
☐ Single member LLC
☐ Multi-member LLC
☒ Other

Name *(if individual, last, first, middle initial)* (☐ *mark an X if more than one grantee)*: The People of State of NY by Commissioner of Dept of Environmental Conservation

SSN:

Mailing address: 625 Broadway

SSN:

City: Albany | State: NY | ZIP code: 12233

EIN: 14-6013200

Single member's name if grantee is a single member LLC *(see instructions)*:

Single member EIN or SSN:

Location and description of property conveyed

| Tax map designation – Section, block & lot *(include dots and dashes)* | SWIS code (six digits) | Street address | City, town, or village | County |
|---|---|---|---|---|
| X.9 Block 437, Lots 466, 467<br>X.9 Block 663, Lots 4A, 4B 5 | 282223 | 235-255 East Second Street | Mineola | Nassau |

Type of property conveyed *(mark an X in applicable box)*

1 ☐ One- to three-family house
2 ☐ Residential cooperative
3 ☐ Residential condominium
4 ☐ Vacant land
5 ☒ Commercial/industrial
6 ☐ Apartment building
7 ☐ Office building
8 ☐ Four-family dwelling
9 ☐ Other _____

Date of conveyance: 05 (month) | 20 (day) | 2021 (year)

Percentage of real property conveyed which is residential real property 0 % *(see instructions)*

Condition of conveyance *(mark an X in all that apply)*

a. ☐ Conveyance of fee interest
b. ☐ Acquisition of a controlling interest (state percentage acquired _____ %)
c. ☐ Transfer of a controlling interest (state percentage transferred _____ %)
d. ☐ Conveyance to cooperative housing corporation
e. ☐ Conveyance pursuant to or in lieu of foreclosure or enforcement of security interest *(attach Form TP-584.1, Schedule E)*
f. ☐ Conveyance which consists of a mere change of identity or form of ownership or organization *(attach Form TP-584.1, Schedule F)*
g. ☐ Conveyance for which credit for tax previously paid will be claimed *(attach Form TP-584.1, Schedule G)*
h. ☐ Conveyance of cooperative apartment(s)
i. ☐ Syndication
j. ☐ Conveyance of air rights or development rights
k. ☐ Contract assignment
l. ☐ Option assignment or surrender
m. ☐ Leasehold assignment or surrender
n. ☐ Leasehold grant
o. ☒ Conveyance of an easement
p. ☐ Conveyance for which exemption from transfer tax claimed *(complete Schedule B, Part 3)*
q. ☐ Conveyance of property partly within and partly outside the state
r. ☐ Conveyance pursuant to divorce or separation
s. ☒ Other *(describe)* environmental easement

| *For recording officer's use* | Amount received | Date received | Transaction number |
|---|---|---|---|
| | Schedule B, Part 1 $ _____<br>Schedule B, Part 2 $ | | |

**TP-584 Schedule A**
**Additional Grantor Information**

**Grantor 2 Information**:

**Name**: Alkier Steel, LLC

**Grantor Type**: Multi-Member LLC

**Mailing Address**: C/O Steel Equities, Ste. 200,
999 South Oyster Bay Road,
Bethpage, NY 11714

**EIN**: 20-3915905

## Schedule B – Real estate transfer tax return (Tax Law Article 31)

**Part 1** – Computation of tax due

| | | | |
|---|---|---|---|
| 1 | Enter amount of consideration for the conveyance *(if you are claiming a total exemption from tax, mark an X in the Exemption claimed box, enter consideration and proceed to Part 3)* ☒ **Exemption claimed** | 1. | 0 00 |
| 2 | Continuing lien deduction *(see instructions if property is taken subject to mortgage or lien)* | 2. | 0 00 |
| 3 | Taxable consideration *(subtract line 2 from line 1)* | 3. | 0 00 |
| 4 | Tax: $2 for each $500, or fractional part thereof, of consideration on line 3 | 4. | 0 00 |
| 5 | Amount of credit claimed for tax previously paid *(see instructions and attach Form TP-584.1, Schedule G)* | 5. | 0 00 |
| 6 | Total tax due* *(subtract line 5 from line 4)* | 6. | 0 00 |

**Part 2** – Computation of additional tax due on the conveyance of residential real property for $1 million or more

| | | | |
|---|---|---|---|
| 1 | Enter amount of consideration for conveyance *(from Part 1, line 1)* | 1. | 0 00 |
| 2 | Taxable consideration *(multiply line 1 by the percentage of the premises which is residential real property, as shown in Schedule A)* | 2. | 0 00 |
| 3 | Total additional transfer tax due* *(multiply line 2 by 1% (.01))* | 3. | 0 00 |

**Part 3** – Explanation of exemption claimed on Part 1, line 1 *(mark an X in all boxes that apply)*

The conveyance of real property is exempt from the real estate transfer tax for the following reason:

a. Conveyance is to the United Nations, the United States of America, New York State, or any of their instrumentalities, agencies, or political subdivisions (or any public corporation, including a public corporation created pursuant to agreement or compact with another state or Canada) ..... a ☒

b. Conveyance is to secure a debt or other obligation ..... b ☐

c. Conveyance is without additional consideration to confirm, correct, modify, or supplement a prior conveyance ..... c ☐

d. Conveyance of real property is without consideration and not in connection with a sale, including conveyances conveying realty as bona fide gifts ..... d ☐

e. Conveyance is given in connection with a tax sale ..... e ☐

f. Conveyance is a mere change of identity or form of ownership or organization where there is no change in beneficial ownership. (This exemption cannot be claimed for a conveyance to a cooperative housing corporation of real property comprising the cooperative dwelling or dwellings.) Attach Form TP-584.1, Schedule F ..... f ☐

g. Conveyance consists of deed of partition ..... g ☐

h. Conveyance is given pursuant to the federal Bankruptcy Act ..... h ☐

i. Conveyance consists of the execution of a contract to sell real property, without the use or occupancy of such property, or the granting of an option to purchase real property, without the use or occupancy of such property ..... i ☐

j. Conveyance of an option or contract to purchase real property with the use or occupancy of such property where the consideration is less than $200,000 and such property was used solely by the grantor as the grantor's personal residence and consists of a one-, two-, or three-family house, an individual residential condominium unit, or the sale of stock in a cooperative housing corporation in connection with the grant or transfer of a proprietary leasehold covering an individual residential cooperative apartment ..... j ☐

k. Conveyance is not a conveyance within the meaning of Tax Law, Article 31, § 1401(e) *(attach documents supporting such claim)* ..... k ☐

* The total tax (from Part 1, line 6 and Part 2, line 3 above) is due within 15 days from the date of conveyance. Make check(s) payable to the county clerk where the recording is to take place. For conveyances of real property within New York City, use Form TP-584-NYC. If a recording is not required, send this return and your check(s) made payable to the ***NYS Department of Taxation and Finance***, directly to the NYS Tax Department, RETT Return Processing, PO Box 5045, Albany NY 12205-0045. If not using U.S. Mail, see Publication 55, *Designated Private Delivery Services*.

## Schedule C – Credit Line Mortgage Certificate (Tax Law Article 11)

**Complete the following only if the interest being transferred is a fee simple interest.**
This is to certify that: *(mark an X in the appropriate box)*

1. ☐ The real property being sold or transferred is not subject to an outstanding credit line mortgage.

2. ☐ The real property being sold or transferred is subject to an outstanding credit line mortgage. However, an exemption from the tax is claimed for the following reason:

   a ☐ The transfer of real property is a transfer of a fee simple interest to a person or persons who held a fee simple interest in the real property (whether as a joint tenant, a tenant in common or otherwise) immediately before the transfer.

   b ☐ The transfer of real property is (A) to a person or persons related by blood, marriage or adoption to the original obligor or to one or more of the original obligors or (B) to a person or entity where 50% or more of the beneficial interest in such real property after the transfer is held by the transferor or such related person or persons (as in the case of a transfer to a trustee for the benefit of a minor or the transfer to a trust for the benefit of the transferor).

   c ☐ The transfer of real property is a transfer to a trustee in bankruptcy, a receiver, assignee, or other officer of a court.

   d ☐ The maximum principal amount secured by the credit line mortgage is $3 million or more, and the real property being sold or transferred is **not** principally improved nor will it be improved by a one- to six-family owner-occupied residence or dwelling.

   **Note:** for purposes of determining whether the maximum principal amount secured is $3 million or more as described above, the amounts secured by two or more credit line mortgages may be aggregated under certain circumstances. See TSB-M-96(6)-R for more information regarding these aggregation requirements.

   e ☐ Other *(attach detailed explanation)*.

3. ☐ The real property being transferred is presently subject to an outstanding credit line mortgage. However, no tax is due for the following reason:

   a ☐ A certificate of discharge of the credit line mortgage is being offered at the time of recording the deed.

   b ☐ A check has been drawn payable for transmission to the credit line mortgagee or mortgagee's agent for the balance due, and a satisfaction of such mortgage will be recorded as soon as it is available.

4. ☐ The real property being transferred is subject to an outstanding credit line mortgage recorded in _____ (insert liber and page or reel or other identification of the mortgage). The maximum principal amount of debt or obligation secured by the mortgage is _____. No exemption from tax is claimed and the tax of _____ is being paid herewith. *(Make check payable to county clerk where deed will be recorded.)*

## Signature (both the grantors and grantees must sign)

The undersigned certify that the above information contained in Schedules A, B, and C, including any return, certification, schedule, or attachment, is to the best of their knowledge, true and complete, and authorize the person(s) submitting such form on their behalf to receive a copy for purposes of recording the deed or other instrument effecting the conveyance.

| Grantor signature | Title | Grantee signature | Title |
|---|---|---|---|
| | Managing Member | Bradford D. Burns, Esq. | Bureau Chief |
| | Managing Member | | |

**Reminder:** Did you complete all of the required information in Schedules A, B, and C? Are you required to complete Schedule D? If you marked *e*, *f*, or *g* in Schedule A, did you complete Form TP-584.1? Have you attached your check(s) made payable to the county clerk where recording will take place? If no recording is required, send this return and your check(s), made payable to the ***NYS Department of Taxation and Finance***, directly to the NYS Tax Department, RETT Return Processing, PO Box 5045, Albany NY 12205-0045. If not using U.S. Mail, see Publication 55, *Designated Private Delivery Services*.

## Schedule D – Certification of exemption from the payment of estimated personal income tax (Tax Law, Article 22, § 663)

**Complete the following only if a fee simple interest or a cooperative unit is being transferred by an individual or estate or trust.**

**If the property is being conveyed by a referee pursuant to a foreclosure proceeding, proceed to Part 2, mark an *X* in the second box under *Exemption for nonresident transferors/sellers*, and sign at bottom.**

**Part 1** – New York State residents

If you are a New York State resident transferor/seller listed in Form TP-584, Schedule A (or an attachment to Form TP-584), you must sign the certification below. If one or more transferor/seller of the real property or cooperative unit is a resident of New York State, **each** resident transferor/seller must sign in the space provided. If more space is needed, photocopy this Schedule D and submit as many schedules as necessary to accommodate all resident transferors/sellers.

### Certification of resident transferors/sellers

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor/seller as signed below was a resident of New York State, and therefore is not required to pay estimated personal income tax under Tax Law § 663(a) upon the sale or transfer of this real property or cooperative unit.

| Signature | Print full name | Date |
|---|---|---|
| Signature | Print full name | Date |
| Signature | Print full name | Date |
| Signature | Print full name | Date |

**Note:** A resident of New York State may still be required to pay estimated tax under Tax Law § 685(c), but not as a condition of recording a deed.

**Part 2** – Nonresidents of New York State

If you are a nonresident of New York State listed as a transferor/seller in Form TP-584, Schedule A (or an attachment to Form TP-584) but are not required to pay estimated personal income tax because one of the exemptions below applies under Tax Law § 663(c), mark an ***X*** in the box of the appropriate exemption below. If any one of the exemptions below applies to the transferor/seller, that transferor/seller is not required to pay estimated personal income tax to New York State under Tax Law § 663. **Each** nonresident transferor/seller who qualifies under one of the exemptions below must sign in the space provided. If more space is needed, photocopy this Schedule D and submit as many schedules as necessary to accommodate all nonresident transferors/sellers.

If none of these exemption statements apply, you must complete Form IT-2663, *Nonresident Real Property Estimated Income Tax Payment Form*, or Form IT-2664, *Nonresident Cooperative Unit Estimated Income Tax Payment Form.* For more information, see *Payment of estimated personal income tax,* on Form TP-584-I, page 1.

### Exemption for nonresident transferors/sellers

This is to certify that at the time of the sale or transfer of the real property or cooperative unit, the transferor/seller (grantor) of this real property or cooperative unit was a nonresident of New York State, but is not required to pay estimated personal income tax under Tax Law § 663 due to one of the following exemptions:

☐ The real property or cooperative unit being sold or transferred qualifies in total as the transferor's/seller's principal residence (within the meaning of Internal Revenue Code, section 121) from _____ (Date) to _____ (Date) *(see instructions)*.

☐ The transferor/seller is a mortgagor conveying the mortgaged property to a mortgagee in foreclosure, or in lieu of foreclosure with no additional consideration.

☐ The transferor or transferee is an agency or authority of the United States of America, an agency or authority of New York State, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association, or a private mortgage insurance company.

| Signature | Print full name | Date |
|---|---|---|
| Signature | Print full name | Date |
| Signature | Print full name | Date |
| Signature | Print full name | Date |

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**Office of the General Counsel**
625 Broadway, 14th Floor, Albany, New York 12233-1500
P: (518) 402-9185 | F: (518) 402-9018
www.dec.ny.gov

May 20, 2021

SENT VIA USPS DELIVERY CONFIRMATION
0306303000027041806 5
AND ELECTRONIC MAIL to asloto@sprlaw.com

Allison Sloto, Esq.
Sive, Page & Riesel, PC
560 Lexington Ave.
New York, NY 10022

RE: Environmental Easement Package
Site Name: A.K. Allen
Site no. 130100

Dear Ms. Sloto,,

Enclosed please find a fully executed Environmental Easement, and the TP-584 tax form required for recording.

Once the Environmental Easement is recorded, the local municipality will need to be notified via Certified Mail, Return Receipt Requested.

Please return to this office, copies of the recorded easement marked by the County Clerk's Office with the date and location of recording, and a certified copy of the municipal notices. The information from the recorded easement and notices are necessary to process the Certificate of Completion.

If you have any further questions or concerns relating to this matter, please contact our office at (518) 408-0409.

Sincerely,

Dale L. Thiel
Legal Assistant 2
Remediation
Bureau

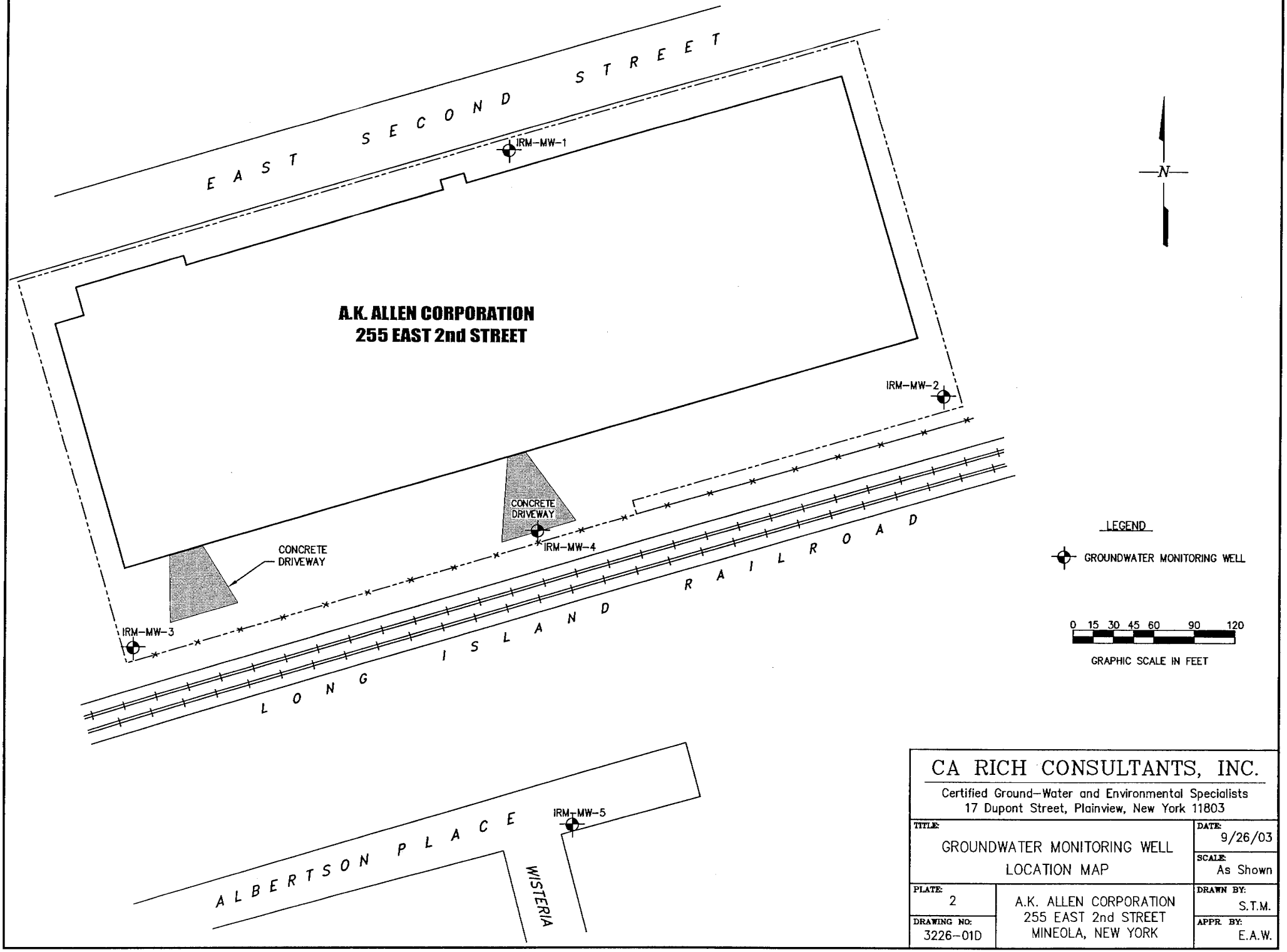
ec: B. Burns, Esq., NYSDEC

# APPENDIX B SITE-RELATED CONTACT INFORMATION

**Appendix B**
**Project Contacts**

| Name | Phone/Email Address |
|---|---|
| Kevin Lumpe<br>Steel Equities Construction and Environmental Director<br>Owner/Operator Representative | 516-465-0016/ klumpe@steelequities.com |
| Chris Wenczel, PG (NY)<br>ERM Consulting & Engineering, Inc.<br>Qualified Environmental Professional | 516-315-8221/ chris.wenczel@erm.com |
| James Ryan, PE (NY)<br>ERM Consulting & Engineering, Inc.<br>Senior Engineer | 315-233-3045 jim.ryan@erm.com |
| Nicholas A. Andrianas, PE (NY)<br>Senior Engineer | 516-680-1677/ nickandrianas@optimum.net |
| Alexander Klein<br>NYSDEC Project Manager | 518-402-9622/ alexander.klein@dec.ny.gov |
| Robert DeCandia<br>NYSDEC Supervisor | 518-402-9693/ rob.decandia@dec.ny.gov |
| Bill Fonda<br>NYSDEC Citizen Participation Specialist | 631-444-0350/ Bill.Fonda@dec.ny.gov |
| Mark S. Sergott, P.G.<br>NYSDOH Project Manager | 518 402-7897 / mark.sergott@health.ny.gov |
| Marlon Ramlogan | 212-637-4185/ ramlogan.marlon@epa.gov |
| Stephen Humes<br>Holland & Knight<br>Remedial Party Attorney | 212-513-3473/ steve.humes@hklaw.com |

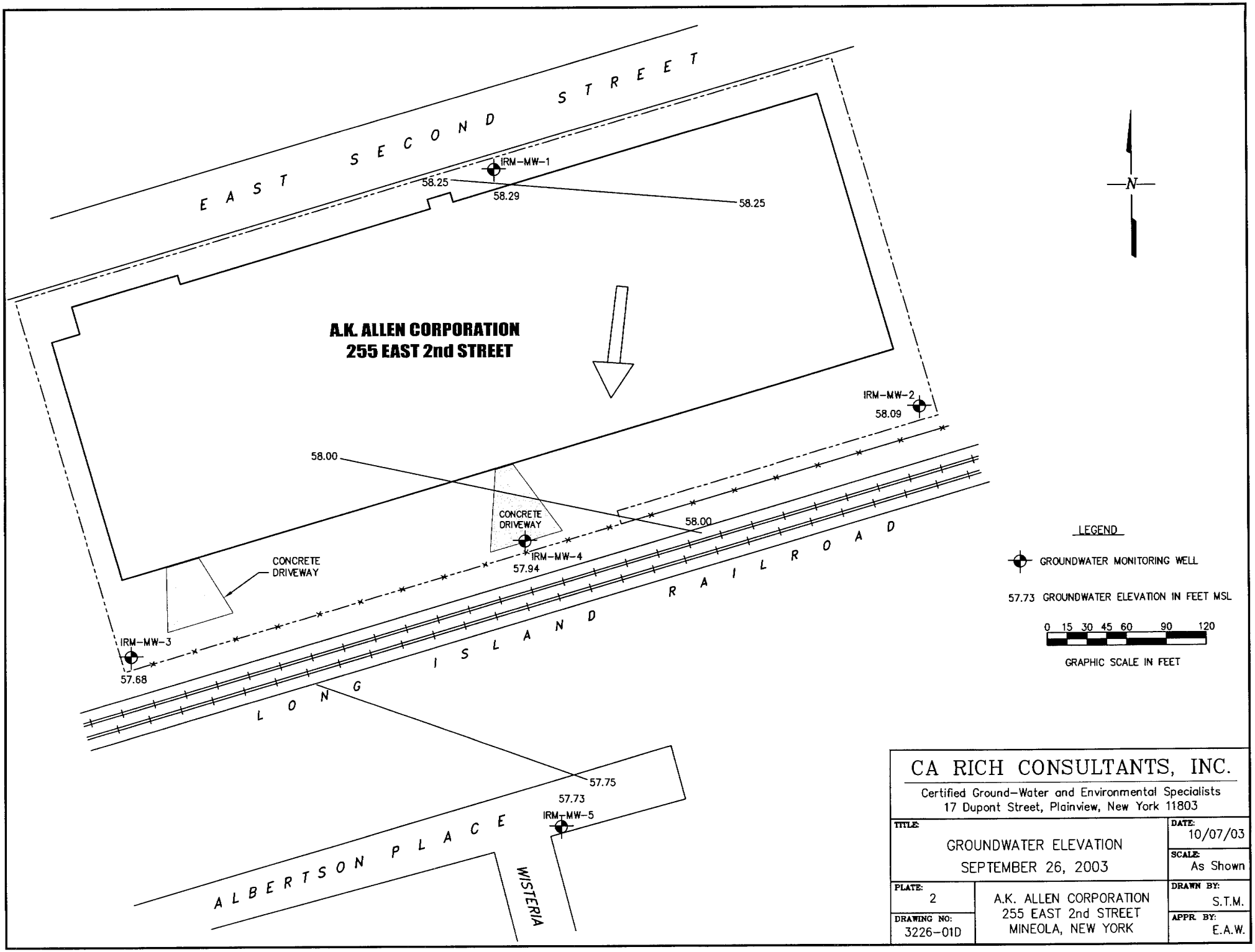
## APPENDIX C SITE-SPECIFIC BORING AND WELL CONSTRUCTION LOGS, SITE WELL LOCATION MAP, SITE-SPECIFIC 2003 GROUNDWATER CONTOUR MAP & REGIONAL 2016 USGS GROUNDWATER SURFACE CONTOUR MAP



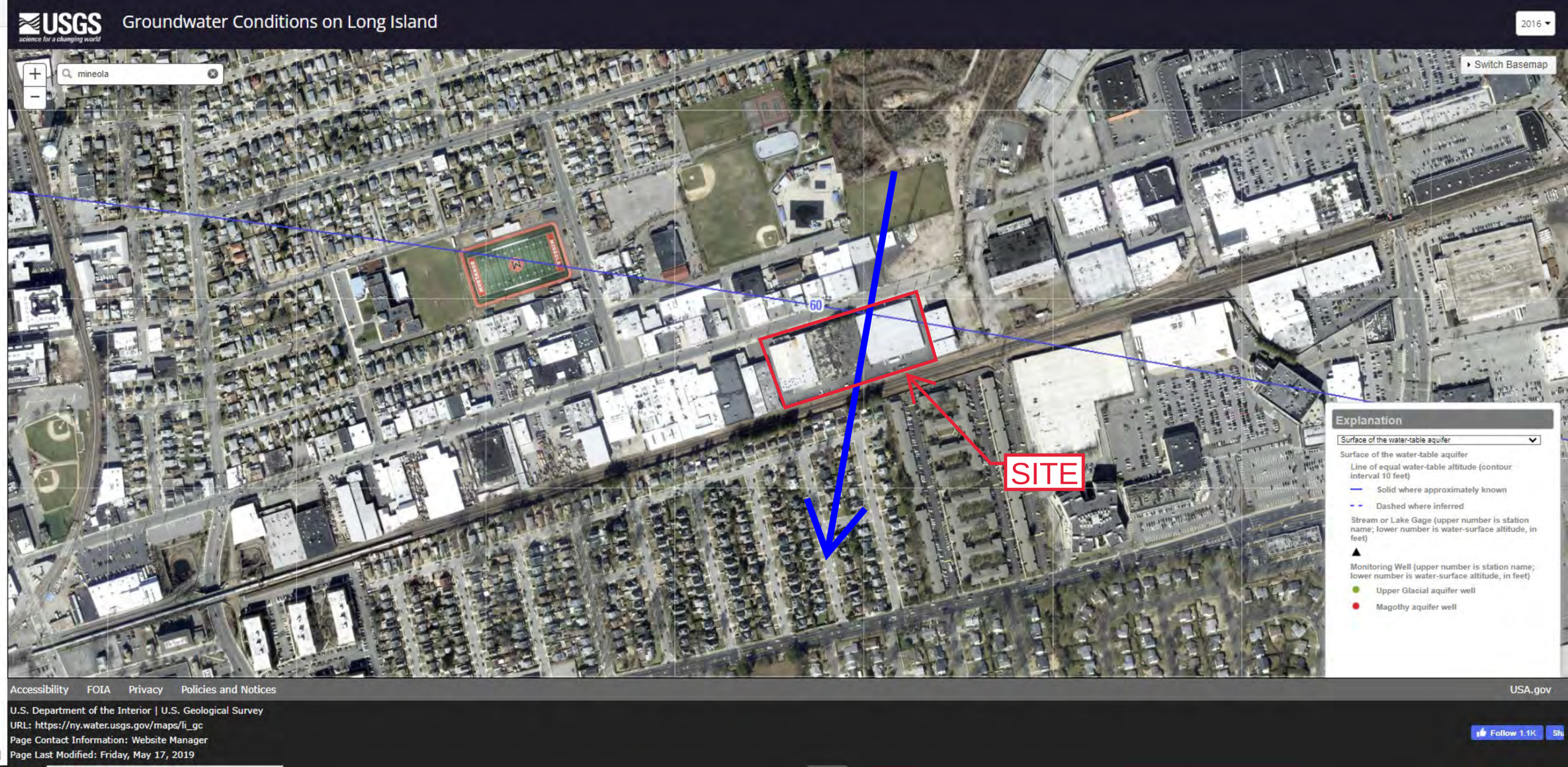

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

| | | |
|---|---|---|
| TITLE: GROUNDWATER MONITORING WELL LOCATION MAP | | DATE: 9/26/03 |
| | | SCALE: As Shown |
| PLATE: 2 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01D | | APPR. BY: E.A.W. |




| CA RICH CONSULTANTS, INC. | | |
|---|---|---|
| Certified Ground-Water and Environmental Specialists<br>17 Dupont Street, Plainview, New York 11803 | | |
| TITLE: GROUNDWATER ELEVATION SEPTEMBER 26, 2003 | | DATE: 10/07/03 |
| | | SCALE: As Shown |
| PLATE: 2 | A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01D | | APPR. BY: E.A.W. |


USGS
science for a changing world
Groundwater Conditions on Long Island
2016
mineola
Switch Basemap
60
SITE
Explanation
Surface of the water-table aquifer
Surface of the water-table aquifer
Line of equal water-table altitude (contour interval 10 feet)
Solid where approximately known
Dashed where inferred
Stream or Lake Gage (upper number is station name; lower number is water-surface altitude, in feet)
Monitoring Well (upper number is station name; lower number is water-surface altitude, in feet)
Upper Glacial aquifer well
Magothy aquifer well
Accessibility
FOIA
Privacy
Policies and Notices
USA.gov
U.S. Department of the Interior | U.S. Geological Survey
URL: https://ny.water.usgs.gov/maps/li_gc
Page Contact Information: Website Manager
Page Last Modified: Friday, May 17, 2019
Follow 1.1K

# CA RICH Consultants, Inc.

17 Dupont Street, Plainview, New York 11803

Boring Number IRM-B1

## BORING LOG

| | | | |
|---|---|---|---|
| Project Name & Location: A.K. Allen, Mineola, NY | Project Number: | Date & Time Started: 3/27/2003 7:45 AM | |
| | | Date & Time Completed: 3/27/2003 12:15 PM | |
| Drilling Company: Aquifer Drilling & Testing | Foreman: Shaun Miller | Sampler(s): IHO & MTY | Sampler Hammer: NA / Drop: NA |
| Drilling Equipment: Hollow Stem Auger | Method: Direct Push | Elevation & Datum: NA | Completion Depth: 54 feet / Rock Depth: None |
| Bit Size(s): Macro | Core Barrel(s): | Project Scientist(s): Ivy Hidalgo-Olberding, Michael T. Yager | |

| DEPTH (ft below grade) | SAMPLES: Sample Interval | Recovery (feet) | FID/PID (ppm) | Blow Counts | SOIL DESCRIPTION | REMARKS |
|---|---|---|---|---|---|---|
| | LOCATION: IRM-B1 | | | | SURFACE DESCRIPTION: | |
| 0 | 0-2 | NA | | | Asphalt cover<br>Brown, tan medium to coarse gravelly sand | Started Drilling at 0745 |
| 2 | 2-4 | 1' | 14.4 | 5,3,4,9 | Orange, tan medium to fine grained sand. | Sample collected 2-4' @0900 |
| 4 | 4-6 | 1' | 6.1 | 12,18,23, 32 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 6 | 6-8 | 1' | 18.9 | 13,16, 23,26 | Orange, tan medium to fine grained sand. | Sample collected 6-8' @ 0910 VOC's & Dupe |
| 8 | 8-10 | 1' | 5.5 | 10,16, 18,20 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 10 | 10-12 | 1' | 3.7 | 10,14, 16,18 | Orange, tan medium to fine grained sand. | Sample collected 10-12' @ 0920 |
| 12 | 12-14 | 1' | 3.7 | 9,11 11,12 | Orange, tan medium to fine grained sand. | Sample collected 10-12' @ 0925 |
| 14 | 14-16 | 1' | 3.3 | 10,11 15,14 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 16 | 16-18 | 1' | 3.3 | 7,7, 11,17 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 18 | 18-20 | 1' | 0.5 | 16,19, 12,16 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 20 | | | | | | |



Signature: [signature] Date: 9/26/03

# CA RICH Consultants, Inc.

17 Dupont Street, Plainview, New York 11803

Boring Number IRM-B1

## BORING LOG

| | | | |
|---|---|---|---|
| Project Name & Location: A.K. Allen, Brooklyn, NY | Project Number: | Date & Time Started: 3/27/2003 7:45 AM | |
| | | Date & Time Completed: 3/27/2003 12:35 PM | |
| Drilling Company: Aquifer Drilling & Testing | Foreman: Shaun Miller | Sampler(s): IHO & MTY | Sampler Hammer: NA / Drop: NA |
| Drilling Equipment: Hollow Stem Auger | Method: | Elevation & Datum: NA | Completion Depth: 54 feet / Rock Depth: None |
| Bit Size(s): Macro | Core Barrel(s): | Project Scientist(s): Ivy Hidalgo-Olberding, Michael T. Yager | |

| DEPTH (ft below grade) | SAMPLES: Sample Number | Recovery (feet) | FID/PID (ppm) | Blow Counts | SOIL DESCRIPTION | REMARKS |
|---|---|---|---|---|---|---|
| | LOCATION: IRM-B1 | | | | SURFACE DESCRIPTION: | |
| 22 | 20-22 | NA | 5.2 | 6,9,13,20 | Orange, tan medium to fine grained sand. | Sample collected 20-22' @ 0940 |
| 24 | 22-24 | 1' | 3.7 | 13,12, 11,14 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 26 | 24-26 | NA | 4.8 | 8,8,11,12 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 28 | 26-28 | NA | 6.2 | 13,14, 22,14 | Orange, tan medium to fine grained sand. | Sample collected 26-28' @ 0950 |
| 30 | 28-30 | NA | 3.1 | 7,9,17,11 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 32 | 30-32 | NA | 1.1 | 19,13, 20,18 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 34 | 32-34 | 1' | 2.5 | 13,17, 20,14 | Orange fine grained sand with pebbles graded to fine grained silty clay at 33-34' | Sample collected 32-34' @ 1015 |
| 36 | 34-36 | 18" | 1.9 | 18,26 20,12 | Orange medium coarse grained sand. | No visual or olfactory signs of contamination. |
| 38 | 36-38 | 18" | 2.1 | 10,16 14,21 | Orange medium coarse grained sand. | No visual or olfactory signs of contamination. |
| 40 | 38-40 | 18" | 3.6 | 24,36 17,18 | Orange medium coarse grained sand. | Sample collected 38-40' @ 1025 |
| 42 | | | | | | |



Signature: Ivy Hidalgo-Olberding Date: 9/26/03

# CA RICH Consultants, Inc.

17 Dupont Street, Plainview, New York 11803

Boring Number **IRM-B1**

## BORING LOG

| | | | |
|---|---|---|---|
| Project Name & Location: A.K. Allen, Brooklyn, NY | Project Number: | Date & Time Started: 3/27/2003 7:45 AM | |
| | | Date & Time Completed: 3/27/2003 12:15 PM | |
| Drilling Company: Aquifer Drilling & Testing | Foreman: Shaun Miller | Sampler(s): IHO & MTY | Sampler Hammer: NA / Drop: NA |
| Drilling Equipment: Hollow Stem Auger | Method: | Elevation & Datum: NA | Completion Depth: 54 feet / Rock Depth: None |
| Bit Size(s): Macro | Core Barrel(s): | Project Scientist(s): Ivy Hidalgo-Olberding, Michael T. Yager | |

| DEPTH (ft below grade) | SAMPLES: Sample Number | Recovery (feet) | FID/PID (ppm) | Blow Counts | SOIL DESCRIPTION | REMARKS |
|---|---|---|---|---|---|---|
| | LOCATION: IRM-B1 | | | | SURFACE DESCRIPTION: | |
| 44 | 40-42 | 18" | 0.8 | 24,18, 30,16 | Orange medium coarse grained sand. | No visual or olfactory signs of contamination. |
| 42 | 42-44 | 18" | 0.6 | 22,18 25,18 | Orange to tan fine grained sand w/ quartz pebbles. Grades to orange- tan med. to fine grained sand. | No visual or olfactory signs of contamination. |
| 46 | 44-46 | 16" | 0.9 | 23,16 21, 24 | Orange- tan med. to fine grained sand. | No visual or olfactory signs of contamination. |
| 48 | 46-48 | 20" | 3.7 | 31, 29, 31, 45 | Orange- tan med. to fine grained sand. | No visual or olfactory signs of contamination. Time: 1043 |
| 50 | 48-50 | 22" | 158.3 0.0 | 27, 27 31, 24 | Tan to orange fine grained sand. | No visual or olfactory signs of contamination. Time: 1140 |
| 52 | 50-52 | 12" | 2.4 0.0 | 20, 34 50, 50 | Light tan fine grained sand w/quartz pebbles. | No visual or olfactory signs of contamination. |
| 54 | 52-54 | 16" | | | Light tan fine-med grained sand w/quartz pebbles. | GW encountered at ~ 54'<br>Drilling stopped at 54'. Time: 1215 |
| | | | | | | Ground water encountered at approximately 52 ft. Borehole terminated at 53 feet. |
| 56 | 54-56 | | | | | |



Signature: [signature] Date: 9/26/03

# CA RICH Consultants, Inc.

Boring Number IRM-B2

17 Dupont Street, Plainview, New York 11803

## BORING LOG

| | | | | |
|---|---|---|---|---|
| Project Name & Location: A.K. Allen, Mineola, NY | Project Number: | Date & Time Started: 3/27/2003 12:00 PM | | |
| | | Date & Time Completed: 3/27/2003 12:50 PM | | |
| Drilling Company: ADT Diamond | Foreman: Dennis Crayon | Sampler(s): IHO & MTY | Sampler Hammer: NA | Drop: NA |
| Drilling Equipment: CME 75 Hollow Stem Auger | Method: Direct Push | Elevation & Datum: NA | Completion Depth: 54 feet | Rock Depth: None |
| Bit Size(s): Macro | Core Barrel(s): | Project Scientist(s): Ivy Hidalgo-Olberding, Michael T. Yager | | |

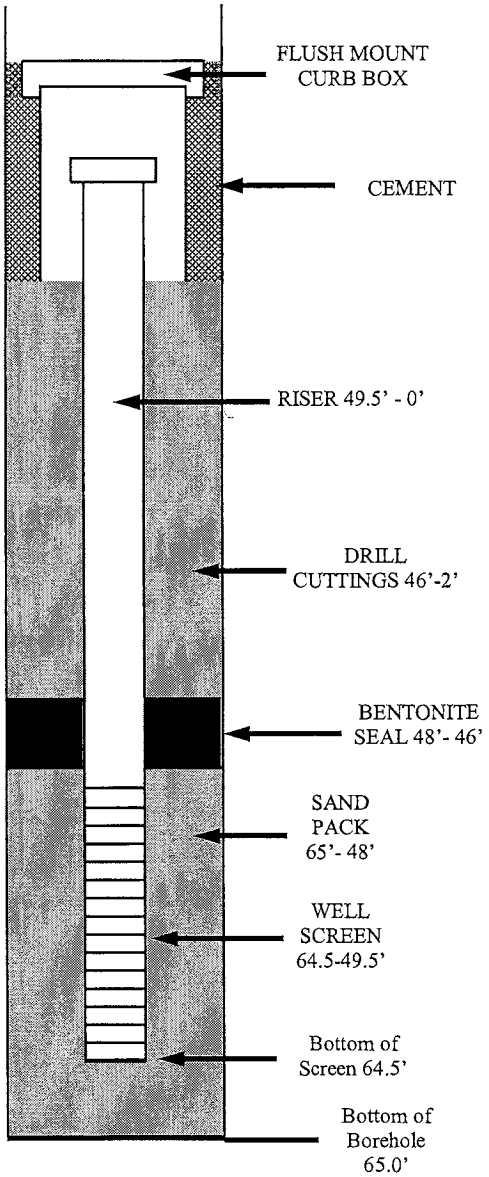
| DEPTH (ft below grade) | SAMPLES: Sample Interval | Recovery (feet) | FID/PID (ppm) | Blow Counts | SOIL DESCRIPTION | REMARKS |
|---|---|---|---|---|---|---|
| | LOCATION: IRM-B2 | | | | SURFACE DESCRIPTION: | |
| 0 | 0-10 | NA | 2.5 | 4,7,8,8 | Asphalt cover<br>Brown, tan medium to coarse gravelly sand | Started Drilling at 1200. No visual or olfactory signs of contamination. |
| 10 | 10-20 | NA | NA | 4,7,8,8 | Orange medium grained sand. | Sample collected 10-12' @ 1210. No visual<br>No visual or olfactory signs of contamination. |
| 20 | 20-30 | NA | NA | 6,8,10,16 | Orange, tan medium grained sand. | Sample collected 20-22' @ 1215. No visual or olfactory signs of contamination. |
| | | | 0.4 | | | |
| 30 | 30-40 | NA | NA | 9,12, 13, 18 | Tan medium to fine grained sand. | Sample collected 30-32' @ 1225. No visual or olfactory signs of contamination. |
| 40 | 40-50 | NA | 2.3 | 5, 8, 10, 16 | Orange, tan medium to fine grained sand. | No visual or olfactory signs of contamination. |
| 50 | 50-60 | NA | 0.2 | 19, 25 28, 23 | Orange, tan fine grained sand. | Encountered Water table at ~ 54'.<br>Stopped drilling at 54' at 1250. |
| 60 | | | | | | |

Page 1 of 1 Signature: Ivy Hidalgo-Olberding Date: 9/26/03

# CA RICH CONSULTANTS, INC.

**Certified Groundwater and Environmental Specialists**
17 Dupont Street
Plainview, New York

**PROJECT: A.K. Allen Company**
**WELL ID: IRM-MW-1**




## DRILLING SUMMARY

**Drilling Co.: ADT Jersey**
**Drillers: Denis Crayon, AJ Benjamin**
**Drill Rig Make/Model: CME 75**
**Borehole Diameters: O.D. 8" I.D. 4.25"**
**Total Depth: 65'**
**Depth to Water: ~ 54'**
**Supervisory Geologist: Ivy Hidalgo-Olberding**

## WELL DESIGN

**Casing Material: PVC**
**Diameter / Length: 2" / 50'**
**Screen Material: PVC**
**Diameter / Length: 2" / 15'**
**Slot Size / Setting: 20 (0.020) / 64.5' - 49.5'**
**Filter Material / Setting: #1 Morie Sand 65' - 48'**
**Seals Material / Setting: Bentonite Chips 48' - 46'**
**Drill Cuttings Setting: 46' - 2'**
**Grout / Setting: Cement / 2' - surface**
**Surface Casing Material : Flush mount curb box**

## TIME LOG

| | | Started | Completed |
|---|---|---|---|
| **Drilling:** | 03-28-03 | 1100 | 1230 |
| **Installation:** | | 1230 | 1300 |
| **Development:** | 9/17/03 | 1135 | 1205 |

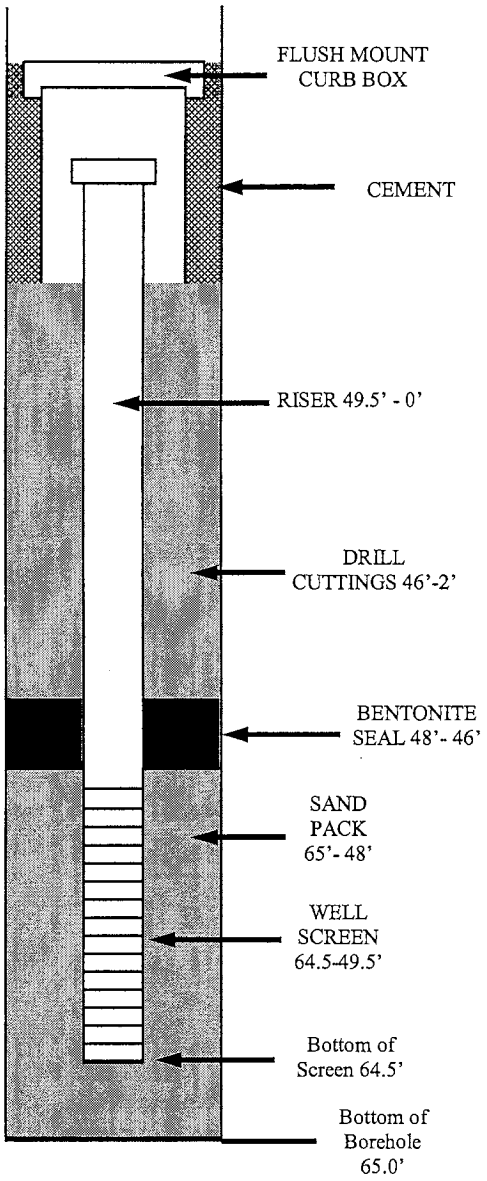
## WELL DEVELOPMENT

**Method: Surge and Pump**
**Static Depth to Water: 53.17**
**Pumping Depth to Water: 53.30**
**Pumping Rate: 2.5 GPM @223 volts**
NTU reading: 22

# CA RICH CONSULTANTS, INC.

**Certified Groundwater and Environmental Specialists**
17 Dupont Street
Plainview, New York

**PROJECT: A.K. Allen Company**
**WELL ID: IRM-MW-2**




## DRILLING SUMMARY

**Drilling Co.: ADT Jersey**
**Drillers: Denis Crayon, AJ Benjamin**
**Drill Rig Make/Model: CME 75**
**Borehole Diameters: O.D. 8" I.D. 4.25"**
**Total Depth: 65'**
**Depth to Water: ~ 54'**
**Supervisory Geologist: Ivy Hidalgo-Olberding**

## WELL DESIGN

**Casing Material: PVC**
**Diameter / Length: 2" / 50'**
**Screen Material: PVC**
**Diameter / Length: 2" / 15'**
**Slot Size / Setting: 20 (0.020) / 64.5' - 49.5'**
**Filter Material / Setting: #1 Morie Sand 65' - 48'**
**Seals Material / Setting: Bentonite Chips 48' - 46'**
**Drill Cuttings Setting: 46' - 2'**
**Grout / Setting: Cement / 2' - surface**
**Surface Casing Material : Flush mount curb box**

## TIME LOG

| | | Started | | Completed |
|---|---|---|---|---|
| **Drilling:** | 03-27-03 | 1355 | | 1445 |
| **Installation:** | | 1450 | 3-28-03 | 0800 |
| **Development: 9/27/03** | | **1245** | | **1315** |

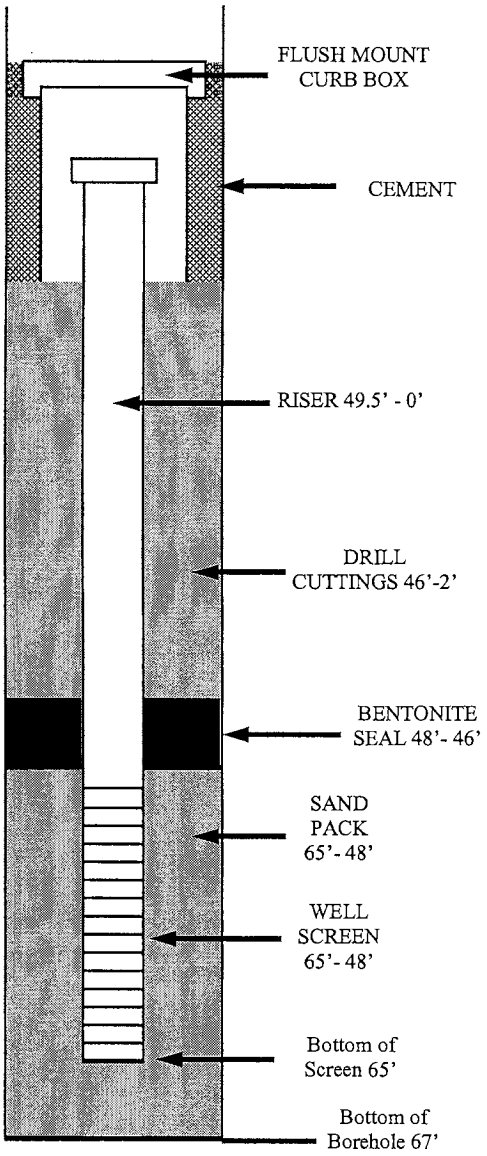
## WELL DEVELOPMENT

**Method: Pump and Surge**
**Static Depth to Water:** 53.63
**Pumping Depth to Water: 53.75**
**Pumping Rate: 2.5 GPM @ 223 volts**
**NTU reading: 18**

# CA RICH CONSULTANTS, INC.

**Certified Groundwater and Environmental Specialists**
17 Dupont Street
Plainview, New York

**PROJECT: A.K. Allen Company**
**WELL ID: IRM-MW-3**




## DRILLING SUMMARY

**Drilling Co.: ADT Jersey**
**Drillers: Shawn Miller, Yousri Kamel**
**Drill Rig Make/Model: Mobil Drill B-61**
**Borehole Diameters: O.D. 8" I.D. 4.25"**
**Total Depth: 67'**
**Depth to Water: ~ 52' BLS**
**Supervisory Geologist: Michael T. Yager**

## WELL DESIGN

**Casing Material: PVC**
**Diameter / Length: 2" / 50'**
**Screen Material: PVC**
**Diameter / Length: 2" / 15'**
**Slot Size / Setting: 20 (0.020) / 65' - 50'**
**Filter Material / Setting: #1 Morie Sand 65' - 48'**
**Seals Material / Setting: Bentonite Chips 48' - 46'**
**Drill Cuttings Setting: 46' - 2'**
**Grout / Setting: Cement / 2' - surface**
**Surface Casing Material : Flush mount curb box**

## TIME LOG

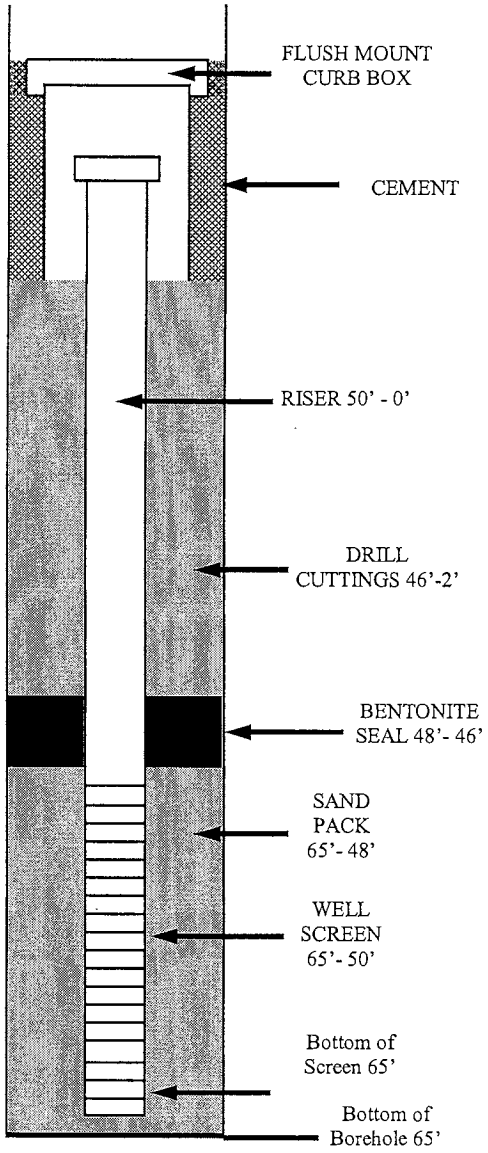
| | Started | Completed |
|---|---|---|
| **Drilling: 03-27-03** | 1315 | 1400 |
| **Installation:** | 1400 | 1500 |
| **Development: 9/17/03** | **1345** | **1415** |

## WELL DEVELOPMENT

**Method: Pump and Surge**
**Static Depth to Water: 53.10**
**Pumping Depth to Water: 54.05**
**Pumping Rate: 2.5 GPM @ 221 volts**
NTU reading: 15

**CA RICH CONSULTANTS, INC.**
**Certified Groundwater and Environmental Specialists**
17 Dupont Street
Plainview, New York

**PROJECT: A.K. Allen Company**
**WELL ID: IRM-MW-4**




## DRILLING SUMMARY

**Drilling Co.: Aquifer Drilling & Testing**
**Drillers: Lloyd Adams, Rudolfo Rios**
**Drill Rig Make/Model: CME-75**
**Borehole Diameters: O.D. 8" I.D. 4.25"**
**Total Depth: 65'**
**Depth to Water: ~ 52' BLS**
**Supervisory Geologist: Ivy Hidalgo-Olberding**

## WELL DESIGN

**Casing Material: PVC**
**Diameter / Length: 2" / 50'**
**Screen Material: PVC**
**Diameter / Length: 2" / 15'**
**Slot Size / Setting: 20 (0.020) / 65' - 50'**
**Filter Material / Setting: #1 Morie Sand 65' - 48'**
**Seals Material / Setting: Bentonite Chips 48' - 46'**
**Drill Cuttings Setting: 46' - 2'**
**Grout / Setting: Cement / 2' - surface**
**Surface Casing Material : Flush mount curb box**

## TIME LOG

| | | Started | Completed |
|---|---|---|---|
| **Drilling:** | 09-15-03 | 1300 | 1500 |
| **Installation:** | | 1500 | 1630 |
| **Development:** | 9/17/03 | 1445 | 1340 |

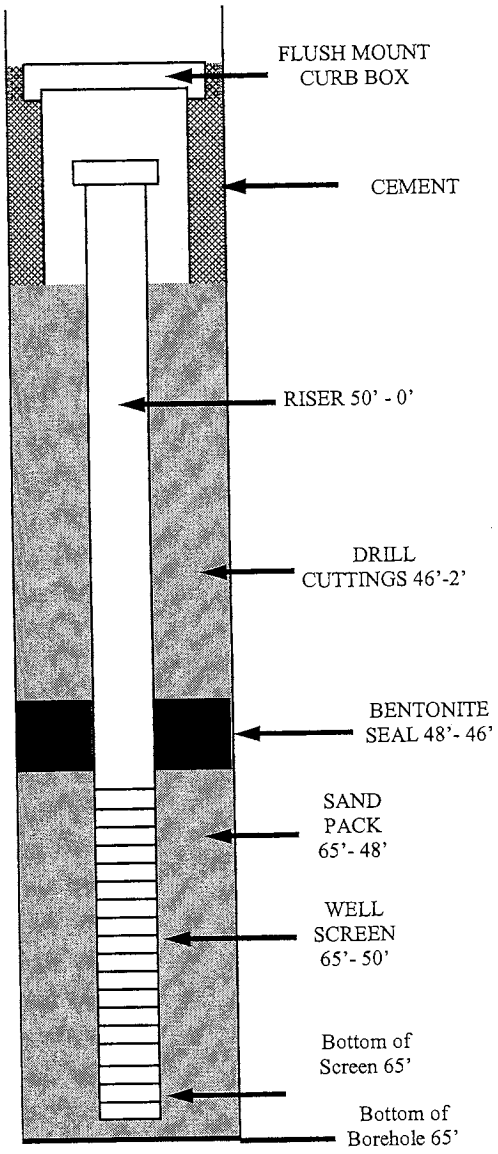
## WELL DEVELOPMENT

**Method: Pump and Surge**
**Static Depth to Water: 51.65**
**Pumping Depth to Water: 51.81**
**Pumping Rate: 3 GPM @ 202 volts**
**NTU reading: 25**

# CA RICH CONSULTANTS, INC.

**Certified Groundwater and Environmental Specialists**
17 Dupont Street
Plainview, New York

**PROJECT: A.K. Allen Company**
**WELL ID: IRM-MW-5**




## DRILLING SUMMARY

**Drilling Co.: Aquifer Drilling & Testing**
**Drillers: Lloyd Adams, Rudolfo Rios**
**Drill Rig Make/Model: CME-75**
**Borehole Diameters: O.D. 8" I.D. 4.25"**
**Total Depth: 65'**
**Depth to Water: ~ 52' BLS**
**Supervisory Geologist: Ivy Hidalgo-Olberding**

## WELL DESIGN

**Casing Material: PVC**
**Diameter / Length: 2" / 50'**
**Screen Material: PVC**
**Diameter / Length: 2" / 15'**
**Slot Size / Setting: 20 (0.020) / 65' - 50'**
**Filter Material / Setting: #1 Morie Sand 65' - 48'**
**Seals Material / Setting: Bentonite Chips 48' - 46'**
**Drill Cuttings Setting: 46' - 2'**
**Grout / Setting: Cement / 2' - surface**
**Surface Casing Material : Flush mount curb box**

## TIME LOG

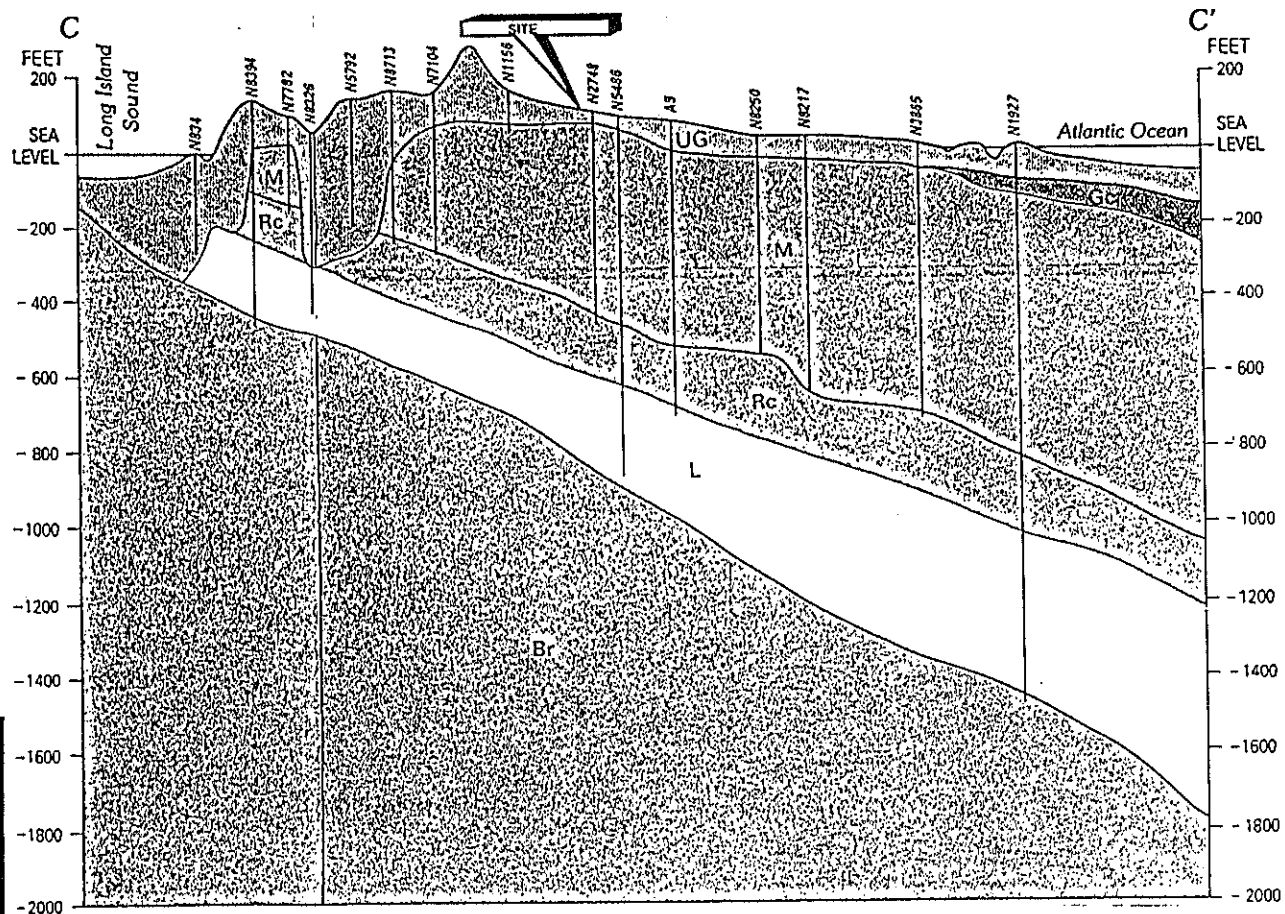
| | | Started | Completed |
|---|---|---|---|
| **Drilling:** | 09-15-03 | 0900 | 1100 |
| **Installation:** | | 1100 | 1230 |
| **Development:** | 09/17/03 | 1025 | **1100** |

## WELL DEVELOPMENT

**Method: Pump and Surge**
**Static Depth to Water: 49.10**
**Pumping Depth to Water: 49.15**
**Pumping Rate: 2.5 GPM**
NTU reading: 19

## APPENDIX D 1996 RI REPORT FIGURES & TABLES

# FIGURES

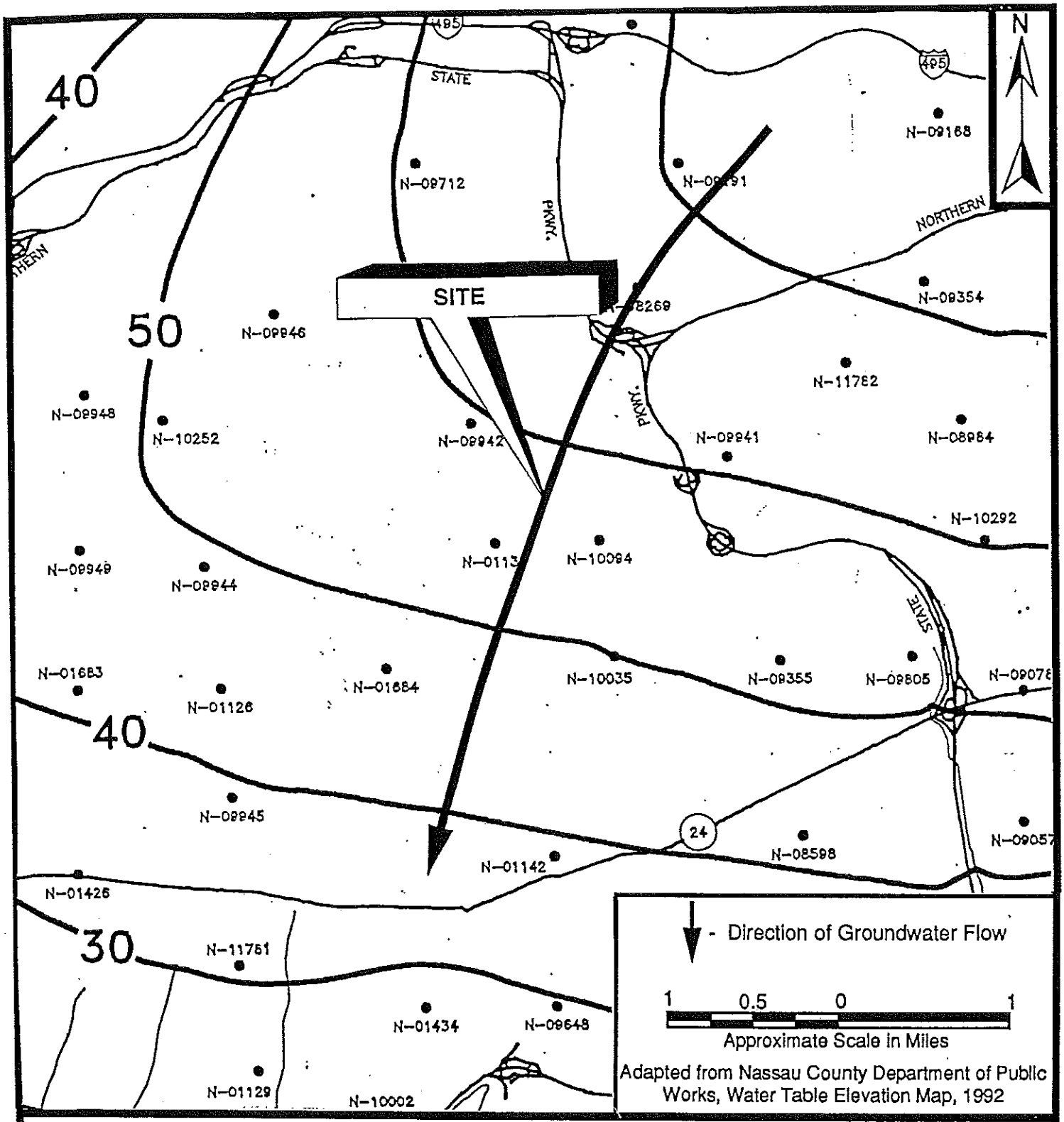



| KEY |
|---|
| UG - Upper Glacial Aquifer |
| M - Magothy Aquifer |
| Rc - Raritan Confining Unit |
| L - Loyd Aquifer |
| Br - Bedrock |

Adapted from Hydrologic Framework of Long Island, New York, D. A. Smolensky et. al., 1989

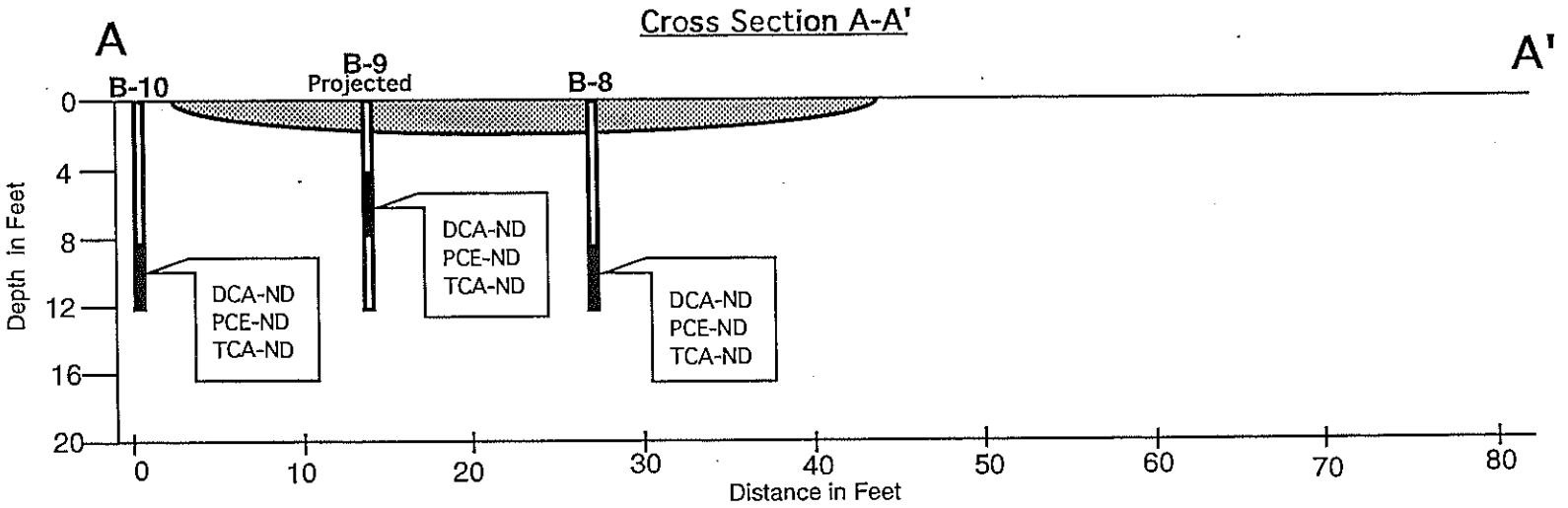
**Geologic Cross Section Intersecting the Area of the Site**

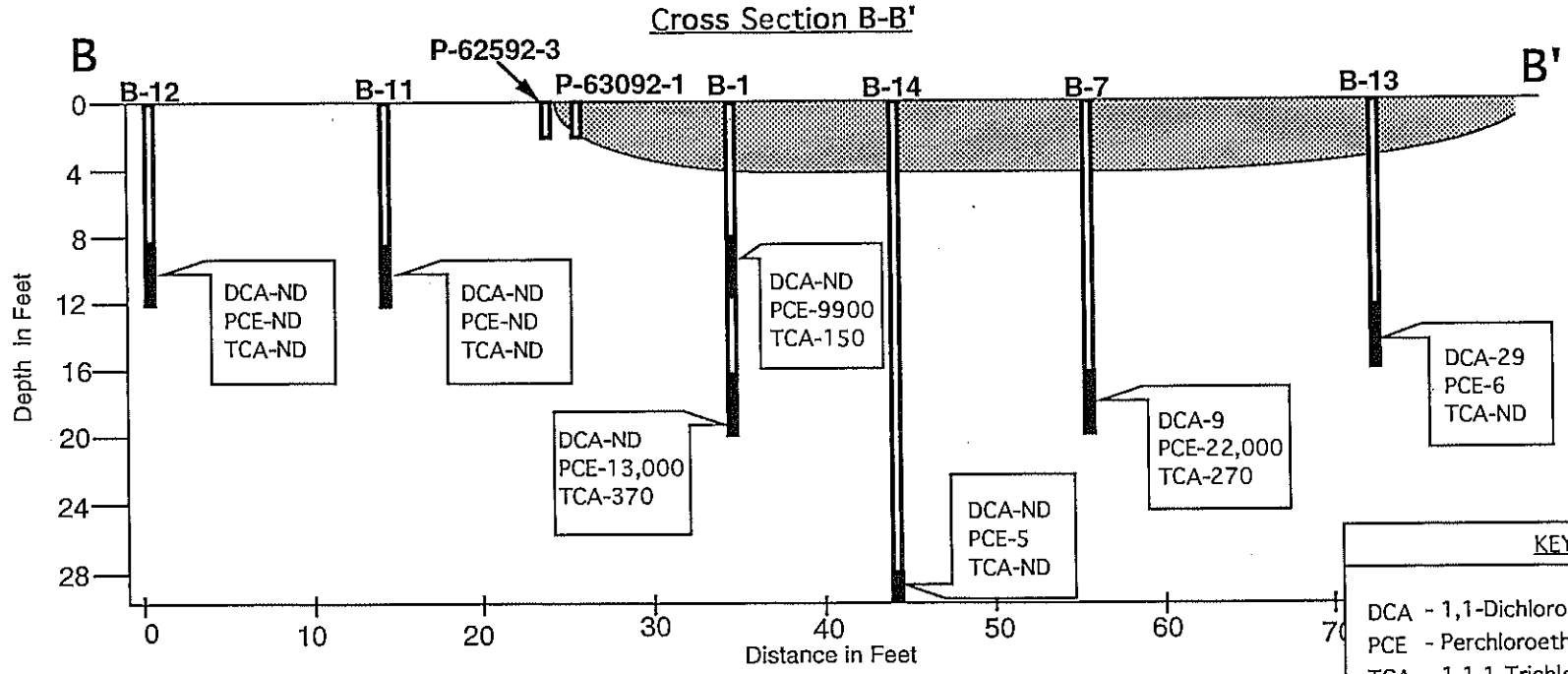
| | | |
|---|---|---|
| ***CA RICH CONSULTANTS, INC.***<br>**Certified Ground-Water and Environmental Specialists** | **A.K. Allen Corporation**<br>**255 East 2nd Street**<br>**Mineola, New York** | |
| **404 Glen Cove Avenue, Sea Cliff, N.Y. 11579** | **Prepared By:** NBG | **Date:** December 1994 |
| | **Reviewed By:** EAW | **Figure:** 1 |




Water Table Contour Map

| | |
|---|---|
| ***CA RICH CONSULTANTS, INC.***<br>Certified Ground-Water and Environmental Specialists | A.K. Allen Corporation<br>255 East 2nd Street<br>Mineola, New York |
| 404 Glen Cove Avenue, Sea Cliff, N.Y. 11579 | Prepared By: NBG<br>Date: December 1995 |
| | Reviewed By: EAW<br>Figure: 2 |




KEY

DCA - 1,1-Dichloroethane
PCE - Perchloroethene
TCA - 1,1,1-Trichloroethane
▌ - Indicates Sample Interval
▒ - Estimated zone of oily soil

NOTE: All concentrations reported in micrograms per kilogram (ug/Kg)

Fig. 3-Cross Sections Showing Concentrations of Contaminants of Concern
&
Estimated Zones of Oily Soil

*Prepared by CA RICH CONSULTANTS, INC.*

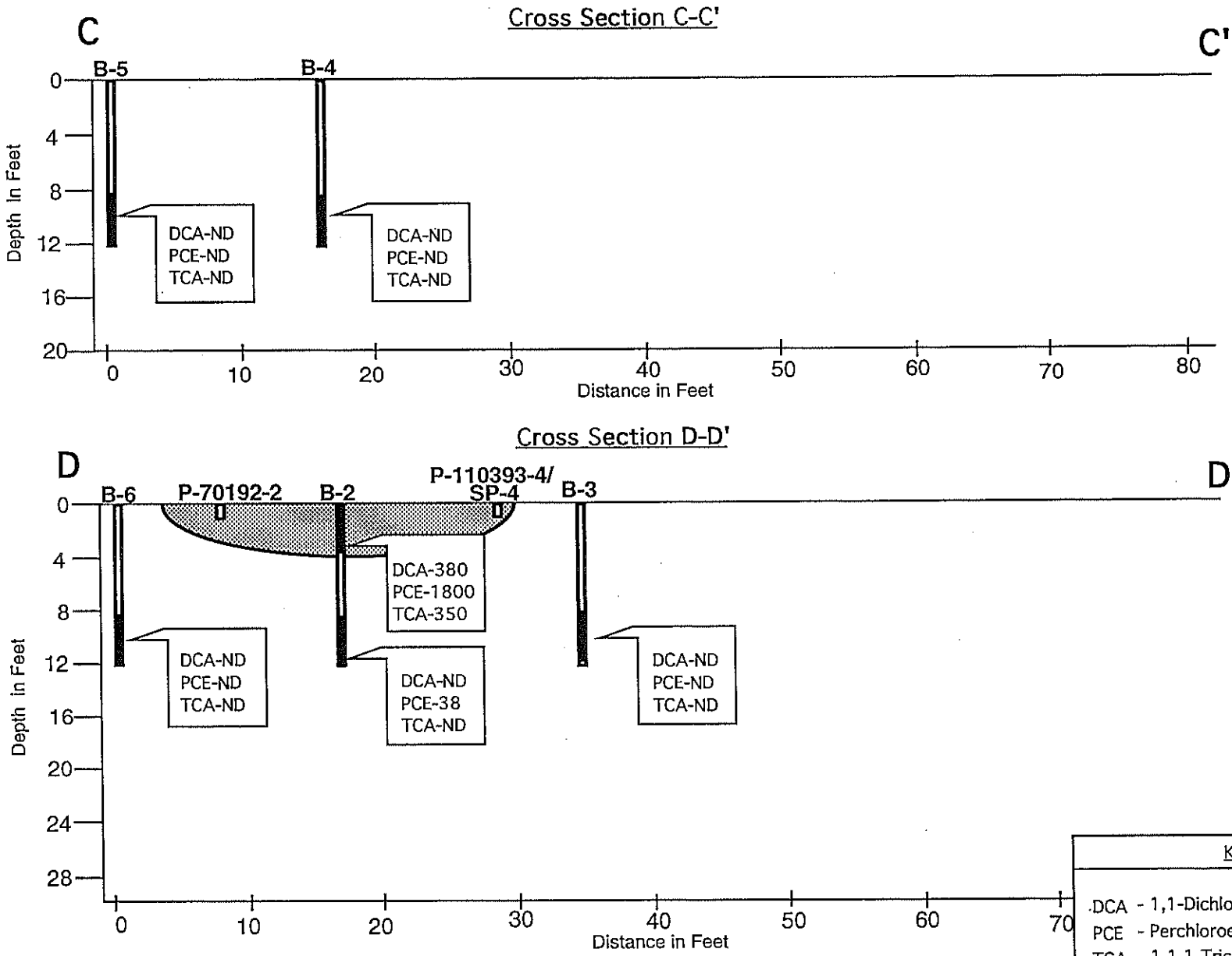
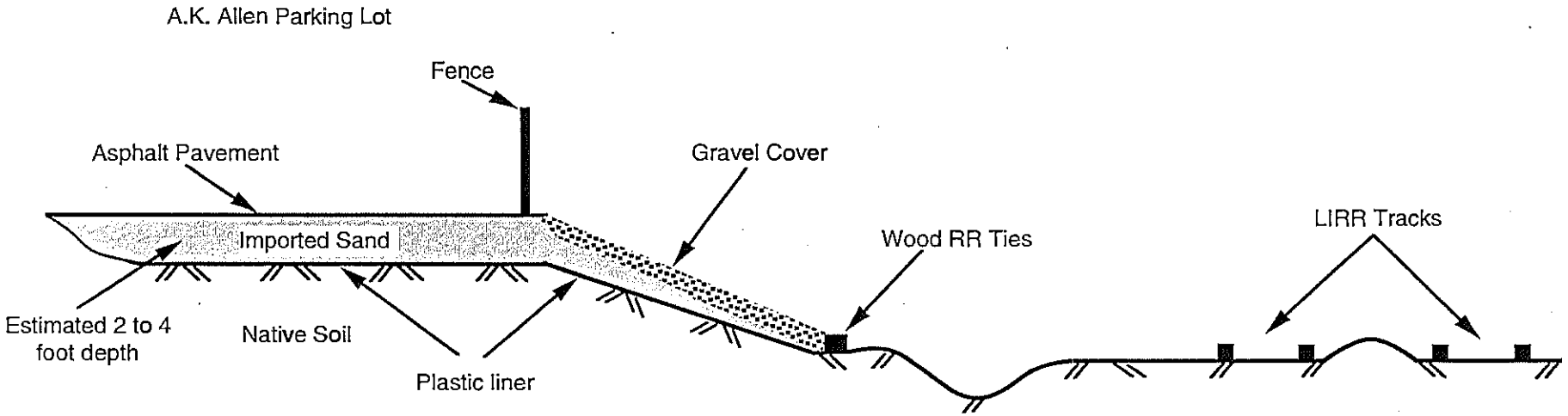



Fig. 3-Cross Sections Showing Concentrations of Contaminants of Concern
&
Estimated Zones of Oily Soil

*Prepared by CA RICH CONSULTANTS, INC.*




Not to Scale

**Conceptual Post Remediation Cross Section**

*CA RICH CONSULTANTS, INC.*
Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, N.Y. 11579

A.K. Allen Corporation
255 East 2nd Street
Mineola, New York

| | | | |
|---|---|---|---|
| Prepared By: | NBG | Date: | January 1996 |
| Reviewed By: | EAW | Figure: | 4 |

Drawing I.D: USERS/NANCY/PROJECTS/ACTIVE/AK ALLEN/Post Remed. x-sec

# TABLES

TABLE 1

**Summary of Analytical Detections in Soil Boring Samples**
**A.K. Allen Company, Inc.**
**255 East Second Street, Mineola, NY**

| Sample I.D.<br>Depth (ft.)<br>Date | B-1<br>(8-12)<br>11/6/95 | B-1<br>(18-20)<br>11/6/95 | B-2<br>(0-4)<br>11/6/95 | B-2<br>(8-12)<br>11/6/95 | B-3<br>(8-12)<br>11/7/95 | B-4<br>(8-12)<br>11/7/95 | Trip<br>Blank<br>11/6-7/95 | NYSDEC *<br>TAGM | NYSDEC**<br>Eastern USA<br>Background Levels |
|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/Kg)**<br>**(EPA Method 8010/8020)** | | | | | | | | | |
| 1,1-Dichloroethane | ND | ND | 380 | ND | ND | ND | ND | 200 | N/A |
| 1,2-Dichloroethane | ND | ND | 39 | ND | ND | ND | ND | 100 | N/A |
| 1,1,1-Trichloroethane | 150 | 370 | 350 | ND | ND | ND | ND | 800 | N/A |
| Trichloroethylene | ND | ND | 33 | ND | ND | ND | ND | 700 | N/A |
| Chlorodibromomethane | ND | ND | 40 | ND | ND | ND | ND | NG | N/A |
| Tetrachloroethene | 9900 | 13000 | 1800 | 38 | ND | ND | ND | 1,400 | N/A |
| Toluene | ND | ND | 67 | ND | ND | ND | ND | 1,500 | N/A |
| **RCRA Metals (mg/Kg)** | | | | | | | | | |
| Arsenic as As | 1.2 | 1.1 | 6.4 | 1 | 1.5 | 0.94 | NA | 7.5 or SB | 3-12 |
| Barium as Ba | 12 | 9.2 | 29 | 6.1 | 8.9 | 9.4 | NA | 300 or SB | 15-600 |
| Cadmium as Cd | 2.9 | 0.17 | 1.8 | <0.010 | <0.010 | 2 | NA | 1.0 or SB | 0.1-1.0 |
| Chromium as Cr | 6.8 | 5.6 | 200 | 6 | 3.6 | 4.9 | NA | 10.0 or SB | 1.5-40 |
| Lead as Pb | 5.6 | 2.1 | 23 | 2.3 | 3.2 | 7 | NA | 200-500 or SB | 200-500 ** |
| Mercury as Hg | 0.037 | 0.016 | 0.16 | 0.014 | 0.01 | 0.008 | NA | 0.1 | 0.001-0.2 |
| Selenuim as Se | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | NA | 2.0 or SB | 0.1-3.9 |
| Silver as Ag | <0.10 | <0.10 | 0.49 | <0.1 | <0.10 | <0.10 | NA | SB | NV |
| **Semi-Volatile PAHs (ug/Kg)**<br>**(EPA Method 8270)** | ND | ND | ND | ND | NA | ND | NA | N/A | N/A |

*ug/Kg: micrograms per Kilogram (parts per billion, ppb)*
*mg/Kg: milligrams per Kilogram (parts per million, ppm)*
*ND: Not Detected at or above Method Detection Limits*
*N/A: Not Applicable*
*NV: No Value established*
*NA: Not Analyzed*
*SB: Site Background (see Table 2, T-1 and T-8)*

* *NYSDEC Division Technical and Administrative Guidance Memorandum Determination of Soil Cleanup Objectives and Cleanup Levels; 1/24/94*

** *Average background levels in metropolitan and urban areas*

*Indicates levels that exceed NYSDEC TAGM Cleanup Objective and Site Background*

*Prepared by CA RICH CONSULTANTS, INC.*

## TABLE 1

### Summary of Analytical Detections in Soil Boring Samples
### A.K. Allen Company, Inc.
### 255 East Second Street, Mineola, NY

| Sample I.D.<br>Depth (ft.)<br>Date | B-5<br>(8-12)<br>11/7/95 | B-6<br>(4-8)<br>11/7/95 | B-7<br>(16-20)<br>11/7/95 | B-8<br>(8-12)<br>11/7/95 | B-9<br>(4-8)<br>11/7/95 | B-10<br>(8-12)<br>11/7/95 | Trip<br>Blank<br>11/7/95 | NYSDEC *<br>TAGM | NYSDEC*<br>Eastern USA<br>Background Levels |
|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/Kg)**<br>**(EPA Method 8010/8020)** | | | | | | | | | |
| 1,1-Dichloroethane | ND | ND | 9 | ND | ND | ND | ND | 200 | N/A |
| 1,2-Dichloroethane | ND | ND | ND | ND | ND | ND | ND | 100 | N/A |
| 1,1,1-Trichloroethane | ND | ND | 270 | ND | ND | ND | ND | 800 | N/A |
| Trichloroethylene | ND | ND | ND | ND | ND | ND | ND | 700 | N/A |
| Chlorodibromomethane | ND | ND | ND | ND | ND | ND | ND | NG | N/A |
| Tetrachloroethene | ND | ND | 22000 | ND | ND | ND | ND | 1,400 | N/A |
| Toluene | ND | ND | ND | ND | ND | ND | ND | 1,500 | N/A |
| **RCRA Metals (mg/Kg)** | | | | | | | | | |
| Arsenic as As | 1.2 | 1.5 | 2.2 | 0.7 | 1.3 | 0.82 | NA | 7.5 or SB | 3-12 |
| Barium as Ba | 4.1 | 8.6 | 7.7 | 7.9 | 8.4 | 11 | NA | 300 or SB | 15-600 |
| Cadmium as Cd | <0.010 | 0.018 | 0.34 | 0.013 | <0.010 | <0.010 | NA | 1.0 or SB | 0.1-1.0 |
| Chromium as Cr | 2.7 | 8.6 | 6.0 | 4.8 | 3.4 | 2.5 | NA | 10.0 or SB | 1.5-40 |
| Lead as Pb | 1.8 | 2.4 | 3.7 | 2.0 | 2.2 | 1.9 | NA | 200-500 or SB | 200-500 ** |
| Mercury as Hg | 0.008 | <0.005 | <0.005 | <0.005 | 0.008 | 0.005 | NA | 0.1 | 0.001-0.2 |
| Selenuim as Se | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | NA | 2.0 or SB | 0.1-3.9 |
| Silver as Ag | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | NA | SB | NV |
| **Semi-Volatile PAHs (ug/Kg)**<br>**(EPA Method 8270)** | NA | ND | ND | NA | ND | NA | NA | N/A | N/A |

*ug/Kg: micrograms per Kilogram (parts per billion, ppb)*
*mg/Kg: milligrams per Kilogram (parts per million, ppm)*
*ND: Not Detected at or above Method Detection Limits*
*N/A: Not Applicable*
*NV: No Value established*
*NA: Not Analyzed*
*SB: Site Background (see Table 2, T-1 and T-8)*

* *NYSDEC Division Technical and Administrative Guidance Memorandum Determination of Soil Cleanup Objectives and Cleanup Levels; 1/24/94*

** *Average background levels in metropolitan and urban areas*

*Indicates levels that exceed NYSDEC TAGM Cleanup Objective and Site Background*

*Prepared by CA RICH CONSULTANTS, INC.*

TABLE 1

Summary of Analytical Detections in Soil Boring Samples
A.K. Allen Company, Inc.
255 East Second Street, Mineola, NY

| Sample I.D.<br>Depth (ft.)<br>Date | B-11<br>(8-12)<br>11/7/95 | B-12<br>(8-12)<br>11/7/95 | B-13<br>(12-16)<br>11/7/95 | B-14<br>(29-31)<br>11/7/95 | Trip<br>Blank<br>11/7/95 | NYSDEC *<br>TAGM | NYSDEC*<br>Eastern USA<br>Background Levels |
|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/Kg)**<br>**(EPA Method 8010/8020)** | | | | | | | |
| 1,1-Dichloroethane | ND | ND | 29 | ND | ND | 200 | N/A |
| 1,2-Dichloroethane | ND | ND | ND | ND | ND | 100 | N/A |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | 800 | N/A |
| Trichloroethylene | ND | ND | ND | ND | ND | 700 | N/A |
| Chlorodibromomethane | ND | ND | ND | ND | ND | NG | N/A |
| Tetrachloroethene | ND | ND | 6 | 5 | ND | 1,400 | N/A |
| Toluene | ND | ND | ND | ND | ND | 1,500 | N/A |
| **RCRA Metals (mg/Kg)** | | | | | | | |
| Arsenic as As | 0.66 | 1.5 | 1.6 | 0.7 | NA | 7.5 or SB | 3-12 |
| Barium as Ba | 11 | 7.5 | 12 | 7 | NA | 300 or SB | 15-600 |
| Cadmium as Cd | 0.028 | <0.01 | 0.05 | 0.075 | NA | 1.0 or SB | 0.1-1.0 |
| Chromium as Cr | 2.0 | 3.7 | 19.0 | 3.1 | NA | 10.0 or SB | 1.5-40 |
| Lead as Pb | 2.6 | 1.6 | 2.7 | 1.2 | NA | 200-500 or SB | 200-500 ** |
| Mercury as Hg | 0.005 | 0.008 | 0.01 | 0.006 | NA | 0.1 | 0.001-0.2 |
| Selenuim as Se | <0.40 | <0.40 | <0.40 | <0.40 | NA | 2.0 or SB | 0.1-3.9 |
| Silver as Ag | <0.10 | <0.10 | <0.10 | <0.10 | NA | SB | NV |
| **Semi-Volatile PAHs (ug/Kg)**<br>**(EPA Method 8270)** | NA | NA | NA | NA | NA | N/A | N/A |

*ug/Kg: micrograms per Kilogram (parts per billion, ppb)*
*mg/Kg: milligrams per Kilogram (parts per million, ppm)*
*ND: Not Detected at or above Method Detection Limits*
*N/A: Not Applicable*
*NV: No Value established*
*NA: Not Analyzed*
*SB: Site Background (see Table 2, T-1 and T-8)*

* *NYSDEC Division Technical and Administrative Guidance Memorandum Determination of Soil Cleanup Objectives and Cleanup Levels; 1/24/94*

** *Average background levels in metropolitan and urban areas*

*Indicates levels that exceed NYSDEC TAGM Cleanup Objective and Site Background*

*Prepared by CA RICH CONSULTANTS, INC.*

TABLE 2

**Summary of Analytical Detections In Shallow Soil Samples**
**A.K. Allen Company, Inc.**
**255 East Second Street, Mineola, NY**

| Sample I.D.<br>Depth (ft.)<br>Date | T-1<br>(0-.25)<br>11/6/95 | T-2<br>(1-1.5)<br>11/6/95 | T-3<br>(1-1.5)<br>11/6/95 | T-4<br>(1-1.5)<br>11/6/95 | T-5<br>(1-1.5)<br>11/6/95 | T-6<br>(1-1.5)<br>11/6/95 | T-7<br>(1-1.5)<br>11/6/95 | T-8<br>(0-.25)<br>11/6/95 | Trip<br>Blank<br>11/6/95 | NYSDEC *<br>TAGM | NYSDEC*<br>Eastern USA<br>Background Levels |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/Kg)**<br>**(EPA Method 8010/8020)** | | | | | | | | | | | |
| 1,1-Dichloroethene | ND | 6 | ND | ND | ND | ND | ND | ND | ND | 400 | N/A |
| 1,1-Dichloroethane | ND | 160 | ND | ND | 540 | 130 | 47 | ND | ND | 200 | N/A |
| 1,2-Dichloroethane | ND | 25 | ND | ND | ND | 11 | ND | ND | ND | 100 | N/A |
| Chloroform | ND | 5 | ND | ND | ND | ND | ND | 18 | ND | 300 | N/A |
| 1,1,1-Trichloroethane | 30 | 1400 | ND | ND | 9600 | 3100 | 510 | 140 | ND | 800 | N/A |
| Trichloroethylene | ND | 120 | ND | ND | 1200 | 880 | 100 | 18 | ND | 700 | N/A |
| Chlorodibromomethane | ND | 130 | ND | ND | 500 | 160 | 15 | ND | ND | NG | N/A |
| Tetrachloroethene | 86 | 260 | ND | ND | 4200 | 4300 | 410 | 120 | ND | 1,400 | N/A |
| Toluene | ND | 19 | ND | ND | 390 | 270 | 42 | 160 | ND | 1,500 | N/A |
| Ethylebenzene | ND | ND | ND | ND | ND | 20 | ND | 180 | ND | 5,500 | N/A |
| Xylenes (total) | 47 | 35 | ND | ND | ND | 550 | 75 | 790 | ND | 1,200 | N/A |
| **RCRA Metals (mg/Kg)** | | | | | | | | | | | |
| Arsenic as As | 3.8 | 3.2 | 0.88 | 1.6 | 7.0 | 4 | 3.3 | 9.1 | NA | 7.5 or SB | 3-12 |
| Barium as Ba | 26 | 21 | 7.7 | 12 | 82 | 27 | 19 | 74 | NA | 300 or SB | 15-600 |
| Cadmium as Cd | 0.81 | 0.5 | 0.34 | 0.19 | 6.4 | 15 | 0.72 | 2.9 | NA | 1.0 or SB | 0.1-1.0 |
| Chromium as Cr | 22 | 32 | 4.1 | 18 | 260 | 11 | 45 | 19 | NA | 10.0 or SB | 1.5-40 |
| Lead as Pb | 79 | 20 | 3.8 | 24 | 23 | 27 | 33 | 450 | NA | 200-500 or SB | 200-500 ** |
| Mercury as Hg | 0.11 | 0.041 | 0.007 | 0.09 | 0.14 | 0.09 | 0.095 | 0.26 | NA | 0.1 | 0.001-0.2 |
| Selenuim as Se | <0.40 | <0.40 | <0.40 | <0.40 | 0.48 | 0.48 | <0.40 | 0.88 | NA | 2.0 or SB | 0.1-3.9 |
| Silver as Ag | <0.10 | <0.10 | <0.10 | <0.10 | 0.44 | <0.10 | <0.10 | <0.10 | NA | SB | NV |

*ug/Kg: micrograms per Kilogram (parts per billion, ppb)*
*mg/Kg: milligrams per Kilogram (parts per million, ppm)*
*ND: Not Detected at or above Method Detection Limits*
*NG: No Guideline is reported*
*NV: No Value established*
*NA: Not Analyzed*
*SB: Site Background (see Samples T-1 and T-8)*

* *NYSDEC Division Technical and Administrative Guidance Memorandum Determination of Soil Cleanup Objectives and Cleanup Levels; 1/24/94*

** *Average background levels in metropolitan and urban areas*

*Indicates levels that exceed NYSDEC TAGM Cleanup Objective and Site Background*

*Prepared by CA RICH CONSULTANTS, INC.*

TABLE 3

**Summary of Analytical Detections in Storm Drain and Floor Drain Sediment Samples**
**A.K. Allen Company, Inc.**
**255 East Second Street, Mineola, NY**

| Sample I.D.<br>Depth (ft.)<br>Date | SD-01<br>(12-13)<br>11/6/95 | SD-01<br>(18-20)<br>11/6/95 | SD-02<br>(3-4)<br>11/7/95 | FD-01<br>(4-5)<br>11/7/95 | FD-01<br>(8-12)<br>11/7/95 | Trip<br>Blank<br>11/6-7/95 | NYSDEC *<br>TAGM | NYSDEC*<br>Eastern USA<br>Background Levels |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/Kg)** | | | | | | | | |
| **(EPA Method 8010/8020)** | | | | | | | | |
| 1,1-Dichloroethene | 12 | ND | ND | 140 | ND | ND | 400 | N/A |
| 1,1-Dichloroethane | ND | ND | ND | 380 | ND | ND | 200 | N/A |
| 1,1,1-Trichloroethane | 5900 | ND | ND | 34000 | ND | ND | 800 | N/A |
| Trichloroethylene | ND | ND | ND | ND | ND | ND | 700 | N/A |
| Chlorodibromomethane | ND | ND | ND | 50 | ND | ND | NG | N/A |
| Tetrachloroethene | 50 | ND | ND | 500 | ND | ND | 1,400 | N/A |
| Toluene | ND | ND | ND | ND | ND | ND | 1,500 | N/A |
| **RCRA Metals (mg/Kg)** | | | | | | | | |
| Arsenic as As | 3 | 0.78 | 1.7 | 4.0 | 0.42 | NA | 7.5 or SB | 3-12 |
| Barium as Ba | 7 | 7.8 | 12 | 180 | 8.9 | NA | 300 or SB | 15-600 |
| Cadmium as Cd | 0.45 | 0.08 | 0.61 | 24 | 0.04 | NA | 1.0 or SB | 0.1-1.0 |
| Chromium as Cr | 66 | 9.0 | 11 | 1300 | 1.9 | NA | 10.0 or SB | 1.5-40 |
| Lead as Pb | 69 | 3.0 | 180 | 990 | 2.2 | NA | 200-500 or SB | 200-500 *** |
| Mercury as Hg | 0.19 | 0.013 | 0.082 | 2.6 | 0.021 | NA | 0.1 | 0.001-0.2 |
| Selenuim as Se | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | NA | 2.0 or SB | 0.1-3.9 |
| Silver as Ag | <0.10 | <0.10 | <0.10 | 35 | <0.10 | NA | SB | NV |
| **Semi-Volatile PAHs (ug/Kg)** | | | | | | | | |
| **(EPA Method 8270)** | | | | | | | | |
| Naphthalene | 1,000 | ND | NA | ND | ND | NA | 13,000 | N/A |
| Acenaphthene | 4,800 | ND | NA | ND | ND | NA | 50,000 | N/A |
| Fluorene | 5,000 | ND | NA | ND | ND | NA | 50,000 | N/A |
| Phenanthrene | 49,000 | 99 | NA | ND | ND | NA | 50,000 | N/A |
| Anthracene | 10,000 | 30 | NA | ND | ND | NA | 50,000 | N/A |
| Fluoranthene | 48,000 | 140 | NA | ND | ND | NA | 50,000 | N/A |
| Pyrene | 50,000 | 110 | NA | 300 | ND | NA | 50,000 | N/A |
| Benzo(a)anthracene | 19,000 | 47 | NA | ND | ND | NA | 224 or MDL | N/A |
| Chrysene | 18,000 | 53 | NA | ND | ND | NA | 400 | N/A |
| Benzo(b)fluoranthrene ** | 15,000 | 43.5 | NA | ND | ND | NA | 1,100 | N/A |
| Benzo(k)fluoranthrene ** | 15,000 | 43.5 | NA | ND | ND | NA | 1,100 | N/A |
| Benzo(a)pyrene | 17,000 | 44 | NA | ND | ND | NA | 61 or MDL | N/A |
| Dibenzo(a,h)anthracene | 2,200 | ND | NA | ND | ND | NA | 14 or MDL | N/A |
| Indeno(1,2,3-cd)pyrene | 5,900 | 30 | NA | ND | ND | NA | 3,200 | N/A |
| Benzo(g,h,i)perylene | 5,800 | 30 | NA | ND | ND | NA | 50,000 | N/A |

*ug/Kg: micrograms per Kilogram (parts per billion, ppb)*
*mg/Kg: milligrams per Kilogram (parts per million, ppm)*
*ND: Not Detected at or above Method Detection Limits*
*N/A: Not Applicable*
*NV: No Value established*
*NA: Not Analyzed*
*SB: Site Background (see Table 2, T-1 and T-8)*

* *NYSDEC Division Technical and Administrative Guidance Memorandum Determination of Soil Cleanup Objectives and Cleanup Levels; 1/24/94*
** *Unable to separate isomers, reported concentrations is half the total*
*** *Average background levels in metropolitan and urban areas*
*Indicates levels that exceed NYSDEC TAGM Cleanup Objective and Site Background*

*MDL: Method detection Limit = 300 ug/Kg*

*Prepared by CA RICH CONSULTANTS, INC.*

TABLE 4

Summary of Analytical Detections in Groundwater Samples
A.K. Allen Company, Inc.
255 East Second Street, Mineola, NY

| Sample I.D. / Date | GW-2 11/6/95 | GW-3 11/6/95 | Trip Blank 11/6/95 | NYSDEC * TOGS |
|---|---|---|---|---|
| **Volatile Organics (ug/L) (EPA Method 601/602)** | | | | |
| 1,2-Dichloroethane | 5 | ND | ND | 5 |
| 1,1,1-Trichloroethane | 5 | ND | ND | 5 |
| Tetrachloroethene | 6 | ND | ND | 5 |
| **RCRA Metals Dissolved (mg/L)** | | | | |
| Arsenic as As | 0.006 | 0.002 | NA | 25 |
| Barium as Ba | 0.22 | 0.1 | NA | 1,000 |
| Cadmium as Cd | <0.001 | <0.001 | NA | 10 |
| Chromium as Cr | <0.02 | <0.02 | NA | 50 |
| Lead as Pb | <0.005 | <0.005 | NA | 25 |
| Mercury as Hg | <0.00025 | <0.00025 | NA | 2 |
| Selenuim as Se | <0.002 | <0.002 | NA | 10 |
| Silver as Ag | <0.01 | <0.01 | NA | 50 |

*ug/L: micrograms per Liter (parts per billion, ppb)*
*mg/L: milligrams per Liter (parts per million, ppm)*
*ND: Not Detected at or above Method Detection Limits*
*NA: Not Analyzed*

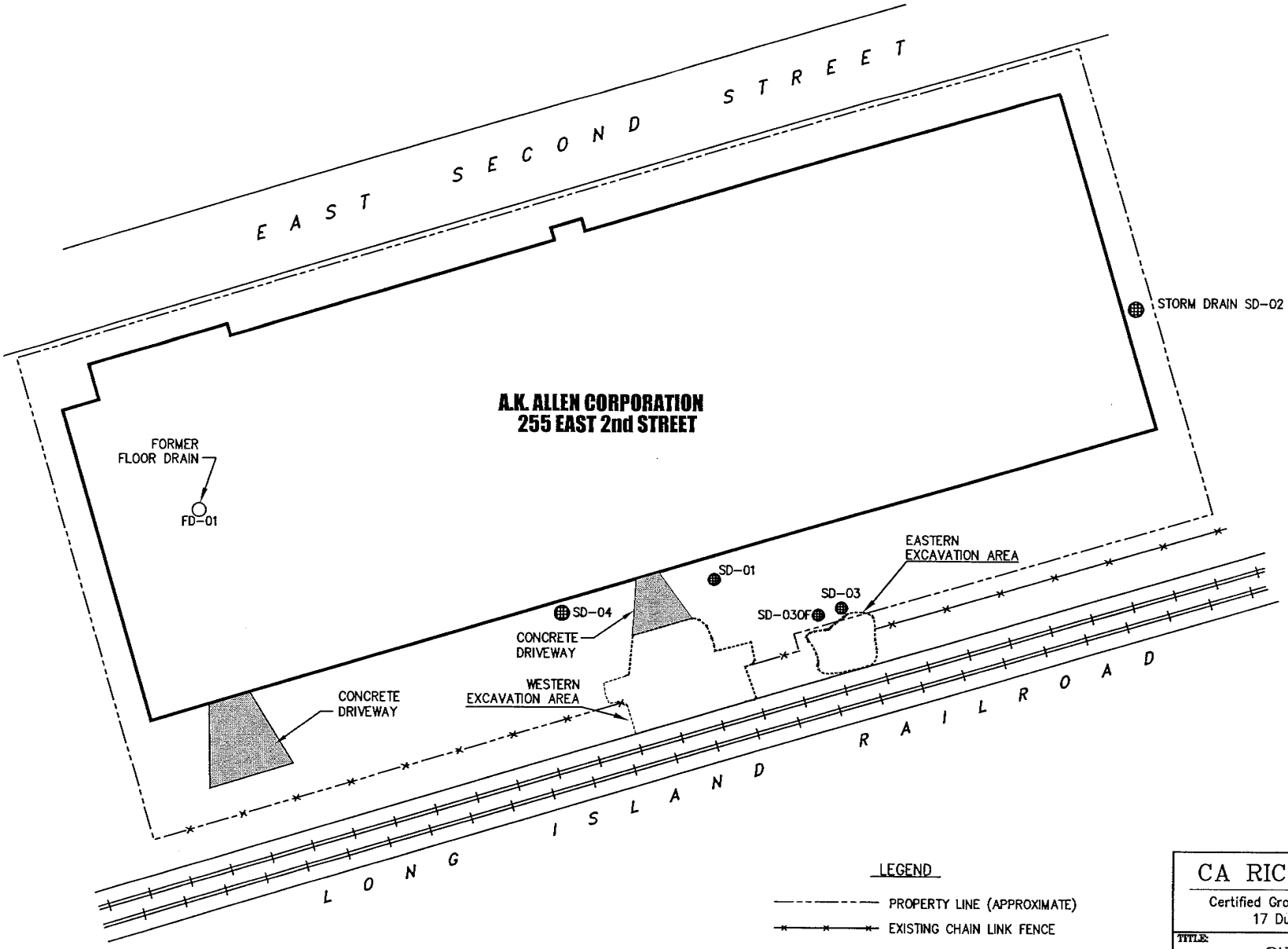
* *NYSDEC Division of Water Technical and Operational Guidance Series, Ambient Water Quality Standards and Guidance Values, 10/22/93*

Indicates levels that exceed NYSDEC TOGS

*Prepared by CA RICH CONSULTANTS, INC.*

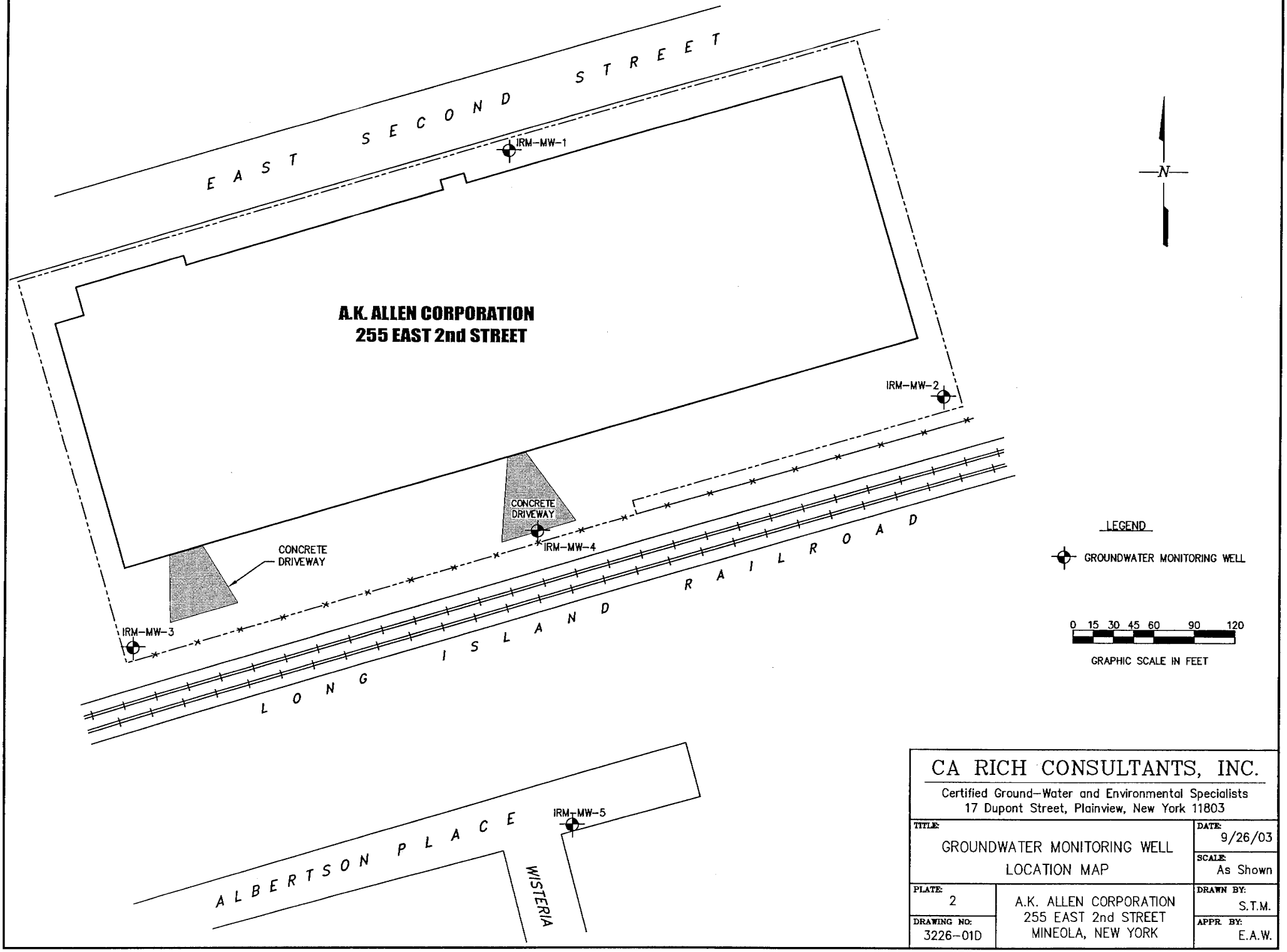
## APPENDIX E 2004 IRM REPORT FIGURES & TABLES

# FIGURES




CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, NY 11803

| | | |
|---|---|---|
| TITLE: SITE PLAN & AREAS OF CONCERN | | DATE: 9/16/03 |
| | | SCALE: As Shown |
| PLATE: 1 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01AA | | APPR. BY: E.A.W. |

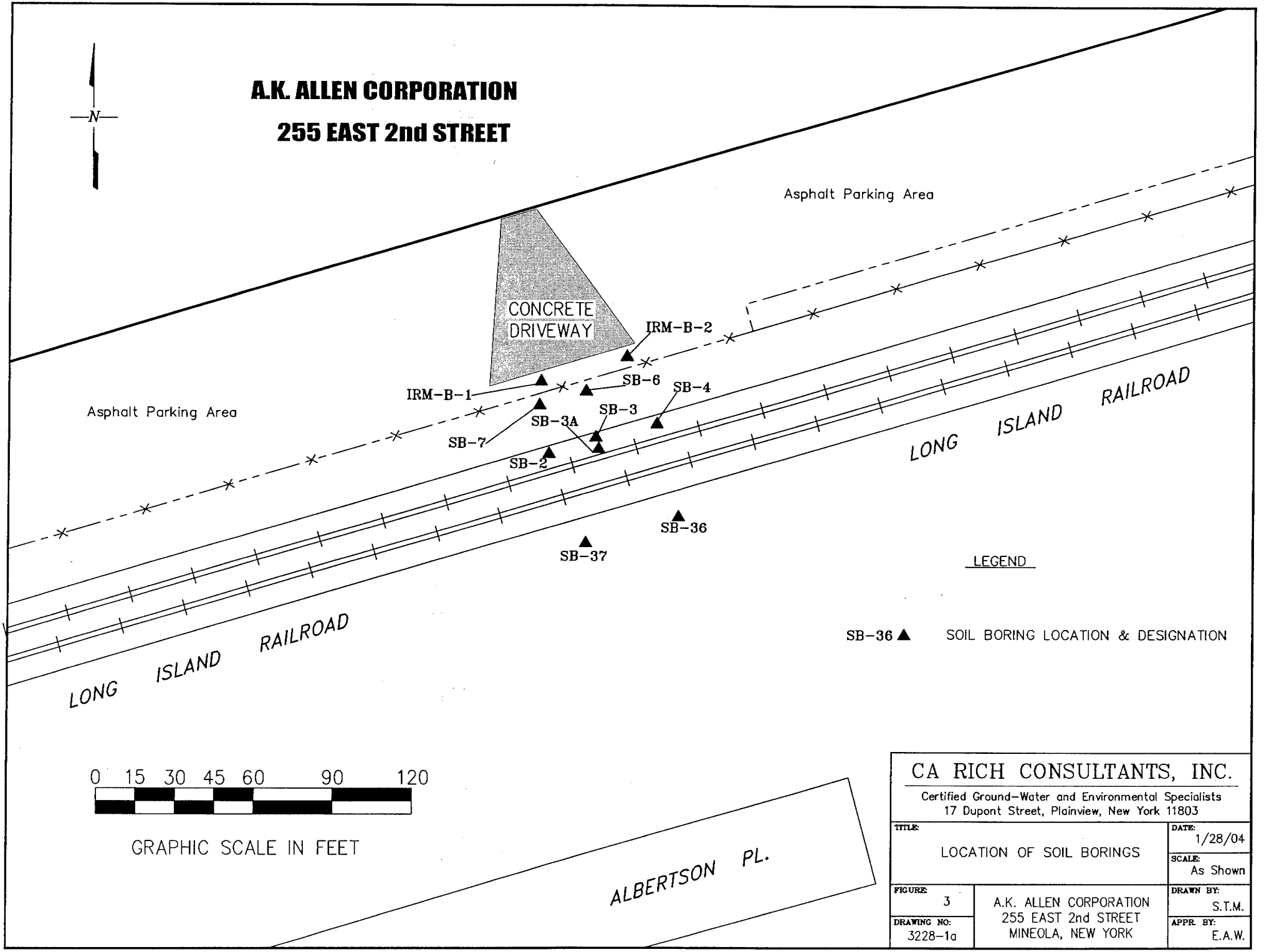



CA RICH CONSULTANTS, INC.

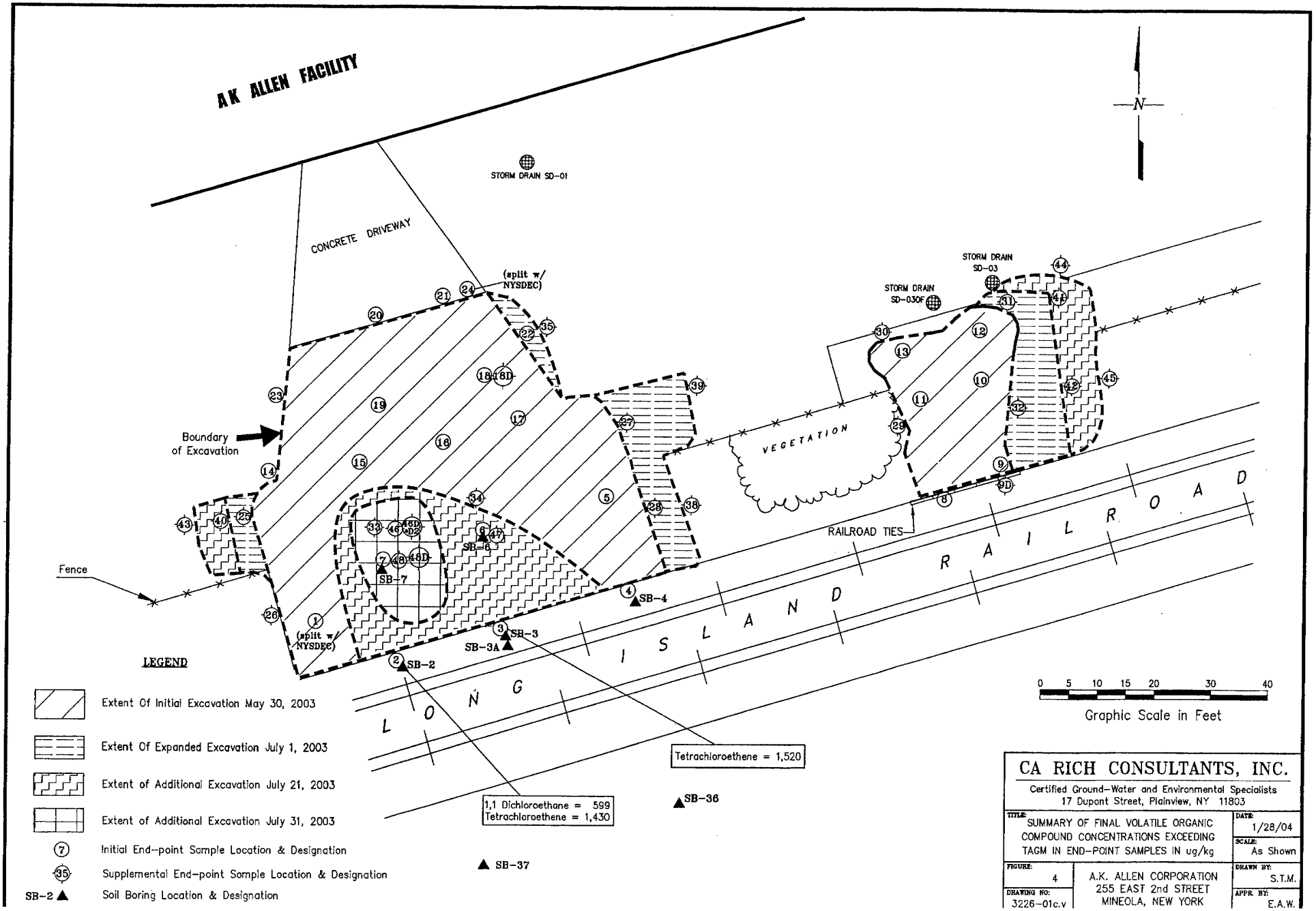
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

| | | |
|---|---|---|
| TITLE: GROUNDWATER MONITORING WELL LOCATION MAP | | DATE: 9/26/03 |
| | | SCALE: As Shown |
| PLATE: 2 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01D | | APPR. BY: E.A.W. |

# A.K. ALLEN CORPORATION
## 255 EAST 2nd STREET




| CA RICH CONSULTANTS, INC. | | |
|---|---|---|
| Certified Ground-Water and Environmental Specialists<br>17 Dupont Street, Plainview, New York 11803 | | |
| TITLE: LOCATION OF SOIL BORINGS | | DATE: 1/28/04<br>SCALE: As Shown |
| FIGURE: 3<br>DRAWING NO: 3228-1a | A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M.<br>APPR. BY: E.A.W. |

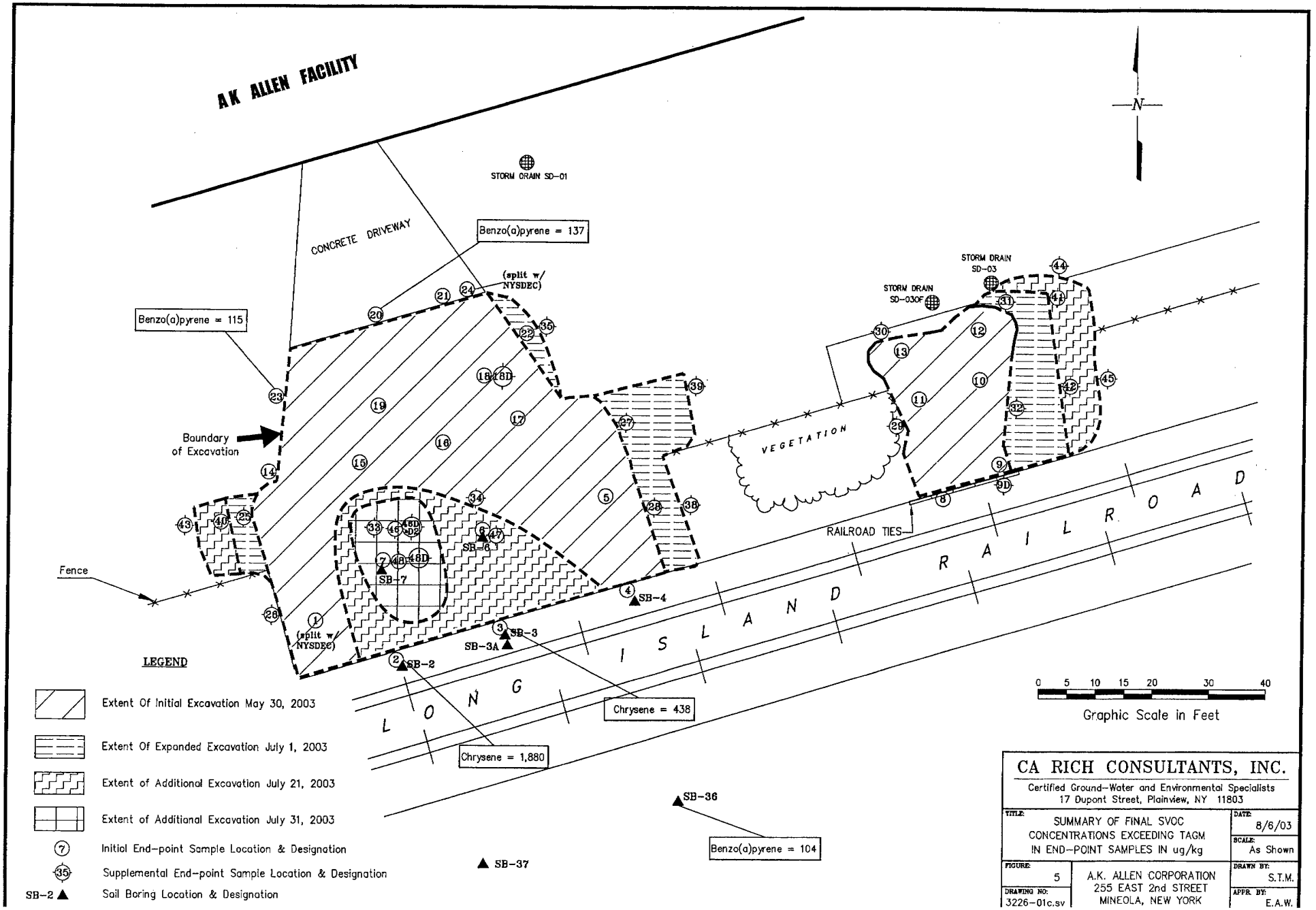



CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, NY 11803

| | |
|---|---|
| TITLE: SUMMARY OF FINAL VOLATILE ORGANIC COMPOUND CONCENTRATIONS EXCEEDING TAGM IN END-POINT SAMPLES IN ug/kg | DATE: 1/28/04 |
| | SCALE: As Shown |
| FIGURE: 4 | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01c.v | APPR. BY: E.A.W. |

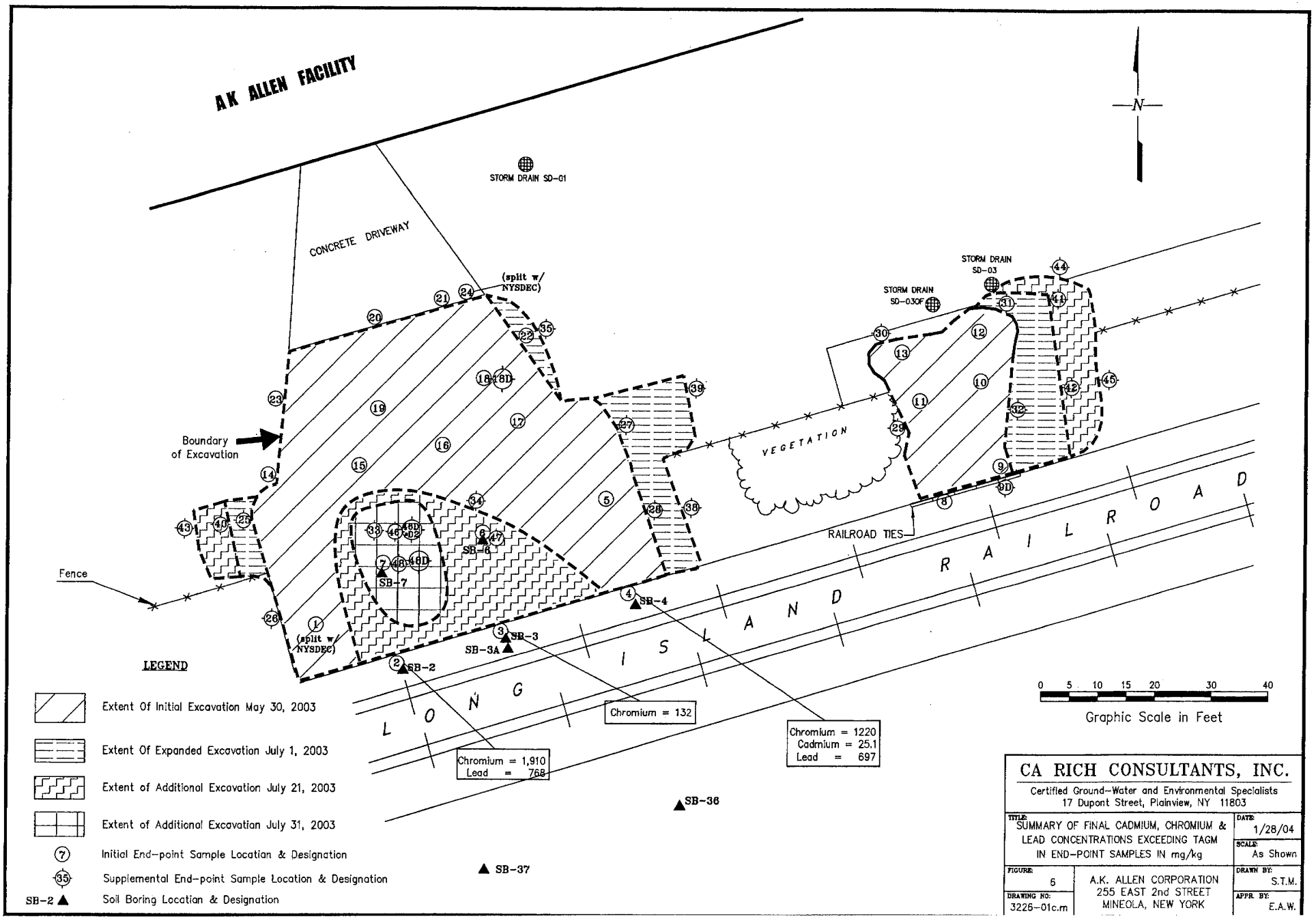
A.K. ALLEN CORPORATION
255 EAST 2nd STREET
MINEOLA, NEW YORK



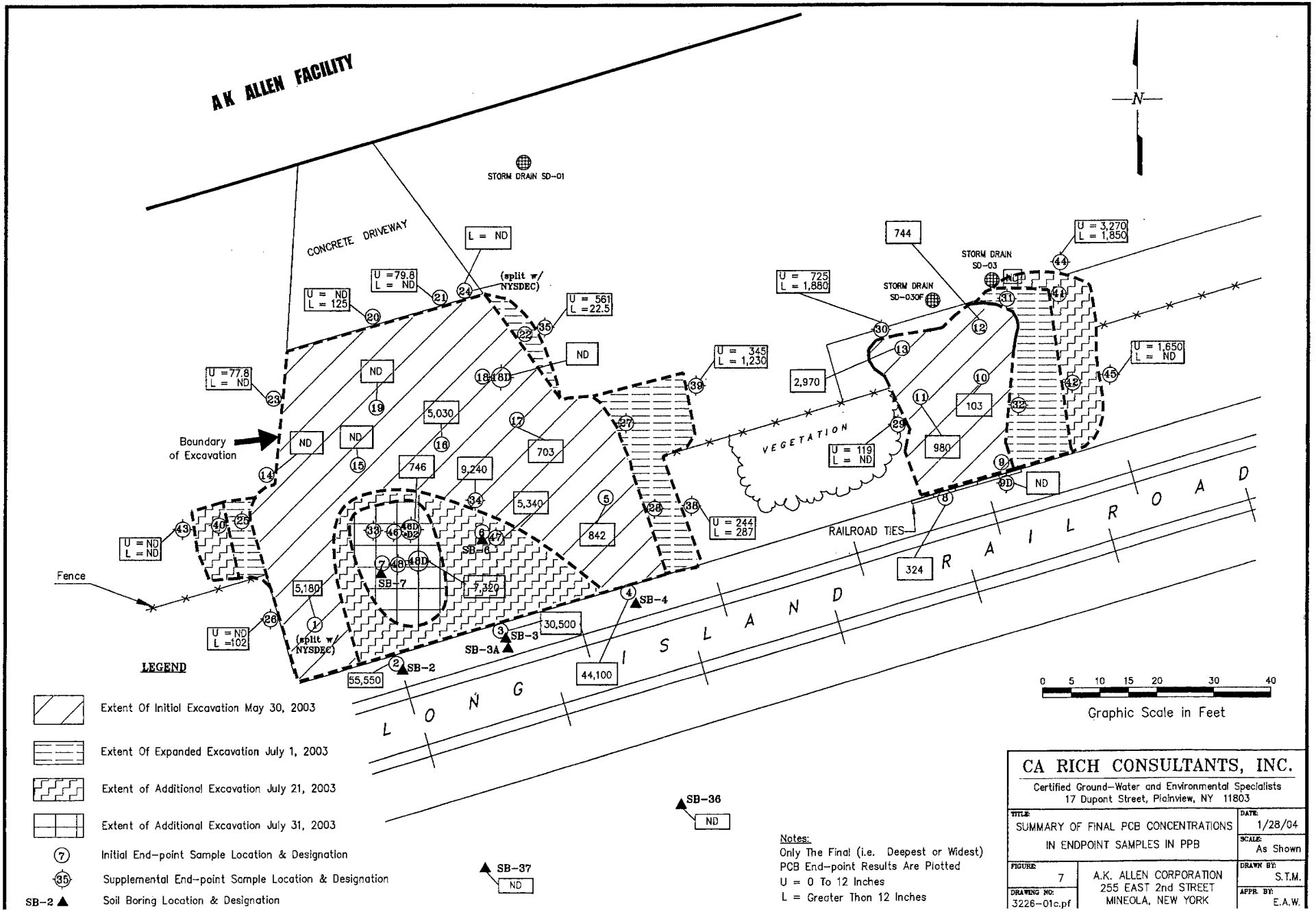

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, NY 11803

| | | |
|---|---|---|
| TITLE: SUMMARY OF FINAL SVOC CONCENTRATIONS EXCEEDING TAGM IN END-POINT SAMPLES IN ug/kg | | DATE: 8/6/03 |
| | | SCALE: As Shown |
| FIGURE: 5 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01c.sv | | APPR. BY: E.A.W. |




| | |
|---|---|
| **CA RICH CONSULTANTS, INC.** | |
| Certified Ground-Water and Environmental Specialists<br>17 Dupont Street, Plainview, NY 11803 | |
| TITLE: SUMMARY OF FINAL CADMIUM, CHROMIUM & LEAD CONCENTRATIONS EXCEEDING TAGM IN END-POINT SAMPLES IN mg/kg | DATE: 1/28/04 |
| | SCALE: As Shown |
| FIGURE: 6 | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01c.m | APPR. BY: E.A.W. |
| A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | |




| | |
|---|---|
| CA RICH CONSULTANTS, INC. | |
| Certified Ground-Water and Environmental Specialists<br>17 Dupont Street, Plainview, NY 11803 | |
| TITLE: SUMMARY OF FINAL PCB CONCENTRATIONS IN ENDPOINT SAMPLES IN PPB | DATE: 1/28/04 |
| | SCALE: As Shown |
| FIGURE: 7 | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01c.pf | APPR. BY: E.A.W. |
| A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | |

# TABLES

**Table EP-1**

**Summary of Validated Detections - PCBs**
**End-point Samples 1-20**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-1 | EP-2 | EP-3 | EP-3D | EP-4 | EP-5 | EP-6 | EP-7 | EP-8 | EP-9 | EP-9D | EP-10 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 5/27/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | Cleanup |
| Location | BOT | SW | SW | Duplicate | SW | BOT | BOT | BOT | SW | SW | SW | BOT | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | Yes | Yes | |
| Depth | 18 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 15 Inches | 15 Inches | 15 Inches | 18 Inches | 25 Inches | 30 Inches | 45 Inches | |
| **PCB Method 8082** | | | | | | | | | | | | | |
| **Upper 12 Inches** | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1,000 |
| **Below 12 Inches** | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 5180 | 55500 | 30500 | 26200 | 44100 | 842 | 24700 | 19800 | 324 | 3680 | 143 | 103 | 10,000 |

| Sample ID | EP-11 | EP-12 | EP-13 | EP-14 | EP-15 | EP-16 | EP-17 | EP-18 | EP-18D | EP-19 | EP-20 | EP-20(U) | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 5/27/2003 | 5/28/2003 | 5/28/2003 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 6/2/2002 | 6/18/2003 | 6/2/2002 | 6/2/2002 | 6/11/2003 | Cleanup |
| Location | BOT | BOT | BOT | BOT | BOT | BOT | BOT | BOT | BOT | BOT | SW | SW | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | |
| Depth | 45 Inches | 26 Inches | 24 Inches | 26 Inches | 17 Inches | 17 Inches | 18 Inches | 39 Inches | 50 Inches | 33 Inches | 17 Inches | 17 inches | |
| **PCB Method 8082** | | | | | | | | | | | | | |
| **Upper 12 Inches** | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1,000 |
| **Below 12 Inches** | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 980 | 744 | 2970 | ND | ND | 5030 | 703 | ND | ND | ND | 125 | ND | 10,000 |
| Aroclor 1260 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NGV |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NA-Not applicable*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in micrograms per kilogram (ug/kg) or parts per billion.*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*SW-Sidewall*

BOT-Bottom

# Table EP-1

## Summary of Validated Detections - PCBs
## End-point Samples 21-33
## A. K. Allen
## Mineola, New York

| Sample ID | EP-21 | EP-21(U) | EP-21D | EP-22 | EP-23 | EP-23(U) | EP-24(L) | EP-25(L) | EP-25(U) | EP-26(L) | EP-26(U) | EP-27(L) | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/2/2002 | 6/16/2003 | 6/2/2002 | 6/2/2002 | 6/2/2002 | 6/16/2003 | 6/16/2003 | 6/16/2003 | 6/16/2003 | 6/18/2003 | 6/18/2003 | 6/16/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | Objective |
| Final Endpoint | Yes | Yes | Yes | No | Yes | Yes | Yes | No | No | Yes | Yes | No | |
| Depth | 22 Inches | 0-12 Inches | 22 Inches | 24 Inches | 20 Inches | 0-12 Inches | >12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | |
| **PCB Method 8082** | | | | | | | | | | | | | |
| **Upper 12 Inches** | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | NA | 79.8 | NA | NA | NA | 77.8 | NA | NA | 5110 | NA | 129 | NA | 1,000 |
| Aroclor 1260 | NA | ND | NA | NA | NA | ND | NA | NA | ND | NA | ND | NA | |
| **Below 12 Inches** | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | ND | NA | ND | 6460 | ND | NA | ND | 803 | NA | 102 | NA | 35100 | 10,000 |
| Aroclor 1260 | ND | NA | ND | 1060 | ND | NA | ND | ND | NA | ND | NA | ND | NGV |

| Sample ID | EP-27(U) | EP-28 | EP-28(L) | EP-28(U) | EP-29(L) | EP-29(U) | EP-30(L) | EP-30(U) | EP-31(L) | EP-31(U) | EP-32(L) | EP-32(U) | EP-33 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/16/2003 | 6/18/2003 | 6/18/2003 | 6/18/2003 | 6/18/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | 6/16/2003 | 6/16/2003 | 6/18/2003 | 6/18/2003 | 6/16/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | BOT | Objective |
| Final Endpoint | No | No | No | No | Yes | Yes | Yes | Yes | No | No | No | No | No | |
| Depth | 0-12 Inches | 20 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | 16 Inches | |
| **PCB Method 8082** | | | | | | | | | | | | | | |
| **Upper 12 Inches** | | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 88600 | NA | NA | 5000 | NA | 119 | NA | 725 | NA | 5130 | NA | 7030 | NA | 1,000 |
| Aroclor 1260 | ND | NA | NA | ND | NA | ND | NA | ND | NA | ND | NA | NA | NA | NGV |
| **Below 12 Inches** | | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | NA | 5040 | 9700 | NA | 286 | NA | 169 | NA | 11100 | NA | 1880 | NA | 17100 | 10,000 |
| Aroclor 1260 | NA | ND | ND | NA | ND | NA | ND | NA | ND | NA | ND | NA | ND | NGV |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NA-Not applicable*

*ND-Not Detected*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*SW-Sidewall*

BOT-Bottom

**Table EP-1**

**Summary of Validated Detections - PCBs**
**End-point Samples 34-48**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-34 | EP-35(L) | EP-35(U) | EP-38(L) | EP-38(U) | EP-39(L) | EP-39(U) | EP-40(L) | EP-40(U) | EP-41(L) | EP-41(U) | EP-42(L) | EP-42(U) | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/16/2003 | 6/18/2003 | 6/18/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | Cleanup |
| Location | BOT | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | Objective |
| Final Endpoint | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | |
| Depth | 17 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | |
| **PCB Method 8082** | | | | | | | | | | | | | | |
| **Upper 12 Inches** | | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | NA | NA | 561 | NA | 204 | NA | 345 | NA | 1660 | NA | 17200 | NA | 20600 | 1,000 |
| Aroclor 1260 | NA | NA | NA | NA | 40.3 | NA | ND | NA | ND | NA | ND | NA | ND | NGV |
| **Below 12 Inches** | | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 9240 | 22.5 | NA | 236 | NA | 235 | NA | 1230 | NA | 18100 | NA | 17000 | NA | 10,000 |
| Aroclor 1260 | ND | ND | NA | 51.5 | NA | ND | NA | ND | NA | ND | NA | ND | NA | NGV |

| Sample ID | EP-43(L) | EP-43(U) | EP-43MS | EP-43MSD | EP-44(L) | EP-44(U) | EP-45(L) | EP-45(U) | EP-46 | EP-46D | EP-46D2 | EP-47 | EP-48 | EP-48D | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 8/1/2003 | 8/18/2003 | 7/21/2003 | 7/21/2003 | 8/1/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | BOT | BOT | BOT | BOT | Objective |
| Final Endpoint | Yes | Yes | NA | NA | Yes | Yes | Yes | Yes | No | No | No | Yes | No | Yes | |
| Depth | >12 Inches | 0-12 Inches | 0-12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 0-12 Inches | >12 Inches | 4 feet | 10 feet | >12 Inches | >12 Inches | 4 feet | |
| **PCB Method 8082** | | | | | | | | | | | | | | | |
| **Upper 12 Inches** | | | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | NA | ND | ND | ND | NA | 3270 | NA | 1650 | NA | NA | NA | ND | ND | NA | 1,000 |
| Aroclor 1260 | NA | ND | 522 | 410 | NA | ND | NA | ND | NA | NA | NA | ND | ND | NA | NGV |
| **Below 12 Inches** | | | | | | | | | | | | | | | |
| Parameters | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | ND | NA | NA | NA | 1680 | NA | 1850 | NA | 20300 D | 16700 D | 746 | 5340 D | 24800 D | 7320 | 10,000 |
| Aroclor 1260 | ND | NA | NA | NA | ND | NA | ND | NA | ND | ND | ND | ND | ND | ND | NGV |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NA-Not applicable*

*ND-Not Detected*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.*

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*D-Indicates result is based on a dilution*

*SW-Sidewall*

BOT-Bottom

36&37 are Soil Borings

Table EP-2

**Summary of Validated Detections - Volatile Organic Compounds**
**End-Point Samples 1-10**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-1 | EP-2 | EP-3 | EP-3D | EP-4 | EP-5 | EP-6 | EP-7 | EP-8 | EP-9 | EP-9D | EP-10 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 5/27/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | Cleanup |
| Location | BOT | SW | SW | Duplicate | SW | BOT | BOT | BOT | SW | SW | SW | BOT | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | |
| Depth | 18 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 15 Inches | 15 Inches | 15 Inches | 18 Inches | 25 Inches | 30 inches | 45 Inches | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | NDUJ | ND | NDUJ | NDUJ | NDUJ | NDUJ | ND | ND | NDUJ | ND | ND | NDUJ | 200 |
| Benzene | ND | ND | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 60 |
| Chloroethane | ND | ND | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 1,900 |
| 1,1-Dichloroethane | ND | 599 | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 200 |
| cis-1,2-Dichloroethene | ND | 2440 | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | NGV |
| Ethylbenzene | ND | ND | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 5,500 |
| Tetrachloroethene | 10.9 | 1430 | 1520 | ND | 855J | ND | 23.6 J | 47.4 | ND | ND | ND | ND | 1,400 |
| Toluene | ND | 46 J | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | 93.2 | 73.7 | ND | 115J | ND | ND | ND | ND | ND | ND | ND | 800 |
| Trichloroethene | ND | 59.5 J | 57 | ND | 91J | ND | ND | ND | ND | ND | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | ND | 131 J | ND | ND | NDUJ | ND | 15.9 J | 2.9 | ND | ND | ND | ND | 10,000 |
| 1,3,5-Trimethylbenzene | ND | 191 J | ND | ND | NDUJ | ND | 10 J | 1.7 | ND | ND | ND | ND | 3,300 |
| Xylene (total) | ND | 85.2 J | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*
*ND-Not Detected*
*NGV-No given value*
*Bot-Bottom*
*SW-Sidewall*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Boxed value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

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**Table EP-2**

**Summary of Validated Detections - Volatile Organic Compounds**
**End-Point Samples 11-23**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-11 | EP-12 | EP-13 | EP-14 | EP-15 | EP-16 | EP-17 | EP-18 | EP-18D | EP-19 | EP-20 | EP-20U | EP-21 | EP-21D | EP-22 | EP-23 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 5/28/2003 | 5/29/2003 | 5/29/2003 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 5/30/2002 | 6/2/2002 | 6/18/2003 | 6/2/2003 | 6/2/2003 | 6/11/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | Cleanup |
| Location | BOT | BOT | BOT | SW | BOT | BOT | BOT | SW | SW | SW | BOT | BOT | SW | SW | SW | SW | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | |
| Depth | 45 Inches | 26 Inches | 34 Inches | 26 Inches | 17 Inches | 17 Inches | 18 Inches | 39 Inches | 50 Inches | 33 Inches | 17 Inches | 17 Inches | 22 Inches | 22 Inches | 24 Inches | 20 Inches | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | ND | ND | ND | NDR | NDR | NDR | NDR | ND | ND | ND | 36.9 | 12.7 | 28.9 | 31.5 | 60.9 | 12.3 | 200 |
| Benzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 60 |
| Chloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,900 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | 1.3 J | 16.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 200 |
| cis-1,2-Dichoroethene | ND | ND | ND | ND | ND | 5.7 | 5.7 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NGV |
| Ethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5,500 |
| Tetrachloroethene | ND | 4.2 J | 1.8 | ND | 6.5 J | 17.2 | 17.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,400 |
| Toluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 800 |
| Trichloroethene | ND | ND | ND | ND | ND | 14.8 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | ND | ND | ND | ND | ND | 4.1 J | ND | ND | ND | ND | ND | ND | ND | ND | 12.9 | ND | 10,000 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | 2.0 | ND | ND | ND | ND | ND | ND | ND | ND | 7.6 | ND | 3,300 |
| 2-Butanone (MEK) | ND | ND | ND | NDR | NDR | NDR | NDR | ND | ND | ND | 10.7 J | ND | 7.8 J | 9.2 J | 13.9 | ND | NGV |
| Xylene (total) | ND | ND | 2.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*ND-Not Detected*

*NGV-No given value*

*Bot-Bottom*

*SW-Sidewall*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Boxed value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

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## Table EP-2

**Summary of Validated Detections - Volatile Organic Compounds**
**End-Point Samples 24-34**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-24(L) | EP-25 | EP-26 | EP-27 | EP-28 | EP-29 | EP-30 | EP-31 | EP-32 | EP-33 | EP-34 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/11/2003 | 6/16/2003 | 6/18/2003 | 6/16/2003 | 6/18/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | Objective |
| Final End Piont | Yes | No | Yes | No | No | Yes | Yes | No | No | NA | NA | |
| Depth | 17 Inches | 20 Inches | 22 Inches | 17 Inches | 20 Inches | 18 Inches | 30 Inches | 16 Inches | 18 Inches | 16 Inches | 17 Inches | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | 64.4 | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 200 |
| Benzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 60 |
| Chloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 1,900 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 200 |
| cis-1,2-Dichoroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV |
| Ethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 5,500 |
| Tetrachloroethene | ND | ND | ND | ND | ND | ND | ND | 1.7 J | ND | NA | NA | 1,400 |
| Toluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 800 |
| Trichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 700 |
| 1,2,4-Trimethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 10,000 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 3,300 |
| Xylene (total) | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*NA-Not applicable*

*ND-Not Detected*

*NGV-No given value*

*Bot-Bottom*

*SW-Sidewall*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Shaded value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

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## Table EP-2

### Summary of Validated Detections - Volatile Organic Compounds
### End-Point Samples 35-48
### A. K. Allen
### Mineola, New York

| Sample ID | EP-35 | EP-38 | EP-39 | EP-40 | EP-41 | EP-42 | EP-43 | EP-44 | EP-45 | EP-46 | EP-47 | EP-48 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/18/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | BOT | Objective |
| Final End Point | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Depth | 24 Inches | <12 Inches | <12 Inches | <12 Inches | <12 Inches | <12 Inches | 0-12 Inches | <12 Inches | <12 Inches | 36 Inches | 36 Inches | 36 Inches | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | ND | ND | ND | ND | ND | ND | 8UJ | ND | 8UJ | 11UJ | ND | ND | 200 |
| Benzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 60 |
| 2-Butanone | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2 J | 300 |
| Chlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,700 |
| Chloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,900 |
| 1,1-Dichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 400 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 200 |
| cis-1,2-Dichoroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NGV |
| Ethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5,500 |
| Methylene Chloride | ND | ND | ND | ND | ND | ND | 14 U | ND | ND | ND | ND | ND | 100 |
| Tetrachloroethene | ND | ND | 18.9 | ND | ND | ND | ND | ND | ND | ND | ND | 1 J | 1,400 |
| Toluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 800 |
| Trichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | 1 J | ND | 10,000 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3,300 |
| Xylene (total) | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*ND-Not Detected*

*NGV-No given value*

*Bot-Bottom*

*SW-Sidewall*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*B-Indicated compound found in associated black*

*Boxed value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

**Table EP-3**
**Summary of Validated Detections - Semi-Volatile Organic Compounds**
**End-point Samples 1-10**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-1 | EP-2 | EP-3 | EP-3D | EP-4 | EP-5 | EP-6 | EP-7 | EP-8 | EP-9 | EP-9D | EP-10 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 5/27/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 6/18/2003 | 5/28/2003 | Cleanup |
| Location | BOT | SW | SW | Duplicate | SW | BOT | BOT | BOT | SW | SW | SW | BOT | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | Yes | Yes | |
| Depth | 18 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 15 Inches | 15 Inches | 15 Inches | 18 Inches | 25 Inches | 30 Inches | 45 Inches | |
| ***Semi-Volatile Organic Compounds (USEPA Method 8270)*** | | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acenaphthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Anthracene | ND | ND | ND | 177 J | ND | ND | ND | ND | ND | 295 J | ND | ND | 50,000 |
| Benzo(a)anthracene | ND | 755 J | ND | 116 J | ND | ND | ND | ND | ND | 657 | 18.7 | ND | 224 |
| Benzo(a)pyrene | NDUJ | ND | NDUJ | NDUJ | ND | ND | ND | ND | ND | 694 | 22.4 | ND | 61 |
| Benzo(b)fluoranthene | NDUJ | ND | NDUJ | NDUJ | ND | ND | ND | ND | ND | 1350 | 43.5 | ND | 1,100 |
| Benzo(g,h,i)perylene | NDUJ | ND | NDUJ | 97.3 J | ND | ND | ND | ND | ND | 707 | 19.1 | ND | 50,000 |
| Benzo(k)fluoranthene | NDUJ | ND | NDUJ | NDUJ | ND | ND | ND | ND | ND | 341 J | 35 | ND | 1,100 |
| Buty benzyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Carbazole | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NVG |
| Chrysene | ND | 1880 J | ND | 438 | ND | ND | ND | ND | ND | 989 | 28.3 | ND | 400 |
| Dibenzofuran | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 6,200 |
| Di-n-butyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 8,100 |
| bis (2-Ethylhexyl)phthalate | ND | 29,900 | 7120 | 5960 | 16,000 | ND | 1040 | 1810 | ND | ND | ND | ND | 50,000 |
| Fluoranthene | ND | 2,380 | ND | 284 J | ND | ND | ND | ND | ND | 1150 | 19.6 | ND | 50,000 |
| Fluorene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Indeno(1,2,3-cd)pyrene | NDUJ | ND | NDUJ | NDUJ | ND | ND | ND | ND | ND | 674 | 25 | ND | 3,200 |
| 2-Methylnaphthalene | ND | ND | ND | 139 J | ND | ND | ND | ND | ND | 64.9 J | ND | ND | 36,400 |
| Naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 13,000 |
| Phenanthrene | ND | 1,120 J | ND | 209 J | ND | ND | ND | ND | ND | 487 | ND | ND | 50,000 |
| Pyrene | ND | 3,290 | ND | 460 | ND | ND | ND | ND | ND | 1260 | 21.4 | ND | 50,000 |
| Acenaphthylene | ND | ND | ND | ND | ND | ND | ND | ND | ND | 175 J | ND | ND | NVG |

*Notes:*

*Boxed values exceed TAGM*

*NGV - No Given Value*

*E-Indicate the analyte's concenration exceeds the calibrated range*

*ND-Not Detected above the method detection limit*

*All concentrations are reported in micrograms per kilogram ( µg/kg) or parts per billion.*

*NA-Not applicable*

Bot-Bottom

SW-Sidewall

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

**Table EP-3**
**Summary of Validated Detections - Semi-Volatile Organic Compounds**
**End-point Samples 11-23**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-11 | EP-12 | EP-13 | EP-14 | EP-15 | EP-16 | EP-17 | EP-18 | EP-18D | EP-19 | EP-20 | EP-20U | EP-21 | EP-21D | EP-22 | EP-23 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 5/27/2003 | 5/28/2003 | 5/28/2003 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 6/2/2003 | 6/18/2003 | 6/2/2003 | 6/2/2003 | 6/11/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | Cleanup |
| Location | BOT | BOT | BOT | SW | BOT | BOT | BOT | BOT | BOT | SW | BOT | BOT | SW | SW | SW | SW | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | |
| Depth | 45 Inches | 26 Inches | 24 Inches | 26 Inches | 17 Inches | 17 Inches | 18 Inches | 39 Inches | 50 Inches | 33 Inches | 17 Inches | 17 Inches | 22 Inches | 22 Inches | 24 Inches | 20 Inches | |
| ***Semi-Volatile Organic Compounds (USEPA Method 8270)*** | | | | | | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acenaphthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 22.4 | ND | ND | ND | ND | 50,000 |
| Anthracene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 37.3 J | 84.0 | ND | ND | ND | 40.7 J | 50,000 |
| Benzo(a)anthracene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 132 | 151 | ND | ND | 64.1 J | 129 | 224 |
| Benzo(a)pyrene | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 121 | 137 | ND | ND | 39.2 J | 115 | 61 |
| Benzo(b)fluoranthene | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 113 | 210 | ND | ND | 32.9 J | 98.8 | 1,100 |
| Benzo(g,h,i)perylene | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 83.4 | 75.5 | ND | ND | 23.7 J | 74.3 J | 50,000 |
| Benzo(k)fluoranthene | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 93.7 | 86.8 | ND | ND | 26.3 J | 107 | 1,100 |
| Butyl benzyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 50,000 |
| Carbazole | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 24.8 | ND | ND | ND | ND | NVG |
| Chrysene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 132 | 141 | ND | ND | 56.8 J | 131 | 400 |
| Dibenzo(a,h)anthracene | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 20.8 J | ND | ND | ND | ND | ND | 6,200 |
| Di-n-butyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 8,100 |
| bis (2-Ethylhexyl)phthalate | ND | ND | ND | ND | ND | 129 | 103 | ND | ND | ND | 94.1 | ND | ND | ND | 50.4 J | ND | 50,000 |
| Fluoranthene | ND | 19.4 J | ND | ND | ND | ND | ND | ND | ND | ND | 258 | 365 | 30.5 J | ND | 59.8 J | 258 | 50,000 |
| Fluorene | ND | ND | ND | ND | ND | ND | ND | NO | ND | ND | ND | 20.7 | ND | ND | ND | ND | 50,000 |
| Indeno(1,2,3-cd)pyrene | ND | ND | NDUJ | ND | ND | ND | ND | ND | ND | ND | 92.9 | 76.8 | ND | ND | 27.4 J | 80.9 | 3,200 |
| 2-Methylnaphthalene | ND | ND | ND | ND | ND | 26 J | ND | ND | ND | ND | ND | ND | ND | ND | 148 | ND | 36,400 |
| Naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NO | ND | ND | ND | ND | 69.5 J | ND | 13,000 |
| Phenanthrene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 138 | 251 | 23.4 J | ND | 98.2 | 137 | 50,000 |
| Pyrene | ND | 18.7 J | ND | ND | ND | ND | ND | ND | ND | ND | 230 | 263 | 25.8 J | ND | 81.5 | 216 | 50,000 |

*Notes:*

*Shaded values exceed TAGM*

*NGV - No Given Value*

*E-Indicate the analyte's concenration exceeds the calibrated range*

*ND-Not Detected above the method detection limit*

*All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.*

*NA-Not applicable*

Bot-Bottom

SW-Sidewall

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

**Table EP-3**
**Summary of Validated Detections - Semi-Volatile Organic Compounds**
**End-point Samples 24-34**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-24(L) | EP-25 | EP-26 | EP-27 | EP-28 | EP-29 | EP-30 | EP-31 | EP-32 | EP-33 | EP-34 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/11/2003 | 6/16/2003 | 6/18/2003 | 6/16/2003 | 6/18/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | Objective |
| Final End Point | Yes | No | Yes | No | No | Yes | Yes | No | No | Yes | Yes | |
| Depth | 17 Inches | 20 Inches | 22 Inches | 17 inches | 20 Inches | 18 Inches | 30 Inches | 16 Inches | 18 Inches | 16 Inches | 17 Inches | |
| ***Semi-Volatile Organic Compounds (USEPA Method 8270)*** | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acenaphthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 50,000 |
| Anthracene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 50,000 |
| Benzo(a)anthracene | ND | 28.8 J | ND | 196 J | ND | ND | ND | ND | ND | NA | NA | 224 |
| Benzo(a)pyrene | ND | 32.3 J | ND | ND | ND | ND | ND | ND | ND | NA | NA | 61 |
| Benzo(b)fluoranthene | ND | 46.6 J | ND | ND | ND | ND | ND | ND | ND | NA | NA | 1,100 |
| Benzo(g,h,i)perylene | ND | 25.1 J | ND | ND | ND | ND | ND | ND | ND | NA | NA | 50,000 |
| Benzo(k)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 1,100 |
| Buty benzyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 50,000 |
| Carbazole | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NVG |
| Chrysene | ND | 32.5 J | ND | 315 J | ND | ND | ND | ND | ND | NA | NA | 400 |
| Dibenzofuran | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 6,200 |
| Di-n-butyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 8,100 |
| bis (2-Ethylhexyl)phthalate | ND | ND | ND | 1250 | ND | ND | 121 | ND | ND | NA | NA | 50,000 |
| Fluoranthene | ND | 52.6 J | ND | 532 | ND | ND | 25.6 J | ND | ND | NA | NA | 50,000 |
| Fluorene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 50,000 |
| Indeno(1,2,3-cd)pyrene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 3,200 |
| 2-Methylnaphthalene | ND | ND | ND | 121 J | ND | ND | ND | ND | ND | NA | NA | 36,400 |
| Naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 13,000 |
| Phenanthrene | ND | 30.1 J | ND | 27.0 J | ND | ND | 20.7 J | 25.1 J | ND | NA | NA | 50,000 |
| Pyrene | ND | 41.4 J | ND | 457 | ND | ND | 20.9 J | ND | ND | NA | NA | 50,000 |

*Notes:*

*Shaded values exceed TAGM*

*NGV - No Given Value*

*E-Indicate the analyte's concenration exceeds the calibrated range*

*ND-Not Detected above the method detection limit*

*All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.*

*NA-Not applicable* *ND-Not Detected*

W-West

Bot-Bottom

SW-Sidewall

Ex- Excavation

* *NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

J-Estimated vlaue when the results was less than the specified *detection limit but greater than zero.*

**Table EP-3**
**Summary of Validated Detections - Semi-Volatile Organic Compounds**
**End-point Samples 35-48**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-35 | EP-38 | EP-39 | EP-40 | EP-41 | EP-42 | EP-43 | EP-44 | EP-45 | EP-46 | EP-46DL | EP-47 | EP-48 | EP-48DL | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 6/18/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | BOT | BOT | BOT | BOT | Objective |
| Final End Point | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Depth | 24 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | 0-12 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | |
| ***Semi-Volatile Organic Compounds (USEPA Method 8270)*** | | | | | | | | | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acenaphthene | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | ND | NDUJ | NDUJ | ND | 50000 |
| Anthracene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |
| Benzo(a)anthracene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 224 |
| Benzo(a)pyrene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | NDUJ | 61 |
| Benzo(b)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | NDUJ | 1100 |
| Benzo(g,h,i)perylene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | ND | NDUJ | NDUJ | 50000 |
| Benzo(k)fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | NDUJ | 1100 |
| Buty benzyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |
| 2-Chlorophenol | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 800 |
| Carbazole | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | NVG |
| Chrysene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | NDUJ | 400 |
| 1,4 Dichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | NVG |
| Dibenzofuran | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 6200 |
| Di-n-butyl phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 8100 |
| bis (2-Ethylhexyl)phthalate | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1300 JD | 1500 JD | 200 J | 1800J | 1100 J | 50000 |
| Fluoranthene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |
| 2,4-Dinitrotoluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | NVG |
| 4-Nitrophenol | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | NDUJ | ND | NDUJ | NDUJ | 330 |
| Fluorene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |
| Indeno(1,2,3-cd)pyrene | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | ND | NDUJ | NDUJ | 3200 |
| 4-Chloro-3-methylphenol | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | NVG |
| 1,2,4-Trichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | NVG |
| 2-Methylnaphthalene | ND | ND | ND | ND | ND | ND | NDUJ | NDUJ | NDUJ | NDUJ | ND | NDUJ | 51 J | NDUJ | 36400 |
| N-Nitroso-dl-n-propylamine | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | NVG |
| Naphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 13000 |
| Pentachlorophenol | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 1000 |
| Phenanthrene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |
| Phenol | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 30 |
| Pyrene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |
| | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NDUJ | ND | 50000 |

*Notes:*

*Shaded values exceed TAGM*

*NGV - No Given Value*

*E-Indicate the analyte's concenration exceeds the calibrated range*

*ND-Not Detected above the quanititation limit*

*All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.*

*NA-Not applicable*

W-West

Bot-Bottom

SW-Sidewall

Ex- Excavation

* *NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

**Table EP-4**

**Summary of Validated Detections - Metals**
**End-point Samples 1-10**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-1 | EP-2 | EP-3 | EP-3D | EP-4 | EP-5 | EP-6 | EP-7 | EP-8 | EP-9 | EP-9D | EP-10 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 5/28/2003 | 6/18/2003 | 5/28/2003 | Eastern US | Cleanup |
| Location | BOT | SW | SW | Duplicate | SW | BOT | BOT | BOT | SW | SW | SW | BOT | Background | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | | |
| Depth | 18 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 10-15 Inches | 15 Inches | 15 Inches | 15 Inches | 18 Inches | 25 Inches | 30 Inches | 45 Inches | | |
| *TAL Metals Compounds* | | | | | | | | | | | | | | |
| Parameters | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 1.6J | 10.4J | 4.9J | 9.9J | 12.2J | 1.7J | 4.6 | 24.4 | 3.9J | 8.3 | 1JK | 1.6J | 3 to 12 | 7.5 |
| Barium | <22 | 268 | 90.5 | 83.9 | 147 | 28.8 | 33.2 | 70.6 | <23 | 24.8 | <21 | <21 | 15 to 600 | 300 |
| Cadmium | 1.6 | 8.1 | 1.2 | 2 | 25.1 | <0.54 | <0.57 | 0.91 | <0.57 | <0.56 | <0.52UJ | <0.52 | 0.1 to 1 | 1(10**) |
| Chromium | 5.9 | 1910 | 132 | 105 | 1220 | 8.2 | 114 | 133 | 22.6 | 36.3 | 3.4 | 5.0 | 1.5 to 40 | 10(50**) |
| Lead | 53.4 | 768 | 171 | 175 | 697 | 3.2 | 25.6 | 56.8 | 9.4 | 35.5 | 2.9 | 1.8 | 200 to 500 | NGV |
| Mercury | <0.033 | 0.59 | 0.46 | 0.34 | 2.7 | <0.033 | 0.062 | <0.035 | <0.036 | 0.084 | <0.033 | <0.030 | 0.001 to 0.2 | 0.1 |
| Selenium | <1.1 | 2.7 | <1.1 | <1.1 | 2.2 | <1.1 | <1.1 | 1.7 | <1.1 | <1.1 | <1.0 | <1.0 | 0.1 to 3.9 | 2 |
| Silver | <1.1 | 1.8 | <1.1 | <1.1 | 1.8 | <1.1 | <1.1 | <1.2 | <1.1 | <1.1 | <1.0UJ | <1.0 | NVG | NGV |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated vlaue when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg) or parts per million.*

*NF-The analyte was not analyzed for*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*SW.-Sidewall*

*Bot.-Bottom*

***(50)=Draft TAGM Cleanup Objective*

**Table EP-4**

**Summary of Validated Detections - Metals**
**End-point Samples 11-23**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-11 | EP-12 | EP-13 | EP-14 | EP-15 | EP-16 | EP-17 | EP-18 | EP-18D | EP-19 | EP-20 | EP-20U | EP-21 | EP-21D | EP-22 | EP-23 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 5/28/2003 | 5/29/2003 | 5/29/03 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 5/30/2003 | 6/2/2003 | 6/18/2003 | 6/2/2003 | 6/2/2003 | 6/11/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | Eastern US | Cleanup |
| Location | BOT | BOT | BOT | BOT | BOT | BOT | BOT | BOT | BOT | BOT | SW | SW | SW | SW | SW | SW | Background | Objective |
| Final End Point | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | | |
| Depth | 45 Inches | 26 Inches | 24 Inches | 26 Inches | 17 Inches | 17 Inches | 18 Inches | 39 Inches | 50 Inches | 33 Inches | 17 Inches | 17 Inches | 22 Inches | 22 Inches | 24 Inches | 20 Inches | | |
| *TAL Metals Compounds* | | | | | | | | | | | | | | | | | | |
| Parameters | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 4.5J | 4.0 | 2.9 | 3.5J | 3.4J | 3.8J | 5.4J | 5.1 | 1.8JK | 4 | 2.8 | 1.8J | 2.3 | 1 | 2 | 3.3 | 3 tp 12 | 7.5 |
| Barium | 26 | <21 | 26.2 | 25.4 | 43.9 | 36.3 | 43.5 | 34.7 | 31.5 | 35.6 | 24.3 | <23 | 24.2 | <21 | 23.1 | 23.9 | 15 to 600 | 300 |
| Cadmium | 0.69 | 0.83 | <0.58 | <0.58 | <0.66 | <0.67 | <0.73 | <0.58 | <0.57UJ | <0.67 | 0.85 | <0.56 | <0.57 | <0.52 | <0.57 | <0.56 | 0.1 to 1 | 1(10**) |
| Chromium | 26.5 | 25.7 | 12.4 | 16.8 | 19.4 | 24.6 | 34.3 | 1630 | 15.3 | 20.1J | 46J | 11.2 | 15.2J | 5.7J | 34 | 14.1J | 1.5 to 40 | 10(50**) |
| Lead | 189 | 37J | 14.5J | 8 | 8.8 | 10.1 | 10.5 | 11.6 | 4.7 | 8.9J | 99.9J | 8.9 | 10.6J | 5.4J | 25.1 | 17.5J | 200 to 500 | NGV |
| Mercury | <0.034 | <0.034 | + | <0.037 | <0.042 | <0.039 | <0.045 | <0.042 | <0.035 | <0.039 | <0.034 | 0.038 | <0.035 | <0.033 | <0.037 | 0.06 | 0.001 to 0.2 | 0.1 |
| Selenium | <1.1 | <1.1 | <1.2 | <1.2 | <1.3 | <1.3 | <1.5 | <1.2 | <1.1 | <1.3 | <1.1 | <1.1 | <1.1 | <1 | <1.1 | <1.1 | 0.1 to 3.9 | 2 |
| Silver | <1.1 | <1.1 | <1.2 | <1.2 | <1.3 | <1.3 | <1.5 | <1.2 | <1.1UJ | <1.3 | <1.1 | <1.1 | <1.1 | <1 | <1.1 | <1.1 | NVG | NGV |

*Notes:*

*Shaded values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated vlaue when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg) or parts per million.*

*NF-The analyte was not analyzed for*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

***(50)=Draft TAGM Cleanup Objective*

## Table EP-4

**Summary of Validated Detections - Metals**
**End-point Samples 24-34**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-24(L) | EP-25 | EP-26 | EP-27 | EP-28 | EP-29 | EP-30 | EP-31 | EP-32 | EP-33 | EP-34 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 6/11/2003 | 6/16/2003 | 6/18/2003 | 6/16/2003 | 6/18/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | 6/18/2003 | 6/16/2003 | 6/16/2003 | Eastern US | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | Background | Objective |
| Final End Point | Yes | No | Yes | No | Yes | Yes | Yes | No | No | NA | NA | | |
| Depth | 17 Inches | 20 Inches | 22 Inches | 17 Inches | 20 Inches | 18 Inches | 30 Inches | 16 Inches | 18 Inches | 16 Inches | 17 Inches | | |
| *TAL Metals Compounds* | | | | | | | | | | | | | |
| Parameters | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 3J | 3.2 | <1.0UJ | 3.9 | 1.2 | 3.2JK | 13.3K | 2.9 | 1.7 | NA | NA | 3 to 12 | 7.5 |
| Barium | 33.5 | 33.3 | <21 | 34.8 | <22 | <23 | <24 | 41.7 | <21 | NA | NA | 15 to 600 | 300 |
| Cadmium | <0.63 | 4.4 | <0.52UJ | 4.5 | <0.54 | <0.57UJ | <0.61 | 0.83 | <0.53 | NA | NA | 0.1 to 1 | 1(10**) |
| Chromium | 16.8 | 31.3 | 9.2 | 1010 | 6.4 | 16.3 | 42.9 | 133 | 23.4 | NA | NA | 1.5 to 40 | 10(50**) |
| Lead | 7.7 | 17.8 | 2.8 | 86.6 | 13.1 | 10.3 | 40.8K | 23.5 | 4.2 | NA | NA | 200 to 500 | NGV |
| Mercury | <0.041 | <0.038 | <0.032 | 0.11 | <0.034 | <0.037 | <0.037 | 0.069 | <0.030 | NA | NA | 0.001 to 0.2 | 0.1 |
| Selenium | 1.3 | <1.2 | <1.0 | <1.4 | <1.1 | <1.1UJ | <1.2 | <1.3 | <1.1 | NA | NA | 0.1 to 3.9 | 2 |
| Silver | <1.3 | <1.2 | <1.0UJ | 2.7 | <1.1 | <1.1 | <1.2 | <1.3 | <1.1 | NA | NA | NVG | NGV |

*Notes:*

*Shaded values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated vlaue when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg) or parts per million.*

*NF-The analyte was not analyzed for*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*SW.-Sidewall*

*Bot.-Bottom*

***(50)=Draft TAGM Cleanup Objective*

**Table EP-4**

**Summary of Validated Detections - Metals**
**End-point Samples 35-48**
**A. K. Allen**
**Mineola, New York**

| Sample ID | EP-35 | EP-38 | EP-39 | EP-40 | EP-41 | EP-42 | EP-43 | EP-44 | EP-45 | EP-46 | EP-46D | EP-47 | EP-48 | EP-48D | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 6/18/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/21/2003 | 7/31/2003 | 7/21/2003 | 7/21/2003 | 7/31/2003 | Eastern US | Cleanup |
| Location | SW | SW | SW | SW | SW | SW | SW | SW | SW | BOT | BOT | BOT | BOT | BOT | Background | Objective |
| Final End Point | Yes | Yes | Yes | No | No | No | Yes | Yes | Yes | No | Yes | Yes | No | Yes | | |
| Depth | 24 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | >12 Inches | 0-12 Inches | >12 Inches | >12 Inches | 36 Inches | 50 Inches | 36 Inches | 36 Inches | 50 Inches | | |
| *TAL Metals Compounds* | | | | | | | | | | | | | | | | |
| Parameters | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 2.5JK | 2.5 | 4.7 | 2.6 | 1.2 | 1.3 | 4.4J | 5.7J | 5.78J | 3.03J | NA | NDUJ | 2.44J | NA | 3 to 12 | 7.5 |
| Barium | 25.5 | <20 | 27.2 | <22 | <21 | <21 | 36.5 | 58.8 | 57.4 | 37.7 | NA | 18.5 | 25.9 | NA | 15 to 600 | 300 |
| Cadmium | <0.52UJ | <0.51 | <0.65 | <0.56 | <0.52 | <0.54 | ND | ND | ND | 1.08 | NA | ND | ND | NA | 0.1 to 1 | 1(10**) |
| Chromium | 21.8 | 5.3J | 38.7J | 10.6 | 123 | 4.4 | 20.1 | 26.1 | 24.4 | 81.9 | 5.04J | 14.3 | 75.1 | 2.64J | 1.5 to 40 | 10(50**) |
| Lead | 6.9 | 2.9 | 8.9 | 4.8 | 14.6 | 4.5 | 12.4 | 16 | 15.3 | 37.1 | NA | 5.51 | 18.5 | NA | 200 to 500 | NGV |
| Mercury | <0.033 | <0.032 | <0.042 | <0.034 | <0.032 | <0.035 | ND | ND | ND | ND | NA | ND | ND | NA | 0.001 to 0.2 | 0.1 |
| Selenium | <1.0UJ | <1.0 | 1.9 | <1.1 | 1.0 | <1.1 | ND | ND | ND | ND | NA | ND | ND | NA | 0.1 to 3.9 | 2 |
| Silver | <1.0 | <1.0 | <1.3 | <1.1 | 1.6 | <1.1 | ND | ND | ND | ND | NA | ND | ND | NA | NVG | NGV |

*Notes:*

*Shaded values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated vlaue when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg) or parts per million.*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*SW.-Sidewall ND-NotDetected*

*Bot.-Bottom NA-Not Analyzed*

***(50)=Draft TAGM Cleanup Objective*

# TABLE SB-1

## Summary of Validated Detections - Volatile Organic Compounds in Pre-Excavation Soil Borings
## A. K. Allen
## Mineola, New York

| Sample ID | SD-03 Surface | SD-03 5' | SD-03 6-9' | SD-99 6-9' | IRM B-1 0-10 (2-4') | IRM B-1 0-10 (6-8') | *NYSDEC |
|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/28/2003 | 3/28/2003 | 3/28/2003 | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Storm Drain 3 | Storm Drain 3 | Storm Drain 3 | Duplicate Storm Drain 3 | Boring IRM B-1 | Boring IRM B-1 | Objective |
| Depth | Surface | 5 feet | 6 to 9 feet | 6 to 9 feet | 2 to 4 feet | 6 to 8 feet | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | NDUJ | ND | ND | ND | ND | ND | 200 |
| Benzene | NDUJ | ND | ND | ND | 10.7 J | ND | 60 |
| Chloroethane | NDUJ | ND | ND | ND | 285 | ND | 1,900 |
| 1,1-Dichloroethane | NDUJ | ND | ND | ND | 245 | ND | 200 |
| cis-1,2-Dichoroethene | NDUJ | ND | ND | ND | 22.1 J | ND | NGV |
| Ethylbenzene | NDUJ | ND | ND | ND | 78.6 | ND | 5,500 |
| Tetrachloroethene | 11.2J | 13.3 J | ND | ND | 845 | ND | 1,400 |
| Toluene | NDUJ | ND | ND | ND | 450 | ND | 1,500 |
| 1,1,1-Trichloroethane | NDUJ | ND | ND | ND | 31.1 J | ND | 800 |
| Trichloroethene | NDUJ | ND | ND | ND | 21.9 J | ND | 700 |
| 1,2,4-Trimethylbenzene | 4.7 J | 26.4 J | 1.1 J | 8.0 | 1000 | ND | 10,000 |
| 1,3,5-Trimethylbenzene | NDUJ | 277 | ND | 3.2 J | 740 | ND | 3,300 |
| Xylene | 3.3J | 87.6 | ND | ND | 1220 | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*ND-Not Detected*

*NGV-No given value*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

**Prepared By CA RICH CONSULTANTS, INC.**

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## TABLE SB-1 continued

### Summary of Validated Detections - Volatile Organic Compounds
### in Pre-Excavation Soil Borings
### A. K. Allen
### Mineola, New York

| Sample ID | IRM B-1A | IRM B-1 10-20 (10-12') | IRM B-1 10-20 (12-14') | IRM B-1 10-20 (18-20') | IRM B-1 20-30 (20-22') | IRM B-1 20-30 (26-28') | *NYSDEC |
|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Duplicate of Boring IRM B-1 6-8' | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Objective |
| Depth | 6 to 8 feet | 10 to 12 feet | 12 to 14 feet | 18 to 20 feet | 20 to 22 feet | 26 to 28 feet | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | ND | ND | ND | ND | ND | ND | 200 |
| Benzene | ND | ND | ND | ND | ND | ND | 60 |
| Chloroethane | ND | ND | ND | ND | ND | ND | 1,900 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | ND | 200 |
| cis-1,2-Dichoroethene | ND | ND | ND | ND | ND | ND | NGV |
| Ethylbenzene | ND | ND | ND | ND | ND | ND | 5,500 |
| Tetrachloroethene | ND | ND | ND | ND | ND | ND | 1,400 |
| Toluene | ND | ND | ND | ND | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | 800 |
| Trichloroethene | ND | ND | ND | ND | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | 1.9 J | ND | ND | ND | 4.6 J | ND | 10,000 |
| 1,3,5-Trimethylbenzene | 1.0 J | ND | ND | ND | 2.8 J | ND | 3,300 |
| Xylene | ND | ND | ND | ND | ND | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*ND-Not Detected*

*NGV-No given value*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Shaded value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

## TABLE SB-1 continued

### Summary of Validated Detections - Volatile Organic Compounds
### in Pre-Excavation Soil Borings
### A. K. Allen
### Mineola, New York

| Sample ID | IRM B-1 30-40 (32-34') | IRM B-1 30-40 (38-40') | IRM B-1 40-50 (44-46') | IRM B-1 40-50 (46-48') | IRM B-1 50-60 (50-52') | IRM B-1 50-60 (52-54') | *NYSDEC |
|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Boring IRM B-1 | Objective |
| Depth | 32 to 34 feet | 38 to 40 feet | 44 to 46 feet | 46 to 48 feet | 50 to 52 feet | 52 to 54 feet | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | ND | ND | ND | ND | ND | ND | 200 |
| Benzene | ND | ND | ND | ND | ND | ND | 60 |
| Chloroethane | ND | ND | ND | ND | ND | ND | 1,900 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | ND | 200 |
| cis-1,2-Dichoroethene | ND | ND | ND | ND | ND | ND | NGV |
| Ethylbenzene | ND | ND | ND | ND | ND | ND | 5,500 |
| Tetrachloroethene | ND | ND | ND | ND | ND | ND | 1,400 |
| Toluene | ND | ND | ND | ND | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | 800 |
| Trichloroethene | ND | ND | ND | ND | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | ND | ND | ND | ND | ND | ND | 10,000 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | ND | 3,300 |
| Xylene | ND | ND | ND | ND | ND | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*ND-Not Detected*

*NGV-No given value*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Shaded value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

## TABLE SB-1 continued

### Summary of Validated Detections - Volatile Organic Compounds in Pre-Excavation Soil Borings
### A. K. Allen
### Mineola, New York

| Sample ID | IRM B-2 10' | IRM B-2 20' | IRM B-2 30' | IRM B-2 40' | IRM B-2 50' | IRM B-2 52-54' | *NYSDEC |
|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Boring IRM B-2 | Boring IRM B-2 | Boring IRM B-2 | Boring IRM B-2 | Boring IRM B-2 | Boring IRM B-2 | Objective |
| Depth | 10 to 12 feet | 20 to 22 feet | 30 to 32 feet | 40 to 42 feet | 50 to 52 feet | 52 to 54 feet | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acetone | ND | 6.7 J | ND | ND | ND | ND | 200 |
| Benzene | ND | ND | ND | ND | ND | ND | 60 |
| Chloroethane | ND | 4.2 J | ND | ND | ND | ND | 1,900 |
| 1,1-Dichloroethane | ND | 4.7 J | ND | ND | ND | ND | 200 |
| cis-1,2-Dichoroethene | ND | 13.7 | ND | ND | ND | ND | NGV |
| Ethylbenzene | ND | 5.1 | ND | ND | ND | ND | 5,500 |
| Tetrachloroethene | ND | 103 | ND | ND | ND | ND | 1,400 |
| Toluene | ND | 23.5 | ND | ND | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | 800 |
| Trichloroethene | ND | 3.6 J | ND | ND | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | ND | 114 | ND | ND | ND | ND | 10,000 |
| 1,3,5-Trimethylbenzene | ND | 68.7 | ND | ND | ND | ND | 3,300 |
| Xylene | ND | 63.4 | ND | ND | ND | ND | 1,200 |

*Notes:*

*J-Estimated value when the result was less than the specified detection limit but greater than zero.*

*ND-Not Detected*

*NGV-No given value*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Shaded value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

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## TABLE SB-1 continued

### Summary of Validated Detections - Volatile Organic Compounds in Pre-Excavation Soil Borings
### A. K. Allen
### Mineola, New York

| Sample ID | AK Allen Field Blank 3-27-03 | AK Allen Trip Blank 3-27-03 | *NYSDEC |
|---|---|---|---|
| Matrix | water | water | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Field Blank | Trip Blank | Objective |
| Depth | NA | NA | |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg |
| Acetone | NDR | ND | 200 |
| Benzene | ND | ND | 60 |
| Chloroethane | ND | ND | 1,900 |
| 1,1-Dichloroethane | ND | ND | 200 |
| cis-1,2-Dichoroethene | ND | ND | NGV |
| Ethylbenzene | ND | ND | 5,500 |
| Tetrachloroethene | ND | ND | 1,400 |
| Toluene | ND | ND | 1,500 |
| 1,1,1-Trichloroethane | ND | ND | 800 |
| Trichloroethene | ND | ND | 700 |
| 1,2,4-Trimethylbenzene | ND | ND | 10,000 |
| 1,3,5-Trimethylbenzene | ND | ND | 3,300 |
| Xylene | ND | ND | 1,200 |

*Notes:*
*J-Estimated value when the result was less than the specified detection limit but greater than zero.*
*ND-Not Detected*
*NGV-No given value*
*NA-Not applicable*
*Shaded value exceeds TAGM*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

# TABLE SB-2

## Summary of Validated Detections - Semi-Volatile Organic Compounds in Pre-Exvacation Soil Borings

## A. K. Allen

## Mineola, New York

| Sample ID | SD-03 Surface | SD-03 5' | SD-03 6-9' | SD-99 6-9' | AK Allen Field Blank 3-27-03 | *NYSDEC |
|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Water | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Storm Drain 3 | Storm Drain 3 | Storm Drain 3 | Duplicate Storm Drain 3 | Field Blank | Objective |
| Depth | Surface | 5 feet | 6 to 9 feet | 6 to 9 feet | NA | |
| ***Semi-Volatile Organic Compounds (USEPA Method 8270)*** | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Acenaphthene | 92.9 | 382 J | ND | ND | ND | 50,000 |
| Anthracene | 238 | 813 | ND | ND | ND | 50,000 |
| Benzo(a)anthracene | 754 | 2580 | ND | ND | ND | 224 |
| Benzo(a)pyrene | 755 | 1680 | ND | ND | ND | 61 |
| Benzo(b)fluoranthene | 1100 | 2620 | ND | ND | ND | 1,100 |
| Benzo(g,h,i)perylene | 430 | 1080 | ND | ND | ND | 50,000 |
| Benzo(k)fluoranthene | 969 | 1450 | ND | ND | ND | 1,100 |
| Buty benzyl phthalate | 644 | 1240 | ND | ND | ND | 50,000 |
| Carbazole | 177 | ND | ND | ND | ND | NVG |
| Chrysene | 860 | 2850 | ND | ND | ND | 400 |
| Dibenzofuran | 76.7 J | ND | ND | ND | ND | 6,200 |
| Di-n-butyl phthalate | 147 | 300 J | ND | ND | ND | 8,100 |
| bis (2-Ethylhexyl)phthalate | 15600 | 39800 | ND | ND | ND | 50,000 |
| Fluoranthene | 1590 | 4760 | ND | ND | ND | 50,000 |
| Fluorene | 93.3 | 742 | ND | ND | ND | 50,000 |
| Indeno(1,2,3-cd)pyrene | 327 | 696 | ND | ND | ND | 3,200 |
| 2-Methylnaphthalene | 57.1 J | ND | ND | ND | ND | 36,400 |
| Naphthalene | 58.9 J | 1430 | ND | ND | ND | 13,000 |
| Phenanthrene | 1230 | 3920 | ND | ND | ND | 50,000 |
| Pyrene | 2580 | 11200 | ND | ND | ND | 50,000 |

*Notes:*

*Shaded values exceed TAGM*

*NGV - No Given Value*

*E-Indicate the analyte's concenration exceeds the calibrated range*

*ND-Not Detected above the quanititation limit*

*All concentrations are reported in micrograms per kilogram ( µg/kg) or parts per billion.*

*NA-Not applicable*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

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## TABLE SB-3
### Summary of Validated Detections - PCBs
### in Pre-Excavation Soil Borings
### A. K. Allen
### Mineola, New York

| Sample ID | SD-03 6-9 feet | SD-99 6 to 9 feet | IRM B-1 0-10 (4-6 ft.) | IRM B-2 10 ft. | AK Allen Field Blank 3-27-03 | *NYSDEC |
|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Water | TAGM #4046 |
| Date Sampled | 3/28/2003 | 3/28/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | Cleanup |
| Location | Storm Drain 3 | Storm Drain 3 Duplicate | Boring B-1 | Boring B-2 | Field Blank | Objective |
| Depth | 6 to 9 feet | 6 to 9 feet | 4 to 6 feet | 10 to 12 feet | NA | |
| ***PCBs (USEPA Method 8082)*** | | | | | | |
| Parameters | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Aroclor 1254 | 381 | 276 | 3230 | ND | ND | 10,000 |

*Notes:*

*Shaded values exceed TAGM*

*NGV - No Given Value*

*E-Indicate the analyte's concenration exceeds the calibrated range*

*ND-Not Detected above the quanititation limit*

*All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.*

*NA-Not applicable*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

# TABLE SB-4

## Summary of Validated Detections - Metals
## in Pre-Excavation Soil Borings
## A. K. Allen
## Mineola, New York

| Sample ID | SD-03 Surface | SD-03 5' | SD-03 6-9' | SD-99 6-9' | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | 3/27/2003 | 3/27/2003 | Eastern US | Cleanup |
| Location | Storm Drain 3 | Storm Drain 3 | Storm Drain 3 | Duplicate Storm Drain 3 | Background | Objective |
| Depth | Surface | 5 Feet | 6 to 9 Feet | 6 to 9 Feet | | |
| *TAL Metals Compounds* | | | | | | |
| Parameters | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Aluminum | 18700 | NA | 1920 | 2140 | 33,000 | NGV |
| Antimony | NDUJ | NA | NDUJ | NDUJ | NA | SB |
| Arsenic | 2.5K | 2K | ND | ND | 3 to 12 | 7.5 |
| Barium | 32.3 | 31.4 | ND | ND | 15 to 600 | 300 |
| Beryllium | ND | NA | ND | ND | 1.75 | SB |
| Cadmium | 9K | 4.4K | NDUJ | NDUJ | 0.1 to 1 | 1 (10) |
| Calcium | 3230J | NA | NDUJ | NDUJ | 130 to 35,000 | NGV |
| Chromium | 521 | 253 | 4.3 | 5.1 | 1.5 to 40 | 10 (50) |
| Cobalt | 13.3J | NA | NDUJ | NDUJ | 2.5 to 60 | 30 |
| Copper | 1150 | NA | 14.5 | 13.9 | 1 to 50 | 25 |
| Iron | 14700 | NA | 5340 | 5100 | 2,000 to 550,000 | 2,000 |
| Lead | 450J | 788K | 2.1J | 2.5J | 200 to 500 | NGV |
| Magnesium | 2360 | NA | ND | 646 | 100 to 5,000 | NGV |
| Manganese | 118 | NA | 65.2 | 82.4 | 50 to 5,000 | NGV |
| Mercury | 0.35 | 0.22 | ND | ND | 0.001 to 0.2 | 0.1 |
| Nickel | 255 | NA | 5.4 | 5.6 | 0.5 to 25 | 13 |
| Potassium | ND | NA | ND | ND | 8,500 to 43,000 | SB |
| Selenium | NDUJ | NDUJ | NDUJ | NDUJ | 0.1 to 3.9 | 2 |
| Silver | ND | 1.4 | ND | ND | NGV | NGV |
| Sodium | NDUJ | NA | NDUJ | NDUJ | 6,000 to 8,000 | SB |
| Thallium | ND | NA | ND | ND | NA | SB |
| Vanadium | 34J | NA | NDUJ | 5.2J | 1 to 300 | 150 |
| Zinc | 449.0 | NA | 18.9 | 20.1 | 9 to 50 | 20 |

*Notes:*

*Shaded values exceed TAGM and Eastern US Background*

*NGV - No Given Value, SB - Site Background*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated vlaue when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg) or parts per million.*

*NA-Not applicable, (50) - Draft Standard*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

## TABLE SB-4 continued

### Summary of Validated Detections - Metals
### in Pre-Excavation Soil Borings
### A. K. Allen
### Mineola, New York

| Sample ID | IRM B-1 0-10 (4-6') | IRM B-2 10' | AK Allen Field Blank 3-27-03 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|
| Matrix | Soil | Soil | Water | TAGM #4046 | TAGM #4046 |
| Date Sampled | 3/27/2003 | 3/27/2003 | 3/27/2003 | Eastern US | Cleanup |
| Location | Boring IRM B-1 | Boring IRM B-2 | Field Blank | Background | Objective |
| Depth | 4 to 6 feet | 10 to 12 feet | NA | | |
| ***TAL Metals Compounds*** | | | | | |
| Parameters | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Aluminum | 3470 | 2390 | ND | 33,000 | NGV |
| Antimony | ND | ND | ND | NA | SB |
| Arsenic | 3.0 | ND | ND | 3 to 12 | 7.5 |
| Barium | ND | ND | ND | 15 to 600 | 300 |
| Beryllium | ND | ND | ND | 1.75 | SB |
| Cadmium | ND | ND | ND | 0.1 to 1 | 1 |
| Calcium | ND | ND | ND | 130 to 35,000 | NGV |
| Chromium | 81.9 | 5.6 | ND | 1.5 to 40 | 10 |
| Cobalt | ND | ND | ND | 2.5 to 60 | 30 |
| Copper | 77.6 | 8.8 | ND | 1 to 50 | 25 |
| Iron | 11900 | 7570 | ND | 2,000 to 550,000 | 2,000 |
| Lead | 10.1 | 1.9 | ND | 200 to 500 | NGV |
| Magnesium | 809 | 826 | ND | 100 to 5,000 | NGV |
| Manganese | 143 | 78.4 | ND | 50 to 5,000 | NGV |
| Mercury | ND | ND | ND | 0.001 to 0.2 | 0.1 |
| Nickel | 41.7 | 5.2 | ND | 0.5 to 25 | 13 |
| Potassium | ND | ND | ND | 8,500 to 43,000 | SB |
| Selenium | 1.7 | ND | ND | 0.1 to 3.9 | 2 |
| Silver | 5.0 | ND | ND | NGV | NGV |
| Sodium | ND | ND | ND | 6,000 to 8,000 | SB |
| Thallium | ND | ND | ND | NA | SB |
| Vanadium | 7.5 | ND | ND | 1 to 300 | 150 |
| Zinc | 42.0 | 13.3 | ND | 9 to 50 | 20 |

*Notes:*

*Shaded values exceed TAGM and Eastern US Background*

*NGV - No Given Value, SB - Site Background*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated vlaue when the results was less than the specified detection limit but greater than zero*

*U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg) or parts per million.*

*NA-Not applicable*

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

## Table SB-5

## Summary of Validated Detections - Metals, PCBs, VOCs and SVOCs in Post Excavation Soil Boring Samples
## A. K. Allen
## Mineola, New York

| Sample ID | SB-2 | SB-3 | SB-3 | SB-3A | SB-4 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 6/30/2003 | 6/30/2003 | 6/30/2003 | 6/30/2003 | 6/30/2003 | Eastern US | Cleanup |
| Location | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Background | Objective |
| Depth | 24-28 Inches | 24-28 Inches | 36-40 Inches | 24-28 Inches | 24-28 Inches | | |
| **Parameters** | | | | | | | |
| ***TAL Metals*** | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 91.8 | 15.3 | <1.0 | 19.6 | 16.6 | 3 to 12 | 7.5 |
| Barium | 259 | 82.7 | <20 | 25.5 | 91.6 | 15 to 600 | 300 |
| Cadmium | <0.67 | 7.5 | <0.51 | 5.4 | <0.62 | 0.1 to 1 | 1(10**) |
| Chromium | 52.1J | 63.5J | 7.5J | 8.5J | 14.2J | 1.5 to 40 | 10 (50**) |
| Lead | 264 | 115 | 6.2 | 105 | 183 | 200 to 500 | NGV |
| Mercury | <0.038 | 0.049 | <0.032 | 0.054 | 0.065 | 0.001 to 0.2 | 0.1 |
| Selenium | 2.3 | 1.4 | <1.0 | 1.5 | 1.6 | 0.1 to 3.9 | 2 |
| Silver | <1.3 | <1.2 | <1.0 | <1.2 | <1.2 | NGV | NGV |
| ***PCBs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 41500 | 91700 | 10300 | 4250 | 63300 | NGV | 10,000 |
| ***VOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acetone | ND | ND | ND | ND | ND | NGV | 200 |
| Benzene | 2.2 | ND | ND | ND | ND | NGV | 60 |
| Chloroform | 12.5 | 3.7 J | ND | ND | 7.5 | NGV | 300 |
| Chloroethane | ND | ND | ND | ND | ND | NGV | 1,900 |
| 1,1-Dichloroethane | 2750 | 422 | ND | 55.2 | 6240 | NGV | 200 |
| 1,2-Dichloroethane | 56.2 | 22.3 | ND | 6.1 J | 37.4 | NGV | 200 |
| 1,1-Dichloroethene | 94.4 J | 104 | ND | 4.2 J | 242 | NGV | 400 |
| cis-1,2-Dichoroethene | 332 | 25.8 | ND | 19 | 21.3 | NGV | NGV |
| trans-1,2-Dichloroethene | 19.2 | 5.9 J | ND | 5.5 J | 4.9 J | NGV | 300 |
| Ethylbenzene | ND | ND | ND | ND | ND | NGV | 5,500 |
| Methylene Chloride | 54.4 | 99 | ND | ND | 23.2 | NGV | 100 |
| Tetrachloroethene | 88400 | 41800 | 424 | 678 | 36400 | NGV | 1,400 |
| Toluene | 17.9 | ND | ND | ND | 3.2 | NGV | 1,500 |
| 1,1,1-Trichloroethane | 54800 | 27700 | 56.9 | 186 | 31400 | NGV | 800 |
| Trichloroethene | 12800 | 19100 | 17.9 | 539 | 30300 | NGV | 700 |
| 1,1,2-Trichloroethane | 144 | 18.5 | ND | 6.1 J | 73.4 | NGV | NGV |
| ***SVOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acenaphthylene | ND | ND | ND | 34.4 J | ND | NGV | 41000 |
| Anthracene | ND | ND | NDUJ | 408 | NDUJ | NGV | 50,000 |
| Benzo(a)anthracene | 286 J | NDUJ | ND | 307 | NDUJ | NGV | 224 |
| Beno(a)pyrene | NDUJ | NDUJ | NDUJ | 716J | NDUJ | NGV | 61 |
| Benzo(b)fluoranthene | NDUJ | NDUJ | NDUJ | 478J | NDUJ | NGV | 1,100 |
| Benzo(g,h,i)perylene | NDUJ | 1210J | NDUJ | 360J | 939J | NGV | 50,000 |
| Benzo(k)fluoranthene | NDUJ | NDUJ | NDUJ | 159J | NDUJ | NGV | 1,100 |
| Carbazole | ND | ND | NDUJ | 177 | NDUJ | NGV | NGV |
| Chrysene | 806 | 1370J | ND | 750 | NDUJ | NGV | 400 |
| Dibenzofuran | ND | ND | ND | 32.9 J | ND | NGV | 6,200 |
| Fluoranthene | ND | ND | NDUJ | 160 | 704J | NGV | 50,000 |
| Fluorene | ND | ND | ND | 44.6 J | ND | NGV | 50,000 |
| Indeno(1,2,3-cd)pyrene | NDUJ | 958J | NDUJ | NDUJ | NDUJ | NGV | 3,200 |
| 2-Methylnaphthlene | ND | ND | ND | 59.9 J | ND | NGV | 36,400 |
| Naphthelene | ND | ND | ND | 29.1 J | ND | NGV | 13,000 |
| Phenathrene | ND | ND | NDUJ | 221 | NDUJ | NGV | 50,000 |
| Pyrene | ND | 3020J | ND | 551 | 2230J | NGV | 50,000 |
| Bis(2-ethylhexyl)phthalate | 3490 | 2910J | ND | ND | 2320J | NGV | 50,000 |
| Butyl benzyl phthalate | ND | ND | ND | ND | ND | NGV | 50,000 |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*(50**) - Draft TAGM cleanup objective*

*ND -The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg or parts per million) and micrograom per kilogram (ug/kg or parts per billion).*

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## Table SB-5 Continued

## Summary of Validated Detections - Metals, PCBs, VOCs and SVOCs in Post Excavation Soil Boring Samples
## A. K. Allen
## Mineola, New York

| Sample ID | SB-36 | SB-37 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|
| Matrix | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 6/30/2003 | 6/30/2003 | Eastern US | Cleanup |
| Location | Soil Boring | Soil Boring | Background | Objective |
| Depth | 0-12 Inches | 0-12 Inches | | |
| **Parameters** | | | | |
| ***TAL Metals*** | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 9.5 | 4 | 3 to 12 | 7.5 |
| Barium | 38.7 | <23 | 15 to 600 | 300 |
| Cadmium | 0.67 | <0.58 | 0.1 to 1 | 1(10**) |
| Chromium | 32.9J | 20.6J | 1.5 to 40 | 10 (50**) |
| Lead | 172 | 26.3 | 200 to 500 | NGV |
| Mercury | 0.12 | 0.053 | 0.001 to 0.2 | 0.1 |
| Selenium | <1.3 | 1.2 | 0.1 to 3.9 | 2 |
| Silver | <1.3 | <1.2 | NGV | NGV |
| ***PCBs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | ND | ND | NGV | 10,000 |
| ***VOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acetone | NDUJ | NDUJ | NGV | 200 |
| Benzene | ND | ND | NGV | 60 |
| Chloroform | ND | ND | NGV | 300 |
| Chloroethane | ND | ND | NGV | 1,900 |
| 1,1-Dichloroethane | ND | ND | NGV | 200 |
| 1,2-Dichloroethane | ND | ND | NGV | 200 |
| 1,1-Dichloroethene | ND | ND | NGV | 400 |
| cis-1,2-Dichoroethene | ND | ND | NGV | NGV |
| trans-1,2-Dichloroethene | ND | ND | NGV | 300 |
| Ethylbenzene | ND | ND | NGV | 5,500 |
| Methylene Chloride | ND | ND | NGV | 100 |
| Tetrachloroethene | ND | ND | NGV | 1,400 |
| Toluene | ND | ND | NGV | 1,500 |
| 1,1,1-Trichloroethane | 4.4 J | ND | NGV | 800 |
| Trichloroethene | ND | ND | NGV | 700 |
| 1,1,2-Trichloroethane | ND | ND | NGV | NGV |
| ***SVOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acenaphthylene | ND | ND | NGV | 41000 |
| Anthracene | 26.7 J | ND | NGV | 50,000 |
| Benzo(a)anthracene | 101 | 40.4 J | NGV | 224 |
| Beno(a)pyrene | 104J | 44 J | NGV | 61 |
| Benzo(b)fluoranthene | 237J | 94.5J | NGV | 1,100 |
| Benzo(g,h,i)perylene | 52.2 J | 34.0 J | NGV | 50,000 |
| Benzo(k)fluoranthene | 71.0 J | 31.7 J | NGV | 1,100 |
| Carbazole | 23.1 J | ND | NGV | NGV |
| Chrysene | 162 | 70.6 J | NGV | 400 |
| Dibenzofuran | ND | ND | NGV | 6,200 |
| Fluoranthene | 269 | 117 | NGV | 50,000 |
| Fluorene | ND | ND | NGV | 50,000 |
| Indeno(1,2,3-cd)pyrene | 61.1 J | 34.7 J | NGV | 3,200 |
| 2-Methylnaphthlene | 43.4 J | ND | NGV | 36,400 |
| Naphthelene | 26.6 J | ND | NGV | 13,000 |
| Phenathrene | 151 | 50.0 J | NGV | 50,000 |
| Pyrene | 199 | 81.3 | NGV | 50,000 |
| Bis(2-ethylhexyl)phthalate | 262 | 276 | NGV | 50,000 |
| Butyl benzyl phthalate | 27.8 J | ND | NGV | 50,000 |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*(50**) - Draft TAGM cleanup objective*

*ND -The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg or parts per million) and micrograom per kilogram (ug/kg or parts per billion).*

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## Table SB-5 Continued

## Summary of Detections - Metals, PCBs, VOCs and SVOCs
## in Post Excavation Soil Boring Samples
## A. K. Allen
## Mineola, New York

| Sample ID | SB-6 | SB-6 | SB-6 | SB-7 | SB-7 | SB-7 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | 7/1/2003 | Eastern US | Cleanup |
| Location | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Background | Objective |
| Depth | 6 Inches | 12 Inches | 18 Inches | 6 Inches | 12 Inches | 18 Inches | | |
| **Parameters** | | | | | | | | |
| ***TAL Metals*** | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | NA | NA | NA | NA | NA | NA | 3 to 12 | 7.5 |
| Barium | NA | NA | NA | NA | NA | NA | 15 to 600 | 300 |
| Cadmium | NA | NA | NA | NA | NA | NA | 0.1 to 1 | 1(10**) |
| Chromium | NA | NA | NA | NA | NA | NA | 1.5 to 40 | 10 (50**) |
| Lead | NA | NA | NA | NA | NA | NA | 200 to 500 | NGV |
| Mercury | NA | NA | NA | NA | NA | NA | 0.001 to 0.2 | 0.1 |
| Selenium | NA | NA | NA | NA | NA | NA | 0.1 to 3.9 | 2 |
| Silver | NA | NA | NA | NA | NA | NA | NGV | NGV |
| ***PCBs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 16100 | 4060 | 1010 | 2520 | 5580 | 9900 | NGV | 10,000 |
| ***VOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acetone | NA | NA | NA | NA | NA | NA | NGV | 200 |
| Benzene | NA | NA | NA | NA | NA | NA | NGV | 60 |
| Chloroform | NA | NA | NA | NA | NA | NA | NGV | 300 |
| Chloroethane | NA | NA | NA | NA | NA | NA | NGV | 1,900 |
| 1,1-Dichloroethane | NA | NA | NA | NA | NA | NA | NGV | 200 |
| 1,2-Dichloroethane | NA | NA | NA | NA | NA | NA | NGV | 200 |
| 1,1-Dichloroethene | NA | NA | NA | NA | NA | NA | NGV | 400 |
| cis-1,2-Dichoroethene | NA | NA | NA | NA | NA | NA | NGV | NGV |
| trans-1,2-Dichloroethene | NA | NA | NA | NA | NA | NA | NGV | 300 |
| Ethylbenzene | NA | NA | NA | NA | NA | NA | NGV | 5,500 |
| Methylene Chloride | NA | NA | NA | NA | NA | NA | NGV | 100 |
| Tetrachloroethene | NA | NA | NA | NA | NA | NA | NGV | 1,400 |
| Toluene | NA | NA | NA | NA | NA | NA | NGV | 1,500 |
| 1,1,1-Trichloroethane | NA | NA | NA | NA | NA | NA | NGV | 800 |
| Trichloroethene | NA | NA | NA | NA | NA | NA | NGV | 700 |
| 1,1,2-Trichloroethane | NA | NA | NA | NA | NA | NA | NGV | NGV |
| ***SVOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acenaphthylene | NA | NA | NA | NA | NA | NA | NGV | 41000 |
| Anthracene | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Benzo(a)anthracene | NA | NA | NA | NA | NA | NA | NGV | 224 |
| Beno(a)pyrene | NA | NA | NA | NA | NA | NA | NGV | 61 |
| Benzo(b)fluoranthene | NA | NA | NA | NA | NA | NA | NGV | 1,100 |
| Benzo(g,h,i)perylene | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Benzo(k)fluoranthene | NA | NA | NA | NA | NA | NA | NGV | 1,100 |
| Carbazole | NA | NA | NA | NA | NA | NA | NGV | NGV |
| Chrysene | NA | NA | NA | NA | NA | NA | NGV | 400 |
| Dibenzofuran | NA | NA | NA | NA | NA | NA | NGV | 6,200 |
| Fluoranthene | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Fluorene | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Indeno(1,2,3-cd)pyrene | NA | NA | NA | NA | NA | NA | NGV | 3,200 |
| 2-Methylnaphthlene | NA | NA | NA | NA | NA | NA | NGV | 36,400 |
| Naphthelene | NA | NA | NA | NA | NA | NA | NGV | 13,000 |
| Phenathrene | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Pyrene | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Bis(2-ethylhexyl)phthalate | NA | NA | NA | NA | NA | NA | NGV | 50,000 |
| Butyl benzyl phthalate | NA | NA | NA | NA | NA | NA | NGV | 50,000 |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

** NYSDEC Technical are Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*(50**) - Draft TAGM cleanup objective*

*ND -The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg or parts per million) and micrograom per kilogram (ug/kg or parts per billion).*

Borings SB-6 and SB-7 are the same locations as end-point samples EP-6 and EP-7 before the July 21, 2003 excavation effort

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**TABLE SD-1**

**Summary of Validated Detections - Metals, PCBs, VOCs and SVOCs**
**Storm Drain End-Point Samples**
**A. K. Allen**
**Mineola, New York**

| Sample ID | SD-1EP | SD-2EP | SD-2EP | SD-3EP | SD-3OF | SD-4 | FD-1 | FD-1 | FD-1 | FD-1 | FD-1 | FD-1 | FD-1 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 5/30/2003 | 5/30/2003 | 7/14/2003 | 5/30/2003 | 5/30/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 6/2/2003 | 7/1/2003 | 7/1/2003 | Eastern US | Cleanup |
| Location | Storm Drain 1 | Storm Drain 2 | Storm Drain 2 | Storm Drain 3 | Storm Drain 3 Overflow | Storm Drain 4 | Floor Drain 1 | Floor Drain 1 | Floor Drain 1 | Floor Drain 1 | Floor Drain 1 | Floor Drian 1 | Floor Drian 1 | Background | Objective |
| Depth | 15 feet | 9 feet | 10 feet | 10 feet | 13 feet | 8 feet | 10 feet | north wall | south wall | east wall | west wall | upper east wall | upper south wall | | |
| **Parameters** | | | | | | | | | | | | | | | |
| ***TAL Metals*** | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 4.3J | 11.5J | 8.9 | ND | ND | 1.5J | 7.4 | 4.3 | ND | 2 | 15.2 | NA | NA | 3 to 12 | 7.5 |
| Barium | ND | 59.4 | 97.6 | ND | ND | ND | 33.1 | ND | ND | ND | ND | NA | NA | 15 to 600 | 300 |
| Cadmium | ND | 1.3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 0.1 to 1 | 1 (10**) |
| Chromium | 6.7 | 18.6 | 41.1 | 3.7 | 4.5 | 11.3 | 14.4J | 62.6J | 2.7J | 3.5J | 3.7J | NA | NA | 1.5 to 40 | 10 (50**) |
| Lead | 3.2 | 211 | 245 | 1.4 | 1.5 | 9.3 | 9J | 4.3J | 3.4J | 3.3J | 4.8J | NA | NA | 200 to 500 | 61 |
| Mercury | ND | 0.17 | 0.15 | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | 0.001 to 0.2 | 0.1 |
| Selenium | ND | ND | 1.2 | ND | ND | NDUJ | ND | ND | ND | ND | ND | NA | NA | 0.1 to 3.9 | 2 |
| Silver | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | NGV |
| | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| ***PCBs*** | ND | ND | NA | ND | ND | ND | ND | ND | 3,480 | 3,050 | ND | 52.2 | ND | NGV | 10,000 |
| ***VOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acetone | NDR | 42.8J | ND | NDR | NDR | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 200 |
| Tetrachloroethene | ND | ND | NA | ND | ND | ND | 1.6 J | ND | ND | ND | ND | NA | NA | NGV | 1,400 |
| Xylene | ND | 1.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 1,200 |
| ***SVOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| *Anthracene* | ND | ND | NA | ND | ND | ND | 28.5 J | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| *Benzo(a)anthracene* | 47 J | 71.7 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 224 |
| *Beno(a)pyrene* | 50.8 J | 74.8 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 61 |
| *Benzo(b)fluoranthene* | 59.5 J | 106 | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 1,100 |
| *Benzo(g,h,i)perylene* | 23.6 J | 42.3 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| *Benzo(k)fluoranthene* | 55.4 J | 77 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 1,100 |
| *Chrysene* | 57.2 J | 90 | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 400 |
| Fluoranthene | 90.2 | 165 | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| Fluorene | ND | 34.9 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| Indeno(1,2,3-cd)pyrene | 27.9 J | 44.8 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 3,200 |
| Phenathrene | 50.4 J | 125 | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| Pyrene | 95.9 | 170 | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| Bis(2-ethylhexyl)phthalate | 843 | 279 | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| Butyl benzyl phthalate | ND | 85.5 J | NA | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NGV | 50,000 |
| 2-Methylnaphthalene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 20.8 | NA | NA | NGV | 100 |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value* NA - Not Analyzed

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*(50**) - Draft TAGM cleanup objective*

*ND -The analyte was analyzed for, but was not detected above the reported sample quantitation limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg or parts per million) and microgram per kilogram (ug/kg or parts per billion).*

*Users/eric/docs/akallen/tables/strom drain endpoints*

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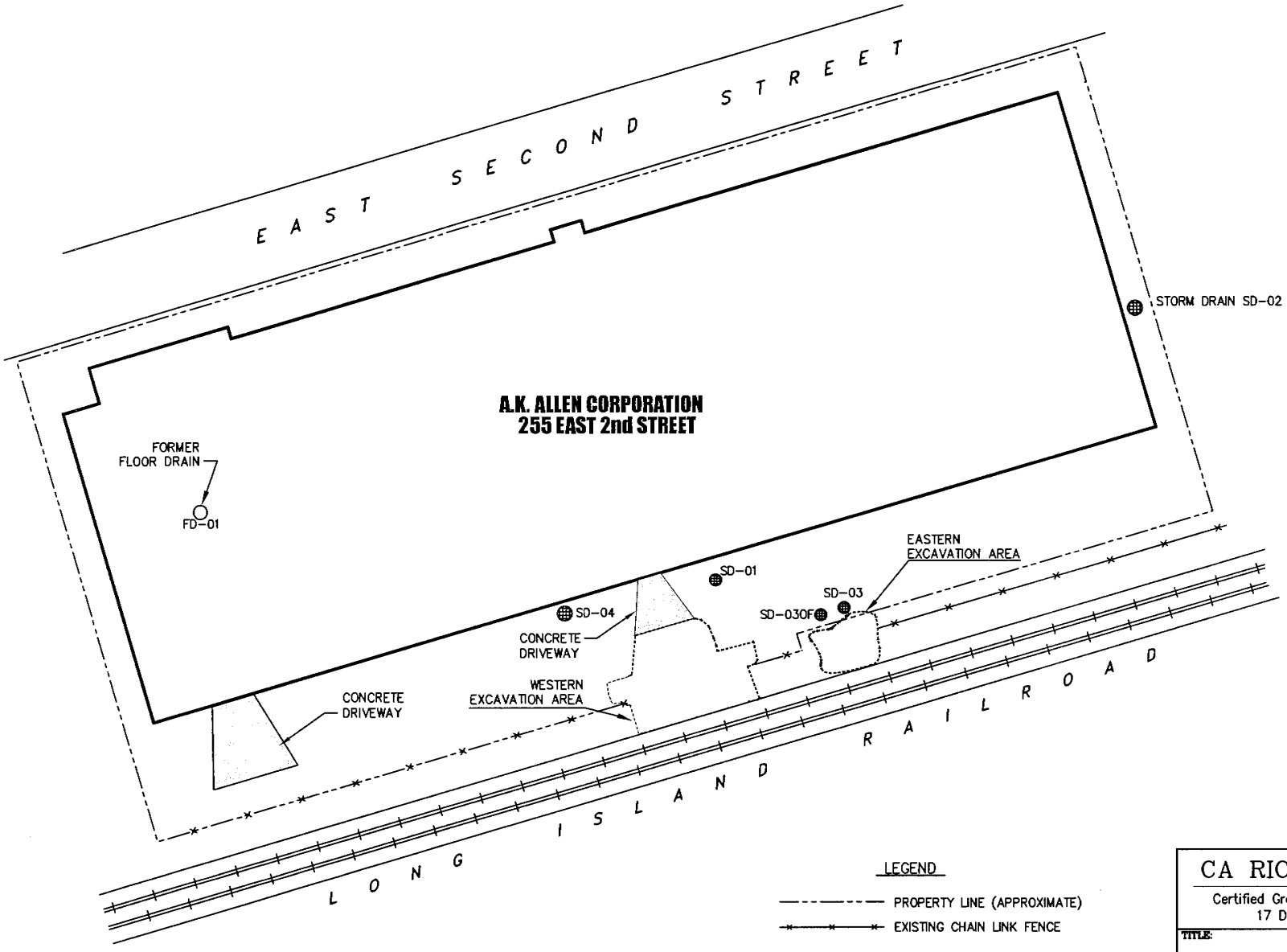
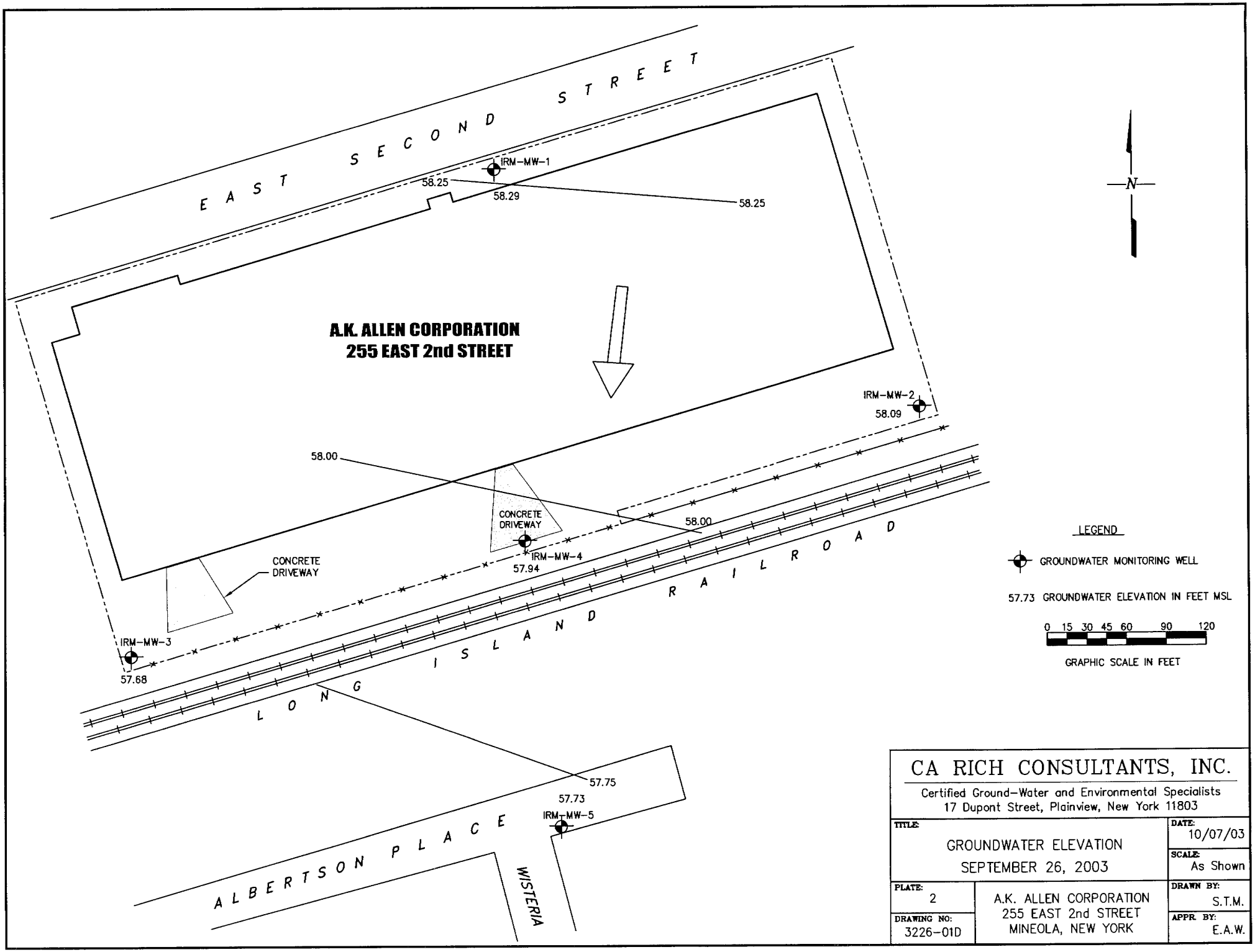
# APPENDIX F 2004 SUPPLEMENTAL RI REPORT FIGURES & TABLES

# FIGURES

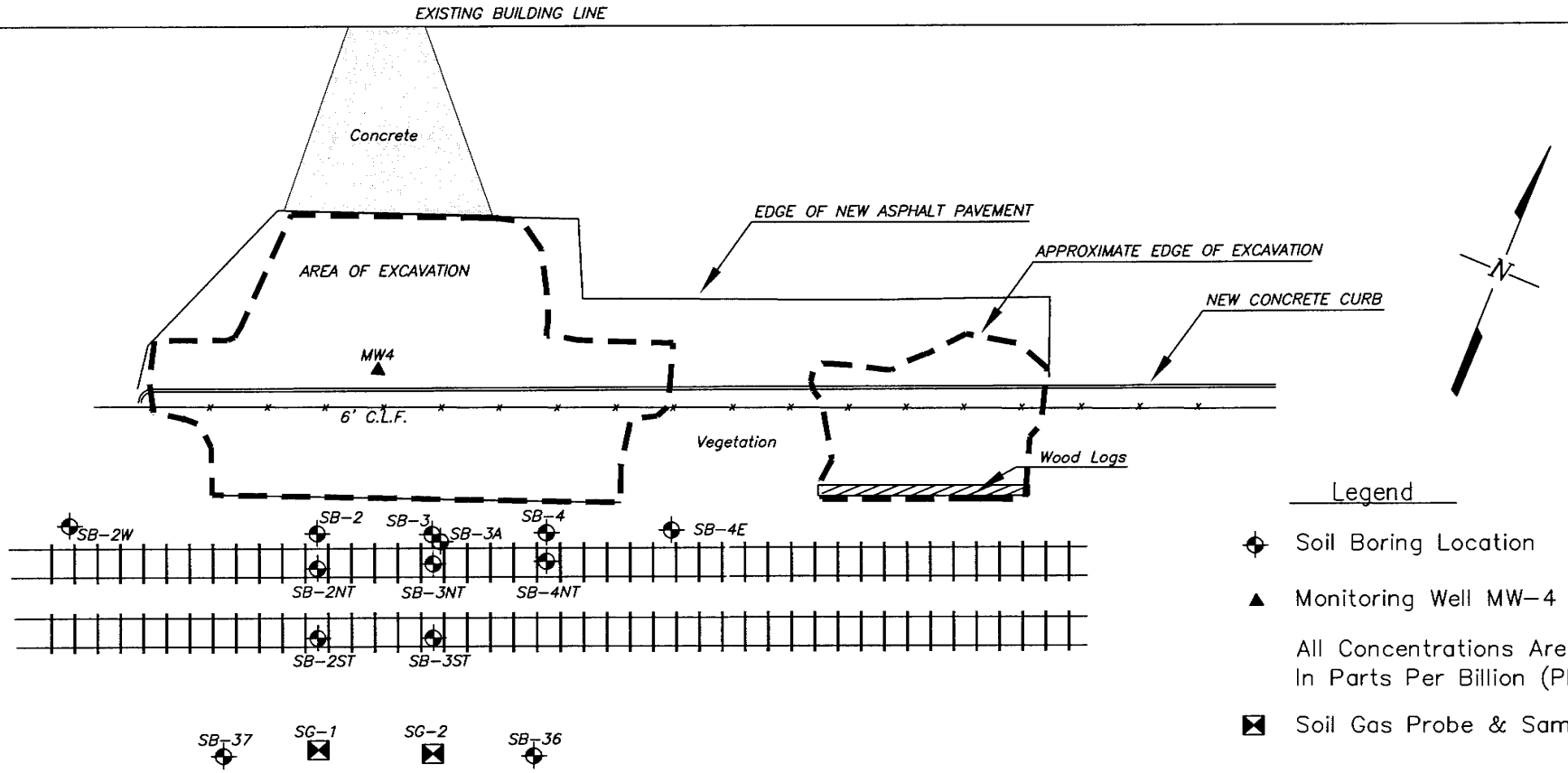



| CA RICH CONSULTANTS, INC. | | |
|---|---|---|
| Certified Ground-Water and Environmental Specialists<br>17 Dupont Street, Plainview, NY 11803 | | |
| TITLE: SITE PLAN | | DATE: 1/19/04<br>SCALE: As Shown |
| PLATE: 1<br>DRAWING NO: 3226-01AA | A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M.<br>APPR. BY: E.A.W. |




| CA RICH CONSULTANTS, INC. | | |
|---|---|---|
| Certified Ground-Water and Environmental Specialists<br>17 Dupont Street, Plainview, New York 11803 | | |
| TITLE: GROUNDWATER ELEVATION SEPTEMBER 26, 2003 | | DATE: 10/07/03 |
| | | SCALE: As Shown |
| PLATE: 2 | A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01D | | APPR. BY: E.A.W. |

# AK ALLEN FACILITY





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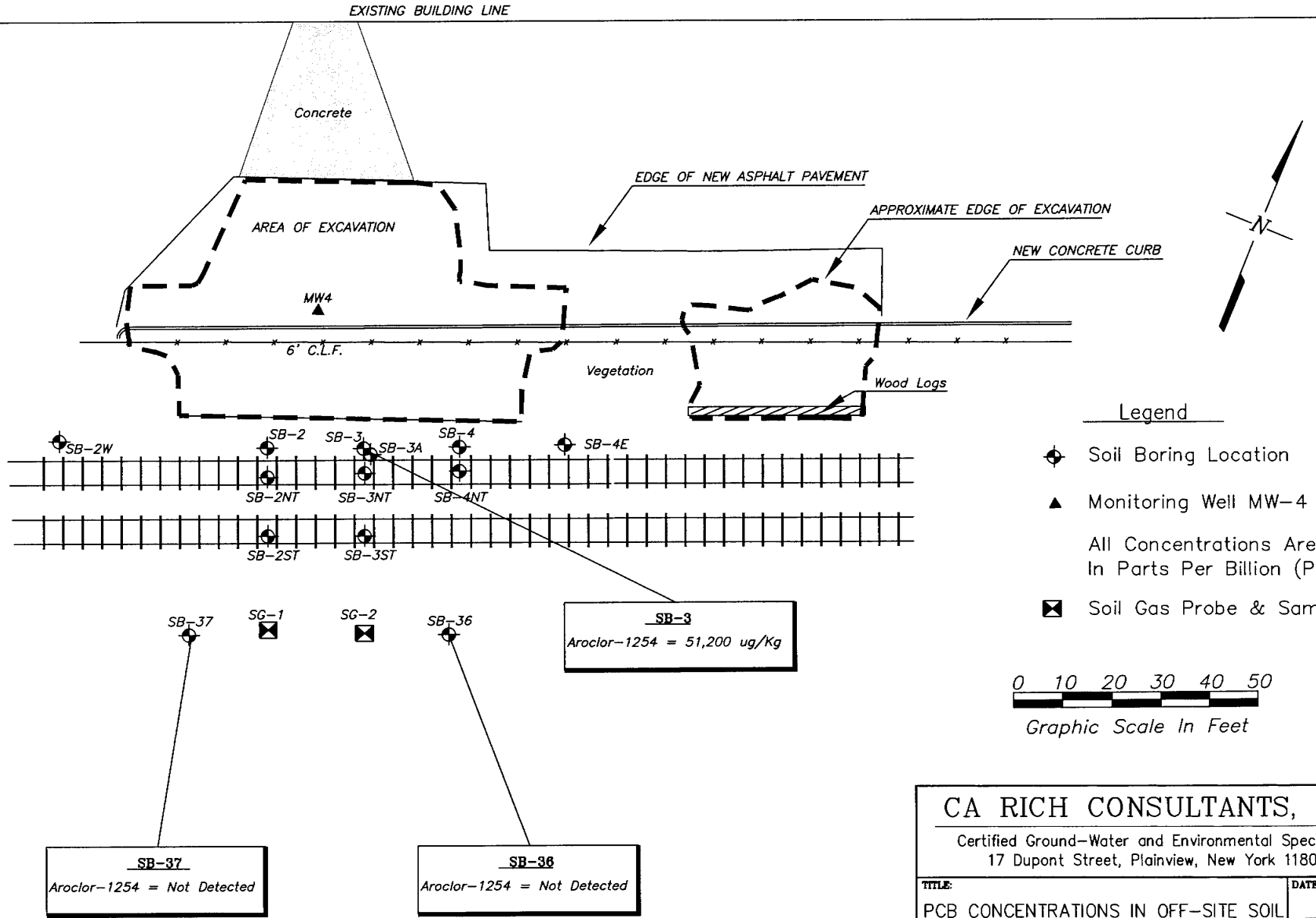
| | | |
|---|---|---|
| TITLE: OFF-SITE BORING and SOIL GAS SAMPLE LOCATION MAP | | DATE: 1/16/04 |
| | | SCALE: 1" = 30' |
| FIGURE: 3 | AK ALLEN CORPORATION<br>255 EAST 2ND STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1a | | APPR. BY: E.A.W. |

# AK ALLEN FACILITY





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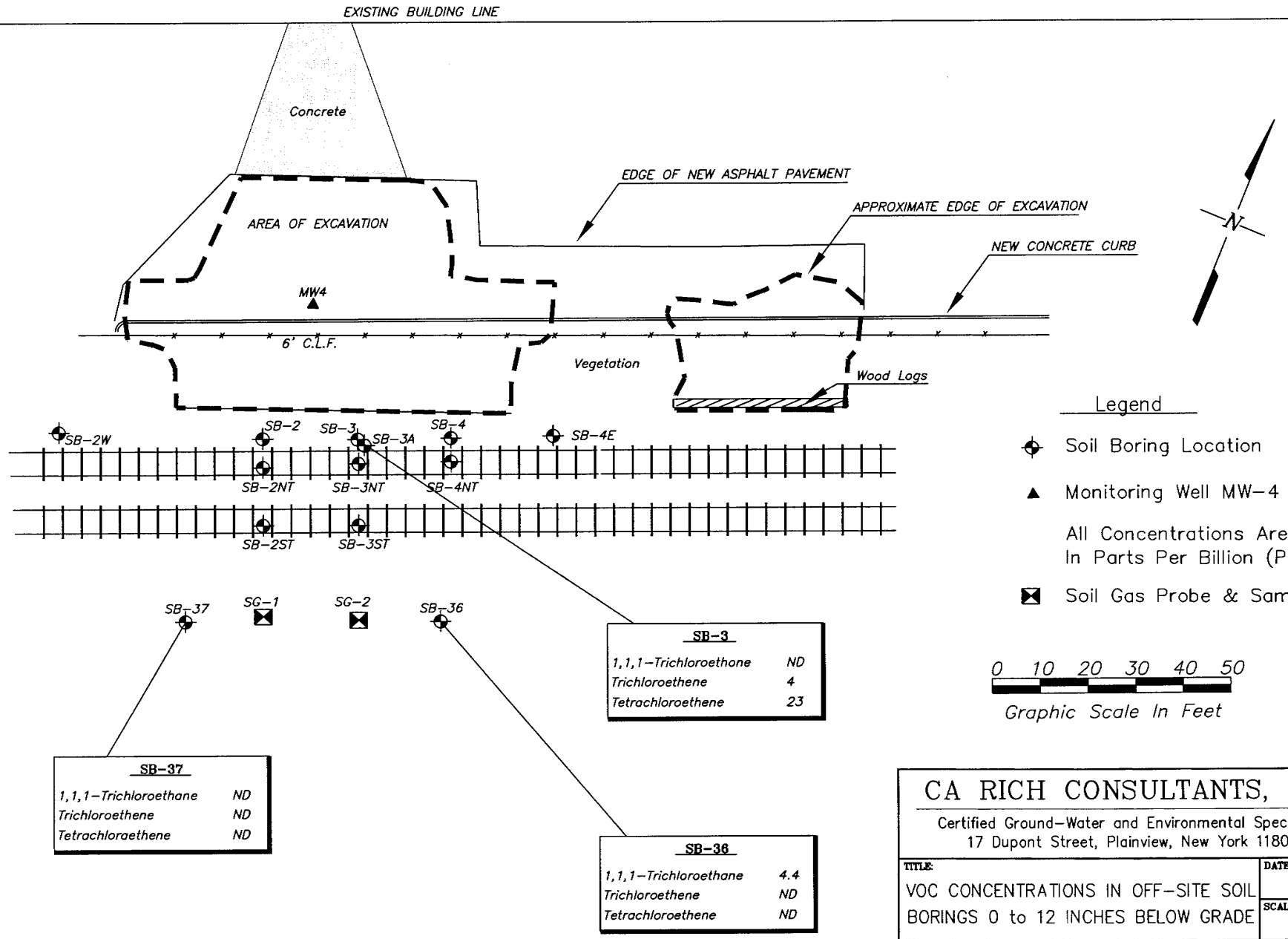
| | | |
|---|---|---|
| TITLE: PCB CONCENTRATIONS IN OFF-SITE SOIL BORINGS 0 to 12 INCHES BELOW GRADE | | DATE: 1/16/04 |
| | | SCALE: 1" = 30' |
| FIGURE: 4 | AK ALLEN CORPORATION 255 EAST 2ND STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.E | | APPR. BY: E.A.W. |

# AK ALLEN FACILITY




**SB-3**

| | |
|---|---|
| 1,1,1-Trichloroethone | ND |
| Trichloroethene | 4 |
| Tetrachloroethene | 23 |

**SB-37**

| | |
|---|---|
| 1,1,1-Trichloroethane | ND |
| Trichloroethene | ND |
| Tetrachloraethene | ND |

**SB-36**

| | |
|---|---|
| 1,1,1-Trichloroethane | 4.4 |
| Trichloroethene | ND |
| Tetrachloroethene | ND |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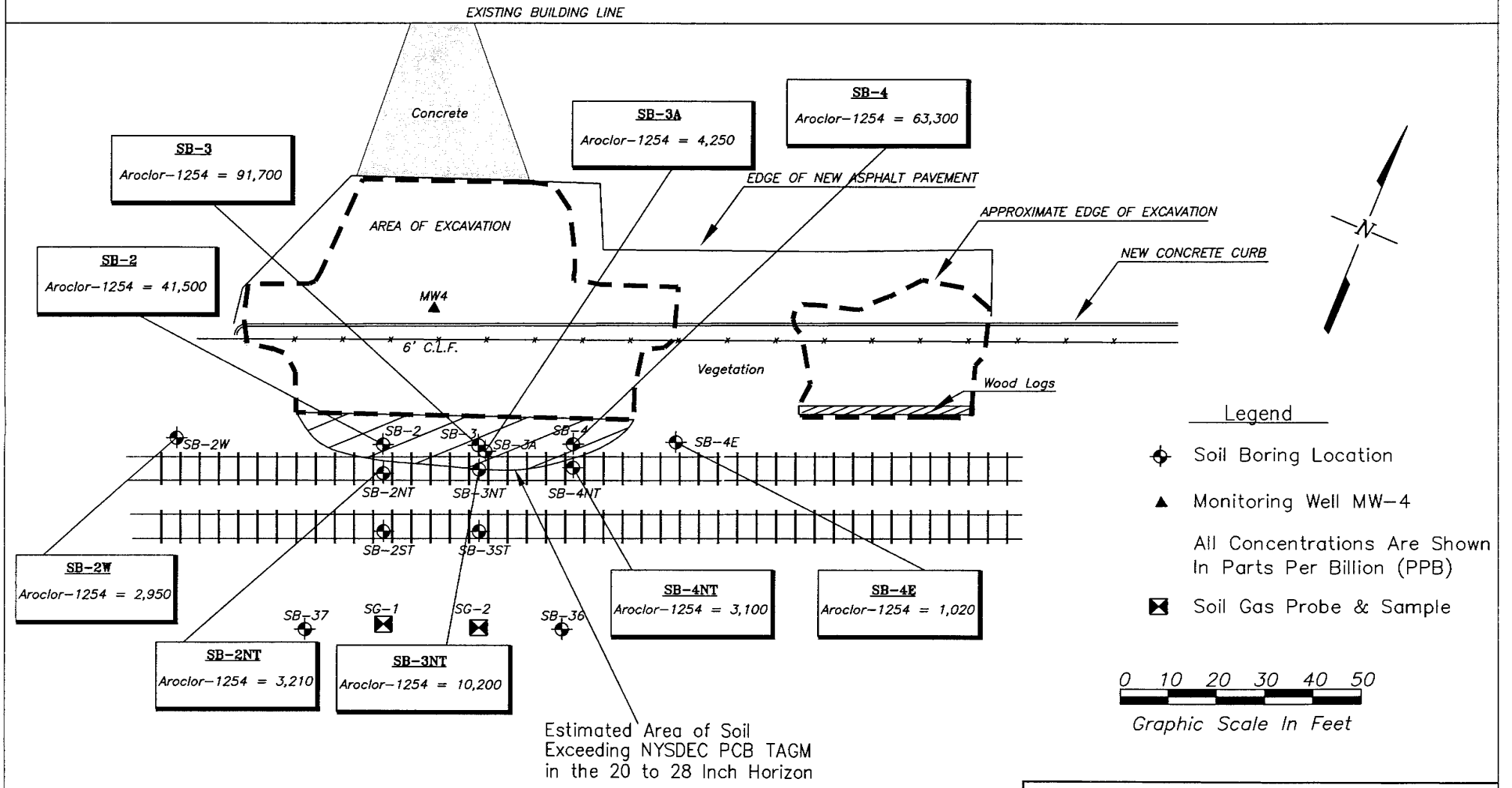
| | |
|---|---|
| TITLE: VOC CONCENTRATIONS IN OFF-SITE SOIL BORINGS 0 to 12 INCHES BELOW GRADE | DATE: 1/16/04 |
| | SCALE: 1" = 30' |
| FIGURE: 5 | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.f | APPR. BY: E.A.W. |

AK ALLEN CORPORATION
255 EAST 2ND STREET
MINEOLA, NEW YORK

# AK ALLEN FACILITY





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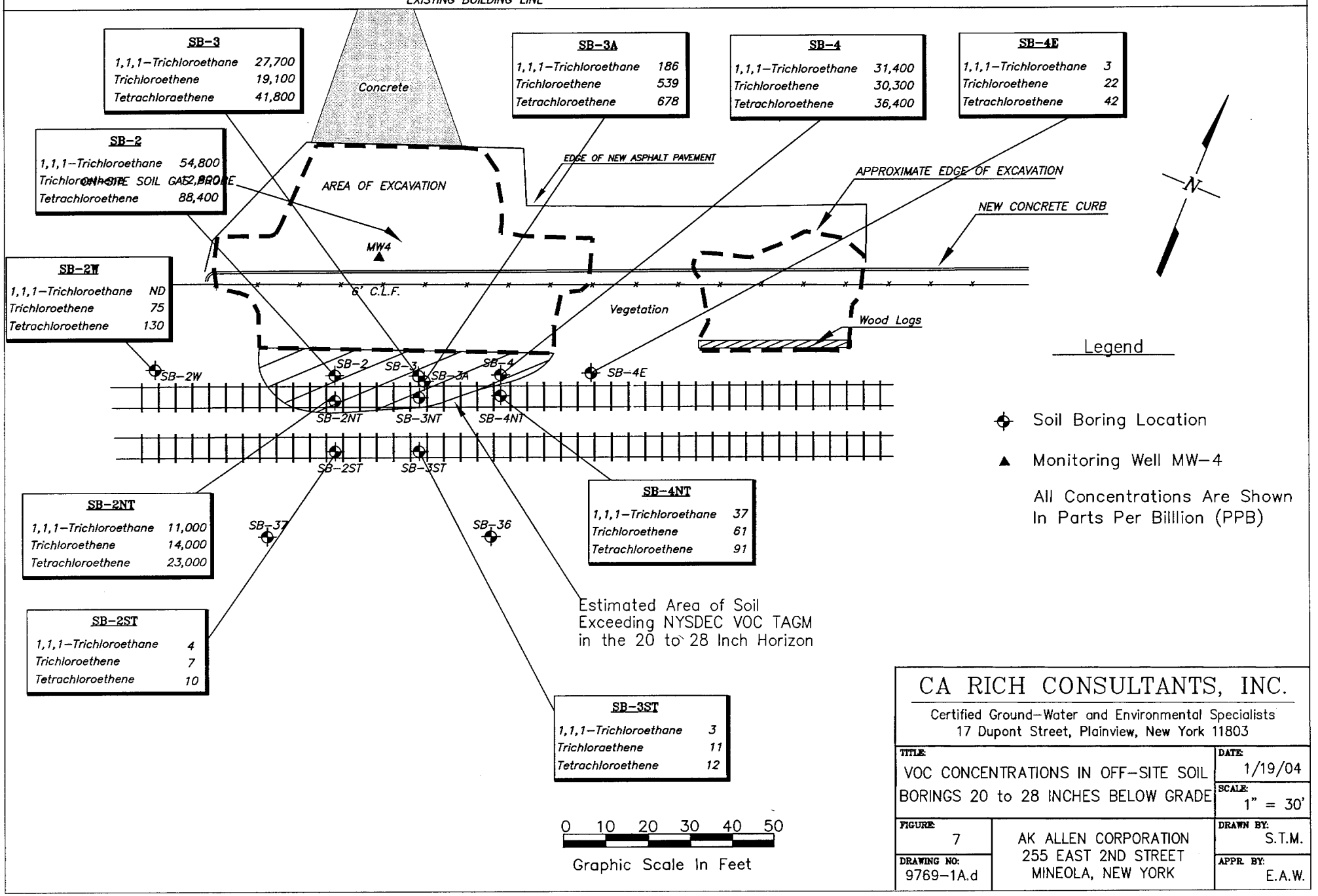
| | | |
|---|---|---|
| TITLE: PCB CONCENTRATIONS IN OFF-SITE SOIL BORINGS 20 to 28 INCHES BELOW GRADE | | DATE: 1/19/04 |
| | | SCALE: 1" = 30' |
| FIGURE: 6 | AK ALLEN CORPORATION<br>255 EAST 2ND STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.a | | APPR. BY: E.A.W. |

# AK ALLEN FACILITY

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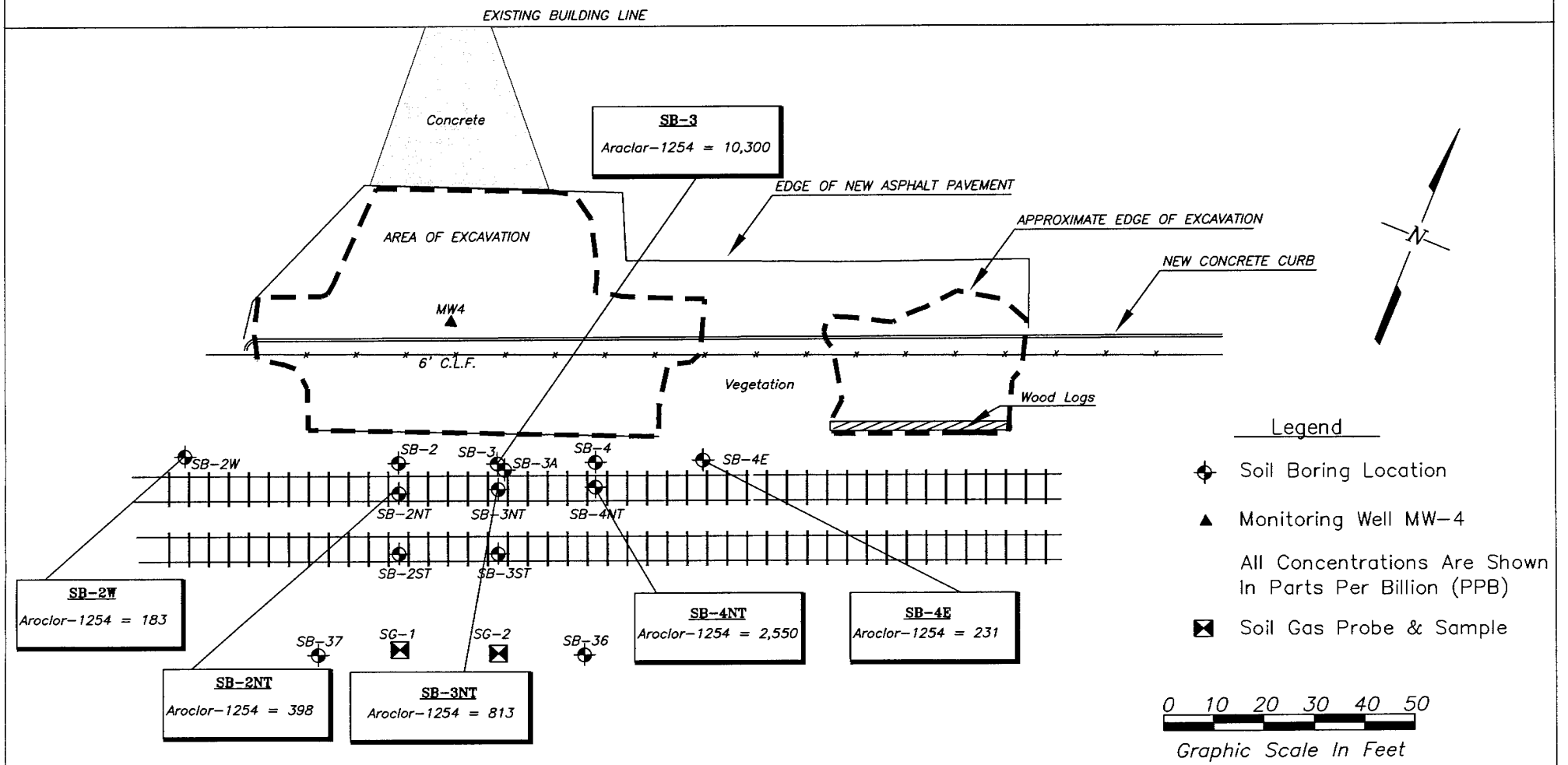
| | |
|---|---|
| TITLE: VOC CONCENTRATIONS IN OFF-SITE SOIL BORINGS 20 to 28 INCHES BELOW GRADE | DATE: 1/19/04 |
| | SCALE: 1" = 30' |
| FIGURE: 7 | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.d | AK ALLEN CORPORATION 255 EAST 2ND STREET MINEOLA, NEW YORK |
| | APPR. BY: E.A.W. |

# AK ALLEN FACILITY





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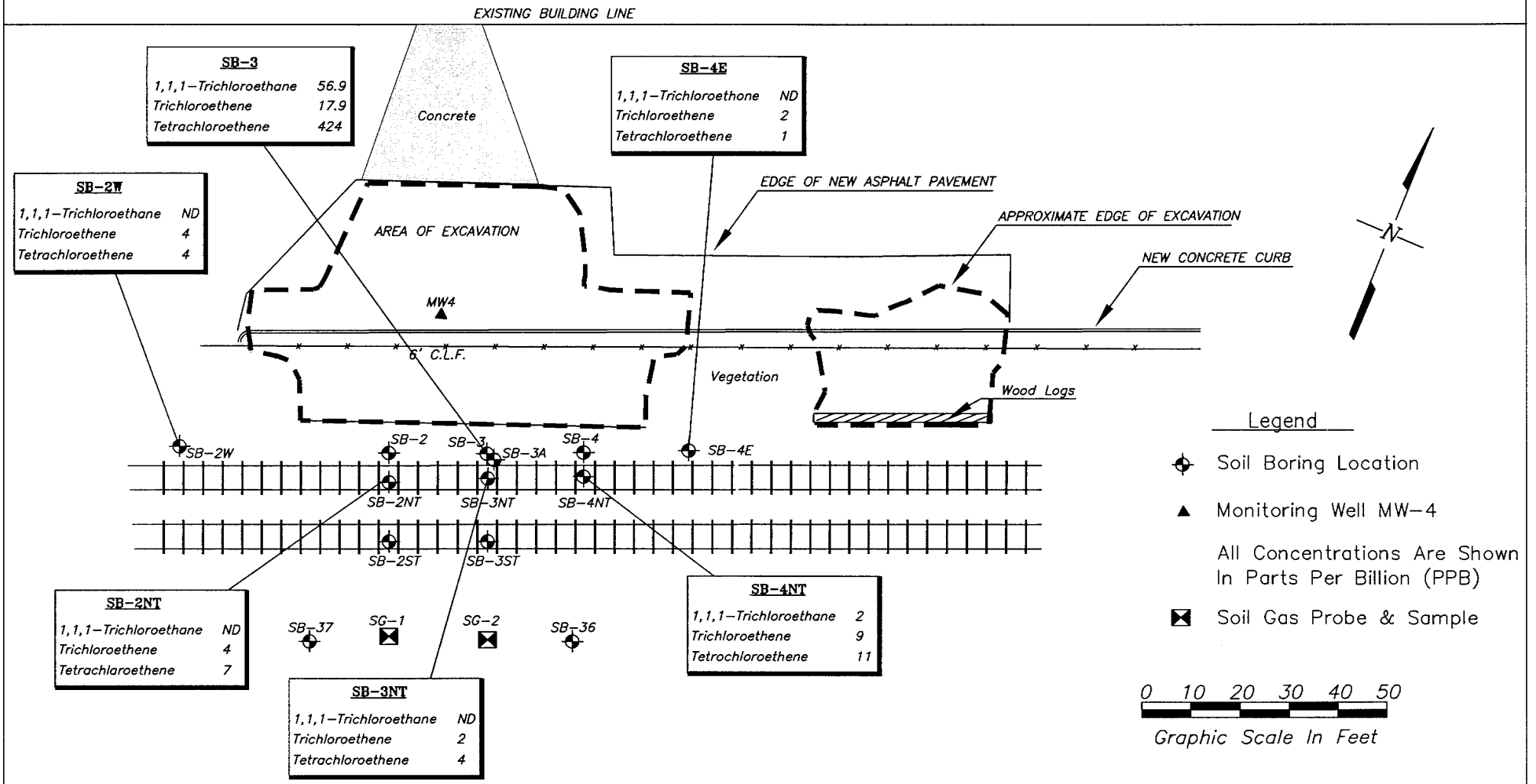
| | | |
|---|---|---|
| TITLE: PCB CONCENTRATIONS IN OFF-SITE SOIL BORINGS 36 to 42 INCHES BELOW GRADE | | DATE: 1/16/04 |
| | | SCALE: 1" = 30' |
| FIGURE: 8 | AK ALLEN CORPORATION<br>255 EAST 2ND STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.b | | APPR. BY: E.A.W. |

# AK ALLEN FACILITY





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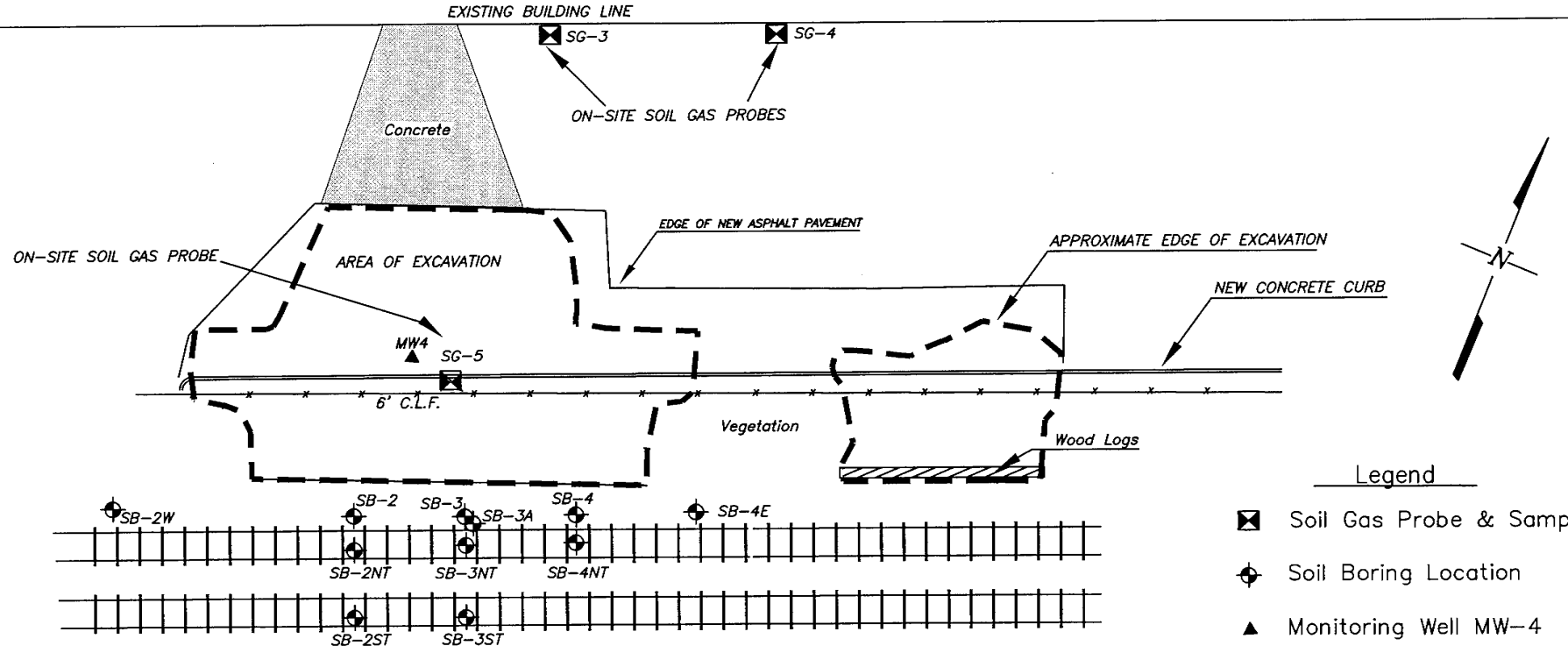
| | | |
|---|---|---|
| TITLE: VOC CONCENTRATIONS IN OFF-SITE SOIL BORINGS 36 to 42 INCHES BELOW GRADE | | DATE: 1/19/04 |
| | | SCALE: 1" = 30' |
| FIGURE: 9 | AK ALLEN CORPORATION 255 EAST 2ND STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.c | | APPR. BY: E.A.W. |

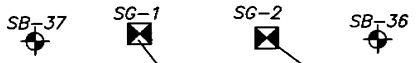
# AK ALLEN FACILITY




Legend

- Soil Gas Probe & Sample
- Soil Boring Location
- ▲ Monitoring Well MW-4

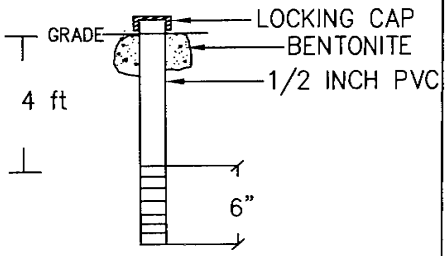
All Concentrations Are Shown In Micrograms per Meter Cubed (ug/m3)




| SG-1 | |
|---|---|
| 1,1,1-Trichloroethone | ND |
| Trichloroethene | ND |
| Tetrachloroethene | ND |
| MTBE | 73 ug/m³ |

| SG-2 | |
|---|---|
| 1,1,1-Trichloroethane | ND |
| Trichloroethene | ND |
| Tetrochloroethene | ND |
| MTBE | 62 ug/m³ |

**PROFILE**




0 10 20 30 40 50

Graphic Scale In Feet

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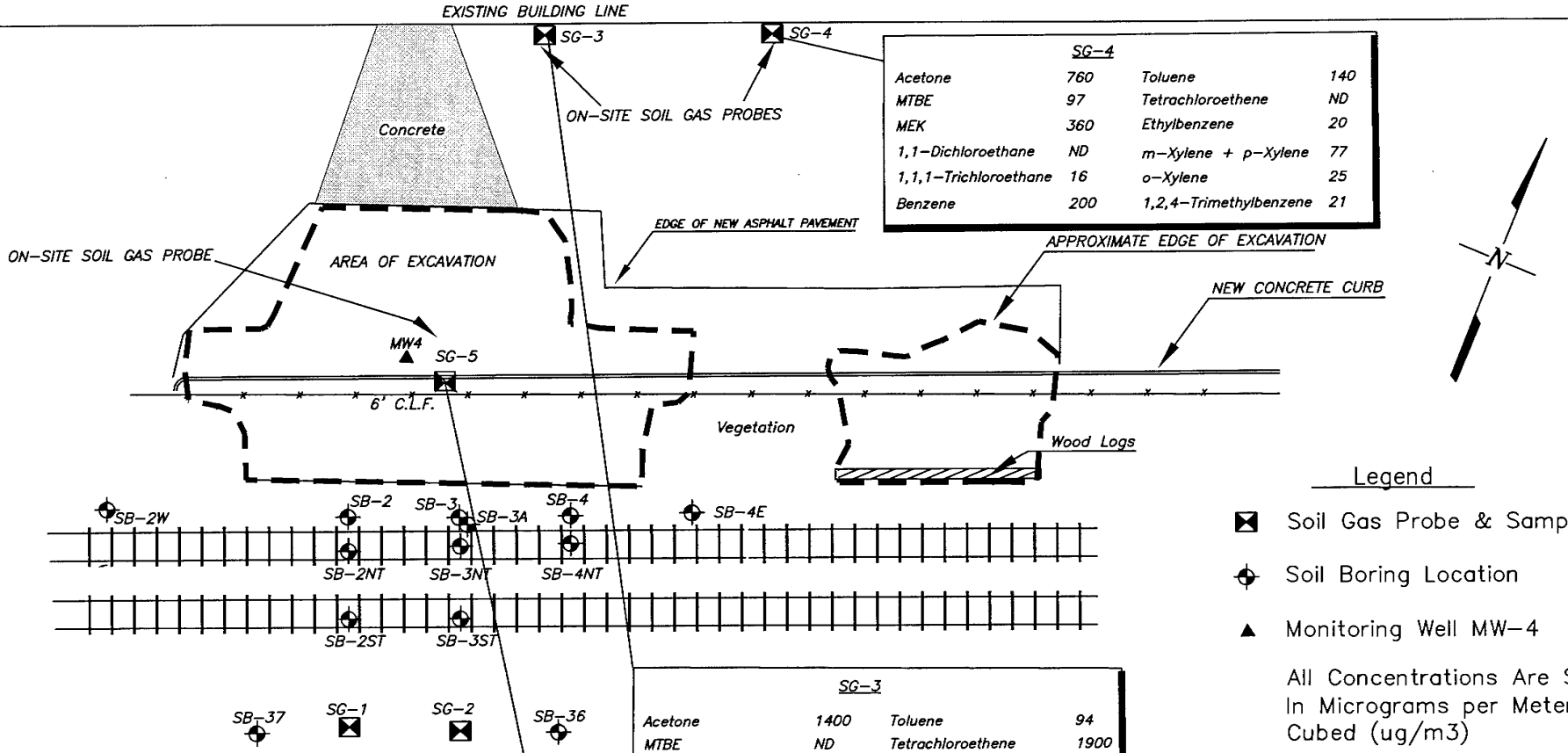
| | |
|---|---|
| TITLE: VOC CONCENTRATIONS IN SOIL GAS SAMPLES SG-1 and SG-2 | DATE: 4/28/04 |
| | SCALE: 1" = 30' |
| FIGURE: 10 | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.S | AK ALLEN CORPORATION 255 EAST 2ND STREET MINEOLA, NEW YORK |
| | APPR. BY: E.A.W. |

# AK ALLEN FACILITY




| SG-4 | | | |
|---|---|---|---|
| Acetone | 760 | Toluene | 140 |
| MTBE | 97 | Tetrachloroethene | ND |
| MEK | 360 | Ethylbenzene | 20 |
| 1,1-Dichloroethane | ND | m-Xylene + p-Xylene | 77 |
| 1,1,1-Trichloroethane | 16 | o-Xylene | 25 |
| Benzene | 200 | 1,2,4-Trimethylbenzene | 21 |

| SG-3 | | | |
|---|---|---|---|
| Acetone | 1400 | Toluene | 94 |
| MTBE | ND | Tetrachloroethene | 1900 |
| MEK | 7300 | Ethylbenzene | ND |
| 1,1-Dichloroethane | 540 | m-Xylene + p-Xylene | ND |
| 1,1,1-Trichloroethane | 1900 | o-Xylene | ND |
| Benzene | 97 | 1,2,4-Trimethylbenzene | ND |

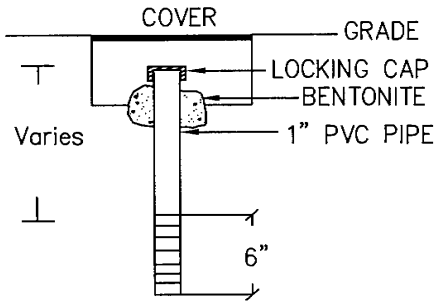
| SG-5 | | | |
|---|---|---|---|
| Acetone | 1900 | Toluene | 79 |
| MTBE | ND | Tetrachloroethene | 9400 |
| MEK | 6600 | Ethylbenzene | ND |
| 1,1-Dichloroethane | ND | m-Xylene + p-Xylene | ND |
| 1,1,1-Trichloroethane | 4400 | o-Xylene | ND |
| Benzene | ND | 1,2,4-Trimethylbenzene | ND |

## Legend

- Soil Gas Probe & Sample
- Soil Boring Location
- ▲ Monitoring Well MW-4

All Concentrations Are Shown In Micrograms per Meter Cubed (ug/m3)

## PROFILE




0 10 20 30 40 50

Graphic Scale In Feet


CA RICH CONSULTANTS, INC.

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17 Dupont Street, Plainview, New York 11803


| | |
|---|---|
| TITLE: VOLATILE CONCENTRATION IN SOIL GAS SAMPLES SG-3, SG-4 AND SG-5 | DATE: 4/28/04 |
| | SCALE: 1" = 30' |
| FIGURE: 11 | DRAWN BY: S.T.M. |
| DRAWING NO: 9769-1A.m | APPR. BY: E.A.W. |

AK ALLEN CORPORATION
255 EAST 2ND STREET
MINEOLA, NEW YORK

# TABLES

# Table 1
## Summary of Validated Detections - Soil Samples From Borings SB-36 and SB-37
## in Post Excavation Soil Boring Samples
## A. K. Allen
## Mineola, New York

| Sample ID | SB-36 | SB-37 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|
| Matrix | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 6/30/2003 | 6/30/2003 | Eastern US | Cleanup |
| Location | Soil Boring | Soil Boring | Background | Objective |
| Depth | 0-12 Inches | 0-12 Inches | | |
| **Parameters** | | | | |
| ***TAL Metals*** | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 9.5 | 4 | 3 to 12 | 7.5 |
| Barium | 38.7 | <23 | 15 to 600 | 300 |
| Cadmium | 0.67 | <0.58 | 0.1 to 1 | 1(10**) |
| Chromium | 32.9 | 20.6 | 1.5 to 40 | 10 (50**) |
| Lead | 172 | 26.3 | 200 to 500 | NGV |
| Mercury | 0.12 | 0.053 | 0.001 to 0.2 | 0.1 |
| Selenium | <1.3 | 1.2 | 0.1 to 3.9 | 2 |
| Silver | <1.3 | <1.2 | NGV | NGV |
| ***PCBs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | ND | ND | NGV | 10,000 |
| ***VOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acetone | ND | ND | NGV | 200 |
| Benzene | ND | ND | NGV | 60 |
| Chloroform | ND | ND | NGV | 300 |
| Chloroethane | ND | ND | NGV | 1,900 |
| 1,1-Dichloroethane | ND | ND | NGV | 200 |
| 1,2-Dichloroethane | ND | ND | NGV | 200 |
| 1,1-Dichloroethene | ND | ND | NGV | 400 |
| cis-1,2-Dichoroethene | ND | ND | NGV | NGV |
| trans-1,2-Dichloroethene | ND | ND | NGV | 300 |
| Ethylbenzene | ND | ND | NGV | 5,500 |
| Methylene Chloride | ND | ND | NGV | 100 |
| Tetrachloroethene | ND | ND | NGV | 1,400 |
| Toluene | ND | ND | NGV | 1,500 |
| 1,1,1-Trichloroethane | 4.4 J | ND | NGV | 800 |
| Trichloroethene | ND | ND | NGV | 700 |
| 1,1,2-Trichloroethane | ND | ND | NGV | NGV |
| ***SVOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acenaphthylene | ND | ND | NGV | 41000 |
| Anthracene | 26.7 J | ND | NGV | 50,000 |
| Benzo(a)anthracene | 101 | 40.4 J | NGV | 224 |
| Beno(a)pyrene | 104 | 44 J | NGV | 61 |
| Benzo(b)fluoranthene | 237 | 94.5 | NGV | 1,100 |
| Benzo(g,h,i)perylene | 52.2 J | 34.0 J | NGV | 50,000 |
| Benzo(k)fluoranthene | 71.0 J | 31.7 J | NGV | 1,100 |
| Carbazole | 23.1 J | ND | NGV | NGV |
| Chrysene | 162 | 70.6 J | NGV | 400 |
| Dibenzofuran | ND | ND | NGV | 6,200 |
| Fluoranthene | 269 | 117 | NGV | 50,000 |
| Fluorene | ND | ND | NGV | 50,000 |
| Indeno(1,2,3-cd)pyrene | 61.1 J | 34.7 J | NGV | 3,200 |
| 2-Methylnaphthlene | 43.4 J | ND | NGV | 36,400 |
| Naphthelene | 26.6 J | ND | NGV | 13,000 |
| Phenathrene | 151 | 50.0 J | NGV | 50,000 |
| Pyrene | 199 | 81.3 | NGV | 50,000 |
| Bis(2-ethylhexyl)phthalate | 262 | 276 | NGV | 50,000 |
| Butyl benzyl phthalate | 27.8 J | ND | NGV | 50,000 |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*(50**) - Draft TAGM cleanup objective*

*ND -The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg or parts per million) and micrograom per kilogram (ug/kg or parts per billion).*

This table was originally included in the IRM Report. The "Raw" laboratory data used to create this table is included in our IRM Report.

\\Nt_server_1\-Users-\ERIC\Docs\AK Allen\Tables\Soil Borings

** NYSDEC Technical are Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

**Table 2**
**Summary of Detections - Soil Samples From Borings SB-2, SB-3, and SB-4**
**in Post Excavation Soil Boring Samples**
**A. K. Allen**
**Mineola, New York**

| Sample ID | SB-2 | SB-3 | SB-3 | SB-3A | SB-4 | *NYSDEC | *NYSDEC |
|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | TAGM #4046 | TAGM #4046 |
| Date Sampled | 6/30/2003 | 6/30/2003 | 6/30/2003 | 6/30/2003 | 6/30/2003 | Eastern US | Cleanup |
| Location | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Soil Boring | Background | Objective |
| Depth | 24-28 Inches | 24-28 Inches | 36-40 Inches | 24-28 Inches | 24-28 Inches | | |
| **Parameters** | | | | | | | |
| ***TAL Metals*** | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |
| Arsenic | 91.8 | 15.3 | <1.0 | 19.6 | 16.6 | 3 to 12 | 7.5 |
| Barium | 259 | 82.7 | <20 | 25.5 | 91.6 | 15 to 600 | 300 |
| Cadmium | <0.67 | 7.5 | <0.51 | 5.4 | <0.62 | 0.1 to 1 | 1(10**) |
| Chromium | 52.1 | 63.5 | 7.5 | 8.5 | 14.2 | 1.5 to 40 | 10 (50**) |
| Lead | 264 | 115 | 6.2 | 105 | 183 | 200 to 500 | NGV |
| Mercury | <0.038 | 0.049 | <0.032 | 0.054 | 0.065 | 0.001 to 0.2 | 0.1 |
| Selenium | 2.3 | 1.4 | <1.0 | 1.5 | 1.6 | 0.1 to 3.9 | 2 |
| Silver | <1.3 | <1.2 | <1.0 | <1.2 | <1.2 | NGV | NGV |
| ***PCBs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Aroclor 1254 | 41500 | 91700 | 10300 | 4250 | 63300 | NGV | 10,000 |
| ***VOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acetone | ND | ND | ND | ND | ND | NGV | 200 |
| Benzene | 2.2 | ND | ND | ND | ND | NGV | 60 |
| Chloroform | 12.5 | 3.7 J | ND | ND | 7.5 | NGV | 300 |
| Chloroethane | ND | ND | ND | ND | ND | NGV | 1,900 |
| 1,1-Dichloroethane | 2750 | 422 | ND | 55.2 | 6240 | NGV | 200 |
| 1,2-Dichloroethane | 56.2 | 22.3 | ND | 6.1 J | 37.4 | NGV | 200 |
| 1,1-Dichloroethene | 94.4 J | 104 | ND | 4.2 J | 242 | NGV | 400 |
| cis-1,2-Dichoroethene | 332 | 25.8 | ND | 19 | 21.3 | NGV | NGV |
| trans-1,2-Dichloroethene | 19.2 | 5.9 J | ND | 5.5 J | 4.9 J | NGV | 300 |
| Ethylbenzene | ND | ND | ND | ND | ND | NGV | 5,500 |
| Methylene Chloride | 54.4 | 99 | ND | ND | 23.2 | NGV | 100 |
| Tetrachloroethene | 88400 | 41800 | 424 | 678 | 36400 | NGV | 1,400 |
| Toluene | 17.9 | ND | ND | ND | 3.2 | NGV | 1,500 |
| 1,1,1-Trichloroethane | 54800 | 27700 | 56.9 | 186 | 31400 | NGV | 800 |
| Trichloroethene | 12800 | 19100 | 17.9 | 539 | 30300 | NGV | 700 |
| 1,1,2-Trichloroethane | 144 | 18.5 | ND | 6.1 J | 73.4 | NGV | NGV |
| ***SVOCs*** | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg | ug/Kg |
| Acenaphthylene | ND | ND | ND | 34.4 J | ND | NGV | 41000 |
| Anthracene | ND | ND | ND | 408 | ND | NGV | 50,000 |
| Benzo(a)anthracene | 286 J | ND | ND | 307 | ND | NGV | 224 |
| Beno(a)pyrene | ND | ND | ND | 716 | ND | NGV | 61 |
| Benzo(b)fluoranthene | ND | ND | ND | 478 | ND | NGV | 1,100 |
| Benzo(g,h,i)perylene | ND | 1210 | ND | 360 | 939 | NGV | 50,000 |
| Benzo(k)fluoranthene | ND | ND | ND | 159 | ND | NGV | 1,100 |
| Carbazole | ND | ND | ND | 177 | ND | NGV | NGV |
| Chrysene | 806 | 1370 | ND | 750 | ND | NGV | 400 |
| Dibenzofuran | ND | ND | ND | 32.9 J | ND | NGV | 6,200 |
| Fluoranthene | ND | ND | ND | 160 | 704 | NGV | 50,000 |
| Fluorene | ND | ND | ND | 44.6 J | ND | NGV | 50,000 |
| Indeno(1,2,3-cd)pyrene | ND | 958 | ND | ND | ND | NGV | 3,200 |
| 2-Methylnaphthlene | ND | ND | ND | 59.9 J | ND | NGV | 36,400 |
| Naphthelene | ND | ND | ND | 29.1 J | ND | NGV | 13,000 |
| Phenathrene | ND | ND | ND | 221 | ND | NGV | 50,000 |
| Pyrene | ND | 3020 | ND | 551 | 2230 | NGV | 50,000 |
| Bis(2-ethylhexyl)phthalate | 3490 | 2910 | ND | ND | 2320 | NGV | 50,000 |
| Butyl benzyl phthalate | ND | ND | ND | ND | ND | NGV | 50,000 |

*Notes:*

*Boxed values exceed TAGM and Eastern US Background*

*NGV - No Given Value*

*B-The reported value is less than the Contract Required Limit*

*J-Estimated value when the results was less than the specified detection limit but greater than zero*

*(50**) - Draft TAGM cleanup objective*

*ND -The analyte was analyzed for, but was not detected above the method detection limit*

*< Indicates that the method detection limit for specific compound.*

*All concentrations are reported in millograms per kilogram (mg/kg or parts per million) and micrograom per kilogram (ug/kg or parts per billion).*

** NYSDEC Technical are Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

This table was originaliy included in the IRM Report. The "Raw" laboratory data used to create this table is included in our IRM Report.
\\Nt_server_1\-Users-\ERIC\Docs\AK Allen\Tables\Soil Borings

**Table 3**
**Summary of Validated Detections in Soil Borings SB-2W, SB-2NT,SB-3NT -**
**Volatile Organic Compounds, Semivolatile Organic Compounds, PCB's, and Metals**
**A K Allen**
**Mineola, New York**



| Sample ID | SB2W2026 | SB2WDL2026 | SB2W3642 | SB2NT2026 | SB2NTDL2026 | SB2NT3642 | SB3NT2026 | SB3NTDL2026 | SB3NT3642 | SB4NT2026 | NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | SB-2W | SB-2W | SB-2W | SB-2NT | SB-2NT | SB-2NT | SB-3NT | SB-3NT | SB-3NT | SB-4NT | TAGM |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Number |
| Depth in inches | 20-26 | 20-26 | 36-42 | 20-26 | 20-26 | 36-42 | 20-26 | 20-26 | 36-42 | 20-26 | 4046 |
| Date Sampled | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | ug/kg |
| **Volatile Organic Compounds** | | | | | | | | | | | |
| **Parameters** | | | | | | | | | | | |
| **(Compounds reported in ug/kg)** | | | | | | | | | | | |
| Acetone | NDJ | NDJ | ND | NDJ | ND | 4J | ND | ND | ND | NDJ | 200 |
| Dichlorofluoromethane | NDJ | NDJ | ND | NDJ | ND | ND | ND | ND | ND | NDJ | NGV |
| Chloromethane | NDJ | NDJ | ND | ND | ND | ND | ND | ND | ND | NDJ | NGV |
| Trichlorofluoromethane | NDJ | NDJ | ND | 24J | ND | ND | ND | ND | ND | NDJ | NGV |
| 1,1-Dichloroethene | NDK | NDJ | ND | 5J | ND | ND | ND | ND | ND | NDJ | 400 |
| Methylene Chloride | NDJ | NDJ | ND | ND | NDD | ND | ND | ND | ND | NDJ | 100 |
| trans- 1,2-Dichloroethene | NDJ | NDJ | ND | 24J | 390JD | ND | 68JD | 170JD | ND | NDJ | 300 |
| 1,1 Dichloroethane | NDJ | NDJ | ND | 33J | 450JD | ND | 160D | 380JD | ND | 3J | 200 |
| 2-Butanone | NDJ | NDJ | ND | NDJ | ND | ND | ND | ND | ND | NDJ | 300 |
| cis-1,2- Dichloroethene | NDJ | NDJ | ND | 140J | 2100D | ND | 130JD | 370JD | ND | NDJ | NGV |
| Chloroform | NDJ | NDJ | ND | 2J | ND | ND | ND | ND | ND | NDJ | 300 |
| 1,1,1-Trichloroethane | 3J | NDJ | ND | 180J | 11000D | ND | 4500D | 9000D | ND | 37J | 800 |
| Carbon Tetrachloride | NDJ | NDJ | ND | 32J | ND | ND | ND | ND | ND | 6J | 600 |
| 1,2-Dichloroethane | NDJ | NDJ | ND | 8J | 160JD | ND | 61JD | ND | ND | NDJ | 100 |
| Trichloroethene | 28J | 75DJ | 4J | 590EJ | 14000D | 4J | 9600E | 20000D | 2J | 61J | 700 |
| Toluene | NDJ | NDJ | ND | NDJ | ND | ND | 27JD | ND | ND | NDJ | 1500 |
| 1,1,2-Trichloroethane | NDJ | NDJ | ND | 32J | 1100D | ND | 1600 | 360JD | ND | NDJ | NGV |
| Tetrachioroethene | 49J | 130DJ | 4J | 1400EJ | 23000D | 7 | 8200DE | 16000D | 4J | 91J | 1400 |
| m,p-Xylene | NDJ | NDJ | ND | NDJ | ND | ND | 79JD | ND | ND | NDJ | 1200 |
| 1,3,5-Trimethylbenzene | NDJ | NDJ | ND | NDJ | ND | ND | 89JD | ND | ND | NDJ | NGV |
| 1,2,4-Trimethylbenzene | NDJ | NDJ | ND | NDJ | ND | ND | 95JD | ND | ND | NDJ | 3400 |
| **Semivolatile Organics Compounds** | | | | | | | | | | | |
| **USEPA Method 8260** | | | | | | | | | | | |
| **Parameters** | | | | | | | | | | | |
| **(Compounds reported in ug/kg)** | | | | | | | | | | | |
| Naphthalene | ND | ND | ND | 76J | ND | ND | 250J | ND | ND | 73J | 13000 |
| 4-Chioro-3-methylphenol | ND | ND | ND | 38J | ND | ND | 1000 | 1400B | ND | 47J | 240 |
| 2-Methylnaphthalene | ND | ND | ND | 150J | 200JD | ND | 380J | ND | ND | 120J | 36400 |
| 2,4,5-Trichlorophenol | ND | ND | ND | ND | ND | ND | 120J | ND | ND | ND | 100 |
| Acenaphthylene | ND | ND | ND | 260J | 590JD | ND | 860J | 1200JD | ND | 170J | 41000 |
| Acenaphthene | ND | ND | ND | ND | ND | ND | 150J | ND | ND | 58J | 50000 |
| Dibenzofuran | ND | ND | ND | 75J | ND | ND | 380J | ND | ND | 100J | 6200 |
| Fluorene | ND | ND | ND | ND | ND | ND | 730J | 920JD | ND | 72J | 50000 |
| Pentachlorophenol | ND | ND | ND | ND | ND | ND | 1100 | ND | ND | 88J | 1000 |
| Phenanthrene | 45J | ND | ND | 400 | 480JD | ND | 2200J | 2200JD | 56J | 440 | 50000 |
| Anthracene | ND | ND | ND | 300J | 390JD | ND | 5500J | 5600JD | 250J | 470 | 50000 |
| Fluoranthene | ND | ND | ND | 360J | 500JD | ND | 2300J | 2500JD | 59J | 960 | 50000 |
| Pyrene | 60J | ND | ND | 420 | 640JD | ND | 2700J | 3300JD | 96J | 1400 | 50000 |
| Benzo[a]anthracene | 45J | ND | ND | 310J | 370JD | ND | 1100J | 1300JD | 36J | 740 | 224 |
| bis(2-Ethylhexyl)phthalate | 150J | 210JD | 110J | 190J | 310JD | 83J | 1200J | 1300JD | 160J | 190J | 50000 |
| Chrysene | 100J | NDJD | ND | 780J | 980JD | ND | 2000J | 2200JD | 71J | 1100J | 400 |
| Benzo[b]fluoranthene | NDJ | ND | ND | 980J | 1300JD | ND | 1800J | 1900JD | ND | 1200J | 1100 |
| Benzo[k]fluoranthene | NDJ | ND | ND | 620J | 680JD | ND | 1500J | 1400JD | ND | 740J | 1100 |
| Benzo[a]pyrene | 230J | ND | ND | 1200J | 300JD | ND | 2400J | ND | 42J | 680J | 61 |
| Indeno[1,2,3-cd]pyrene | ND | ND | ND | 290J | 340JD | ND | 1100J | 900JD | ND | 350J | 3200 |
| Dibenzo[a,h]anthracene | ND | ND | ND | 140J | NDJ | ND | NDJ | NDJ | ND | 180J | 14 |
| Benzo[g,h,l]perylene | 120J | ND | ND | 290J | 340JD | ND | 1100J | 970JD | 79J | 460J | 50000 |
| **Polychlorinated biphenyls (PCB's)** | | | | | | | | | | | |
| **USEPA Method 8082** | | | | | | | | | | | |
| **Parameters** | | | | | | | | | | | |
| **(ug/kg)** | | | | | | | | | | | |
| Aroclor-1254 | 2950 | NA | 183 | 3210 | NA | 398 | 9010E | 10200D | 813 | 3100 | 10000 |
| **Metals** | | | | | | | | | | | (mg/kg) |
| **Parameters** | | | | | | | | | | | |
| **(Metals Reported in mg/kg)** | | | | | | | | | | | |
| Arsenic | 28.2 | NA | 2.58 | 31.4 | NA | 1.59 | 39.7 | NA | 3.42 | 15.2 | 7.5 |
| Barium | 29.6 | NA | 9.01 | 53.3 | NA | 10.7 | 27.9 | NA | 12.2 | 28.6 | 300 |
| Cadmium | 1.05 | NA | ND | 37.8 | NA | ND | 7.85 | NA | ND | 1.37 | 10.0 |
| Chromium | 9.85J | NA | 3.16J | 28.1J | NA | 5.24J | 18.8J | NA | 5.86J | 12.7J | 50.0 |
| Lead | 53.6J | NA | 4.47J | 207J | NA | 5.47J | 179J | NA | 11.7J | 89.2J | SB |
| Mercury | ND | NA | ND | ND | NA | ND | ND | NA | ND | ND | 0.1 |
| Selenium | ND | NA | ND | ND | NA | ND | ND | NA | ND | ND | 2.0 |
| Silver | ND | NA | ND | ND | NA | ND | ND | NA | ND | ND | SB |

ND = Compound Was Analyzed But Not Detected
NA = Not Analyzed
NS = No Standard or Guidance Value
B = Compound Found in Associated Blank
J = Compound Concentration is estimated
D = Sample was diluted
E = Value Exceeded the GC Column
SB = Site Background
The Analyte Exceeds NYSDEC TAGM Value

** NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

**Table 3 (continued)**
**Summary of Validated Detections - Soil Samples From Borings SB-4NT, SB-4E, SB-3**
**A K Allen**
**Mineola, New York**



| Sample ID | SB4NT3642 | SB4NT54-60 | SB4E2026 | SB4E2026DL | SB4E3642 | SB3A3642 | SB3 9" | FB | TB | NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|
| Location | SB-4NT | SB-4NT | SB-4E | SB-4E | SB-4E | SB-3NT Dup. | SB-3 | Field Blank | Trip Blank | TAGM |
| Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Water | Water | Number |
| Depth in inches | 36-42 | 54-60 | 20-26 | 20-26 | 36-42 | 36-42 | 9" | | | 4046 |
| Date Sampled | 10/14/2003 | 10/17/2004 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | 10/14/2003 | ug/kg |
| **Volatile Organic Compounds** | | | | | | | | | | |
| **Parameters** | | | | | | | | | | |
| **(Compounds reported in ug/kg)** | | | | | | | | | | |
| Acetone | NDJ | NA | NDJ | ND | 15 | 8 | NDJ | ND | ND | 200 |
| Dichlorofluoromethane | NDJ | NA | NDJ | 28B | ND | ND | NDJ | ND | ND | NGV |
| Chloromethane | NDJ | NA | NDJ | 2J | ND | ND | NDJ | ND | ND | NGV |
| Trichlorofluoromethane | NDJ | NA | NDJ | ND | ND | ND | 12J | ND | ND | NGV |
| 1,1-Dichloroethene | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 400 |
| Methylene Chloride | NDJ | NA | NDJ | 16B | ND | ND | NDJ | ND | ND | 100 |
| trans- 1,2-Dichloroethene | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 300 |
| 1,1 Dichloroethane | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 200 |
| 2-Butanone | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 300 |
| cis-1,2- Dichloroethene | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | NGV |
| CHloroform | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 300 |
| 1,1,1-Trichloroethane | 2J | NA | 3J | 2J | ND | ND | NDJ | ND | ND | 800 |
| Carbon Tetrachloride | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 600 |
| 1,2-Dichloroethane | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 100 |
| Trichloroethene | 9J | NA | 22 | 26 | 2J | 8 | 4J | ND | ND | 700 |
| Toluene | NDJ | NA | NDJ | ND | 2J | ND | NDJ | ND | ND | 1500 |
| 1,1,2-Trichloroethane | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | NGV |
| Tetrachloroethene | 11J | NA | 42J | 51 | 1J | 9 | 16J | ND | ND | 1400 |
| m,p-Xylene | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | 1200 |
| 1,3,5-Trimethylbenzene | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | NGV |
| 1,2,4-Trimethylbenzene | NDJ | NA | NDJ | ND | ND | ND | NDJ | ND | ND | NGV |
| **Semivolatile Organics Compounds** | | | | | | | | | | |
| **USEPA Method 8260** | | | | | | | | | | |
| **Parameters** | | | | | | | | | | |
| **(Compounds reported in ug/kg)** | | | | | | | | | | |
| Naphthalene | 64J | 81J | ND | ND | ND | ND | 62J | ND | NA | 13000 |
| 4-Chloro-3-methylphenol | 44J | 81J | ND | ND | ND | ND | 230J | ND | NA | 240 |
| 2-Methylnaphthalene | 100J | 140J | ND | ND | ND | ND | 62J | ND | NA | 36400 |
| 2,4,5-Trichlorophenol | ND | ND | ND | ND | ND | ND | NDJ | ND | NA | 100 |
| Acenaphthylene | 140J | 370J | ND | ND | ND | ND | 82J | ND | NA | 41000 |
| Acenaphthene | 51J | 76J | ND | ND | ND | ND | 79J | ND | NA | 50000 |
| Dibenzofuran | 90J | 140J | ND | ND | ND | ND | 67J | ND | NA | 6200 |
| Fluorene | 65J | 150J | ND | ND | ND | ND | 78J | ND | NA | 50000 |
| Pentachlorophenol | ND | 77J | ND | ND | ND | ND | 140J | ND | NA | 1000 |
| Phenanthrene | 380J | 660 | ND | ND | ND | 44J | 790J | ND | NA | 50000 |
| Anthracene | 370J | 770 | ND | ND | ND | 110J | 330J | ND | NA | 50000 |
| Fluoranthene | 830 | 1300 | ND | ND | ND | 53J | 940J | ND | NA | 50000 |
| Pyrene | 1200 | 2500 | 230J | 360JD | 49J | 110J | 1500J | ND | NA | 50000 |
| Benzo[a]anthracene | 630 | 930 | 250J | 320JD | ND | ND | 530J | ND | NA | 224 |
| bis(2-Ethylhexyl)phthalate | 160J | 410 | 110J | ND | 68J | 130J | 1400J | ND | NA | 50000 |
| Chrysene | 870J | 1300 | 570J | 780JD | ND | 66J | 700J | ND | NA | 400 |
| Benzo[b]fluoranthene | 940J | 1500 | 320J | 360JD | ND | 50J | 920J | ND | NA | 1100 |
| Benzo[k]fluoranthene | 680J | 1000 | 190J | 300JD | ND | ND | 710J | ND | NA | 1100 |
| Benzo[a]pyrene | 510J | 720 | 2000J | 1000JD | ND | ND | 620J | ND | NA | 4 |
| Indeno[1,2,3-cd]pyrene | 300J | 340J | 170J | NDJ | ND | 37J | 260J | ND | NA | 3200 |
| Dibenzo[a,h]anthracene | 120J | 140J | 220J | 280JD | ND | ND | 110J | ND | NA | 14 |
| Benzo[g,h,i]perylene | 310J | 300J | 610J | 700JD | 48J | 67J | 310J | ND | NA | 50000 |
| **Polychlorinated biphenyls (PCB's)** | | | | | | | | | | |
| **USEPA Method 8082** | | | | | | | | | | |
| **Parameters** | | | | | | | | | | |
| **(ug/kg)** | | | | | | | | | | |
| Aroclor-1254 | 2550 | NA | 1020 | NA | 231 | 663 | 51200D | ND | NA | 10000 |
| **Metals** | | | | | | | | | | |
| **Parameters** | | | | | | | | | | (mg/kg) |
| **(Metals Reported in mg/kg)** | | | | | | | | | | |
| Arsenic | 4.88 | NA | 48.7 | NA | 1.75 | 3.48 | 11.7 | ND | NA | 7.5 |
| Barium | 20.1 | NA | 28.0 | NA | 7.95 | 16.5 | 147 | ND | NA | 300 |
| Cadmium | 0.952 | NA | ND | NA | ND | 0.764 | 14.4 | ND | NA | 10.0 |
| Chromium | 13.4J | NA | 9.93J | NA | 4.36J | 6.51J | 422J | ND | NA | 50.0 |
| Lead | 44.4J | NA | 36.9J | NA | 5.75J | 16.9J | 814J | ND | NA | SB |
| Mercury | ND | NA | ND | NA | ND | ND | 0.452 | ND | NA | 0.1 |
| Selenium | ND | NA | ND | NA | ND | ND | ND | ND | NA | 2.0 |
| Silver | ND | NA | ND | NA | ND | ND | 1.6 | ND | NA | SB |

ND = Compound Was Analyzed But Not Detected
NA = Not Analyzed
NS = No Standard or Guidance Value
B = Compound Found in Associated Blank
J = Compound Concentration is estimated
D = Sample was diluted
E = Value Exceeded the GC Column
SB = Site Background
The Analyte Exceeds NYSDEC TAGM Value

* *NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

**Table 3 (Continued)**
**Summary of Validated Detections in Soil Borings SB3 20 - SPLP Volatile Organic Compounds and PCB's**
**A K Allen**
**Mineola, New York**



| **Sample ID** | SB3 20" |
|---|---|
| **Location** | SB-3 |
| **Matrix** | Soil |
| **Depth in inches** | 20" |
| **Date Sampled** | 10/14/2003 |
| **SPLP-Volatile Organic Compounds** **Parameters** (Compounds reported in ug/L) | |
| Acetone | ND |
| Dichlorofluoromethane | ND |
| Chloromethane | ND |
| Trichlorofluoromethane | ND |
| 1,1-Dichloroethene | ND |
| Methylene Chloride | ND |
| trans- 1,2-Dichloroethene | ND |
| 1,1 Dichloroethane | 17 |
| 2-Butanone | 1J |
| cis-1,2- Dichloroethene | 2J |
| Chloroform | ND |
| 1,1,1-Trichloroethane | 100 |
| Carbon Tetrachloride | ND |
| 1,2-Dichloroethane | 2J |
| Trichloroethene | 38 |
| Toluene | ND |
| 1,1,2-Trichloroethane | 2J |
| Tetrachloroethene | 56 |
| m,p-Xylene | ND |
| 1,3,5-Trimethylbenzene | ND |
| 1,2,4-Trimethylbenzene | ND |
| **SPLP-Polychlorinated biphenyls (PCB's)** **USEPA Method 8082** **Parameters** (ug/L) | |
| Aroclor-1254 | 1.25 |

ND = Compound Was Analyzed But Not Detected
NA = Not Analyzed
NS = No Standard or Guidance Value
B = Compound Found in Associated Blank
J = Compound Concentration is estimated
SB = Site Background
The Analyte Exceeds NYSDEC TAGM Value

## Table 4
## Summary of Validated Detections - Soil Samples From Borings SB-2ST and SB-3ST
## A K Allen
## Mineola, New York

| Sample ID | SB-2ST | **SB-2X | SB-3ST | FB | TB | *NYSDEC |
|---|---|---|---|---|---|---|
| Location | Off-site | Off-site | Off-site | Field Blank | Trip Blank | TAGM |
| Matrix | Soil | Soil | Soil | Water | Water | Number |
| Depth in inches | 20-26" | 20-26" | 20-26" | | | 4046 |
| Date Sampled | 11/22/2003 | 11/22/2003 | 11/22/2003 | 11/22/2003 | 11/22/2003 | ug/kg |
| **Volatile Organic Compounds** | | | | | | |
| **Parameters** | | | | | | |
| **(Compounds reported in ug/kg)** | | | | | | |
| Acetone | 5JBR | 12BR | NDJ | 6BR | 5JBR | 200 |
| Dichlorofluoromethane | 29BJ | 35BJ | NDJ | NDJ | NDJ | NGV |
| Chloromethane | NDJ | NDJ | NDJ | ND | ND | NGV |
| Trichlorofluoromethane | NDJ | NDJ | 20J | ND | ND | NGV |
| 1,1-Dichloroethene | NDJ | NDJ | NDJ | ND | ND | 400 |
| Carbon disulfide | NDJ | 2J | NDJ | ND | ND | 2700 |
| Methylene Chloride | NDJ | NDJ | NDJ | NDJ | NDJ | 100 |
| trans- 1,2-Dichloroethene | NDJ | NDJ | NDJ | ND | ND | 300 |
| 1,1 Dichloroethane | NDJ | NDJ | NDJ | ND | ND | 200 |
| 2-Butanone | NDJ | NDJ | NDJ | ND | ND | 300 |
| cis-1,2- Dichloroethene | NDJ | NDJ | NDJ | ND | ND | NGV |
| Chloroform | NDJ | NDJ | NDJ | 1J | 1 | 300 |
| 1,1,1-Trichloroethane | 4J | 6J | 3J | ND | ND | 800 |
| Carbon Tetrachloride | NDJ | NDJ | NDJ | ND | ND | 600 |
| 1,2-Dichloroethane | NDJ | NDJ | NDJ | ND | ND | 100 |
| Trichloroethene | 7J | 6J | 11J | ND | ND | 700 |
| Toluene | NDJ | NDJ | NDJ | ND | ND | 1500 |
| 1,1,2-Trichloroethane | NDJ | NDJ | NDJ | ND | ND | NGV |
| Tetrachloroethene | 10J | 12J | 12J | ND | ND | 1400 |
| m,p-Xylene | NDJ | NDJ | NDJ | ND | ND | 1200 |
| 1,3,5-Trimethylbenzene | NDJ | NDJ | NDJ | ND | ND | NGV |
| 1,2,4-Trimethylbenzene | NDJ | NDJ | NDJ | ND | ND | NGV |

Notes:

ND = Compound Was Analyzed But Not Detected

NS = No Standard or Guidance Value

B = Compound Found in Associated Blank

J = Compound Concentration is estimated

R = The presence or absence of the analyte cannot be verified

The Analyte Exceeds NYSDEC TAGM Value

**Sample SB-2X is a duplicate of SB-2ST

* *NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.*

*Users/Eric/Docs/AKAllen/Tables/Table 4 11-22-03*

**TABLE 5**
**Summary of Detections - Soil Gas Samples SG-1 and SG-2**
**AK ALLEN CO., Inc.**
**Mineola, NY**

| Sample ID | SG-1 | SG-2 |
|---|---|---|
| Matrix | Soil Gas | Soil Gas |
| Date Sampled | 12/30/2003 | 12/30/2003 |
| Depth | 4 to 4.5 feet | 4 to 4.5 feet |
| Units | ug/m3 | ug/m3 |
| 1,1 Dichloroethane | ND | ND |
| 1,1 Dichloroethene | ND | ND |
| 1,1-Dichloropropene | ND | ND |
| 1,2 Dibromoethane | ND | ND |
| 1,2 Dichlorobenzene (v) | ND | ND |
| 1,2 Dichloroethane | ND | ND |
| 1,2 Dichloropropane | ND | ND |
| 1,3 Dichlorobenzene (v) | ND | ND |
| 1,3-Dichloropropane | ND | ND |
| 1,4 Dichlorobenzene (v) | ND | ND |
| 111 Trichloroethane | ND | ND |
| 1112Tetrachloroethane | ND | ND |
| 112 Trichloroethane | ND | ND |
| 1122Tetrachloroethane | ND | ND |
| 123-Trichlorobenzene | ND | ND |
| 123-Trichloropropane | ND | ND |
| 124-Trichlorobenzene (v) | ND | ND |
| 124-Trimethylbenzene | ND | ND |
| 1245 Tetramethylbenz | ND | ND |
| 135-Trimethylbenzene | ND | ND |
| 2,2-Dichloropropane | ND | ND |
| 2-Chlorotoluene | ND | ND |
| 4-Chlorotoluene | ND | ND |
| Acetone | ND | ND |
| Benzene | ND | ND |
| Bromobenzene | ND | ND |
| Bromochloromethane | ND | ND |
| Bromodichloromethane | ND | ND |
| Bromoform | ND | ND |
| Bromomethane | ND | ND |
| c-1,2-Dichloroethene | ND | ND |
| c-1,3Dichloropropene | ND | ND |
| Carbon Tetrachloride | ND | ND |
| Chlorobenzene | ND | ND |
| Chlorodibromomethane | ND | ND |
| Chlorodifluoromethane | ND | ND |
| Chloroethane | ND | ND |
| Chloroform | ND | ND |
| Chloromethane | ND | ND |
| Dibromochloropropane | ND | ND |
| Dibromomethane | ND | ND |
| Dichlordifluomethane | ND | ND |
| Ethyl Benzene | ND | ND |
| Freon 113 | ND | ND |
| Hexachlorobutadiene | ND | ND |
| Isopropylbenzene | ND | ND |
| m + p Xylene | ND | ND |
| Methyl Ethyl Ketone | ND | ND |
| Methylene Chloride | ND | ND |
| Methylisobutylketone | ND | ND |
| n-Butylbenzene | ND | ND |
| n-Propylbenzene | ND | ND |
| Naphthalene(v) | ND | ND |
| o Xylene | ND | ND |
| p Diethylbenzene | ND | ND |
| p-Ethyltoluene | ND | ND |
| p-Isopropyltoluene | ND | ND |
| sec-Butylbenzene | ND | ND |
| Styrene | ND | ND |
| t-1,2-Dichloroethene | ND | ND |
| t-1,3Dichloropropene | ND | ND |
| ter.ButylMethylEther | 73 | 62 |
| tert-Butylbenzene | ND | ND |
| Tetrachloroethene | ND | ND |
| Toluene | ND | ND |
| Trichloroethylene | ND | ND |
| Trichlorofluomethane | ND | ND |
| Vinyl Chloride | ND | ND |

## TABLE 6
## SUMMARY OF WATER TABLE ELEVATIONS
**AK Allen Co., Inc.**
**Mineola, NY**

| Monitoring Well ID | Casing Elevation* Above MSL (Ft.) | Depth to Top of Well Screen in feet | Depth to Bottom of Well Screen in feet | Elevation of top of screen in feet (MSL) | Elevation of bottom of screen in feet (MSL) | 9/26/2003 | |
|---|---|---|---|---|---|---|---|
| | | | | | | Depth to Water | GW Elevation in feet (MSL)* |
| **IRM-MW-1** | 111.52 | 50 | 65 | 61.52 | 46.52 | 53.23 | 58.29 |
| **IRM-MW-2** | 111.78 | 50 | 65 | 61.78 | 46.78 | 53.69 | 58.09 |
| **IRM-MW-3** | 109.02 | 52 | 67 | 57.02 | 42.02 | 51.34 | 57.68 |
| **IRM-MW-4** | 109.65 | 45 | 65 | 64.65 | 44.65 | 51.71 | 57.94 |
| **IRM-MW-5** | 106.86 | 45 | 65 | 61.86 | 41.86 | 49.13 | 57.73 |

*Notes:*

*Elevation performed by American Engineering Services April 15, and Sepember 24, 2003*

U:\Eric\Ak allen\docs\tables\groundwater\Water Table Elevations

Table 7
Summary of Validated Detections - Groundwater Monitoring Wells IRM-MW-1 Through 5
A K Allen Co.,Inc.
Mineola, NY

| Sample ID | MW-1 | MW-2 | MW-3 | MW-4 | MW-4A | MW-5 | TB | FB | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|
| Matrix | ground water | ground water | ground water | ground water | ground water | ground water | water | water | TOGS |
| Date Sampled | 9/24/2003 | 9/24/2003 | 9/24/2003 | 9/24/2003 | 9/24/2003 | 9/24/2003 | 9/24/2003 | 9/24/2003 | Standards and |
| Screened Interval (ft. below land surface) | 53.23 - 65 | 53.69 - 65 | 51.34 - 67 | 51.71 - 65 | 51.71 - 65 | 49.13 - 65 | NA | NA | Guidelines |
| **Volatile Organic Compounds (USEPA Method 8260)** | | | | | | | | | |
| Parameters | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/l | ug/L | ug/L |
| Methylene Chloride | ND | ND | ND | ND | ND | ND | ND | ND | 5 |
| 1,1-Dichloroethane | ND | ND | ND | 6 | 5 | 2J | ND | ND | 5 |
| cis-1,2-dichloroethene | ND | ND | ND | ND | ND | 1J | ND | ND | 5 |
| 1,1,1-Trichloroethane | ND | ND | ND | 3J | 3J | 1J | ND | ND | 5 |
| Trichloroethene | ND | ND | 9 | 1J | 1J | ND | ND | ND | 5 |
| Tetrachloroethene | ND | ND | ND | 14 | 13 | 2J | ND | ND | 5 |
| Ethylbenzene | ND | 3J | ND | ND | ND | ND | ND | ND | 5 |
| Chlorobenzene | ND | 2J | ND | ND | ND | ND | ND | ND | 5 |
| m,p-Xylene | ND | 10J | ND | ND | ND | ND | ND | ND | 5 |
| o-Xylene | ND | 3J | ND | ND | ND | ND | ND | ND | 5 |
| Acetone | ND | ND | ND | ND | NDJ | NDJ | ND | 5J | 50 |
| **Semivolatile Organics Compounds USEPA Method 8260** | | | | | | | | | |
| Parameters | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate | ND | ND | ND | ND | ND | ND | NA | 3J | 5 |
| **Polychlorinated biphenyls (PCB's) USEPA Method 8082** | ND | ND | ND | ND | ND | ND | NA | ND | 0.09 |
| **Metals** | | | | | | | | | |
| Parameters | | | | | | | | | |
| Aluminum | NA | NA | NA | ND | 263 | NA | NA | ND | NG |
| Antimony | NA | NA | NA | ND | ND | NA | NA | ND | 3 |
| Arsenic | ND | ND | ND | ND | ND | ND | NA | ND | 25 |
| Barium | 157 | 60.3 | 69.3 | 131 | 110 | 71 | NA | ND | 1000 |
| Beryllium | NA | NA | NA | ND | ND | NA | NA | ND | 3 |
| Cadmium | ND | ND | ND | ND | ND | ND | NA | ND | 5 |
| Calcium | NA | NA | NA | 53400J | 45200J | NA | NA | 500J | NG |
| Chromium | ND | ND | ND | ND | ND | ND | NA | ND | 50 |
| Cobalt | NA | NA | NA | ND | ND | NA | NA | ND | NG |
| Copper | NA | NA | NA | ND | ND | NA | NA | ND | 200 |
| Iron | NA | NA | NA | 40600 | 34800 | NA | NA | ND | 300 |
| Lead | ND | ND | ND | ND | ND | ND | NA | ND | 25 |
| Magnesium | NA | NA | NA | 7180J | 6080J | NA | NA | NDJ | 35000 |
| Manganese | NA | NA | NA | 361 | 304 | NA | NA | ND | 300 |
| Mercury | ND | ND | ND | ND | ND | ND | NA | ND | 0.7 |
| Nickel | NA | NA | NA | ND | ND | NA | NA | ND | 100 |
| Potassium | NA | NA | NA | 12400J | 10300J | NA | NA | NDJ | NG |
| Selenium | ND | ND | ND | ND | ND | ND | NA | ND | 10 |
| Silver | ND | ND | ND | ND | ND | ND | NA | ND | 50 |
| Sodium | NA | NA | NA | 51500 | 40700 | NA | NA | 1670 | 20000 |
| Thallium | NA | NA | NA | ND | ND | NA | NA | ND | 0.5 |
| Vanadium | NA | NA | NA | ND | ND | NA | NA | ND | NG |
| Zinc | NA | NA | NA | ND | ND | NA | NA | ND | 2000 |

ND = Compound Was Analyzed But Not Detected

NA = Not Analyzed

NG = No Guidline is Reported

B = Compound Found in Associated Blank

J = Compound Concentration is estimated

The Analyte Exceeds NYSDEC TOG Value

All concentrations are reported in micrograms per liter (ug/L) or parts per billion.

**Sample MW-4A is a duplicate of MW-4

** NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations TOGS 1.1.1 June 1998*

*Users/ERIC/Docs/AKAllen/Tables/Groundwater/GW9-24-03*

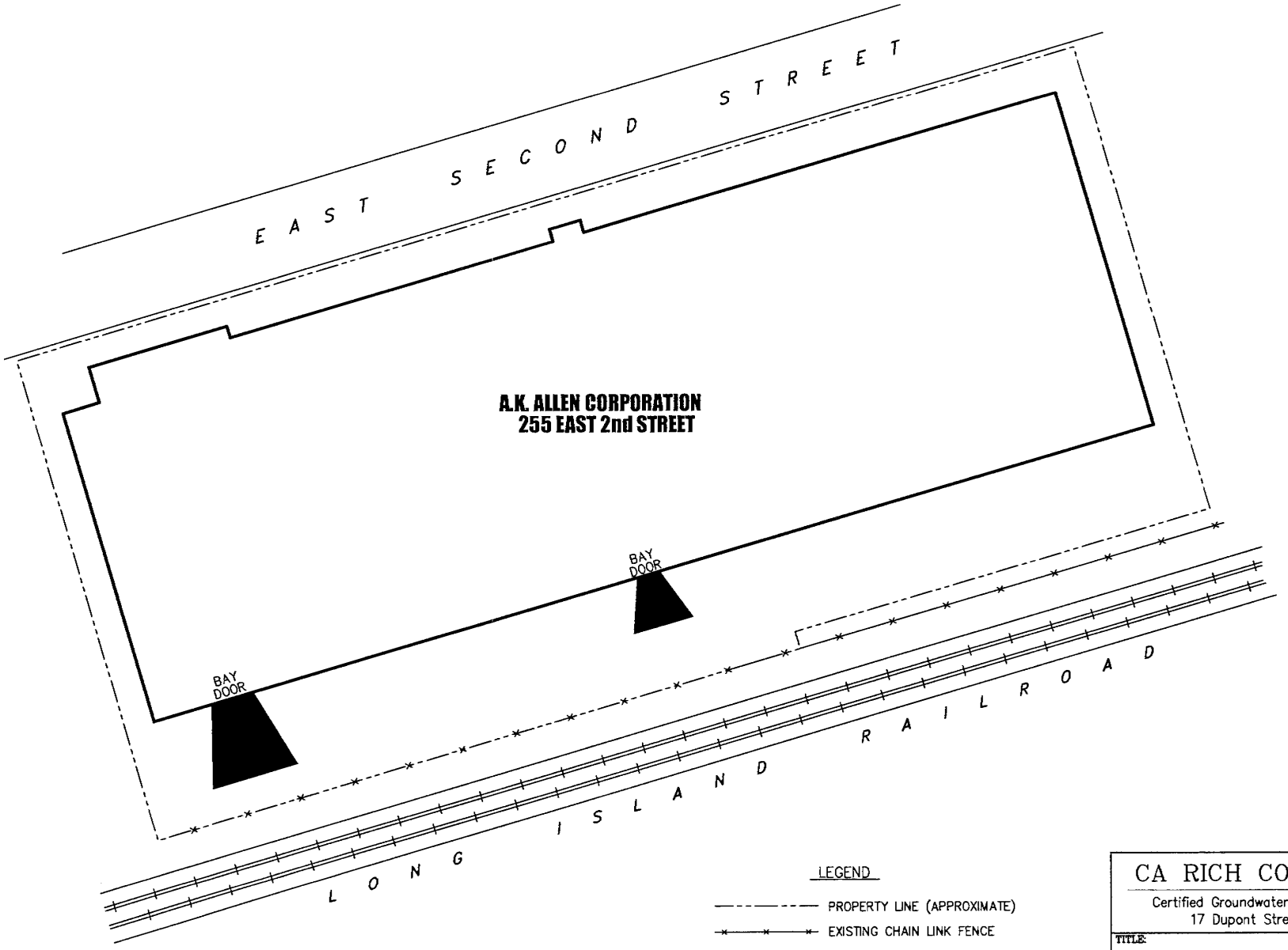
**Table 8**
**Summary of Detections for Volatile Organic Compounds**
**In Soil Gas**
**A.K Allen**
**Mineola, New York**

| Sample ID | SG-3 | SG-4 | SG-5 |
|---|---|---|---|
| Date Sampled | 4/9/2004 | 4/7/2004 | 4/7/2004 |
| Depth | 5 to 5.5 ft | 4 to 4.5 ft | 9 to 9.5 ft |
| Media | Soil Gas | Soil Gas | Soil Gas |
| Location | Adjacent to building | Adjacent to building | Below excavation |
| Units | $ug/m^3$ | $ug/m^3$ | $ug/m^3$ |
| Volatile Organic Compounds *(Method TO-15)* | | | |
| Acetone | 1400 | 760 | 1900 |
| Methyl tert-butyl ether (MTBE) | ND | 97 | ND |
| 2-Butanone (MEK) | 7300 | 360 | 6600 |
| 1,1-Dichloroethane | 540 | ND | ND |
| 1,1,1-Trichloroethane | 1900 | 16 | 4400 |
| Benzene | 97 | 200 | ND |
| Toluene | 94 | 140 | 79 |
| Tetrachloroethene | 1900 | ND | 9400 |
| Ethylbenzene | ND | 20 | ND |
| m-Xylene + p-Xylene | ND | 77 | ND |
| o-Xylene | ND | 25 | ND |
| 1,2,4-Trimethylbenzene | ND | 21 | ND |

Notes:
ND-Not Detected

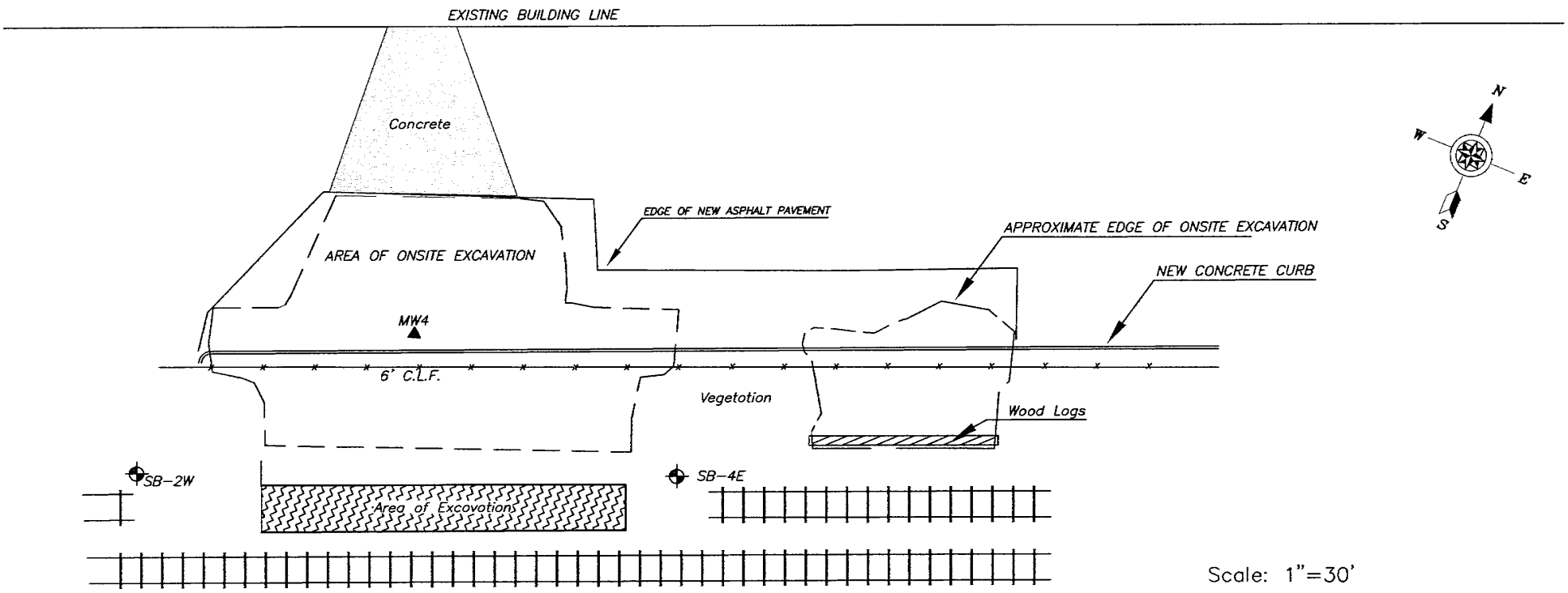
# APPENDIX G 2008 OFF-SITE REMEDIAL ACTION REPORT FIGURES & TABLES

# FIGURES




| CA RICH CONSULTANTS, INC. | | |
|---|---|---|
| Certified Groundwater and Environmental Specialists<br>17 Dupont Street, Plainview, NY 11803 | | |
| TITLE: SITE PLAN | | DATE: 4/3/07<br>SCALE: As Shown |
| Figure: 1<br>DRAWING NO: 2007-35 | A.K. ALLEN CORPORATION<br>255 EAST 2nd STREET<br>MINEOLA, NEW YORK | DRAWN BY: S.T.M.<br>APPR. BY: S.T.S. |

# AK ALLEN FACILITY




Notes: Excavation Dimensions
70 ½' x 9 ¼' x 4' to 5' Deep

Sample Collection Depths (Below Ballast Grade)

| Sample ID | Depth (Feet) |
|---|---|
| SWEP-01 | 4 |
| BEP-02 | 4-5 |
| BEP-03 | 4-5 |
| BEP-04 | 4-5 |
| BEP-05 | 4-5 |
| SWEP-06 | 4 |
| SWEP-07 | 4 |
| SWEP-08 | 4 |
| SWEP-09 (4') | 4 |
| SWEP-10 | 4 |
| SWEP-11 | 3 |
| SWEP-12 | 3 |
| SWEP-13 | 4 |
| SWEP-14 | 4 |
| SWEP-15 (2') | 2 |
| BEP-16 | 4-5 (Duplicate of BEP-05) |

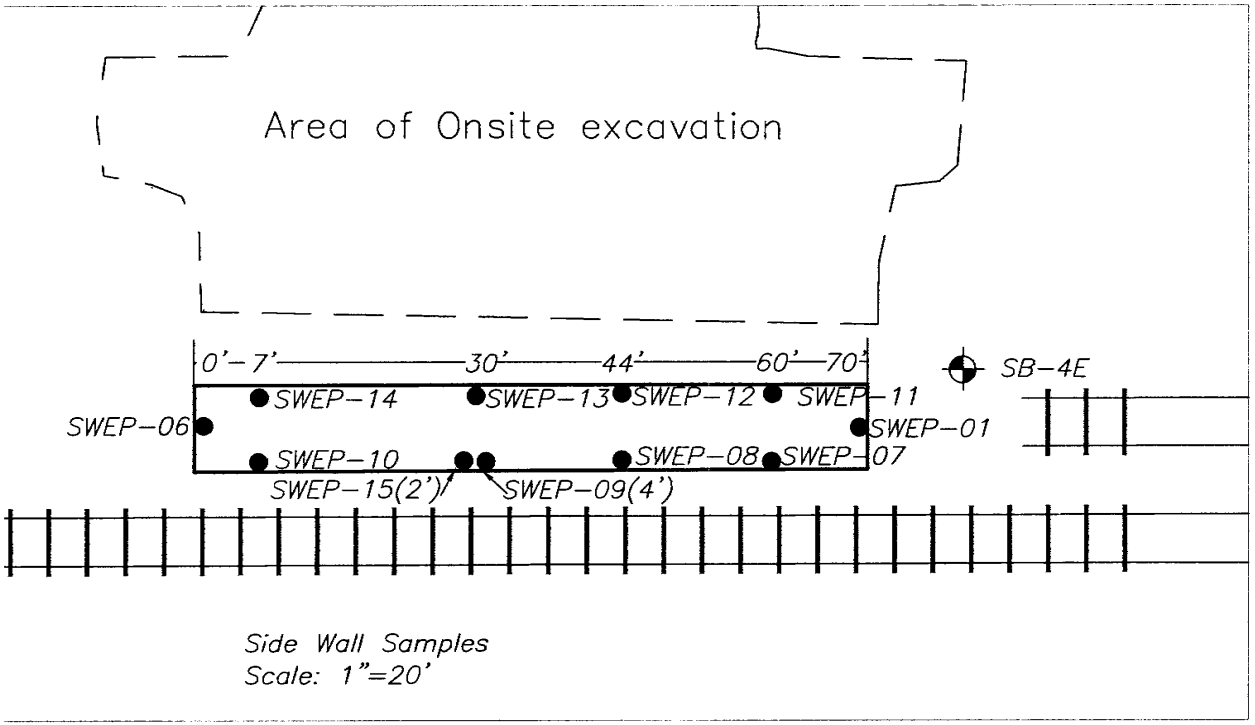
## Legend

- Soil Sample Collected At an Earlier Date
- Monitoring Well Location
- Area of Offsite Excavation of August 25, 2007

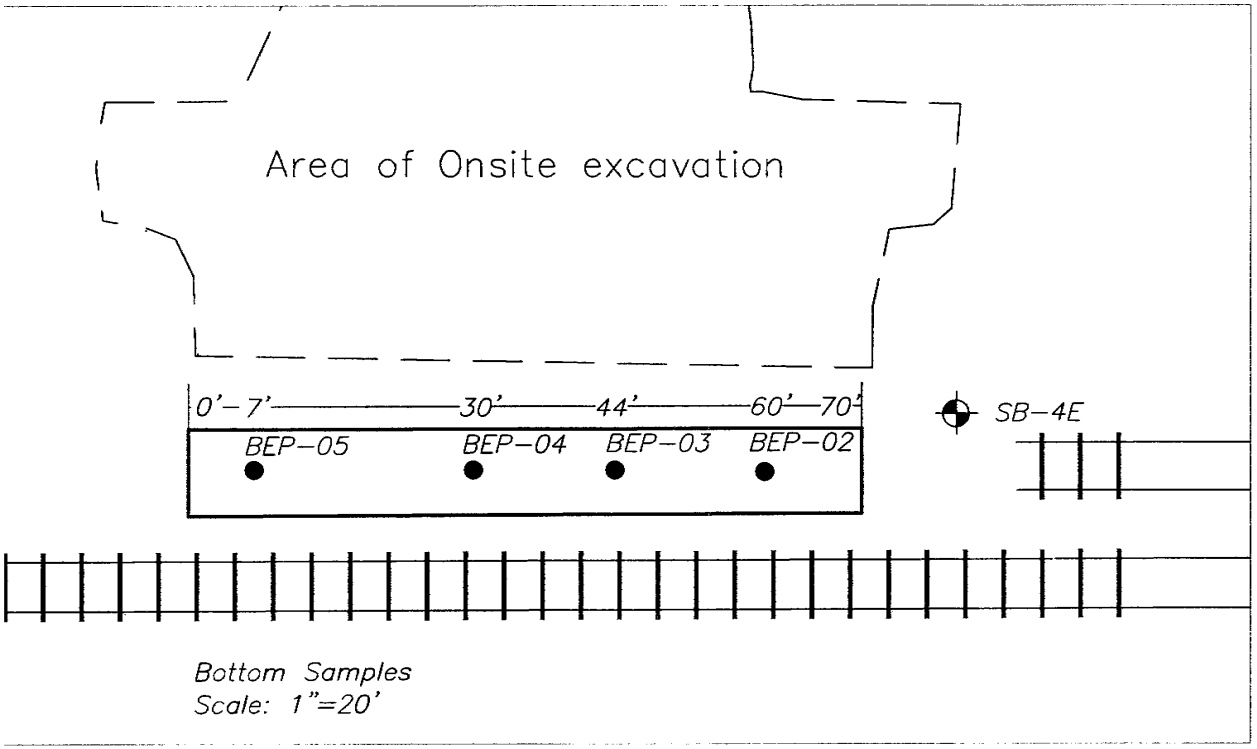

**CA RICH CONSULTANTS, INC.**
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803


| | |
|---|---|
| TITLE: AREA OF OFFSITE EXCAVATION AUGUST 25, 2007 | DATE: 12/6/2007 |
| | SCALE: AS SHOWN |
| FIGURE: 2 | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-37A | APPR. BY: S.T.S. |

AK ALLEN CORPORATION
255 EAST 2ND STREET
MINEOLA, NY




Side Wall Samples
Scale: 1"=20'




Bottom Samples
Scale: 1"=20'

Notes: Excavation Dimensions
70 ½' x 9 ¼' x 4' to 5' Deep

Sample Collection Depths (Below Ballast Grade)

| Sample ID | Depth (Feet) |
|---|---|
| SWEP-01 | 4 |
| BEP-02 | 4-5 |
| BEP-03 | 4-5 |
| BEP-04 | 4-5 |
| BEP-05 | 4-5 |
| SWEP-06 | 4 |
| SWEP-07 | 4 |
| SWEP-08 | 4 |
| SWEP-09 (4') | 4 |
| SWEP-10 | 4 |
| SWEP-11 | 3 |
| SWEP-12 | 3 |
| SWEP-13 | 4 |
| SWEP-14 | 4 |
| SWEP-15 (2') | 2 |
| BEP-16 | 4-5 (Duplicate of BEP-05) |

Legend

- Soil Sample Collected At an Earlier Date
- Offsite Excavation Endpoint Soil Sample Location

**CA RICH CONSULTANTS, INC.**
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

| | | |
|---|---|---|
| TITLE: EXCAVATION ENDPOINT SAMPLE LOCATION AUGUST 25, 2007 | | DATE: 12/6/2007 |
| | | SCALE: AS SHOWN |
| FIGURE: 3 | AK ALLEN CORPORATION 255 EAST 2ND STREET MINEOLA, NY | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-37 | | APPR. BY: S.T.S. |

# TABLE

# TABLE 1

VALIDATED DATA

Summary of Validated Detections - Volatile Organic Compounds and PCBs

End-Point Soil Samples 1 through 8 - Off-Site LIRR Excavation

A. K. Allen

255 East Second Street

Mineola, New York

| Sample ID | SWEP-01 | BEP-02 | BEP-03 | BEP-04 | BEP-05 | BEP-16 | SWEP-06 | SWEP-07 | SWEP-08 | *NYSDEC |
|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | Soil | Soil | Soil | Soil | Soil | Duplicate BEP-05 | Soil | Soil | Soil | 6 NYCRR |
| Date Sampled | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | Part 375 |
| Location | Sidewall | Bottom | Bottom | Bottom | Bottom | Bottom | Sidewall | Sidewall | Sidewall | Restricted |
| Depth in Feet | 4 ft. | 4-5 ft. | 4-5 ft. | 4-5 ft. | 4-5 ft. | 4-5 ft. | 4 ft. | 4 ft. | 4 ft. | Industrial |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | | | | |
| Units | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Methylene Chloride | ND | ND | ND | 4.1 J | 4.1 J | ND | 3.6 J | 4.0 J | ND | 1,000,000 |
| Tetrachloroethene | 2.2 J | 1.2 J | 5.2 J | 0.75 J | ND | ND | 0.70 J | ND | 1.2 J | 300,000 |
| 1,1,1-Trichloroethane | 0.69 J | ND | 0.89 J | ND | ND | ND | ND | ND | ND | 1,000,000 |
| Trichloroethene | 2.8 J | 1.0 J | 7.1 | ND | ND | ND | ND | ND | 1.9 J | 400,000 |
| Xylene (mixed) | 0.87 J | ND | 1.4 J | 0.75 J | ND | ND | 1.4 J | 0.91 J | 1.6 J | 1,000,000 |
| Bromomethane | ND | ND UJ | ND | ND | ND | ND UJ | ND | ND | ND | None |
| Acetone | ND R | ND R | ND R | ND R | ND R | ND R | ND R | ND R | ND R | 1,000,000 |
| ***PCBs (USEPA Method 8082)*** | | | | | | | | | | |
| Units | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Aroclor 1254 | 341 | 1070 | 519 | ND | ND | ND | ND | 92.3 | 362 | 25,000 |
| Aroclor 1260 | ND | ND | 81.3 | ND | ND | ND | 76.0 | 54.7 | 74.5 | 25,000 |

*Notes:*

*ND - Not Detected at the reported method detection limit.*

*J - Estimated value when the result was less than the specified detection limit but greater than zero.*

*U - The analyte was analized for, but not detected above the reported sample quantitation limit.*

*UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.*

*R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verifed.*

*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

** NYSDEC 6 NYCRR Part 375, subparts 375-1 to 376-4 & 375-6 Environmental Remediation Programs, "Restricted Industrial Use" December 14, 2006.*

users/eric/AK Allen/tables/off-Site RA Report/EP1-8-soil-VOC-PCB

# TABLE 1 (cont'd.)

**VALIDATED DATA**

**Summary of Validated Detections - Volatile Organic Compounds and PCBs**

**End-Point Soil Samples 9 through 15 - Off-Site LIRR Excavation**

**A. K. Allen**

**255 East Second Street**

**Mineola, New York**

| **Sample ID** | **SWEP-09(4')** | **SWEP-10** | **SWEP-11** | **SWEP-12** | **SWEP-13** | **SWEP-14** | **SWEP-15(2')** | ***NYSDEC** |
|---|---|---|---|---|---|---|---|---|
| **Matrix** | Soil | Soil | Soil | Soil | Soil | Soil | Soil | 6 NYCRR |
| **Date Sampled** | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | 8/25/2007 | Part 375 |
| **Location** | Sidewall | Sidewall | Sidewall | Sidewall | Bottom | Sidewall | Sidewall | Restricted |
| **Depth in Feet** | 4 ft. | 4 ft. | 3 ft. | 3 ft. | 4 ft. | 4 ft. | 2 ft. | Industrial |
| ***Volatile Organic Compounds (USEPA Method 8260)*** | | | | | | | | |
| Units | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Methylene Chloride | ND | ND | ND | ND | ND | ND | ND | 1,000,000 |
| Tetrachloroethene | ND | ND | 4.1 J | 5.2 | ND | ND | 14.3 | 300,000 |
| 1,1,1-Trichloroethane | ND | ND | 1.2 J | 1.2 J | ND | ND | 6.6 J | 1,000,000 |
| Trichloroethene | ND | ND | 5 | 4.8 J | ND | ND | 7.4 | 400,000 |
| Xylene (mixed) | ND | ND | ND | ND | 0.83 J | ND | ND | 1,000,000 |
| Bromomethane | ND | ND | ND | ND | ND | ND UJ | ND UJ | None |
| Acetone | ND R | ND R | ND R | ND R | ND R | ND R | ND R | 1,000,000 |
| ***PCBs (USEPA Method 8082)*** | | | | | | | | |
| Units | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg | µg/Kg |
| Aroclor 1254 | ND | ND | 637 | 200 | 887 J | ND | 2440 | 25,000 |
| Aroclor 1260 | ND | ND | 95.2 | 40.9 | ND UJ | ND | 581.0 | 25,000 |

*Notes:*

*ND - Not Detected at the reported method detection limit.*

*J - Estimated value when the result was less than the specified detection limit but greater than zero.*

*U - The analyte was analized for, but not detected above the reported sample quantitation limit.*

*UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.*

*R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verifed.*

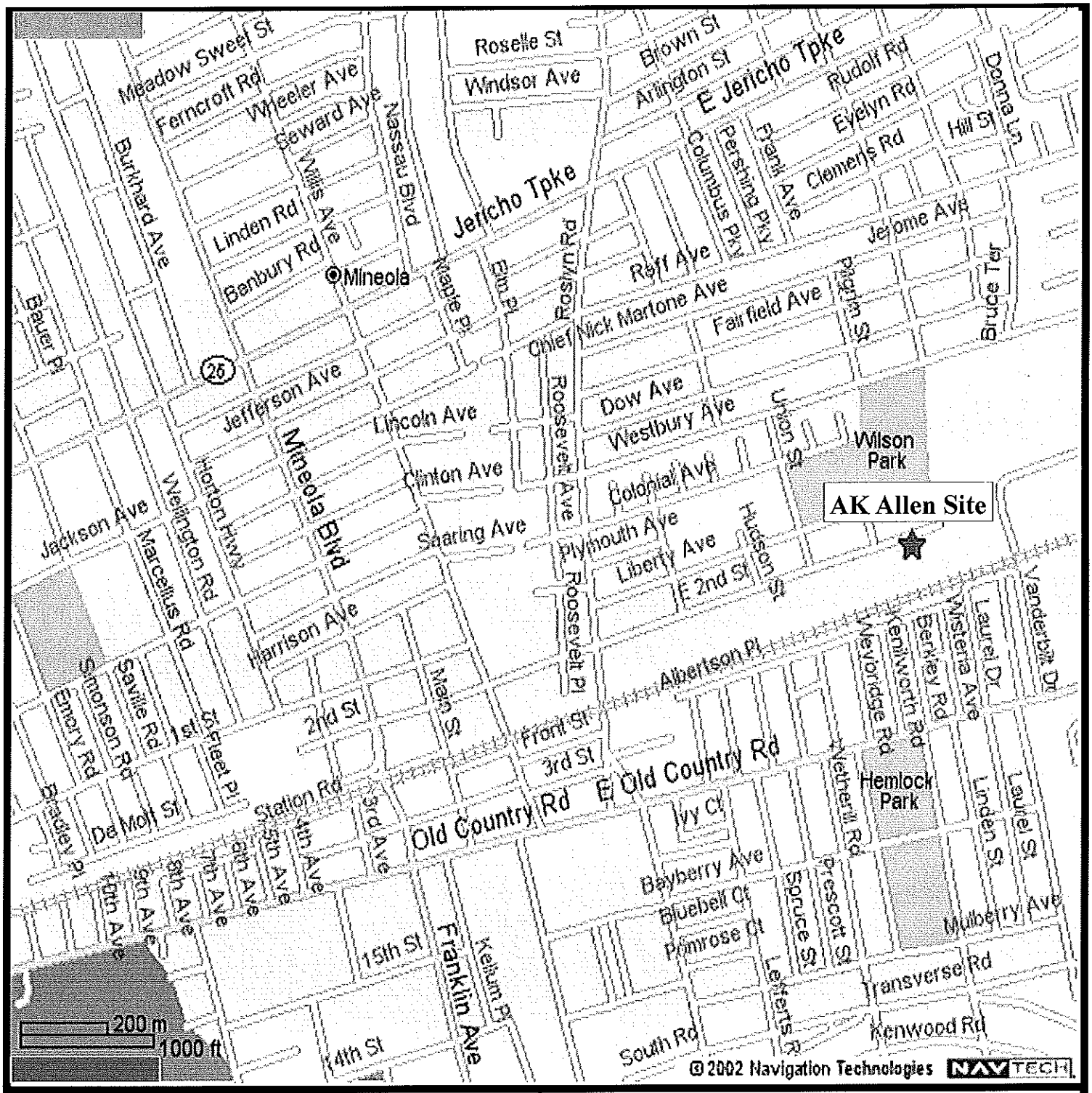
*All concentrations are reported in micrograms per kilogram (ug/Kg) or parts per billion.*

** NYSDEC 6 NYCRR Part 375, subparts 375-1 to 376-4 & 375-6 Environmental Remediation Programs, "Restricted Industrial Use", December 14, 2006.*

users/eric/AK Allen/tables/off-Site RA Report/EP9-15-soil-VOC-PCB

# APPENDIX H 2009 FER OFF-SITE REMEDIAL ACTION REPORT FIGURES & TABLES

# FIGURES




APPROX. SCALE (ft.)

0 1,000 2,000

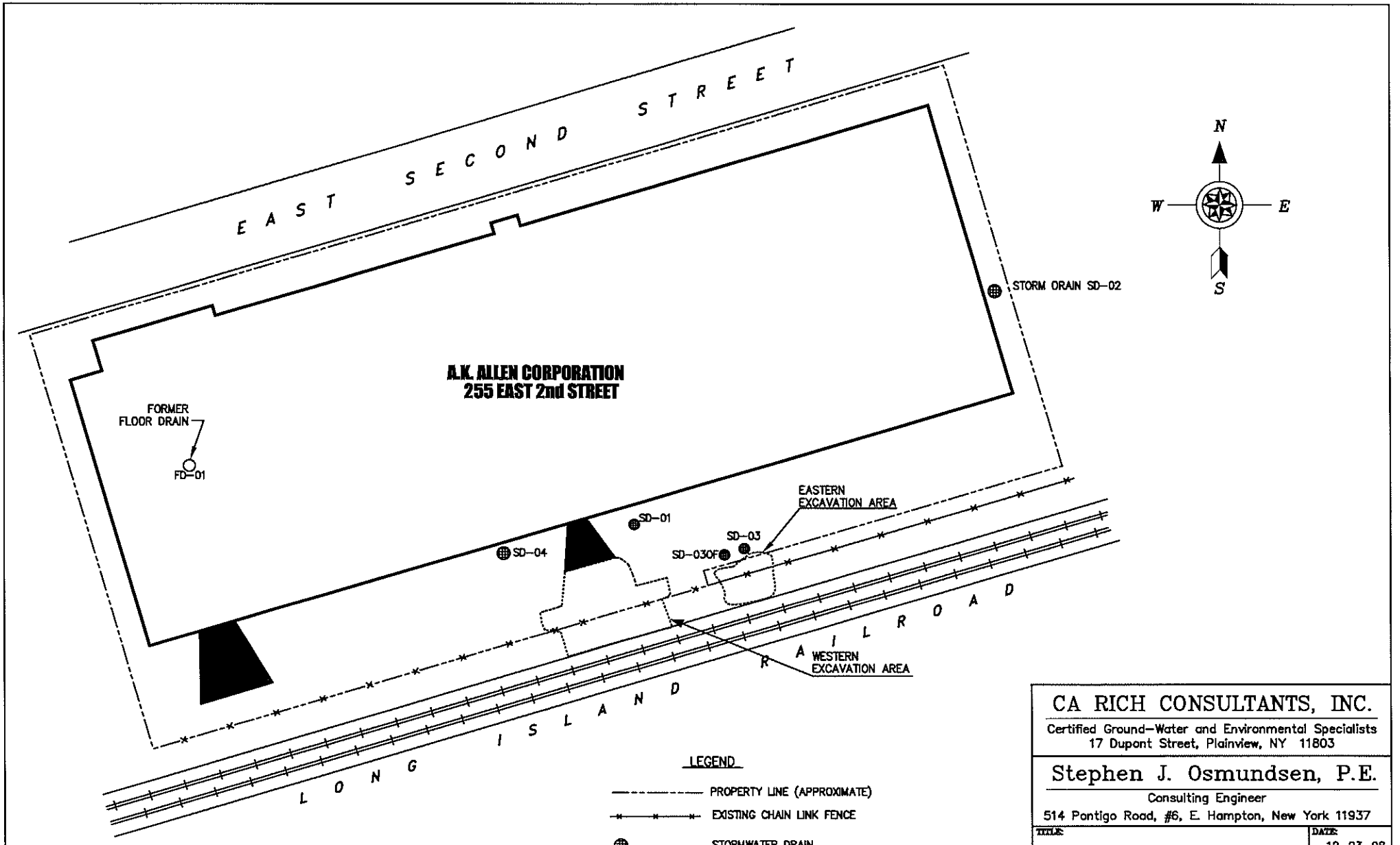
N

**CA RICH CONSULTANTS, INC.**

*Certified Groundwater and Environmental Specialists*

*17 Dupont Street, Plainview, NY 11803*

| | | |
|---|---|---|
| TITLE: **Site Location Map** | | DATE: **2/20/03** |
| | | SCALE: **AS SHOWN** |
| FIGURE: **1** | **A. K. Allen** **255 East 2nd Street** **Mineola, NY** | DRAWN BY: **L.C.R.** |
| DRAWING: | | APPR. BY: **E.A.W.** |

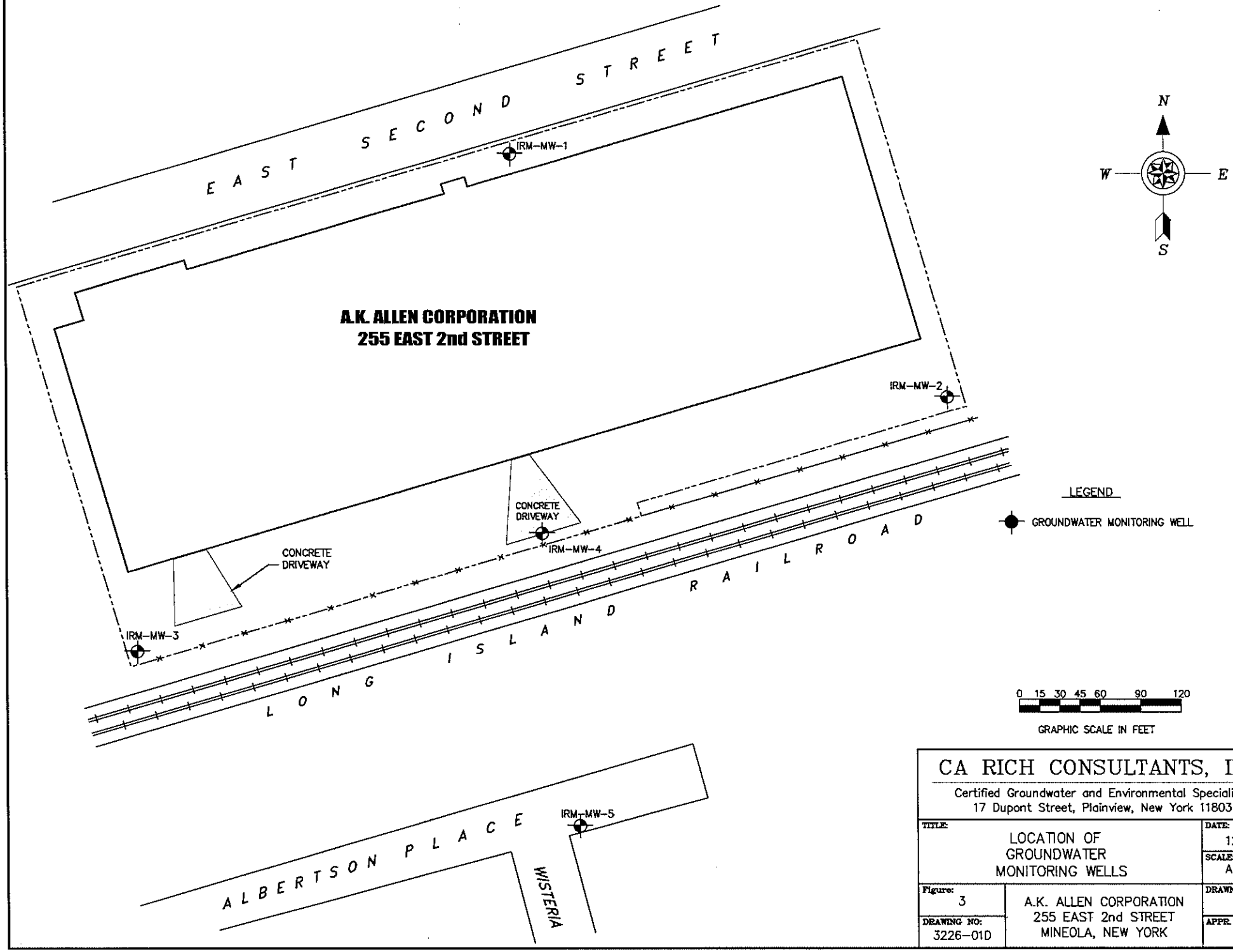




CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, NY 11803

Stephen J. Osmundsen, P.E.
Consulting Engineer
514 Pontigo Road, #6, E. Hampton, New York 11937

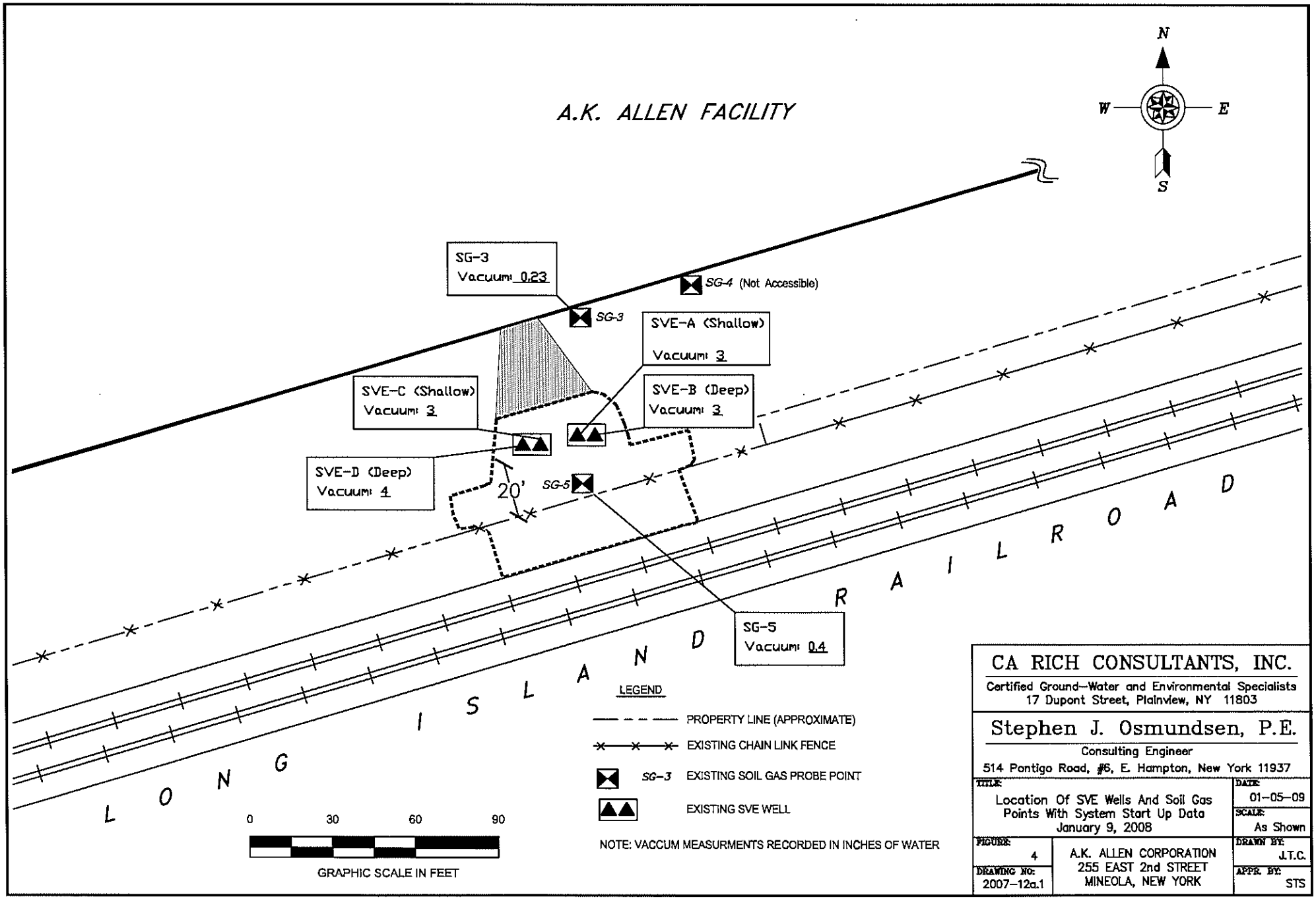

| | | |
|---|---|---|
| TITLE: SITE PLAN WITH CONTAMINANT SOURCE AREA | | DATE: 12-23-08 |
| | | SCALE: As Shown |
| FIGURE: 2 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 2008-1 | | APPR. BY: E.A.W. |




CA RICH CONSULTANTS, INC.

Certified Groundwater and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

| | | |
|---|---|---|
| TITLE: LOCATION OF GROUNDWATER MONITORING WELLS | | DATE: 12/23/08 |
| | | SCALE: As Shown |
| Figure: 3 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: S.T.M. |
| DRAWING NO: 3226-01D | | APPR. BY: E.A.W. |

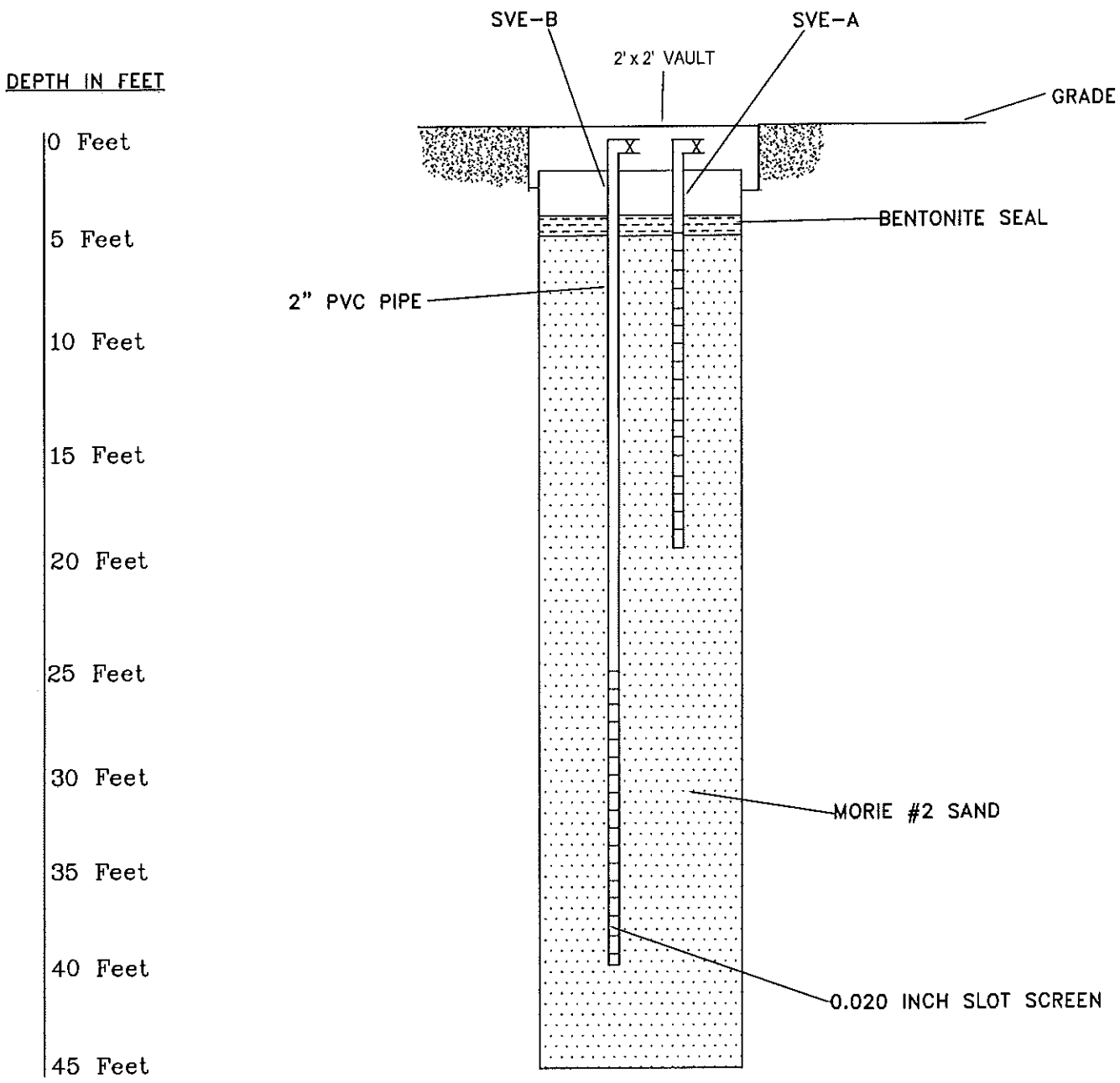



CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, NY 11803

Stephen J. Osmundsen, P.E.
Consulting Engineer
514 Pontigo Road, #6, E. Hampton, New York 11937

| | |
|---|---|
| TITLE: Location Of SVE Wells And Soil Gas Points With System Start Up Data January 9, 2008 | DATE: 01-05-09 |
| | SCALE: As Shown |
| FIGURE: 4 | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-12a.1 | APPR. BY: STS |

A.K. ALLEN CORPORATION
255 EAST 2nd STREET
MINEOLA, NEW YORK




LEGEND

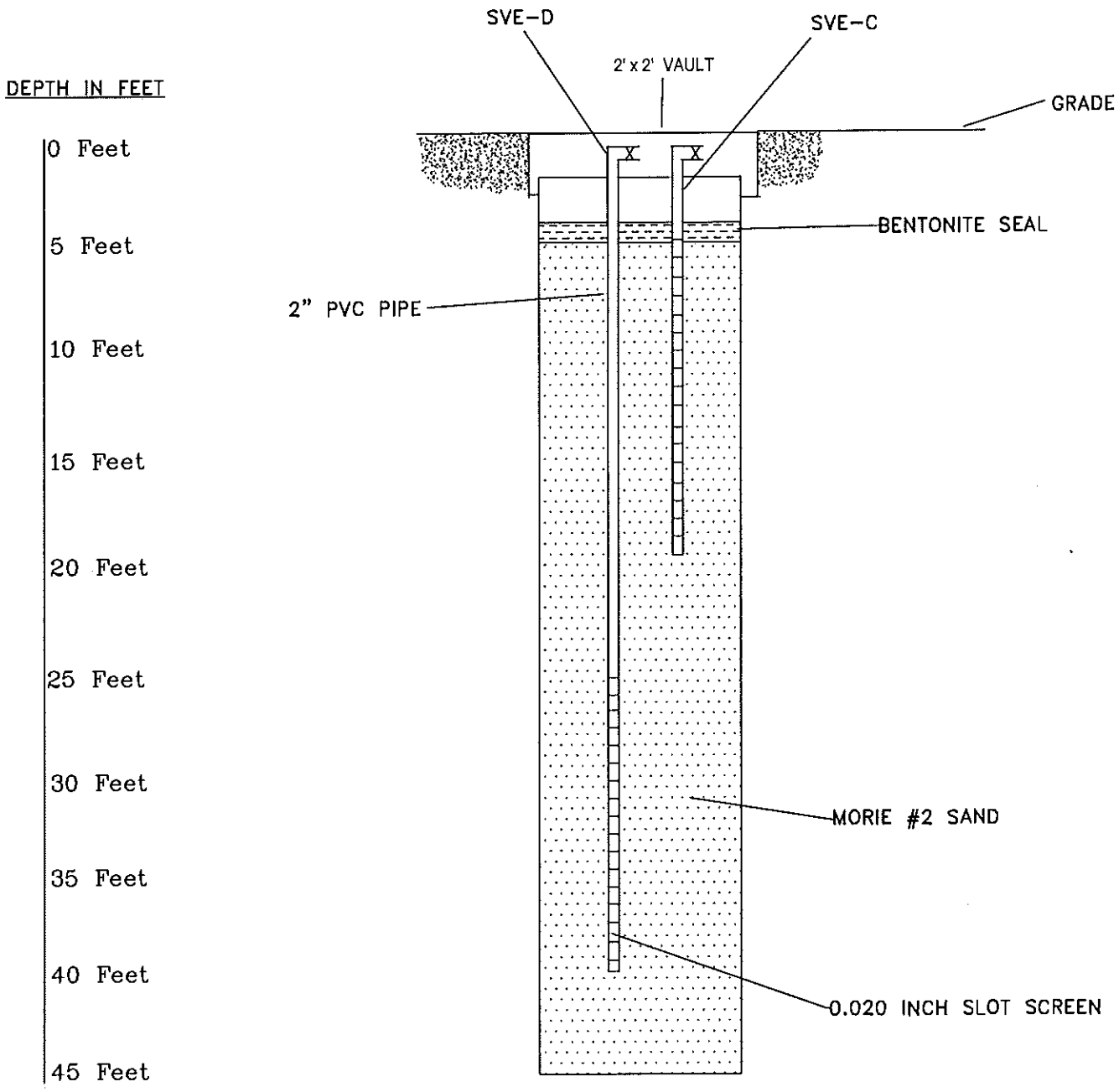
Bentonite Seal

#2 Sand

CA RICH CONSULTANTS, INC.

Certified Groundwater and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

| | | |
|---|---|---|
| TITLE: ON--SITE SVE WELLS A & B DETAILS | | DATE: 3/14/07 |
| | | SCALE: Not to Scale |
| FIGURE: 5 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-15a | | APPR. BY: E.A.W. |




LEGEND

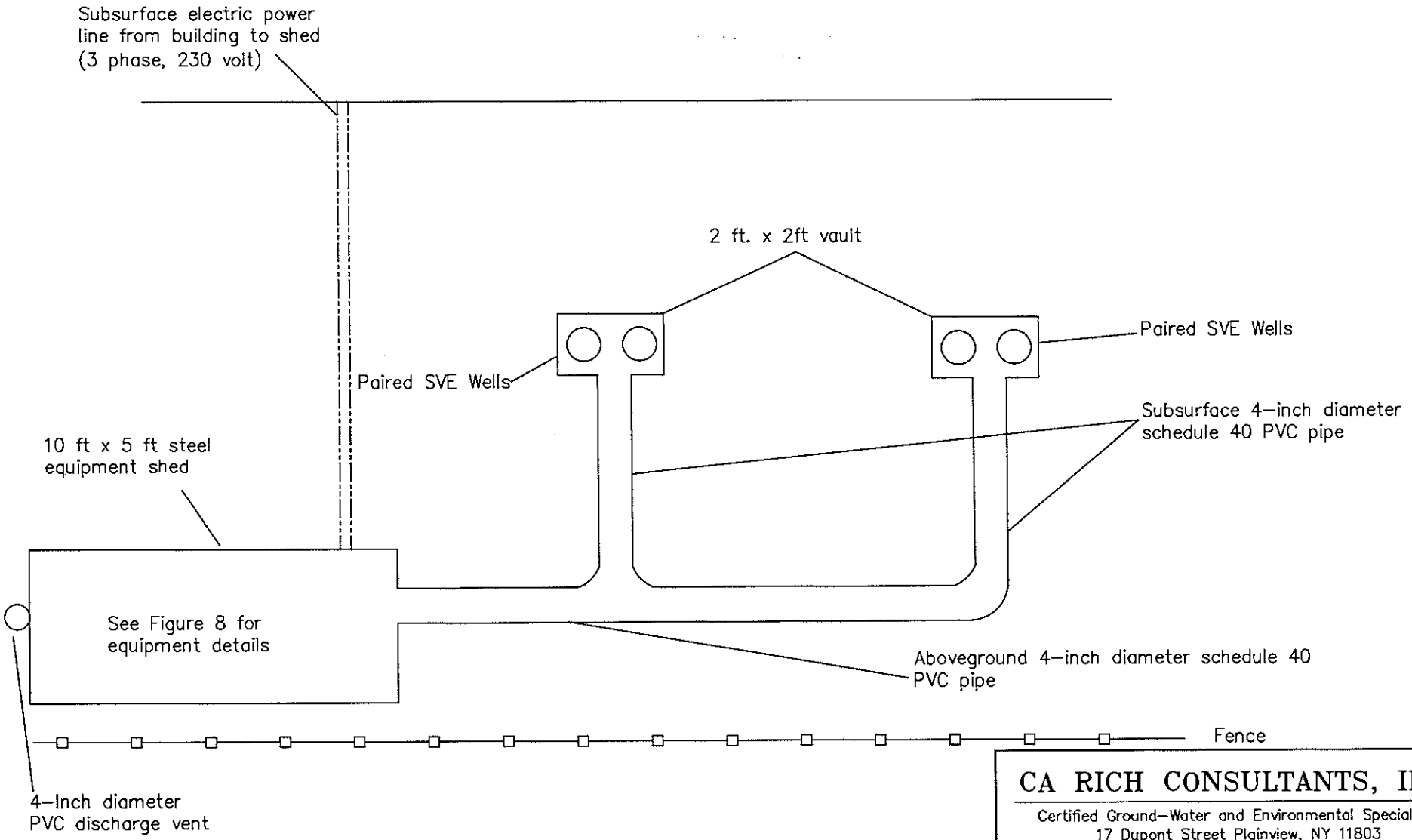
Bentonite Seal

#2 Sand

# CA RICH CONSULTANTS, INC.

Certified Groundwater and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

| | | |
|---|---|---|
| TITLE: ON-SITE SVE WELLS C & D DETAILS | | DATE: 1/8/09 |
| | | SCALE: Not to Scale |
| FIGURE: 6 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-15b | | APPR. BY: E.A.W. |





CA RICH CONSULTANTS, INC.

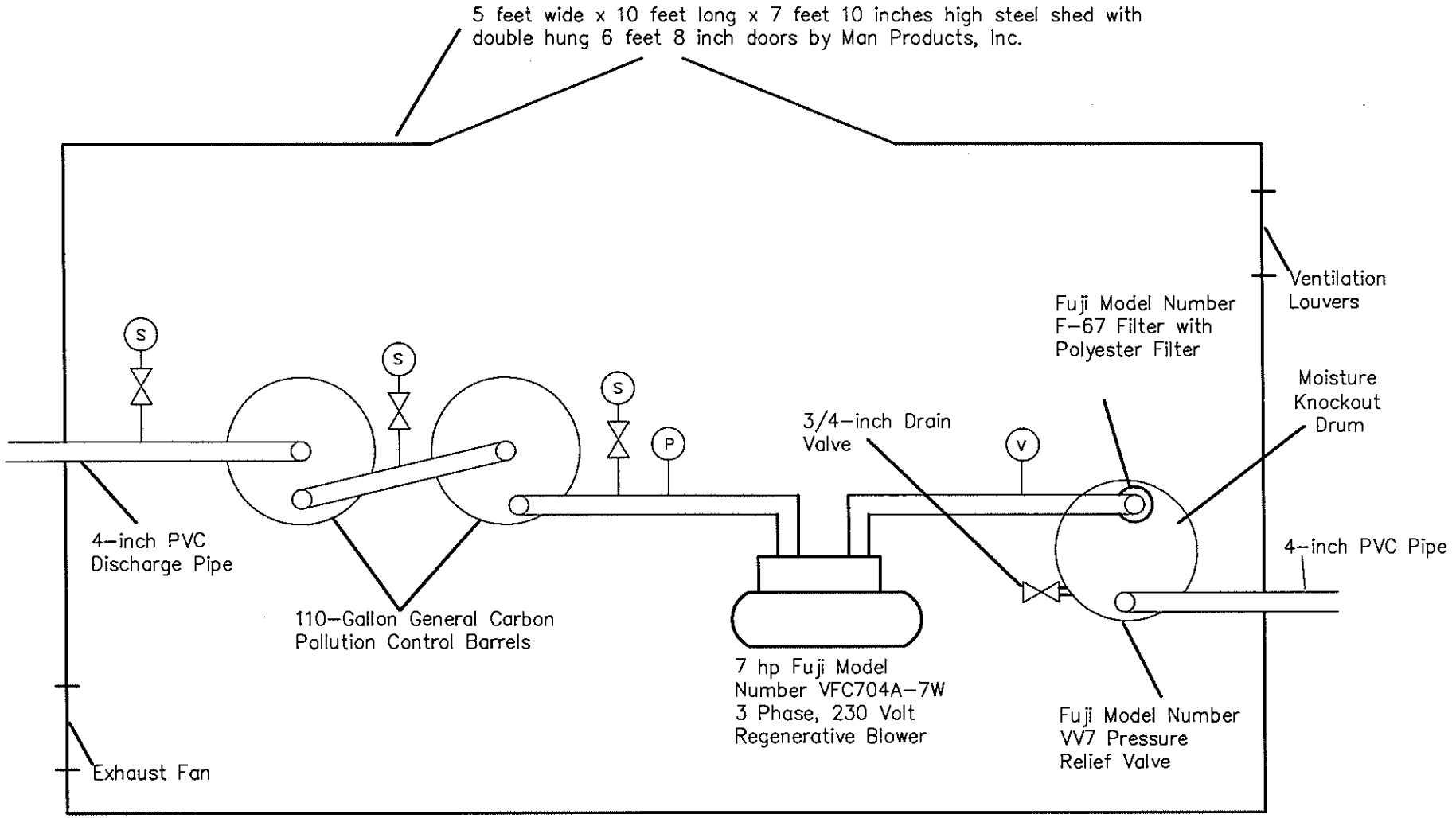
Certified Ground-Water and Environmental Specialists
17 Dupont Street Plainview, NY 11803

Stephen J. Osmundsen, P.E.

Consulting Engineer

514 Pontigo Road, #6, E. Hampton, New York 11937


| | | |
|---|---|---|
| TITLE: AS BUILT LAYOUT OF SVE TREATMENT UNIT | | DATE: 1/8/2009 |
| | | SCALE: NOT TO SCALE |
| FIGURE: 7 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-14a | | APPR. BY: S.J.O. |




**LEGEND**

(S) SAMPLE PORT

(V) VACUUM GAUGE (0 to 60 inches of water)

(P) PRESSURE GAUGE (0 to 60 inches of water)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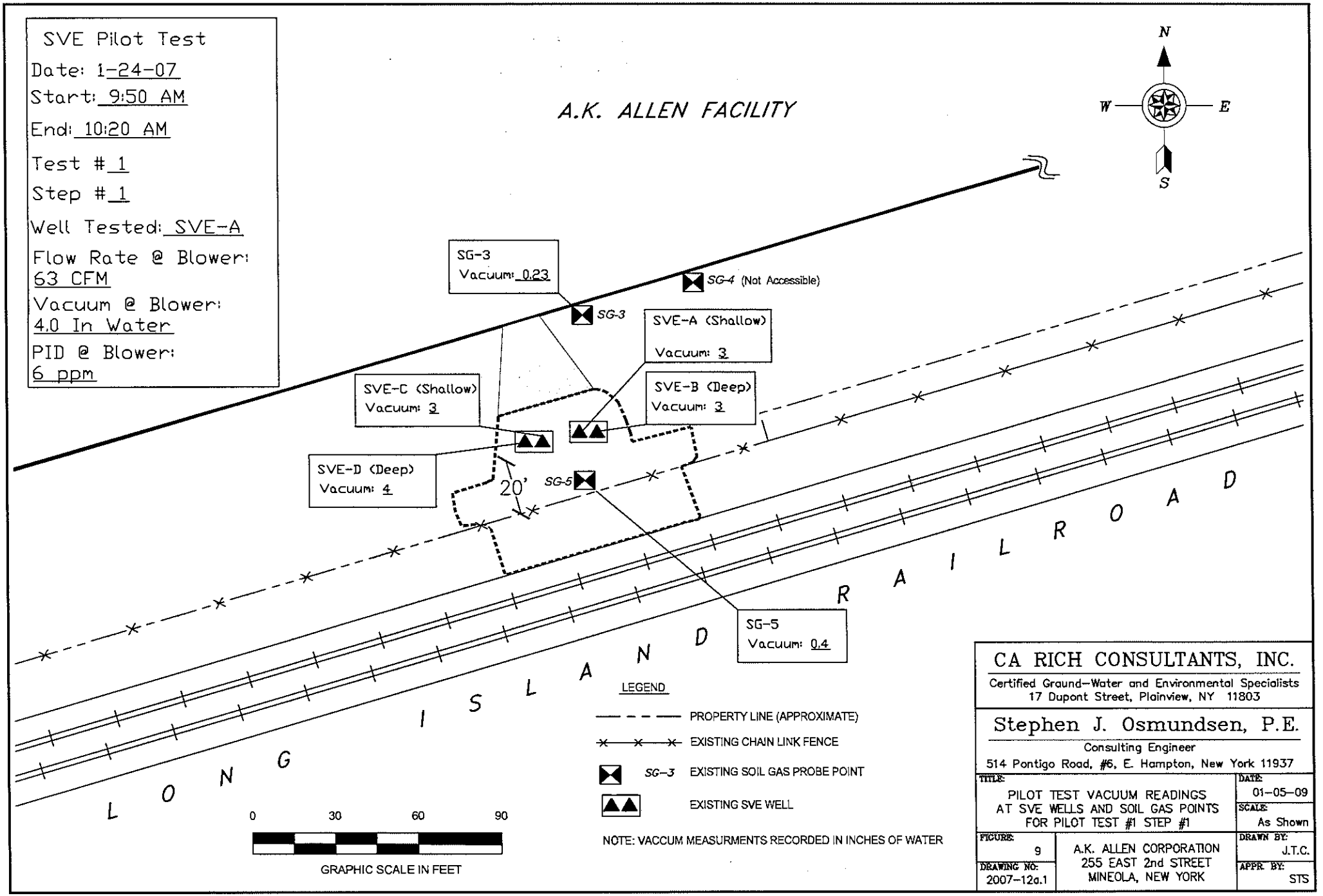
17 Dupont Street, Plainview, NY 11803

Stephen J. Osmundsen, P.E.

Consulting Engineer
514 Pontigo Road, #6, E. Hampton, New York 11937


| | | |
|---|---|---|
| TITLE: AS BUILT OF SVE EQUIPMENT | | DATE: 1/8/09 |
| | | SCALE: NOT TO SCALE |
| FIGURE: 8 | A.K. ALLEN CORPORATION 255 EAST 2nd STREET MINEOLA, NEW YORK | DRAWN BY: J.T.C. |
| DRAWING NO: 20D7-13A | | APPR. BY: S.J.O. |




CA RICH CONSULTANTS, INC.
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17 Dupont Street, Plainview, NY 11803
Stephen J. Osmundsen, P.E.
Consulting Engineer
514 Pontigo Road, #6, E. Hampton, New York 11937

| | |
|---|---|
| TITLE: PILOT TEST VACUUM READINGS AT SVE WELLS AND SOIL GAS POINTS FOR PILOT TEST #1 STEP #1 | DATE: 01-05-09 |
| | SCALE: As Shown |
| FIGURE: 9 | DRAWN BY: J.T.C. |
| DRAWING NO: 2007-12a.1 | APPR. BY: STS |

A.K. ALLEN CORPORATION
255 EAST 2nd STREET
MINEOLA, NEW YORK

# TABLE & GRAPHS

## TABLE 1

**Summary of Extracted Soil Vapor Samples**
**Soil Vapor Extraction System at A.K. Allen Company**
**255 East Second Street in Mineola, New York**
**NYSDEC Site # 1-30-100**

| Sample ID | AK-01 | AS-1/9/08 | AS-4/10/08 | AS-7/16/08 | AS-10/23/08 | | |
|---|---|---|---|---|---|---|---|
| Matrix | Soil Vapor | Soil Vapor | Soil Vapor | Soil Vapor | Soil Vapor | | |
| Location | Untreated | Untreated | Untreated | Untreated | Untreated | | |
| Date Sampled | 1/24/2007 | 1/9/2008 | 4/10/2008 | 7/16/2008 | 10/23/2008 | | |
| Comment | Pilot Test | Start-Up | 1st Quarter | 2nd Quarter | 3rd Quarter | | |
| ***Volatile Organic Compounds (USEPA Method TO-15)*** | | | | | | | |
| Parameters | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | | |
| 1,1 Dichloroethane | 190.40 | 56.71 | 32.00 | 64.82 | 40.51 | | |
| 1,1 Dichloroethene | 34.14 | < 0.79 | 1.99 | 3.97 | < 0.79 | | |
| 1,2 Dibromoethane | < 1.54 | < 1.54 | < 1.54 | < 1.54 | < 1.54 | | |
| 1,2 Dichlorobenzene (v) | < 1.20 | < 1.20 | < 1.20 | < 1.20 | < 1.20 | | |
| 1,2 Dichloroethane | < 0.81 | < 0.81 | < 0.81 | < 0.81 | < 0.81 | | |
| 1,2 Dichloropropane | < 0.92 | < 0.92 | < 0.92 | < 0.92 | < 0.92 | | |
| 1,2-Dichlorotetrafluoroethane | < 1.40 | < 1.40 | < 1.40 | < 1.40 | < 1.40 | | |
| 1,3 Butadiene | < 2.21 | < 2.21 | < 2.21 | < 2.21 | < 2.21 | | |
| 1,3 Dichlorobenzene (v) | < 1.20 | < 1.20 | < 1.20 | < 1.20 | < 1.20 | | |
| 1,4 Dichlorobenzene (v) | < 1.20 | < 1.20 | < 1.20 | < 1.20 | < 1.20 | | |
| 1,4-Dioxane | < 3.60 | < 3.60 | < 3.60 | 6.48 | < 3.60 | | |
| 111 Trichloroethane | 4476.40 | 764.26 | 70.97 | 262.03 | 191.07 | | |
| 112 Trichloroethane | < 1.09 | < 1.09 | < 1.09 | < 1.09 | < 1.09 | | |
| 1122Tetrachloroethane | < 1.37 | < 1.37 | < 1.37 | < 1.37 | < 1.37 | | |
| 124-Trimethylbenzene | 5.90 | < 0.98 | < 0.98 | < 0.98 | < 0.98 | | |
| 135-Trimethylbenzene | 1.97 | < 0.98 | < 0.98 | < 0.98 | < 0.98 | | |
| 2,2,4-Trimethylpentane | < 0.93 | < 0.93 | < 0.93 | < 0.93 | < 0.93 | | |
| 2-Hexanone | < 2.05 | < 2.05 | < 0.82 | < 2.05 | < 2.05 | | |
| 3-Chloropropene | < 1.57 | < 1.57 | < 1.57 | < 1.57 | < 1.57 | | |
| Acetone | 7.37 | 171.22 | 4.52 | 7.61 | < 2.38 | | |
| Acrylonitrile | < 2.17 | < 2.17 | < 2.17 | < 2.17 | < 2.17 | | |
| Benzene | 1.60 | < 0.64 | < 0.64 | < 0.64 | < 0.64 | | |
| Banzyl Chloride | < 25.90 | < 25.90 | < 25.90 | < 25.90 | < 25.90 | | |
| Bromodichloromethane | < 1.33 | < 1.33 | < 1.33 | < 1.33 | < 1.33 | | |
| Bromoform | < 2.07 | < 2.07 | < 2.07 | < 2.07 | < 2.07 | | |
| Bromomethane | < 3.88 | < 3.88 | < 3.88 | < 3.88 | < 3.88 | | |
| c-1,2-Dichloroethene | 83.31 | < 1.59 | 4.36 | 9.52 | < 1.59 | | |
| c-1,3Dichloropropene | < 0.91 | < 0.91 | < 0.91 | < 0.91 | < 0.91 | | |
| Carbon disulfide | 40.43 | < 0.62 | < 0.62 | < 0.62 | < 0.62 | | |
| Carbon Tetrachloride | < 1.26 | < 1.26 | < 1.26 | < 1.26 | < 1.26 | | |
| Chlorobenzene | < 0.92 | < 0.92 | < 0.92 | < 0.92 | < 0.92 | | |
| Chlorodibromomethane | < 1.69 | < 1.69 | < 1.69 | < 1.69 | < 1.69 | | |
| Chloroethane | < 5.28 | < 5.28 | < 5.28 | < 5.28 | < 5.28 | | |
| Chloroform | < 0.97 | < 0.97 | < 0.97 | < 0.97 | < 0.97 | | |
| Chloromethane | < 0.83 | < 0.83 | < 0.83 | < 0.83 | < 0.83 | | |
| Cyclohexane | < 1.72 | < 1.72 | < 1.72 | < 1.72 | < 1.72 | | |
| Dichlordifluoromethane | < 4.95 | < 4.95 | < 4.95 | < 4.95 | < 4.95 | | |
| Ethyl Acetate | < 18.01 | < 18.01 | < 18.01 | < 18.01 | < 18.01 | | |
| Ethyl alcohol | 62.14 | < 3.77 | < 3.77 | < 3.77 | < 3.77 | | |
| Ethyl Benzene | 2.60 | < 0.87 | < 0.87 | < 0.87 | < 0.87 | | |
| Freon 113 | < 1.53 | < 1.53 | < 1.53 | < 1.53 | < 1.53 | | |
| Heptane | < 2.05 | < 2.05 | < 2.05 | < 2.05 | < 2.05 | | |
| Hexachlorobutadiene | < 2.13 | < 2.13 | < 2.13 | < 2.13 | < 2.13 | | |
| Hexane | < 1.76 | < 1.76 | < 1.76 | < 1.76 | < 1.76 | | |
| Isopropyl Alcohol | < 12.28 | < 12.28 | < 12.28 | < 12.28 | < 12.28 | | |
| m + p Xylene | 10.00 | < 0.87 | < 0.87 | < 0.87 | < 0.87 | | |
| Methyl Ethyl Ketone | < 2.95 | 471.36 | < 2.95 | < 2.95 | < 2.95 | | |
| Methylene Chloride | 2.78 | < 0.69 | < 0.69 | < 0.69 | < 0.69 | | |
| Methylisobutylketone | < 4.10 | < 4.10 | < 4.10 | < 4.10 | < 4.10 | | |
| o Xylene | 4.35 | < 0.87 | < 0.87 | < 0.87 | < 0.87 | | |
| p-Ethyltoluene | 4.91 | < 0.98 | < 0.98 | < 0.98 | < 0.98 | | |
| Propylene | < 1.72 | < 1.72 | < 1.72 | < 1.72 | < 1.72 | | |
| Styrene | < 0.85 | < 0.85 | < 0.85 | < 0.85 | < 0.85 | | |
| t-1,2-Dichloroethene | 2.78 | < 0.79 | < 0.79 | 1.98 | < 0.79 | | |
| t-1,3Dichloropropene | < 0.91 | < 0.91 | < 0.91 | < 0.91 | < 0.91 | | |
| ter.ButylMethylEther | < 0.70 | < 0.70 | < 0.70 | < 0.70 | < 0.70 | | |
| tert. Butyl Alcohol | < 6.06 | < 6.06 | < 6.06 | < 6.06 | < 6.06 | | |
| Tetrachloroethene | 34604.00 | 16963.00 | 57.67 | 1357.00 | 814.20 | | |
| Tetrahydrofuran | < 5.89 | < 5.89 | < 5.89 | < 5.89 | < 5.89 | | |
| Toluena | 12.43 | 2.26 | < 0.75 | < 0.75 | < 0.75 | | |
| Trichloroethene | 166.56 | 69.85 | 4.84 | 112.83 | 69.85 | | |
| Trichlorofluoromethane | 2.25 | < 1.12 | < 1.12 | < 1.12 | < 1.12 | | |
| Vinyl Acetate | < 1.76 | < 1.76 | < 1.76 | < 1.76 | < 1.76 | | |
| Vinyl Bromide | < 0.88 | < 0.88 | < 0.88 | < 0.88 | < 0.88 | | |
| Vinyl Chloride | < 1.28 | < 1.28 | < 1.28 | < 1.28 | < 1.28 | | |

*Notes:*

*Concentrations reported in micrograms per cubic meter (ug/m3).*

*< Indicates less than the method detection limit for specific compound.*

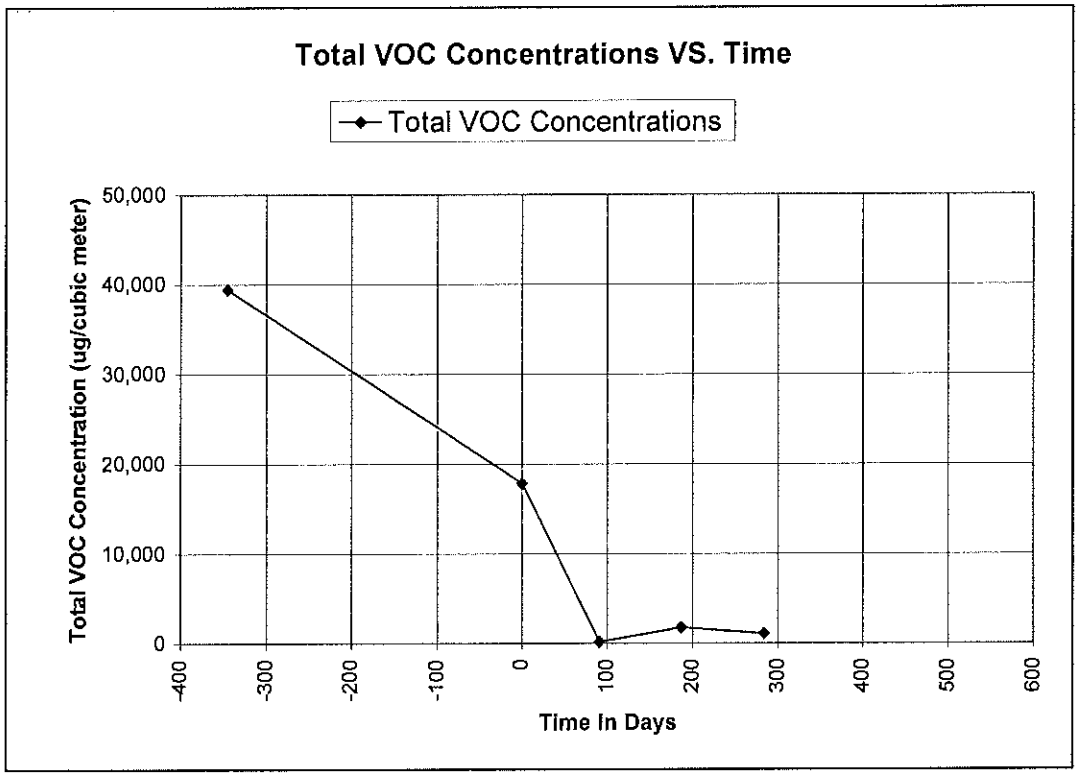
A.K. Allen Company, Inc.
255 East Second Street
Mineola, New York
Site No. 1-30-100

Soil Vapor Quality Analytical Data in ug/cubic meter

SVE SYSTEM

| Date | Days Since System Start Up | PCE | TCE | 1,1,1 - TCA | 1,1 - DCA | Total VOC's | Comments |
|---|---|---|---|---|---|---|---|
| 1/24/2007 | -345 | 34604 | 166 | 4476 | 190 | 39436 | Pilot Test |
| 1/9/2008 | 0 | 16963 | 69 | 764 | 56 | 17852 | System start-up Baseline |
| 4/10/2008 | 91 | 58 | 5 | 71 | 32 | 166 | 1st Qtr. Sample; Shallow Points Only |
| 7/16/2008 | 187 | 1357 | 112 | 262 | 64 | 1795 | 2nd Qtr. Sample; Shallow Points Only |
| 10/23/2008 | 284 | 814 | 70 | 191 | 41 | 1116 | 3nd Qtr. Sample; Shallow Points Only |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Notes:
Time 0 = System activation date- 1/09/08
Air samples were collected using Summa canisters.
Results reported in micro grams per cubic meter (ug/m3).



## APPENDIX I PCB DEED RESTRICTION NOTICE

# **** Electronically Filed Document ****

Instrument Number: 2024-28120 Originator CORPORATION SERVICE COMPANY

Recorded As: EX-D06 - DEED AGREEM

Recorded On: May 08, 2024

Recorded At: 10:53:04 am Receipt Number: 3180016

Number of Pages: 11 Processed By: 001 AAR

Book-VI/Pg: Bk-D VI-14495 Pg-323

Total Rec Fee(s): $695.00

** Examined and Charged as Follows **

| | | | |
|---|---|---|---|
| 06 - DEED AGREEMENT | $ 95.00 | EX-Blocks - Deeds - $300 | $ 600.00 |

Property Information:

| Section | Block | Lot | Unit | Town Name |
|---|---|---|---|---|
| 9 | 437 | 466 | | N. HEMPSTEAD |
| 9 | 437 | 467 | | N. HEMPSTEAD |
| 9 | 663 | 4A | | N. HEMPSTEAD |
| 9 | 663 | 4B | | N. HEMPSTEAD |
| 9 | 663 | 5 | | N. HEMPSTEAD |

**********THIS PAGE IS PART OF THE INSTRUMENT **********

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

NASSAU COUNTY STATE OF NEW YORK

Maureen O'Connell

County Clerk Maureen O'Connell

**DECLARATION OF RESTRICTIVE COVENANTS and**
**NOTICE OF RESTRICTION PURSUANT TO 40 CFR § 761.61**

This Declaration of Restrictive Covenants and Notice of Restriction Pursuant to 40 CFR § 761.61 ("Declaration and Notice of Restriction") is made as of this ____ day of _____, 2024, by Steel Allen Air LLC ( "Declarant"), having an office at 999 South Oyster Bay Road, Suite 200, Bethpage, New York 11714, together with its successors and assigns.

## RECITALS

**WHEREAS**, Declarant the owner in fee simple of land, together with buildings and improvements thereon, located at 225 & 255 East Second Street, Village of Mineola, Town of North Hempstead, Nassau County, New York, more fully described on Exhibit "A" which is attached hereto and made a part hereof (the "Property"). The Property includes the area shown on Exhibit "B" which is attached hereto and made a part hereof;

**WHEREAS**, the Property has been designated as an Inactive Hazardous Waste Disposal Site under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York ("ECL"), and, as of the date of this Declaration and Notice of Restriction, is listed on the Registry of Inactive Hazardous Waste Disposal Sites in New York State as the "A.K. Allen Site," State Site No. 130100;

**WHEREAS**, the Property is subject to an Order on Consent and Administrative Settlement entered between the former fee title owners of the Property, Alkier Steel, LLC and Steel Mineola Second Street, LLC (collectively, the "Former Owners"), and the New York State Department of Environmental Conservation ("NYSDEC"), relating to environmental investigations and remedial response actions to address environmental conditions at the Property (Index# CO 1-20220106-6) (the "Consent Order");

**WHEREAS**, Declarant has assumed all responsibilities and obligations imposed by the Consent Order;

**WHEREAS**, in connection with the Consent Order, NYSDEC approved, and Former Owners subsequently recorded in July 2021, an environmental easement for the Property (the "Environmental Easement") to manage long-term engineering and institutional controls imposed on the Property pursuant to the requirements of NYSDEC and the ECL;

**WHEREAS**, one or more remedial response actions have been conducted at the Property pursuant to the discovery of soils impacted by polychlorinated biphenyls ("PCBs") that are federally regulated as PCB remediation waste under 40 CFR Part 761. Said response actions included excavation and off-site disposal of soils that have been impacted by PCBs. Specifically, remedial response activities consisted of excavating and off-site disposal of PCB-impacted soils in: (i) 2003 at a floor drain within the western portion of the building; (ii) 2003 and 2007 from two areas on the south side of the Site adjacent to, and extending into the Long Island Railroad ("LIRR") right-of-way; (iii) 2020 from beneath the building floor slab in several areas to the maximum extent without undermining a building column footer and/or a bearing wall footing; and (iv) 2024 from

within and beneath a former parking lot stormwater drywell on the south side of the Site. All PCB-impacted soils excavated from the Property have been properly disposed at a RCRA Subtitle C landfill, and all excavated areas have been filled with clean fill material;

**WHEREAS**, seven areas remain at the Property where PCBs in soil remain at concentrations exceeding 1.0 mg/kg (milligrams per kilogram or also known as 1 "part per million" or "ppm") but below 25.0 mg/kg;

**WHEREAS**, the portions of the Property where PCBs remain at levels greater than 1 ppm but below 25 ppm are more fully described and shown on Exhibit "C" which is attached hereto and made a part hereof (the "PCB Affected Areas");

**WHEREAS**, to prevent human exposure to said PCBs at the Property, certain restrictions have been imposed on the PCB Affected Areas at the Property, as set forth below; and

**WHEREAS**, this Declaration and Notice of Restriction has been provided to inform all interested parties of such restrictions, as required by the United States Environmental Protection Agency ("EPA") in accordance with 40 CFR §761.61(a)(8).

**NOW THEREFORE**, notice is hereby given that:

1. The PCB Affected Areas contain concentrations of PCBs above 1 ppm but below 25 ppm that remain in soils beneath the building or parking lot areas at the Property. For avoidance of doubt, the PCB Affected Areas pertain only to certain subgrade portions of the Property as depicted in Exhibit "C"; the Affected Areas do not include or restrict any other land or structures that may be part of the Property.

2. The PCB Affected Areas are restricted to use as a low occupancy area as defined in 40 CFR § 761.3. The federal cleanup level for PCB remediation waste remaining in low occupancy areas is less than or equal to 25 ppm.

3. The PCB Affected Areas shall remain fully subgrade and covered by clean soils and restored ground surface coverings, i.e., building floor concrete slab, or parking lot concrete slab or asphalt, at the Property.

4. If future conditions arise in which the PCB Affected Areas or portions of the PCB Affected Areas require removal from their current locations, then those PCB Affected Areas or portions of the PCB Affected Areas shall be removed from the Property as PCB remediation waste in accordance with 40 CFR Part 761.

5. If future conditions arise in which there is an actual or proposed change in use of the PCB Affected Areas, and the exposure of people or animal life in or at the PCB Affected Areas could reasonably be expected to increase, resulting in a change in status from a low occupancy area to a high occupancy area, Declarant shall clean up the PCB Affected Areas in accordance with the high occupancy area cleanup levels in paragraphs (a)(4)(i) through (a)(4)(iv) of 40 CFR § 761.3.

6. It is the intention of Declarant that the restrictions set forth herein shall be construed to touch and concern the PCB Affected Areas (and only the PCB Affected Areas) and to run with the land, in perpetuity, and shall become effective when executed under seal and acknowledged by the undersigned and recorded with the Nassau County Clerk, subject to modification or removal in accordance with the provisions of 40 CFR § 761.61 or other applicable laws, rules, or regulations, as the same may be amended. The restrictions set forth herein shall not apply to or burden any land outside the boundaries of the Property.

7. In addition to any rights already possessed by EPA, this Declaration and Notice of Restriction grants to EPA, including its authorized employees, agents, representatives and independent contractors and subcontractors, a right of access to the Property, without cost and upon presentation of credentials, for the purposes of monitoring and enforcing this Declaration and Notice of Restriction.

8. The terms and conditions herein may not be amended or terminated except by a written instruction duly executed by the owner of the PCB Affected Areas at the time of the amendment or termination, and EPA, which instrument is duly recorded with the Nassau County Clerk.

9. The current owner of the PCB Affected Areas may petition the EPA to amend some or all of the restrictions, agreements, and obligations herein. The burden is upon the party seeking approval of the modification or removal of the restriction to show that the restriction is no longer necessary to protect public health and safety and the environment. EPA may agree to remove or modify restrictions that, in the exercise of its sole discretion, EPA determines to be no longer necessary to protect public health or the environment.

10. Nothing in this Declaration and Notice of Restriction shall impact the rights granted to NYSDEC, or modify the restrictions, agreements and obligations, under the Environmental Easement.

11. Any future modifications under this Declaration and Notice of Restriction shall not impact the rights, restrictions, agreements and obligations in the Environmental Easement.

12. Nothing in this Declaration and Notice of Restriction shall limit or otherwise affect EPA's rights under the Toxics Substances Control Act, 15 U.S.C. 2601 et seq., or other federal law, or shall constitute a waiver of any rights the State of New York may have pursuant to the ECL, regulations and/or relevant provisions of statutory or common law.

13. Declarant shall deliver to EPA and NYSDEC a true copy of this Declaration and Notice of Restriction, and a signed certification pursuant to 40 CFR § 761.61(a)(8)(i), within sixty (30) days of the same being recorded with the Nassau County Clerk in the manner prescribed by Article 9 of the Real Property Law.

14. Nothing contained herein will result in a forfeiture or reversion of Declarant's title in any respect.

**IN WITNESS WHEREOF**, the undersigned has executed this instrument the day written below.

**Steel Allen Air LLC**

By: _____

Name: Glenn Lostritto

Title: Principal

Date: 4/29/2024

stewart title

STATE OF NEW YORK :
: ss.:
COUNTY OF Nassau :

On the 29 day of April in the year 2024 before me, the undersigned, personally appeared Gina Lotrillo, 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.

Rosemarie Noto
Notary Public

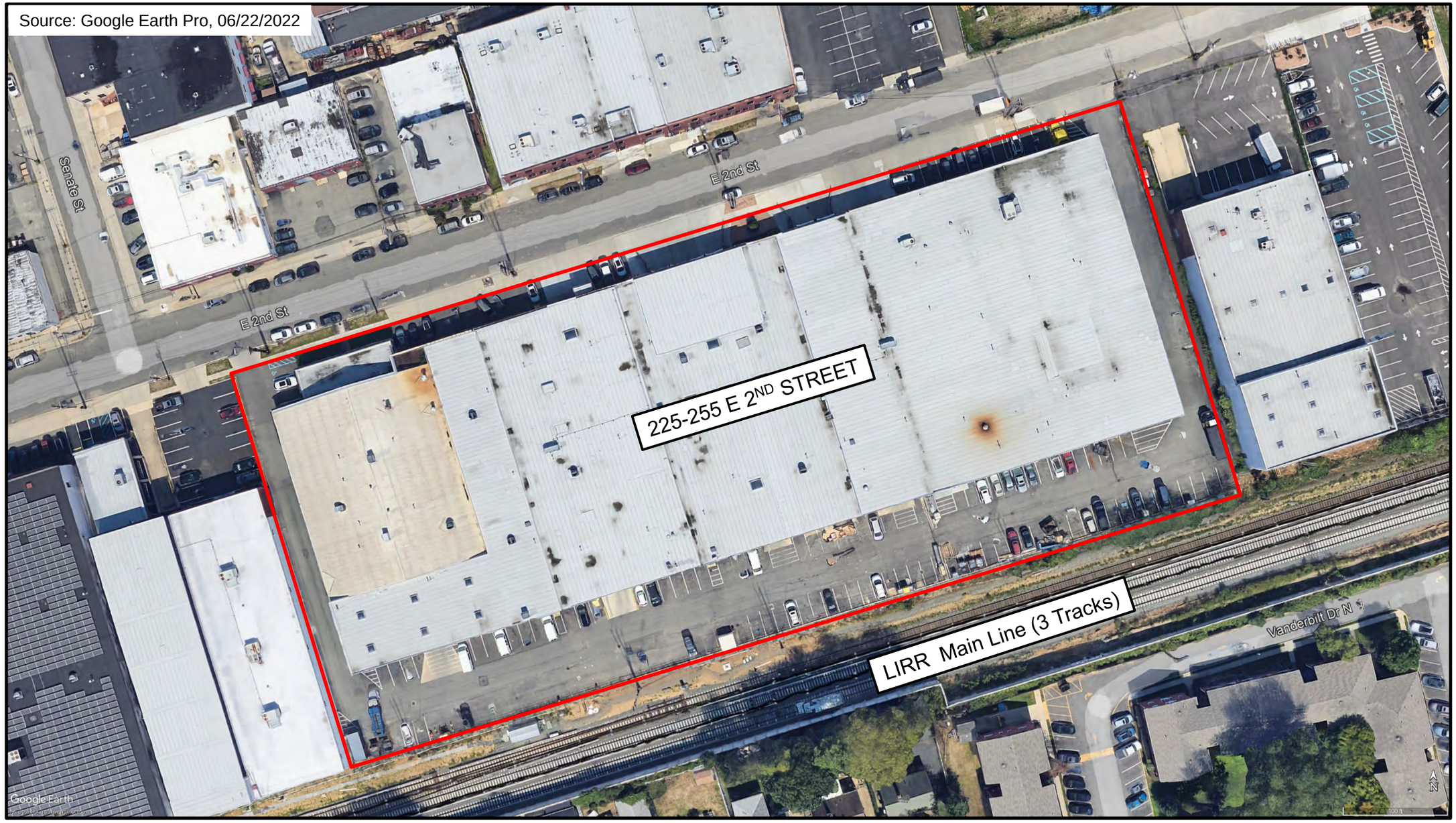
Rosemarie Noto
Notary Public - State of NY
No. 01NO6317227
Qualified in Suffolk County
Expires 12/29/26

EXHIBIT “A”
Property Description

Tax Map/Parcel Nos.: Section 9, Block 437 Lots 466 & 467 and Section 9, Block 663, Lots 4A, 4B & 5, Nassau County, New York
Owner: Alkier Steel, LLC; Steel Mineola Second Street, LLC.

EXHIBIT “B”
Property Map

Source: Google Earth Pro, 06/22/2022




Approximate Property Boundary

Approximate Distance In Feet

0 50 100 200

ERM

**PROPERTY MAP**

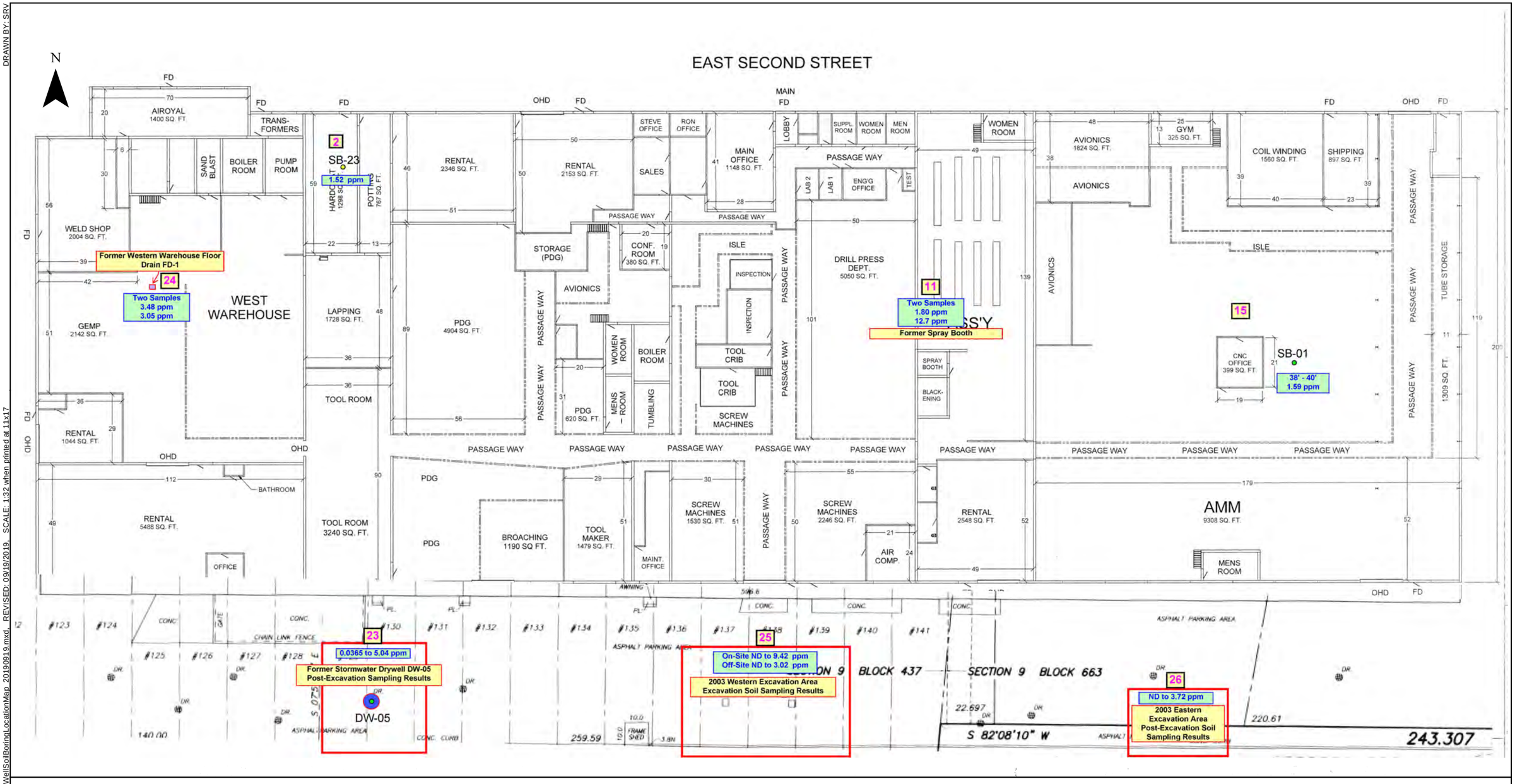
**225-255 E 2nd Street, Mineola, New York**

**EXHIBIT B**

EXHIBIT “C”
PCB Affected Areas

DRAWN BY: SRV

J:\Projects\Misc\Steel Equities_MXD\Figure1-DryWellSoilBoringLocationMap_20190919.mxd, REVISED: 09/19/2019, SCALE: 1:32 when printed at 11x17




## Legend

- Sub-slab Shallow Soil Sample (0-12")
- Geoprobe Boring (Depth Varies)
- Storm Water Drywell

ND = Not Detected

ppm = mg/kg = milligrams per kilogram

Notes: 1. Not to Scale

**Former Areas of Concern**

2. Hard Coating (Plating) Room
11. Spray Booths
15. Eastern Portion of Building Constructed Over Backfilled Former Sand Mine
23. Storm Water Drywell DW-05
24. Floor Drain FD-1 In Western End of Building
25. Western Excavation Area - Former Drum Storage
26. Eastern Excavation Area - Former Drum Storage

# Exhibit C
## Locations Where PCB Concentrations >1ppm Currently Remain On-Site

225-255 E 2nd St
Mineola, New York

Environmental Resources Management
www.erm.com
ERM

# APPENDIX J EXCAVATION WORK PLAN

# APPENDIX I
# EXCAVATION WORK PLAN (EWP)

## 1. NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the Department. Currently, this notification will be made to:

| Name | Phone/Email Address |
|---|---|
| Alexander Klein<br>NYSDEC Project Manager | 518-402-9622/ alexander.klein@dec.ny.gov |
| Robert DeCandia<br>NYSDEC Supervisor | 518-402-9693/ rob.decandia@dec.ny.gov |
| Mark S. Sergott, P.G.<br>NYSDOH Project Manager | 518 402-7860/ mark.sergott@health.ny.gov |

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre- construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan, in electronic format;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

## 2. SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g., photoionization detector) soil screening will be performed during all excavations into known or potentially contaminated material (remaining contamination) or a breach of the cover system. A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will perform the screening. Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Sections 6.0 and 7.0 of this EWP.

## 3. SOIL STAGING METHODS

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

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

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

## 4. MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site. A site utility stakeout will be completed for all utilities prior to any ground intrusive activities at the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements). Trucks transporting contaminated soil must have either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides.

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

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

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials. Material accumulated from the street cleaning and egress cleaning activities will be disposed off-site at a permitted landfill facility in accordance with all applicable local, State, and Federal regulations.

## 5. MATERIALS TRANSPORT OFF-SITE

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

Material transported by trucks exiting the site will be secured with either tight- fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes will be established and followed. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; [(g) community input [where necessary]

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

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

## 6. MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed off-site in a permitted facility in accordance with all local, State and Federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC project manager. Unregulated off-site management of materials from this site will not occur without formal NYSDEC project manager approval.

Off-site disposal locations for excavated soils will be identified in the pre- excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, (e.g., hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C&D debris recovery facility). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include, but will not be limited to: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled consistent with 6 NYCRR Parts 360, 361, 362, 363, 364 and 365. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 360-15 registered or permitted facility).

## 7. MATERIALS RESUSE ON-SITE

The qualified environmental professional, as defined in 6 NYCRR Part 375, will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material (i.e. contaminated) does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within the cover system or within landscaping berms. Contaminated on-site material may only be used beneath the site cover as backfill for subsurface utility lines with prior approval from the DEC project manager.

Proposed materials for reuse on-site must be sampled for full suite analytical parameters including per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. The sampling frequency will be in accordance with DER-10 Table 5.4(e)10 unless prior approval is obtained from the NYSDEC project manager for modification of the sampling frequency. The analytical results of soil/fill material testing must meet the site use criteria presented in NYSDEC DER-10 Appendix 5 – Allowable Constituent Levels for Imported Fill or Soil for all constituents listed, and the current NYSDEC PFAS guidance (November 2022 NYSDEC guidance for Per- And Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs) values. Approvals for modifications to the analytical parameters must be obtained from the NYSDEC project manager prior to the sampling event.

Soil/fill material for reuse on-site will be segregated and staged as described in Sections 2.0 and 3.0 of this EWP. The anticipated size and location of stockpiles will be provided in the 15-day notification to the NYSDEC project manager. Stockpile locations will be based on the location of site excavation activities and proximity to nearby site features. Material reuse on-site will comply with requirements of NYSDEC DER-10 Section 5.4(e)4. Any modifications to the requirements of DER-10 Section 5.4(e)4 must be approved by the NYSDEC project manager.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

## 8. FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed off-site at a permitted facility in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

## 9. COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the Record of Decision. The demarcation layer, consisting of orange snow fencing material or equivalent material will be replaced to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation this will constitute a modification of the cover element of the remedy and the upper surface of the 'Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the SMP.

## 10. BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional, as defined in 6 NYCRR Part 375, and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Backfill brought on-Site to fill excavations will be from a pre-determined source of clean backfill documented with analytical samples in conformance with the requirements of Chapter 5.4 of DER-10 (Table 5.4(e)10), and current November 2022 NYSDEC guidance for Per- And Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs .

DER-10 requires testing for full list Target Compound List (TCL) organic compounds and Target Analyte List (TAL) inorganics including 23 metals plus cyanide. The PFAS guidance states that testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS will be compared to the applicable Restricted Commercial Use guidance values of 500 μg/kg and 440 μg/kg, respectively. PFOA, PFOS and 1,4-dioxane are all considered SVOCs, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. NYS ASP Category B deliverables will be submitted for backfill samples.

If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill will be rejected, unless a site-specific exemption were to be sought and approved NYSDEC based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above 10 nanograms per liter (ng/L) (the Maximum Contaminant Levels established for drinking water by the NYSDOH, then the soil is not acceptable.

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

## 11. STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event if determined by the environmental professional they are required. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

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

Silt fencing or hay bales will be installed around the entire perimeter of the construction area if determined to be required by the environmental professional.

## 12. CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition. The NYSDEC project manager will be promptly notified of the discovery.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes [TAL metals, TCL volatiles and semi- volatiles (including 1,4-dioxane), TCL pesticides and PCBs, and PFAS], unless the site history and previous sampling results provide sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC project manager for approval prior to sampling. Any tanks will be closed as per NYSDEC regulations and guidance.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone within two hours to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

## 13. COMMUNITY AIR MONITORING PLAN

When excavation activities are to be completed at the Site, the Community Air Monitoring Plan presented in Appendix J will be followed.

## 14. ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors on- and off- site. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted, and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils.

If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods [add other measures as necessary].

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

## 15. DUST CONTROL PLAN

Particulate monitoring must be conducted according to the Community Air Monitoring Plan (CAMP). If particulate levels at the site exceed the thresholds listed in the CAMP or if airborne dust is observed on the site or leaving the site, the dust suppression techniques listed below will be employed. The remedial party will also take measures listed below to prevent dust production on the site.

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved using a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

## 16. OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

# APPENDIX K COMMUNITY AIR MONITORING PLAN

# APPENDIX J
# COMMUNITY AIR MONITORING PLAN

## 1. COMMUNITY AIR MONITORING PLAN

This CAMP prescribes real-time monitoring for VOCs and particulate matter less than ten (10) microns in diameter (PM-10), i.e., dust at the downwind perimeter of the designated work area when intrusive/excavation activities are in progress. The CAMP provides a measure of protection for on-Site workers, on-Site tenants, and the downwind community (i.e., off-site receptors including residences, parks, businesses, etc.) not directly involved with the subject work activities.

Routine monitoring is required to evaluate concentrations and corrective action and/or work stoppage may be required to abate emissions detected at concentrations above specified action levels. Data collected during implementation of the CAMP will also help document that work activities did not spread compounds of potential concern off-site through the air. Reliance on the procedures and action levels described in this CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around work areas.

### 1.1 Approach

It is anticipated that operation of the SVE system has mitigated significant VOC impacts in soil, so elevated concentrations of VOCs in air are not anticipated as result of the remedial excavation activities. Nevertheless, appropriate health and safety air monitoring for VOCs and particulate matter is required and will be implemented during all intrusive and above grade contaminated soil handling work activities.

VOC and particulate matter concentrations will be measured/monitored using a minimum of three (3) typical stationary CAMP stations mounted on tripods. VOC concentrations in air will be measured using PIDs. Particulate matter concentrations will be measured using calibrated electronic aerosol monitors.

CAMP equipment placement locations will be determined daily based on wind direction and expected workday activities. Wind direction will be recorded daily through the use of a weather station, windsock, or wind vane for the purpose of establishing an upwind station and a downwind station.

Portions of the work to be performed may be within 20 feet of the tenant-occupied building and a potentially exposed worker population. The continuous monitoring locations for VOCs and particulates must be protective of the nearest potentially exposed individuals and/or the location of ventilation system intakes for nearby structures. Accordingly, the CAMP stations will be positioned immediately adjacent to the building, and at locations upwind and downwind of the work area based on prevailing wind direction each day.

The upwind location will be established at the beginning of each day. The purpose of the upwind location is to establish a baseline level of VOCs and PM-10 that are present in the air and independent of Site activities. The downwind location will provide information regarding any VOCs or PM-10 emissions from the Site activities. Should the wind direction change by more than 60 degrees from the established morning direction, both CAMP stations will be adjusted. Any location changes will be documented in field logs. Rain or precipitation events may eliminate the need for particulate monitoring as dust generation is suppressed naturally and can damage CAMP equipment.

The use of engineering controls such as wetting dry soils, vapor/dust barriers, temporary negative pressure enclosures, or special ventilation devices will be considered to prevent exposures related to the work activities, and to control dust and odors. In the unlikely event that engineering controls are insufficient, consideration would be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

CAMP data will be transmitted daily to the NYSDEC and NYSDOH (the Agencies) and should there be any exceedances, the Agencies will be informed of those exceedances on the day of the exceedance, what was exceeded, and the steps taken to address the exceedance.

Periodic monitoring for VOCs will be performed during non-intrusive activities. Non-intrusive activities include any work activity that does not disturb the subsurface or staged soil piles, including routine site visits, installation of equipment, operations and maintenance, surveying, etc. Periodic monitoring if performed will consist of collecting readings downwind of the work area at the following intervals:

- Upon arrival at the work activity location;
- During performance of the relevant work activity; and
- Prior to leaving the work activity location.

## 1.2 VOC Monitoring, Response Levels & Actions

During Work activities, PID measurements will continuously monitor air in the work area for total VOCs. Each CAMP station will be equipped with a 10.6 electron volt (eV) lamp PID (MiniRae 2000 Handheld VOC Monitor or equivalent) to monitor VOCs with ionization potentials below 10 eV.

A second PID, equipped with an 11.7 eV lamp (Thermo Environmental 580B Organic Vapor Meter or equivalent) will placed at each CAMP station to monitor VOCs with higher ionization potentials. The monitoring equipment will be equipped with an alarm to indicate an exceedance of a specified action level.

At the beginning of each workday, the PID instruments will be turned on and calibrated, alarms set, and instruments placed in the work area. VOC concentrations will be continuously monitored, and concentration data recorded at 15-minute intervals. Instruments will be shut down at the end of the workday.

When intrusive activities are occurring, the exclusion zone will encompass the area around the work site extending outward a minimal distance to exceed the swing radius of any excavation equipment to allow for workers to pass safely should they need to access locations around the excavation area. Therefore, the distance to the downwind extent of the exclusion zone will vary with the given work activity for that day with respect to the equipment's position and the wind direction.

The OSHA permissible exposure limit (PEL) for TCE and PCE is 100 parts per million (ppm) and the short-term exposure limit (STEL) set by the American Conference of Governmental Industrial Hygienists (ACGIH) for TCE is 25. Action levels are typically set at 25% of the OSHA PEL, which is also the TCE STEL set by ACGIH. VOC monitoring, response levels and required actions are as follow:

- Special requirements are necessary because portions of the work to be performed at DW-05 may be within 20 feet of the tenant-occupied building. In this circumstance, if total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate predetermined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If the ambient air concentration of VOCs at the downwind perimeter of the work area exclusion zone exceeds 5 ppm above background (upwind perimeter) for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the VOC readings readily decrease (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If a PID instrument registers readings exceeding 25 ppm for a sustained period of 2 minutes, additional action will be undertaken. The instruments will be placed near the excavation and/or

placed a safe distance from the open hole and Teflon tubing (connected to the instrument) extended to a point near the open hole. The instruments will continuously monitor VOCs in the work zone as the sub-surface soils are exposed.

- If VOCs levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of VOCs identified, corrective actions taken to abate emissions (if the source is related to work activities) and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the total VOC concentration is greater than 25 ppm above background at the downwind perimeter, intrusive work activities will be halted, and the source of the VOCs will be identified. Work will resume when additional continuous monitoring demonstrates that VOC concentrations have dropped below 25 ppm for a minimum of one-half hour, and the total VOC concentration 200 feet downwind of the work area, or half the distance to the nearest potential receptor, whichever is less (but in no case less than 20 feet), is below 5 ppm above background for the 15-minute average.

## 1.3 Particulate Monitoring, Response Levels, & Actions

Dust monitoring will be conducted to protect workers in the work area and to provide real-time monitoring for particulates in the surrounding environment. Air quality monitoring will be performed consistent with the CAMP as follows: dust monitoring will be conducted along the perimeters of the work area and an action level of 100 micrograms per cubic meter ($\mu g/m^3$) above ambient/background has been established to trigger mitigation measures

Fugitive dust migration from the work area will be visually assessed during intrusive activities. Particulate concentrations will be monitored continuously at the downwind perimeter during intrusive activities. Particulate monitoring will be performed using real-time electronic aerosol monitoring equipment capable of measuring particulate matter less than 10-micrometers in size (PM-10) and capable of integrating over a period of 15 minutes for comparison to the airborne particulate action levels referenced below. The monitoring equipment will be equipped with an alarm to indicate an exceedance of a specified action level.

- If the downwind PM-10 concentration is 100 $\mu g/m^3$ greater than background for the 15-minute period, or if airborne dust is observed leaving the work area, dust suppression techniques will be employed. Work may continue with dust suppression techniques provided that downwind PM-10 concentration does not exceed 150 $\mu g/m3$ above background and provided that significant visible dust is not migrating from the work area.
- If downwind PM-10 concentrations are greater than 150-$\mu g/m^3$ above background after the implementation of dust suppression activities, intrusive activities will be stopped, and a re-evaluation of the intrusive activities will be initiated. Work can resume if dust suppression measures and/or other controls are successful in reducing the downwind PM-10 concentration to within 150 $mcg/m^3$ of background and in preventing significant visible dust migration.
- If visible dust is seen leaving the Site regardless of PM-10 levels picked up by the air monitoring equipment, additional dust suppression techniques must be employed.
- In the event of heavy rain, particulate monitoring will not be performed for the protection of the equipment. Heavy rain would limit the effectiveness of the sensors in the equipment and act as a suppressor of particulates. In the event of extreme wind conditions that make dust control ineffective, work activities may need to be suspended. Work activities will be stopped and modified if fugitive dust migration is observed during poor weather conditions.

## APPENDIX L

## NAC CONSULTANTS INC. SSDS PILOT TEST, START-UP & INDOOR AIR SAMPLING REPORT & SSDS OPERATIONS AND MAINTENANCE PLAN

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July 30, 2020

Mr. Kevin J. Lumpe
Director of Construction & Environmental
Alkier Steel
999 South Oyster Bay Road
Bethpage, New York 11714

**Re: Sub-Slab Depressurization System**
**Pilot Test, Start-up, and Indoor Air Sampling Report**
**255 East 2nd Street**
**Mineola, New York**

Dear Mr. Lumpe:

This report presents the results of the sub-slab depressurization system (SSDS) pilot test, sub-slab depressurization system (SSDS) installation, SSDS start-up, and indoor air sampling performed in the two currently tenant-occupied spaces at the above referenced site. In addition, there is a SVE system installed at the south side of the facility and the system was found to be shut down by the previous owner. The SVE was repaired and brought online in the fall of 2019 by Alkier Steel. The operating vacuum and air flowrate for the SVE system are provided in this report.

The SSDS was designed by **NAC CONSULTANTS, INC**, (**NAC**). The SSDS was started up prior to tenant occupancy in the eastern spaces of the building. This section of the building has a footprint of approximately 36,000 square feet with spread footing foundations around the perimeter. The tenant spaces are shown on Figure 1. The pilot test was performed by **NAC** in October and November 2019. The SSDS start-up and indoor air sampling was performed by **NAC** on July 18, 2020.

## SSDS Pilot Test

The objective of the SSDS pilot test was to determine the vacuum capture radius at the benchmark

for vacuum response of the SSDS is 0.010 inches (in) water column (wc). **NAC** performed the pilot test for the SSDS in October and November 2019. Two temporary sub-slab depressurization wells (TSSD) wells and sub-slab temporary implants were installed in the tenant spaces. The locations of the TSSD wells for the pilot test are shown on Figure 2. Three pilot test runs were completed at the two TSSD wells using a Radonaway model HP-220 and a Radonaway model GP-501 inline blower. The pilot test data are provided in Table 1. Based on the pilot test results, a capture radius of 40 feet was determined, based on a benchmark for vacuum response of 0.010 in wc.

## System Installation

The full scale SSDS was installed prior to tenants occupying the spaces. The spaces are shown on Figure 1. **NAC** designed the full-scale system based on a 40 foot capture radius established by the pilot test. The SSDS for the present two tenants in the eastern section of the building consists of 9 Radonaway, GP501 Radon Fan Pro Series blowers individually connected to sub-slab depressurization suction pits located in the building as shown on Figure 2. The suction pits are 3 ft by 3 ft by 1 ft deep and are installed below the building slab. The concrete slab was sawcut and removed to install the suction pits. The concrete floor slab was replaced over the pits. The pits are fabricated of steel with angle iron framed number 13 expanded metal with ½-inch by 1-inch openings attached to the angle iron frame supports. The suction pits were installed on a 3 inch thick concrete support slab placed approximately 2 feet below the existing floor slab. Pea gravel was backfilled around the suction pit. A galvanized metal deck was installed on the top of the suction pit to support the concrete building slab. A 4 inch diameter, Schedule 40 PVC pipe connects each suction pit to a roof mounted blower and the piping is back pitched to the suction pit to minimize condensate accumulation in the piping. The SSDS suction pit layout is shown on Figure 2. The typical SSDS suction pit construction is shown on Figure 3. Photographs of the suction pits are attached.

The SSDS blowers discharge to the atmosphere through stacks installed at the roof above the highest roof elevation and at least 20 feet from any air handler unit intake or building opening. The schematic of the roof mounted blower is shown on Figure 4. There are three SSD suction pits

(SSD-5, SSD-6, and SSD-7) in the Standard Tinsmith tenant space. There are six SSD suction points (SSD-1, SSD-2, SSD-3, SSD-4, SSD-8, and SSD-9) in the Hitachi tenant space. The SSDS was operational before the tenant spaces were occupied.

## SSDS Start-up

On July 18th, 2020, **NAC** performed SSDS start-up tests on SSDS installed in the Standard Tinsmith and Hitachi tenant spaces at the east end of the building. Standard Tinsmith distributes and fabricates sheet metal products. Incidental chemical usage was observed in Standard Tinsmith. Hitachi warehouses parts and bagged dry chemicals. Both companies were closed on the day of the testing and sampling.

Vacuum and flow measurement sampling ports were installed in the accessible SSD suction point piping to determine the vacuum at the suction point and the air flow rate at the individual SSD points. The startup data are provided in Table 2. Temporary sub-slab vapor points (TSSV) were installed throughout the space to determine that the SSDS was achieving the -0.010" WC benchmark throughout both tenant spaces. The vacuum measurements collected from the TSSV-1 through TSSV-12 are provided in Table 2. The start-up vacuum data confirm that the SSDS provides adequate capture at the -0.010" WC benchmark throughout both tenant spaces. Vacuum contours (-0.010" WC and -0.100" WC), TSSV locations, and SSDS suction point locations are shown on Figure 2.

## SVE System

There is an existing SVE system installed at the former A. K. Allen facility. The system was shut down by the former owner. The SMP and related correspondence reports that the SVE system was installed to remediate soil at the south side of the property outside the building and to control VOC soil vapor migration to occupants in the building. The SMP states that the SVE was operated for a period of five years and that asymptotic VOC removal conditions were met in June 2013, therefore the SVE system met the soil remediation objective.

The SVE system is located in a metal shed in the southern parking lot. SVE wells were connected to a moisture knock-out drum, a 7-horsepower blower and a series of two vapor-phase, 400-pound carbon units. **NAC** and Alkier Steel repaired the SVE system and it is presently in operation. It was placed in service in the fall of 2019, prior to installation of the SSDS and occupancy of the building. Vacuum and air flow measurements were obtained at the system on July 18, 2020. The blower vacuum was -30.0 inches WC and the air flow rate was 236 CFM. The SVE system data are provided in Table 2. Based on the blower size, the SVE appears to be operating at greater than the design vacuum and flow rate.

The Site Management Plan for 255 East Second Street, Mineola, New York will be modified to include a sub-slab depressurization system (SSDS) for the occupied space in the building. The mitigative objective of the sub-slab depressurization (SSDS) system is to prevent soil vapor intrusion into the building by creating negative pressure below the building slab and within the building foundation footprint. The SVE system should be decommissioned, because the system achieved asymptotic VOC removal after five years in operation and the soil vapor migration into the building will be controlled by the SSDS installed in each occupied tenant space.

**Indoor Air Sampling**

On July 18, 2020 **NAC** collected indoor air samples for TO-15 laboratory analyses in both the Standard Tinsmith and Hitachi tenant spaces. The sampling round consisted of three indoor air samples (IA-1 through IA-6) for each tenant space and one outdoor ambient air (AA-1) sample located upwind (southeast corner) of the Site. Samples IA-5 and IA-2 correspond to samples IA-7 and IA-8 respectively collected in a prior sampling round conducted by ERM during the due diligence period. Indoor air sampling locations are shown on Figure 1. The sampling data are provided in Table 3 and the laboratory report is attached.

The sampling results for trichloroethene (TCE), tetrachloroethene (PCE), and methylene chloride were compared to the *New York State Department of Health FINAL Guidance for Evaluating Soil Vapor Intrusion in the State of New York October 2006* and subsequent updated indoor air quality (IAQ) guidelines. Table 4 presents the comparison.

The concentrations of 1,1,1-TCA, 1,1-DCE, and vinyl chloride were non-detect in the indoor and the outdoor ambient air samples. Carbon tetrachloride was also found in indoor and outdoor ambient air concentrations at similar low concentrations. The PCE concentrations in samples IA-1 (0.37 mcg/$m^3$), IA-2 (0.62 mcg/$m^3$), IA-5 (0.84 mcg/$m^3$) and IA-6 (0.64 mcg/$m^3$) were similar to the ambient air concentration found in sample AA-1 (0.62 mcg/$m^3$). The PCE concentration in sample IA-3 was non-detect. The PCE concentration at IA-4 (8.81 ug/m3) was found to be less than the NYSDOH guideline (30 mcg/$m^3$). The TCE concentrations were non-detect in samples IA-1, IA-2, IA-4, IA-5, IA-6 and the ambient air sample. The TCE concentration in sample IA-3 (0.23 mcg/$m^3$) was less than the NYSDOH guideline (2 mcg/$m^3$).

The concentrations of methylene chloride found in samples IA-4, IA-5 and IA-6 collected in the Standard Tinsmith tenant space were greater than the NYSDOH guideline (60 mcg/$m^3$). Methylene chloride was not found at concentrations of concern in either sub-slab vapor or indoor air collected during the due diligence investigation prior to Standard Tinsmith's occupancy in the building. Standard Tinsmith fabricates spiral sheet metal duct. Minor petroleum product incidental spillage and small spray can and bottled degreasing chemical cleaners were observed in the Standard Tinsmith tenant space and likely contribute to elevated methylene chloride concentrations found in the indoor air samples its' space.

**Conclusions**

The SSDS startup test results confirm that the system meets the design objective to control sub-slab vapor migration to indoor air. Nine SSDS suction point and blowers provide the required vacuum field beneath the footprint of the tenant spaces in accordance with NYSDOH guidance. Indoor air concentrations of VOCs appear to be related to ambient air and to tenant chemical usage. Sampling of sub-slab vapors and indoor air sampling should be performed in accordance an updated Site Management Plan (SMP) and SSDS operation and maintenance (O&M) plan for the site.

The SVE system should be decommissioned, because the system achieved asymptotic VOC

removal after five years in operation and the soil vapor migration into the building will be controlled by the SSDS installed in each tenant occupied space.

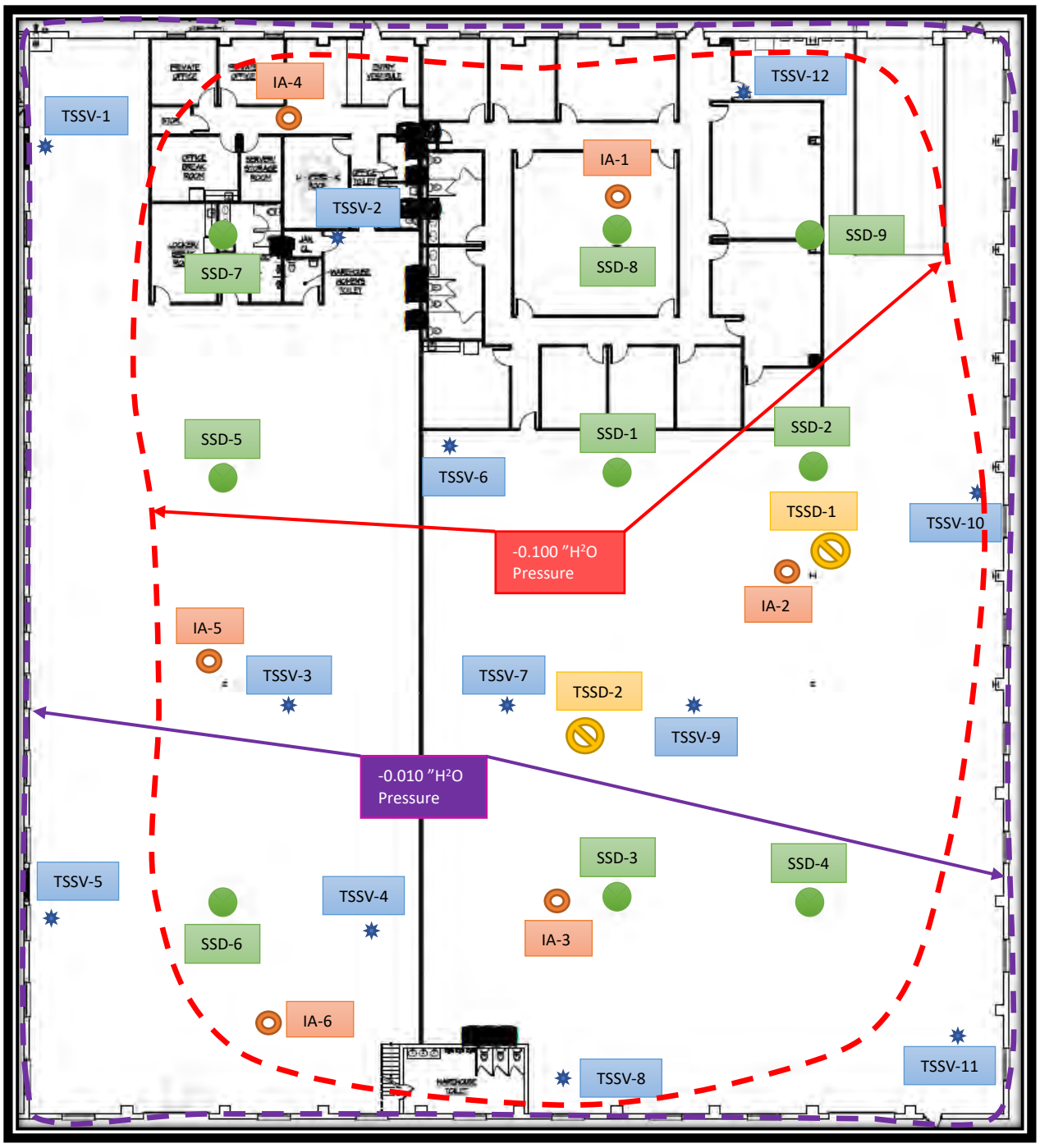
Sincerely,

Nicholas A. Andrianas, P.E.

Enclosure

Standard Tinsmith Tenant Space - Hitachi Tenant Space - Vacant Tenant Space -

**Figure 1**
**Tenant Spaces**
**255 East 2nd Street**
**Mineola, New York**




Ambient Air - Temporary Sub-Slab Vapor Implant - SSD Well - TSSD WELL -

-0.010 "H2O Pressure Contour - -0.100 "H2O Pressure Contour -

**Figure 2**
**Start-up Testing Locations**
**255 East 2nd Street**
**Mineola, New York**

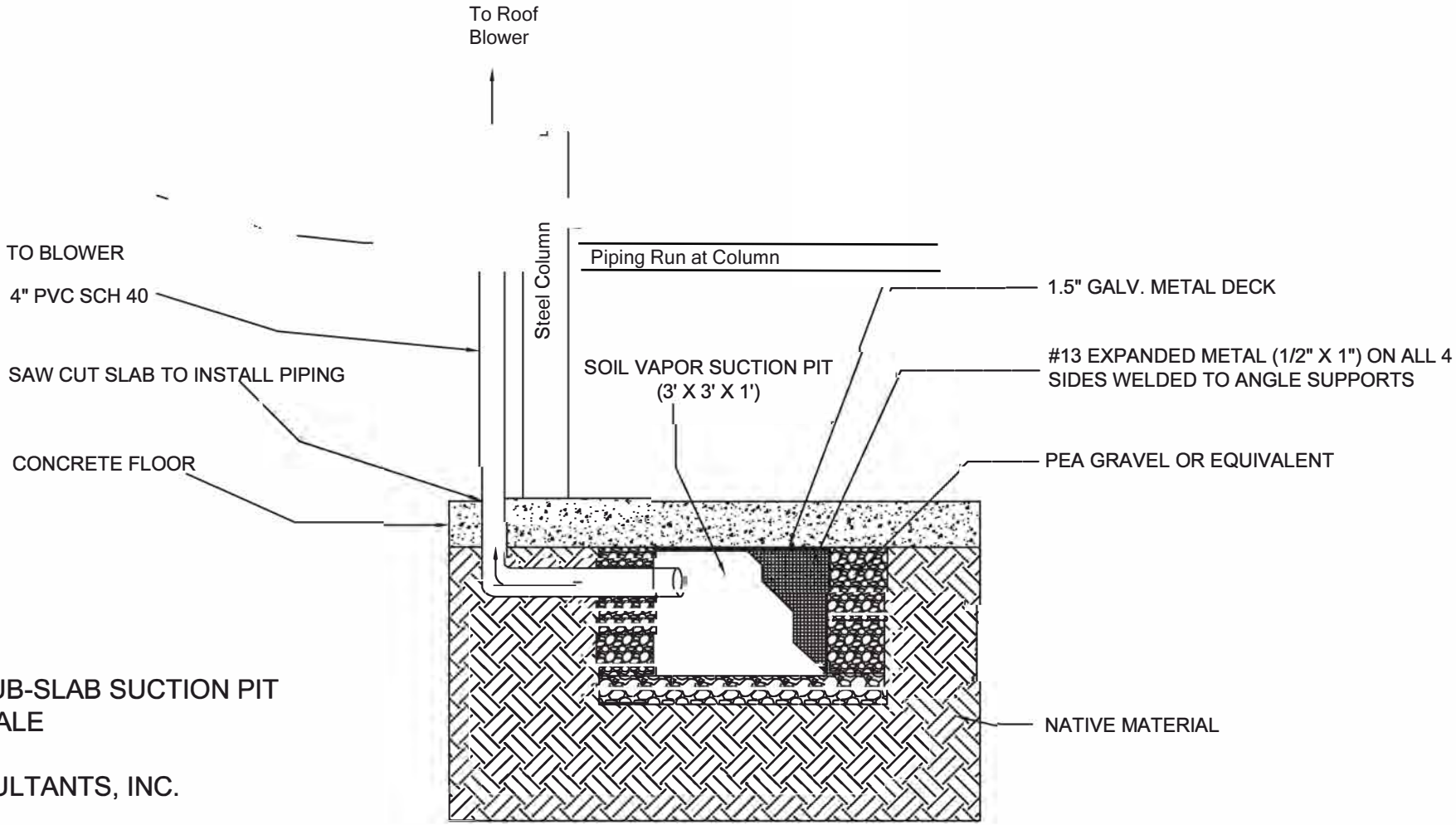
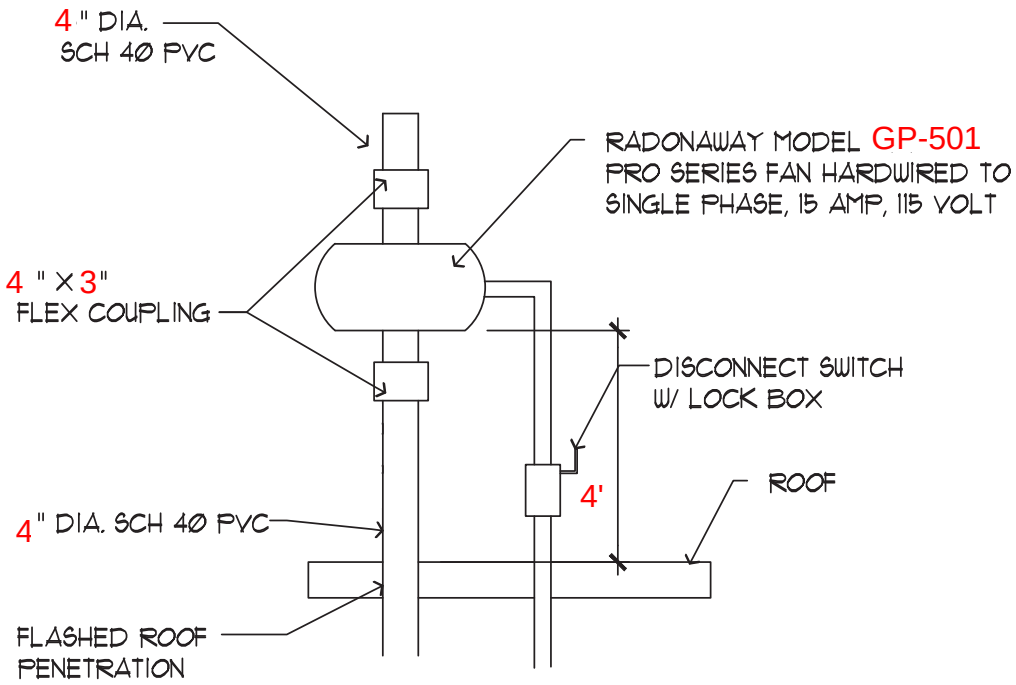



FIGURE 3
TYPICAL SUB-SLAB SUCTION PIT
NOT TO SCALE

NAC CONSULTANTS, INC.




TYPICAL SSDS BLOWER
ROOF DETAIL Figure 4

SCALE: NOT TO SCALE

**255 East 2nd Street**
**Mineola, New York**
**Table 1 - Pilot Test Data**
**November 1st, 2019**

**RUN 1 HP-220**

| Location | Vacuum Measurement ("H2O) | Distance from SSD | CFM |
|---|---|---|---|
| TSSD-2 | -1.974 | | 50 |
| TSSV-1 | -0.020 | 20' | |
| TSSV-2 | -0.013 | 30' | |
| TSSV-3 | -0.053 | 20' | |
| TSSV-4 | -0.008 | 40' | |
| TSSV-5 | N/A | 10' | |
| TSSV-6 | N/A | 40' | |
| TSSV-7 | N/A | 50' | |

**RUN 2 GP-501**

| Location | Vacuum Measurement ("H2O) | Distance from SSD | CFM |
|---|---|---|---|
| TSSD-2 | -2.858 | | 58 |
| TSSV-1 | -0.034 | 20' | |
| TSSV-2 | -0.020 | 30' | |
| TSSV-3 | -0.087 | 20' | |
| TSSV-4 | -0.016 | 40' | |
| TSSV-5 | -0.110 | 10' | |
| TSSV-6 | -0.011 | 40' | |
| TSSV-7 | -0.009 | 50' | |

**RUN 3 GP-501**

| Location | Vacuum Measurement ("H2O) | Distance from SSD | CFM |
|---|---|---|---|
| TSSD-1 | -3.844 | | 14 |
| TSSV-8 | -0.005 | 25' | |
| TSSV-9 | -0.005 | 40' | |
| TSSV-10 | -0.010 | 35' | |
| TSSV-11 | -0.010 | 30' | |
| TSSV-12 | -0.013 | 30' | |
| TSSV-13 | -0.024 | 15' | |

**255 East 2nd Street**
**Mineola, New York**
**Table 2 - Start-Up Performance Data**
**July 18, 2020**

| Location | Vacuum Measurement ("H2O) | CFM |
|---|---|---|
| SSD-1 | -3.956 | 15 |
| SSD-2 | -3.988 | 13 |
| SSD-3 | -3.524 | 40 |
| SSD-4 | -3.745 | 35 |
| SSD-5 | -3.204 | 48 |
| SSD-6 | -3.508 | 42 |
| TSSV-1 | -0.012 | |
| TSSV-2 | -0.374 | |
| TSSV-3 | -0.235 | |
| TSSV-4 | -0.262 | |
| TSSV-5 | -0.012 | |
| TSSV-6 | -0.322 | |
| TSSV-7 | -0.560 | |
| TSSV-8 | -0.142 | |
| TSSV-9 | -1.142 | |
| TSSV-10 | -0.102 | |
| TSSV-11 | -0.083 | |
| TSSV-12 | -0.244 | |

**255 East 2nd Street**
**Mineola, New York**
**Table 3 - SVE System Data**
**July 18, 2020**

| Location | Vacuum/Pressure Measurement ("H2O) | CFM |
|---|---|---|
| KO DRUM | -14.000 | - |
| BLOWER INTAKE | -30.000 | - |
| BLOWER EXHAUST | 14.000 | - |
| LEAD-LAG | 7.088 | - |
| SYSTEM EXHAUST | 0.075 | 236 |

**255 East 2nd Street**
**Mineola, New York**
**Table 4 -Indoor Air Sampling Data**
**July 18, 2020**

| Sample ID | AA-1 | IA-1 | IA-2 | IA-3 | IA-4 | IA-5 | IA-6 | NYSDOH Indoor Air Guidelines |
|---|---|---|---|---|---|---|---|---|
| Sampling Date | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | |
| Concentration | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 |
| Parameter | | | | | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | ND | - |
| 1,1-Dichloroethene | ND | ND | ND | ND | ND | ND | ND | - |
| Carbon Tetrachloride | 0.63 | 0.61 | 0.61 | 0.6 | 0.61 | 0.62 | 0.64 | - |
| Cis-1,2-Dichloroethene | ND | ND | ND | ND | 0.38 | ND | ND | - |
| Methylene Chloride | ND | 15.8 | 12.8 | 28.4 | 103 | 139 | 1,420 | 60 |
| Tetrachloroethene | 0.62 | 0.37 | 0.62 | ND | 8.81 | 0.084 | 0.64 | 30 |
| Trichloroethene | ND | ND | ND | 0.23 | ND | ND | ND | 2 |
| Vinyl Chloride | ND | ND | ND | ND | ND | ND | ND | - |

**NYSDEC IHWDS NO. 1-30-100**

**FORMER A.K. ALLEN COMPANY, INC. FACILITY**

**255 EAST 2ND STREET**

**MINEOLA, NEW YORK**

# SSDS Suction Pit Photographs

CAUTION / CUIDADO

# GP501 Radon Fan Pro Series

**SKU:** 28468

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RadonAway's GP501 Pro Series radon fan installs white and stays white. It provides versatility and a broad performance range for both initial installation and fan replacement. Made in the USA with U.S. and imported parts.

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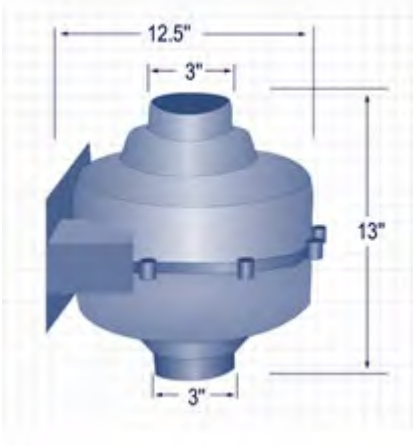
# GP501 Radon Fan Features:

Stay-White™ housing
Five-year limited warranty
Seams sealed to inhibit radon leakage
Mounts on duct pipe or with integral flange
3" diameter ducts for use with 3" or 4" pipe
Electrical box for hard wire or plug in
ETL Listed - for indoor or outdoor use
4 interchangeable models




# Additional Radon Fan Information:

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Downloadable Fan Installation Instructions (PDF format)
Calculate your estimated annual electrical cost.
Also available through our Canadian distribution location.

**Typical CFM vs. Static Pressure WC**

| Model | P/N | Fan Duct Diameter | Watts | Recommended Max Operating Pressure "WC | 1.0" | 1.5" | 2.0" | 2.5" | 3.0" | 3.5" | 4.0" |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GP201 Pro Series | 28465 | 3" | 31-65 | 1.8 | 54 | 42 | 11 | - | - | - | - |

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**Typical CFM vs. Static Pressure WC**

| Model | P/N | Fan Duct Diameter | Watts | Recommended Max Operating Pressure "WC | 1.0" | 1.5" | 2.0" | 2.5" | 3.0" | 3.5" | 4.0" |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GP301 Pro Series | 28466 | 3" | 56-100 | 2.3 | 64 | 54 | 41 | 4 | - | - | - |
| GP401 Pro Series | 28467 | 3" | 63-128 | 3.0 | - | 61 | 52 | 44 | 22 | - | - |
| GP501 Pro Series | 28468 | 3" | 68-146 | 3.8 | - | - | - | 70 | 57 | 30 | 10 |

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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 15:41 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 21318 | | | | |

Project ID: AK ALLEN
Client ID: AA-1

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36798

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | ND | *0.204* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | ND | *0.204* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | ND | *0.204* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | ND | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 4.00 | *0.421* | 9.50 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | ND | *0.313* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: AA-1

Phoenix I.D.: CG36798

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.100 | *0.032* | 0.63 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.591 | *0.485* | 1.22 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | ND | *0.291* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.306 | *0.202* | 1.51 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 7.68 | *0.531* | 14.5 | *1.00* | 07/21/20 | KCA | 1 | ,B* |
| Ethyl acetate | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | ND | *0.230* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | ND | *0.284* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | 0.837 | *0.407* | 2.06 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | ND | *0.204* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 0.247 | *0.230* | 1.07 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 0.432 | *0.339* | 1.27 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | ND | *0.864* | ND | *3.00* | 07/21/20 | KCA | 1 | |
| n-Butylbenzene | ND | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | ND | *0.230* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | ND | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | ND | *0.235* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | 0.092 | *0.037* | 0.62 | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | ND | *0.266* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | ND | *0.037* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.287 | *0.178* | 1.61 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | |
| % Bromofluorobenzene | 98 | *%* | 98 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 82 | *%* | 82 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 83 | *%* | 83 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 86 | *%* | 86 | *%* | 07/21/20 | KCA | 1 | |

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B* = Present in blank, a bias is possible.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 16:34 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 368 | | | | |

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36799

Project ID: AK ALLEN
Client ID: IA-6

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | 5.89 | *0.204* | 28.9 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | 1.83 | *0.204* | 8.99 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | 5.21 | *0.204* | 25.6 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | 0.190 | *0.182* | 1.04 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | 3.21 | *0.244* | 13.1 | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 20.6 | *0.421* | 48.9 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | 2.06 | *0.313* | 6.58 | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-6

Phoenix I.D.: CG36799

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.102 | *0.032* | 0.64 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.681 | *0.485* | 1.41 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | 3.75 | *0.291* | 12.9 | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.294 | *0.202* | 1.45 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 242 | *10.6* | 456 | *20.0* | 07/21/20 | KCA | 20 | 1,B |
| Ethyl acetate | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | 3.77 | *0.230* | 16.4 | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | 9.35 | *0.244* | 38.3 | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | 5.84 | *0.284* | 20.6 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | ND | *0.407* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | 0.481 | *0.204* | 2.36 | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 12.2 | *0.230* | 52.9 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 2.62 | *0.339* | 7.72 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | 408 | *17.3* | 1420 | *60.1* | 07/21/20 | KCA | 20 | |
| n-Butylbenzene | 0.451 | *0.182* | 2.47 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | 4.60 | *0.230* | 20.0 | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | 0.197 | *0.182* | 1.08 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | 0.279 | *0.235* | 1.19 | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | 0.095 | *0.037* | 0.64 | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | 33.1 | *0.266* | 125 | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | ND | *0.037* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.270 | *0.178* | 1.52 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | |
| % Bromofluorobenzene | 100 | *%* | 100 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 79 | *%* | 79 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 78 | *%* | 78 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 88 | *%* | 88 | *%* | 07/21/20 | KCA | 1 | |
| % Bromofluorobenzene (20x) | 99 | *%* | 99 | *%* | 07/21/20 | KCA | 20 | |
| % IS-1,4-Difluorobenzene (20x) | 97 | *%* | 97 | *%* | 07/21/20 | KCA | 20 | |
| % IS-Bromochloromethane (20x) | 95 | *%* | 95 | *%* | 07/21/20 | KCA | 20 | |
| % IS-Chlorobenzene-d5 (20x) | 98 | *%* | 98 | *%* | 07/21/20 | KCA | 20 | |

Project ID: AK ALLEN
Client ID: IA-6

Phoenix I.D.: CG36799

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 16:23 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 28613 | | | | |

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36800

Project ID: AK ALLEN
Client ID: IA-5

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | 5.15 | *0.204* | 25.3 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | 1.59 | *0.204* | 7.81 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | 4.66 | *0.204* | 22.9 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | ND | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | 2.82 | *0.244* | 11.5 | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 17.2 | *0.421* | 40.8 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | 1.87 | *0.313* | 5.97 | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-5

Phoenix I.D.: CG36800

| Parameter | ppbv Result | | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.098 | | *0.032* | 0.62 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.578 | | *0.485* | 1.19 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | ND | | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | 3.37 | | *0.291* | 11.6 | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.290 | | *0.202* | 1.43 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 204 | E | *0.531* | 384 | *1.00* | 07/21/20 | KCA | 1 | 1,B |
| Ethyl acetate | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | 3.50 | | *0.230* | 15.2 | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | 7.34 | | *0.244* | 30.1 | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | 5.38 | | *0.284* | 19.0 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | 4.10 | | *0.407* | 10.1 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | 0.466 | | *0.204* | 2.29 | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 11.4 | | *0.230* | 49.5 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 2.16 | | *0.339* | 6.37 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | 40.0 | | *0.864* | 139 | *3.00* | 07/21/20 | KCA | 1 | |
| n-Butylbenzene | 0.422 | | *0.182* | 2.32 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | 4.29 | | *0.230* | 18.6 | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | 0.188 | | *0.182* | 1.03 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | 0.246 | | *0.235* | 1.05 | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | 0.124 | | *0.037* | 0.84 | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | 29.0 | | *0.266* | 109 | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | ND | | *0.037* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.259 | | *0.178* | 1.45 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | | |
| % Bromofluorobenzene | 101 | | *%* | 101 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 88 | | *%* | 88 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 88 | | *%* | 88 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 95 | | *%* | 95 | *%* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-5

Phoenix I.D.: CG36800

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 16:14 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 220 | | | | |

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36801

Project ID: AK ALLEN
Client ID: IA-3

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | 1.93 | *0.204* | 9.48 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | 0.736 | *0.204* | 3.62 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | 1.86 | *0.204* | 9.14 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | ND | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | 0.335 | *0.244* | 1.37 | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 11.7 | *0.421* | 27.8 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | ND | *0.313* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-3

Phoenix I.D.: CG36801

| Parameter | ppbv Result | | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.096 | | *0.032* | 0.60 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.598 | | *0.485* | 1.23 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | ND | | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | ND | | *0.291* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.289 | | *0.202* | 1.43 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 217 | E | *0.531* | 409 | *1.00* | 07/21/20 | KCA | 1 | 1,B |
| Ethyl acetate | 1.41 | | *0.278* | 5.08 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | 0.343 | | *0.230* | 1.49 | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | 0.658 | | *0.244* | 2.69 | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | 0.578 | | *0.284* | 2.04 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | 3.59 | | *0.407* | 8.82 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | ND | | *0.204* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 1.15 | | *0.230* | 4.99 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 1.23 | | *0.339* | 3.63 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | 8.18 | | *0.864* | 28.4 | *3.00* | 07/21/20 | KCA | 1 | |
| n-Butylbenzene | ND | | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | 0.629 | | *0.230* | 2.73 | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | ND | | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | ND | | *0.235* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | ND | | *0.037* | ND | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | 2.46 | | *0.266* | 9.26 | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | 0.042 | | *0.037* | 0.23 | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.257 | | *0.178* | 1.44 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | | |
| % Bromofluorobenzene | 102 | | *%* | 102 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 94 | | *%* | 94 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 93 | | *%* | 93 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 95 | | *%* | 95 | *%* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-3

Phoenix I.D.: CG36801

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 16:26 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 28553 | | | | |

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36802

Project ID: AK ALLEN
Client ID: IA-2

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | 2.31 | *0.204* | 11.3 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | 0.891 | *0.204* | 4.38 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | 2.18 | *0.204* | 10.7 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | ND | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 11.8 | *0.421* | 28.0 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | ND | *0.313* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-2

Phoenix I.D.: CG36802

| Parameter | ppbv Result | | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.097 | | *0.032* | 0.61 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.628 | | *0.485* | 1.30 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | ND | | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | ND | | *0.291* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.318 | | *0.202* | 1.57 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 239 | E | *0.531* | 450 | *1.00* | 07/21/20 | KCA | 1 | 1,B |
| Ethyl acetate | 1.07 | | *0.278* | 3.85 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | 0.255 | | *0.230* | 1.11 | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | 0.421 | | *0.244* | 1.72 | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | 0.389 | | *0.284* | 1.37 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | 4.31 | | *0.407* | 10.6 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | ND | | *0.204* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 0.947 | | *0.230* | 4.11 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 1.34 | | *0.339* | 3.95 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | 3.70 | | *0.864* | 12.8 | *3.00* | 07/21/20 | KCA | 1 | |
| n-Butylbenzene | ND | | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | 0.596 | | *0.230* | 2.59 | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | ND | | *0.182* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | ND | | *0.235* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | 0.091 | | *0.037* | 0.62 | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | 1.83 | | *0.266* | 6.89 | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | ND | | *0.037* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.263 | | *0.178* | 1.48 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | | |
| % Bromofluorobenzene | 99 | | *%* | 99 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 94 | | *%* | 94 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 92 | | *%* | 92 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 98 | | *%* | 98 | *%* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-2

Phoenix I.D.: CG36802

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 16:40 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 156 | | | | |

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36803

Project ID: AK ALLEN
Client ID: IA-4

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | 5.47 | *0.204* | 26.9 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | 2.07 | *0.204* | 10.2 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | 4.89 | *0.204* | 24.0 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | 0.188 | *0.182* | 1.03 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 15.2 | *0.421* | 36.1 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | 1.22 | *0.313* | 3.90 | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-4

Phoenix I.D.: CG36803

| Parameter | ppbv Result | | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.097 | | *0.032* | 0.61 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.635 | | *0.485* | 1.31 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | 0.096 | | *0.051* | 0.38 | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | 2.12 | | *0.291* | 7.29 | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.295 | | *0.202* | 1.46 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 414 | E | *0.531* | 780 | *1.00* | 07/21/20 | KCA | 1 | 1,B |
| Ethyl acetate | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | 2.13 | | *0.230* | 9.24 | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | 4.34 | | *0.244* | 17.8 | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | 3.38 | | *0.284* | 11.9 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | 7.06 | | *0.407* | 17.3 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | 0.464 | | *0.204* | 2.28 | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 7.15 | | *0.230* | 31.0 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 2.28 | | *0.339* | 6.72 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | 29.7 | | *0.864* | 103 | *3.00* | 07/21/20 | KCA | 1 | |
| n-Butylbenzene | 0.337 | | *0.182* | 1.85 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | 2.95 | | *0.230* | 12.8 | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | 0.208 | | *0.182* | 1.14 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | ND | | *0.235* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | 1.30 | | *0.037* | 8.81 | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | 17.0 | | *0.266* | 64.0 | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | ND | | *0.037* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.266 | | *0.178* | 1.49 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | | |
| % Bromofluorobenzene | 99 | | *%* | 99 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 92 | | *%* | 92 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 93 | | *%* | 93 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 99 | | *%* | 99 | *%* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-4

Phoenix I.D.: CG36803

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

July 21, 2020

FOR: Attn: James D. Urbat
NAC Consultants Inc.
28 Henry Street
Kings Park, NY 11754

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | AIR | Collected by: | JU | 07/18/20 | 16:04 |
| Location Code: | NAC | Received by: | B | 07/20/20 | 15:50 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | | | | | |
| Canister Id: | 16009 | | | | |

## Laboratory Data

SDG ID: GCG36798
Phoenix ID: CG36804

Project ID: AK ALLEN
Client ID: IA-1

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | Dilution | |
|---|---|---|---|---|---|---|---|---|
| **Volatiles (TO15)** | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 1,1,1-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | *0.146* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1,2-Trichloroethane | ND | *0.183* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,1-Dichloroethene | ND | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trichlorobenzene | ND | *0.135* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2,4-Trimethylbenzene | 5.11 | *0.204* | 25.1 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dibromoethane(EDB) | ND | *0.130* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichloroethane | ND | *0.247* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-dichloropropane | ND | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,2-Dichlorotetrafluoroethane | ND | *0.143* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3,5-Trimethylbenzene | 2.05 | *0.204* | 10.1 | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Butadiene | ND | *0.452* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,3-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dichlorobenzene | ND | *0.166* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 1,4-Dioxane | ND | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| 2-Hexanone(MBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Ethyltoluene | 4.56 | *0.204* | 22.4 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Isopropyltoluene | 0.186 | *0.182* | 1.02 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| 4-Methyl-2-pentanone(MIBK) | ND | *0.244* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Acetone | 16.7 | *0.421* | 39.6 | *1.00* | 07/21/20 | KCA | 1 | |
| Acrylonitrile | ND | *0.461* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzene | ND | *0.313* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Benzyl chloride | ND | *0.193* | ND | *1.00* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-1

Phoenix I.D.: CG36804

| Parameter | ppbv Result | | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By | | |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | *0.149* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromoform | ND | | *0.097* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Bromomethane | ND | | *0.258* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Disulfide | ND | | *0.321* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Carbon Tetrachloride | 0.097 | | *0.032* | 0.61 | *0.20* | 07/21/20 | KCA | 1 | |
| Chlorobenzene | ND | | *0.217* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroethane | ND | | *0.379* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloroform | ND | | *0.205* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Chloromethane | 0.644 | | *0.485* | 1.33 | *1.00* | 07/21/20 | KCA | 1 | |
| Cis-1,2-Dichloroethene | ND | | *0.051* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| cis-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Cyclohexane | ND | | *0.291* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dibromochloromethane | ND | | *0.118* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Dichlorodifluoromethane | 0.307 | | *0.202* | 1.52 | *1.00* | 07/21/20 | KCA | 1 | |
| Ethanol | 334 | E | *0.531* | 629 | *1.00* | 07/21/20 | KCA | 1 | 1,B |
| Ethyl acetate | 0.888 | | *0.278* | 3.20 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Ethylbenzene | 0.365 | | *0.230* | 1.58 | *1.00* | 07/21/20 | KCA | 1 | |
| Heptane | 0.701 | | *0.244* | 2.87 | *1.00* | 07/21/20 | KCA | 1 | |
| Hexachlorobutadiene | ND | | *0.094* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Hexane | 0.404 | | *0.284* | 1.42 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylalcohol | 11.8 | | *0.407* | 29.0 | *1.00* | 07/21/20 | KCA | 1 | |
| Isopropylbenzene | 0.414 | | *0.204* | 2.03 | *1.00* | 07/21/20 | KCA | 1 | |
| m,p-Xylene | 1.59 | | *0.230* | 6.90 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl Ethyl Ketone | 1.80 | | *0.339* | 5.31 | *1.00* | 07/21/20 | KCA | 1 | |
| Methyl tert-butyl ether(MTBE) | ND | | *0.278* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Methylene Chloride | 4.56 | | *0.864* | 15.8 | *3.00* | 07/21/20 | KCA | 1 | |
| n-Butylbenzene | 0.231 | | *0.182* | 1.27 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| o-Xylene | 1.13 | | *0.230* | 4.90 | *1.00* | 07/21/20 | KCA | 1 | |
| Propylene | ND | | *0.581* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| sec-Butylbenzene | 0.191 | | *0.182* | 1.05 | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Styrene | 0.287 | | *0.235* | 1.22 | *1.00* | 07/21/20 | KCA | 1 | |
| Tetrachloroethene | 0.055 | | *0.037* | 0.37 | *0.25* | 07/21/20 | KCA | 1 | |
| Tetrahydrofuran | ND | | *0.339* | ND | *1.00* | 07/21/20 | KCA | 1 | 1 |
| Toluene | 2.58 | | *0.266* | 9.7 | *1.00* | 07/21/20 | KCA | 1 | |
| Trans-1,2-Dichloroethene | ND | | *0.252* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| trans-1,3-Dichloropropene | ND | | *0.221* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Trichloroethene | ND | | *0.037* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| Trichlorofluoromethane | 0.258 | | *0.178* | 1.45 | *1.00* | 07/21/20 | KCA | 1 | |
| Trichlorotrifluoroethane | ND | | *0.131* | ND | *1.00* | 07/21/20 | KCA | 1 | |
| Vinyl Chloride | ND | | *0.078* | ND | *0.20* | 07/21/20 | KCA | 1 | |
| **QA/QC Surrogates/Internals** | | | | | | | | | |
| % Bromofluorobenzene | 99 | | *%* | 99 | *%* | 07/21/20 | KCA | 1 | |
| % IS-1,4-Difluorobenzene | 94 | | *%* | 94 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Bromochloromethane | 93 | | *%* | 93 | *%* | 07/21/20 | KCA | 1 | |
| % IS-Chlorobenzene-d5 | 97 | | *%* | 97 | *%* | 07/21/20 | KCA | 1 | |

Project ID: AK ALLEN
Client ID: IA-1

Phoenix I.D.: CG36804

| Parameter | ppbv Result | ppbv RL | ug/m3 Result | ug/m3 RL | Date/Time | By |
|---|---|---|---|---|---|---|

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

E = Estimated value quantitated above calibration range for this compound.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**July 21, 2020**
**Official Report Release To Follow**

# Sample Criteria Exceedances Report

## GCG36798 - NAC



Criteria: None

State: NY

| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | RL Criteria | Analysis Units |
|---|---|---|---|---|---|---|---|---|

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

**PHOENIX**
*Environmental Laboratories, Inc.*

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

# CHAIN OF CUSTODY RECORD
## AIR ANALYSES

800-827-5426
email: greg@phoenixlabs.com

P.O. # WCIP 1.0 Page 1 of 1

**Data Delivery:**
☐ Fax #:
☐ Email:
☐ Phone #:

| | | |
|---|---|---|
| Report to: James Urbat | Project Name: Ak Allen | Data Format: (Circle) Equis Excel Other: |
| Customer: NAC | Invoice to: NAC | Requested Deliverable: RCP ASP CAT B |
| Address: 28 Henry Street | | MCP NJ Deliverables |
| Kings Park NY | Sampled by: James Urbat | Quote Number: |

| Phoenix ID # | Client Sample ID | Canister ID # | Canister Size (L) | Outgoing Canister Pressure (" Hg) | Incoming Canister Pressure ("Hg) | Flow Regulator ID # | Flow Controller Setting (mL/min) | Sampling Start Time | Sampling End Time | Sample Start Date | Canister Pressure at Start (" Hg) | Canister Pressure at End ("Hg) | Ambient/Indoor Air | Soil Gas | Grab (G) Composite (C) | TO-15 | APH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | THIS SECTION FOR LAB USE ONLY | | | | | | | | | | | MATRIX | | | ANALYSES | |
| 36798 | AA-1 | 21318 | 6.0 | -30 | -8 | 2974 | 10.8 | 8:41 | 15:41 | 7/18/20 | -28 | -5 | X | | | X | |
| 36799 | IA-6 | 368 | | | -6 | 7040 | | 8:46 | 16:34 | | -29 | -5 | X | | | X | |
| 36800 | IA-5 | 28613 | | | -6 | 2929 | | 8:44 | 16:23 | | -30 | -5 | X | | | X | |
| 36801 | IA-3 | 220 | | | -6 | 7023 | | 8:42 | 16:14 | | -29 | -5 | X | | | X | |
| 36802 | IA-2 | 28553 | | | -4 | 3504 | | 8:43 | 16:26 | | -30 | -5 | X | | | X | |
| 36803 | IA-4 | 156 | | | -4 | 6987 | | 8:48 | 16:40 | | -30 | -5 | X | | | X | |
| 36804 | IA-1 | 16009 | | | -5 | 0862 | | 8:44 | 16:04 | | -30 | -5 | X | | | X | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

| Relinquished by: | Accepted by: | Date: | Time: |
|---|---|---|---|
| | | 7.20.20 | 10.14 |
| | | 7/20 | 15:50 |

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document.

Signature: Date:

State Where Samples Collected:

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

24-Hr TAT (7) (6.0L) (8hr)

Turnaround Time:
- 1 Day ☒
- 2 Day ☐
- 3 Day ☐
- 4 Day ☐
- 5 Day ☐

Requested Criteria: (Please Circle)

| CT: | MA: | NJ: | NY: | PA: | VT: |
|---|---|---|---|---|---|
| TAC I/C<br>TAC RES<br>SVVC I/C<br>SVVC RES<br>GWV I/C<br>GWV CES | **Indoor Air:**<br>Residential<br>Ind/Commercial<br>**Soil Gas:**<br>Residential<br>Ind/Commercial | **Indoor Air:**<br>Residential<br>Ind/Commercial<br>**Soil Gas:**<br>Residential<br>Ind/Commercial | Vapor Intrusion | **Indoor Air**<br>Residential<br>Non-residential | **Indoor Air**<br>Residential<br>Industrial<br>**Sub-slab**<br>Residential<br>Industrial |

# SUB-SLAB DEPRESSURIZATION SYSTEM

# OPERATION and MAINTENANCE PLAN

**225-255 EAST 2ND STREET**
**MINEOLA, NEW YORK 11501**

**JULY 2020**
**Revised January 2021**

***Prepared By: Nicholas A. Andrianas, P.E.***
***For:***

**NAC CONSULTANTS, INC.**
***28 Henry Street***
***Kings Park, New York 11754***
***(631) 265-7700***
***(631) 265-9073 FAX***

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## FIGURES

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|---|---|
| Figure 1 | Tenant Spaces 255 East Second Street, Mineola, New York |
| Figure 2 | Standard Tinsmith & Hitachi SSDS Suction Pit Layout |
| Figure 3 | Lasership SSDS Suction Pit Layout |
| Figure 4 | Typical Sub-Slab Suction Pit Detail |
| Figure 5 | Typical SSDS Blower Roof Detail |

## APPENDICES

| | |
|---|---|
| Appendix A | Vacuum Blower Specifications |
| Appendix B | Operation and Maintenance forms |
| Appendix C | Sub-Slab Soil Vapor and Indoor Air Sampling Procedures |

## 1.0 INTRODUCTION

The Site Management Plan for 255 East Second Street, Mineola, New York will be modified to include a sub-slab depressurization system (SSDS) for the occupied space in the building. This O&M plan addresses the SSDS installed at the occupied Lasership, Standard Tinsmith, and the Hitachi tenant spaces at 255 East Second Street Mineola, New York. The tenant spaces are shown on Figure 1. If there are any substantial changes to the interior layout of the tenant spaces due to renovations, then this O&M plan will be updated to incorporate any substantial changes to the SSDS.

The objectives of this plan are summarized as follows:

1. Describe the components of the SSDS.

2. Describe the procedures to operate, monitor and maintain the SSDS.

Section 2 of this OM&M plan provides a site description including site location. The SSDS is described in Section 3 and Section 4 presents the sampling and analyses to be performed. Section 5 describes the system startup and shutdown procedures and site maintenance and inspections. The reports to be prepared for sampling, analyses and inspections are described in Section 6.

# 2.0 SITE DESCRIPTION

## 2.1 Site Location and Description

The Site is located at 255 East Second Street in the Village of Mineola, Town of North Hempstead, County of Nassau, New York and is identified as Section 9 Block 437, Lots 466 & 467 and Section 9, Block 663, Lots 4A, 4B & 5 on the Nassau County Tax Map. The Site is approximately 4.15 acres bounded by East Second Street to the north, the Long Island Railroad (LIRR) tracks to the south, an industrial building property to the east and an industrial building to the west. The building on the property is a one-story slab on grade building approximately 120,000 square feet. The building was constructed in several sections over time, separated by foundations and spread footings. Paved driveways are located to the east and west of the building and paved parking is located along the northern side of the building and the south side of the building. A small area at the building's main entrance is landscaped with grass and trees. The building is occupied by tenants Lasership, Standard Tinsmith, and Hitachi and is in industrial use.

The SSDS shall be specified as part of the remedy for the Site.

## 3.0 SSDS DESIGN

The mitigative objective of the sub-slab depressurization (SSDS) system is to prevent soil vapor intrusion into the building by creating negative pressure below the building slab and within the building foundation footprint. The soil vapor intrusion investigation sampling results during the due diligence period confirmed that a vapor intrusion preferential pathway to indoor air is potentially present. Mitigative measures are required to depressurize the soil void space immediately below the floor slab in accordance with the NYSDOH guidelines.

The SSDS was placed into operation for the Standard Tinsmith and Hitachi tenant spaces in February 2020 prior to tenant occupancy. The SSDS was designed based on the site's specific features and pilot test results. The pilot test was performed by **NAC CONSULTANTS, INC. (NAC)** and established a radius of influence for sub-slab vacuum of approximately 40 feet at 0.010 inches WC within the Standard Tinsmith and the Hitachi spaces. The SSDS for the present two tenants in the eastern section of the building consists of 9 Radonaway, GP501 Radon Fan Pro Series blowers individually connected to sub-slab depressurization suction pits located in the building as shown on Figure 2. The suction pits are 3 ft by 3 ft by 1 ft deep and are installed below the building slab. The concrete slab was sawcut and removed to install the suction pits. The concrete floor slab was replaced over the pits. The pits are fabricated of steel with angle iron framed number 13 expanded metal with ½-inch by 1-inch openings attached to the angle iron frame supports. The suction pits were installed on a 3-inch thick concrete support slab placed approximately 2 feet below the existing floor slab. Pea gravel was backfilled around the suction pit. A galvanized metal deck was installed on the top of the suction pit to support the concrete building slab. A 4-inch diameter, Schedule 40 PVC pipe connects the suction pit to the roof mounted blower and the piping is back pitched to the suction pit to minimize condensate accumulation in the piping. The SSDS suction pit layout is shown on Figure 2.

The SSDS was placed into service for the Lasership tenant space in November 2020 prior to tenant occupancy. The SSDS was designed based on the site's specific features and pilot test results. The pilot test was performed by **NAC** and established a radius of influence for sub-slab vacuum of approximately 45 feet at 0.010 inches WC within the Lasership tenant space. The full scale SSDS

for the Lasership tenant space consists of 28 Radonaway, GP501 Radon Fan Pro Series blowers individually connected to sub-slab depressurization suction pits located in the building as shown on Figure 3. All suction pits, except numbers 4 and 8, are 3 ft by 3 ft by 1 ft deep installed below the building slab. The concrete slab was sawcut and removed to install the suction pits. The concrete floor slab was replaced over the pits. The pits are fabricated of steel with angle iron framed number 13 expanded metal with ½-inch by 1-inch openings attached to the angle iron frame supports. The suction pits were installed on a 3-inch thick concrete support slab placed approximately 2 feet below the existing floor slab. Pea gravel was backfilled around the suction pit. A galvanized metal deck was installed on the top of the suction pit to support the concrete building slab. Suction pits numbers 4 and 8 were installed in the office area. Based on construction constraints and the small size of the office building area, the suctions pit numbers 4 and 8 consist of 2-1/2 feet of 20 slot well screen set in pea gravel to a depth of 2 feet below the concrete floor slab. A 4-inch diameter, Schedule 40 PVC pipe connects each suction pit to a roof mounted blower and the piping is back pitched to the suction pit to minimize condensate accumulation in the piping. The SSDS suction pit layout is shown on Figure 2. The typical SSDS suction pit construction is shown on Figure 4.

The SSDS blowers discharge to the atmosphere through stacks installed at the roof above the highest roof elevation and at least 20 feet from any air handler unit intake or building opening.

Each SSDS blower is hard wired to a separate 110V circuit breaker and a disconnect switch is located at the blower for service and electrical code compliance.

The SSDS blower detail is shown schematically on Figure 5. Photographs of the suction pits are attached.

The SSDS mitigative measures at the Site included sealing potential and/or known pathways for vapor migration to significantly improve the effectiveness of the SSD system, because it limits the flow of subsurface vapors into the building. Joints, cracks and other penetrations of slabs, floor assemblies and foundation walls below or in contact with the ground surface, were sealed with flexible caulking materials that prevents air leakage as needed. The concrete floor slab must be

maintained in good condition.

The SSDS startup vacuum sampling and indoor air sampling was completed on July 18, 2020 for Standard Tinsmith and Hitachi, and November 19, 2020 for Lasership tenant spaces. Sub-slab vacuum measurements were obtained at temporary and permanent sub-slab soil vapor implants (SSVI) throughout the occupied tenant spaces in the eastern end of the building. The vacuum measurements confirmed that the SSDS meets the remedial design objectives and the vacuum field extends to the footprint of the tenant spaces. Indoor air samples for Standard Tinsmith and Hitachi were collected and confirmed that site related VOCs are not present at concentrations above NYSDOH guidelines. The startup results are attached.

# 4.0 SAMPLING AND ANALYSIS

## 4.1 Sub-Slab and Indoor Air Monitoring

Sub-slab soil vapor and indoor air samples will be collected and analyzed for VOCs to track the SSDS operation. The sampling data will be compared to the VOC concentration decision matrices in the NYSDOH "October 2006, Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" guidance document. The indoor air sample detection limits for trichloroethene, carbon tetrachloride and vinyl chloride will be 0.25 micrograms per cubic meter ($mcg/m^3$) or less and the NYSDOH Air Guideline Value for TCE mitigation is 2 $mcg/m^3$.

The sampling procedures are provided in Appendix C.

# 5.0 SITE OPERATION, MAINTENANCE AND INSPECTION

## 5.1 Site Management

**NAC CONSULTANTS, INC. (NAC)** will perform field activities such as sample collection and oversee the monitoring and maintenance of the remediation system.

## 5.2 SSDS Operation and Maintenance

### 5.2.1 SSDS Startup and Shutdown

The SSDS is designed to provide negative pressure below the floor slab and run continuously.

There are 37 SSDS blowers and the blowers are connected to separate branch circuit breaker located in the electrical panel in the building.

**Start up and Shut Down Steps**

1. Turn the circuits breakers to the “on” position.

2. Check the vacuum at each suction point riser. The vacuum should be greater than 3 inches WC.

3. Check the air flow at each SSDS blower using a pitot tube attachment on the micromanometer. The flow rate should be equal to or greater than the startup flow recorded in the attached report.

4. Check the vacuum at temporary and permanent SSVI points with a micromanometer. The vacuum should be 0.005 inches WC or greater.

5. If it is necessary to shut down the blowers, then turn the circuit breakers to the "off" position, tag and lockout the electrical panel and disconnect switch as required by OSHA Lockout Tagout regulations.

### 5.3 Maintenance Activities

#### 5.3.1 Site Access and Security

The SSDS components are secured inside the facility, or located on the exterior walls and roof of the building and the site is fenced.

#### 5.3.2 Leaks

A photoionization air monitor (PID) will be used to screen air quality during routine maintenance. The indoor SSDS pipe fittings will be checked for leaks with a PID. Leaks will be recorded, and corrective measures will be taken accordingly and logged.

#### 5.3.3 SSDS Equipment Maintenance

The SSDS equipment will be inspected for damage. Maintenance will be performed, as needed and logged.

#### 5.3.4 Preventative Maintenance Schedules and Records

A maintenance plan is the most reliable way to minimize repairs and maximize system efficiency. The GP-501 blowers do not require routine maintenance. If needed, maintenance of the piping, placement of permanent or temporary SSVI and circuit breakers will be performed and recorded in a service log kept by **NAC**. As part of the SSDS mitigation, the concrete floor slab and joints

must be maintained in good condition and cracks found must be sealed. The floor will be inspected at a minimum annually, and repairs completed, as needed. Typical O&M documents are listed below and provided in Appendix B:

- Inspection & Maintenance Checklist
- System Operation Log
- Defective Equipment & Repair Log
- Corrective Action Log
- Replacement Part Log

### 5.3.5 Inspection Schedule and Requirements

SSDS components and structures will be periodically inspected to ensure proper and efficient operation. System specific inspection tasks include VOC screening, leak detection, sub-slab vacuum, blower flow rates and vacuum readings.

Basic inspection tasks will be conducted by **NAC** personnel, and only skilled personnel will perform maintenance tasks.

## 6.0 REPORTING

Results of sampling, analysis operation, maintenance and inspections will be provided in the Periodic Review Report for the site.

Standard Tin Smith Tenant Space - Hitachi Tenant Space - Lasership Tenant Space -

**Figure 1**
**Tenant Spaces 225-255**
**East 2nd Street**
**Mineola, New York**

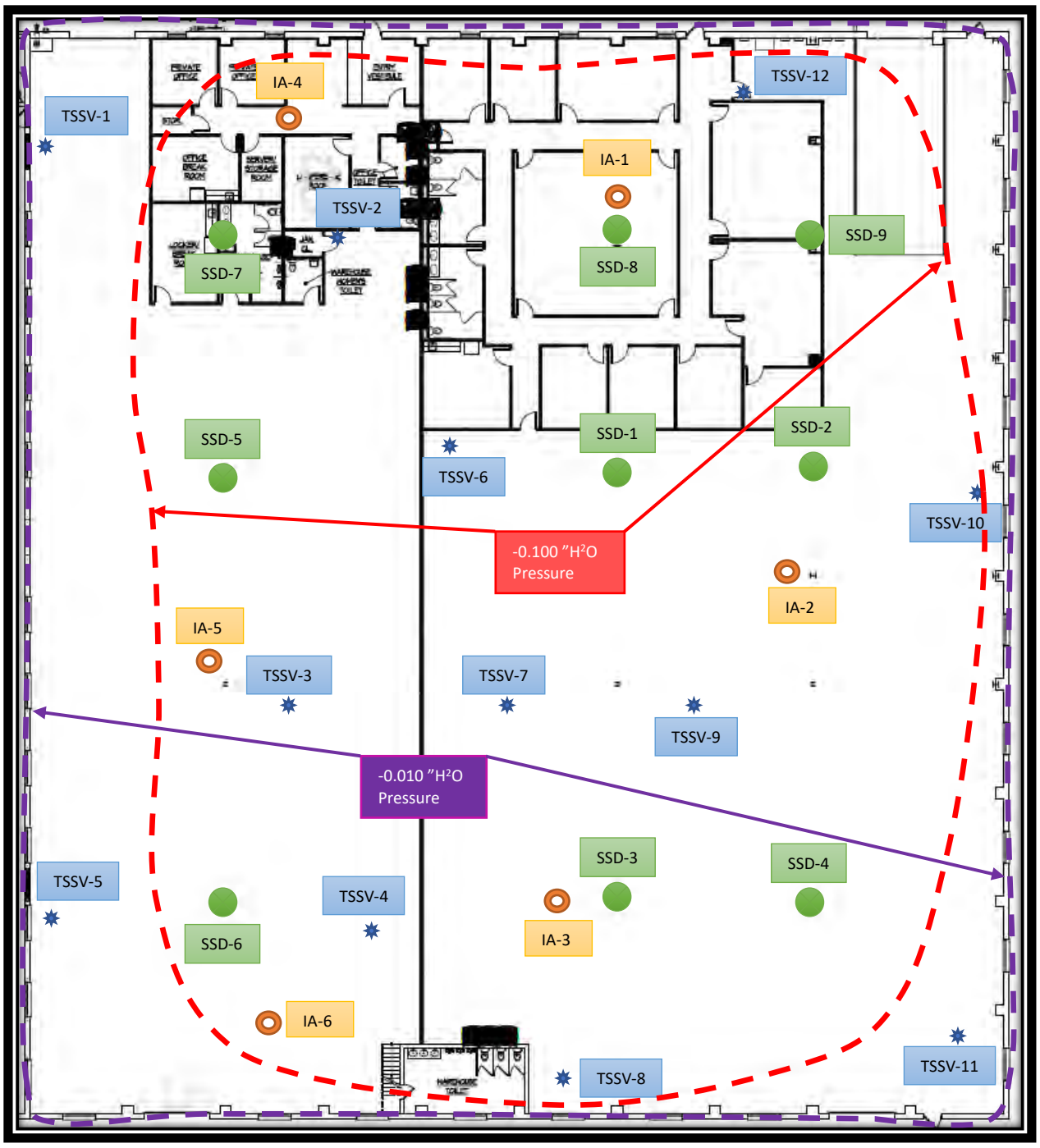



**Figure 2**
**Start-up Testing Locations**
**255 East 2nd Street**
**Mineola, New York**

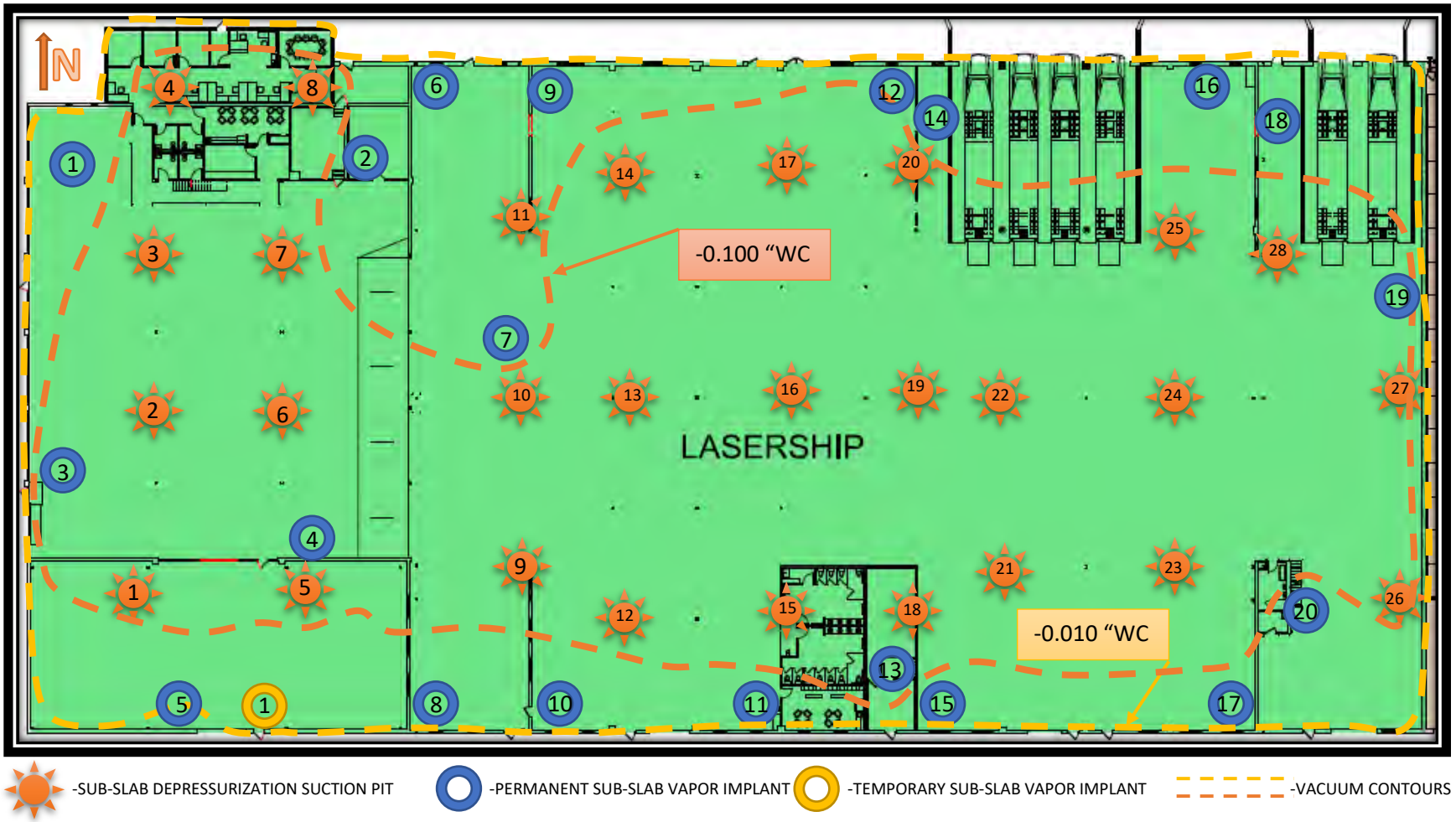



**FIGURE 3**

SSDS START-UP LAYOUT

255 EAST 2ND STREET

MINEOLA, NEW YORK

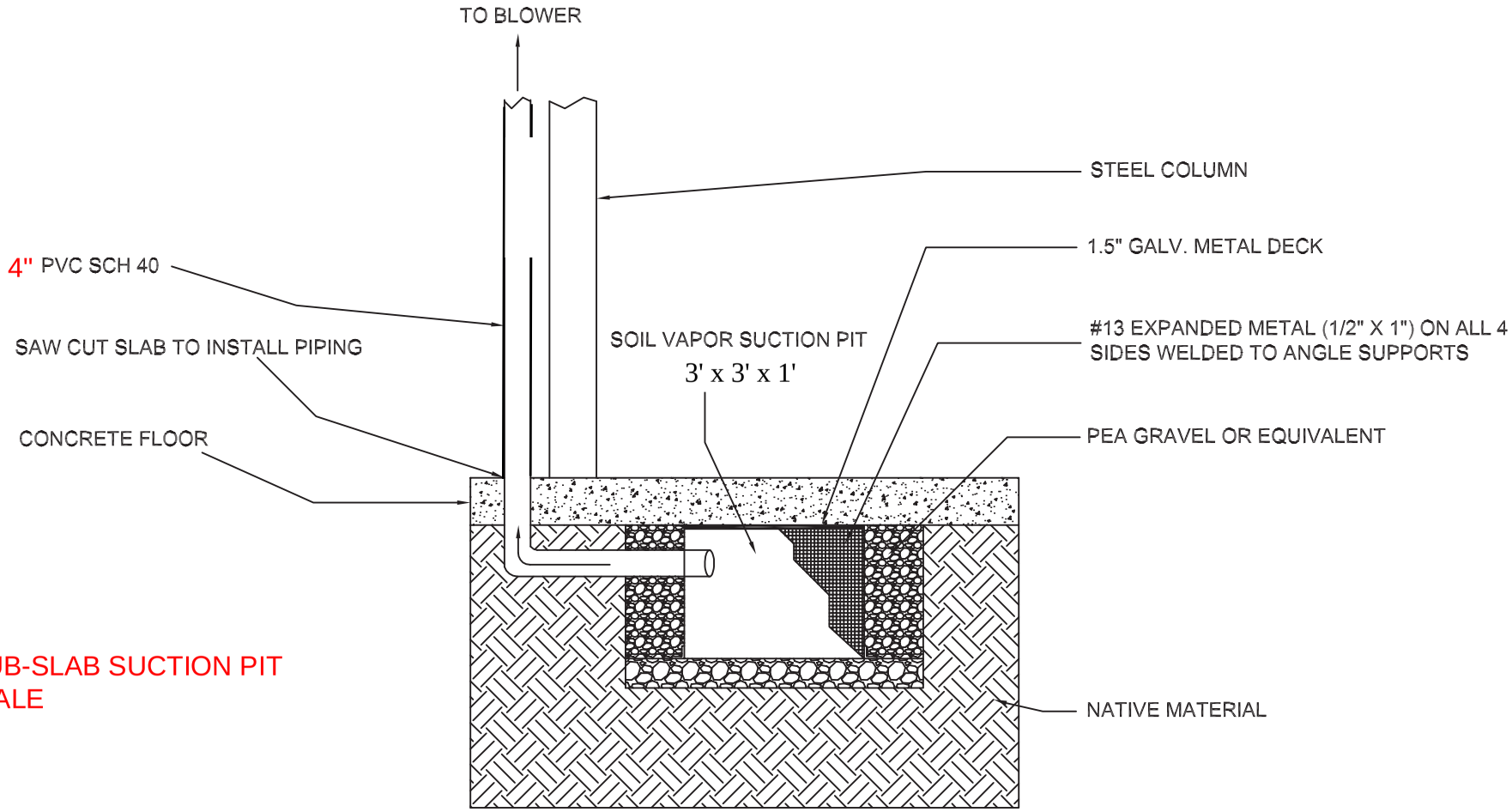
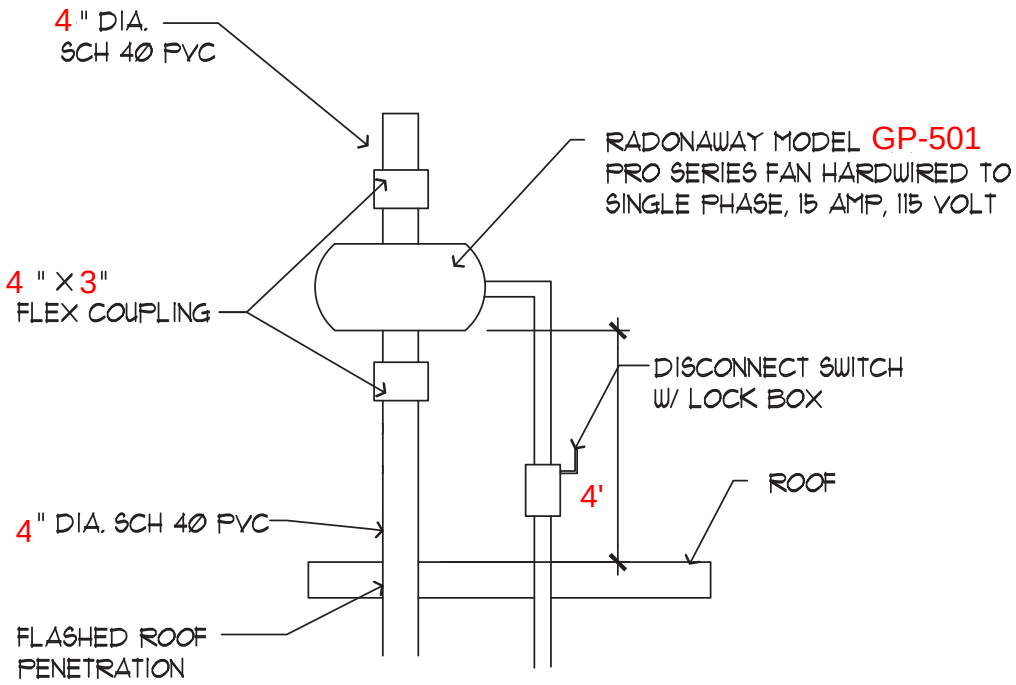



FIGURE 4
TYPICAL SUB-SLAB SUCTION PIT
NOT TO SCALE




TYPICAL SSDS BLOWER
ROOF DETAIL **Figure 5**

SCALE: NOT TO SCALE

**NYSDEC IHWDS NO. 1-30-100**

**FORMER A.K. ALLEN COMPANY, INC. FACILITY**

**255 EAST 2ND STREET**

**MINEOLA, NEW YORK**

# SSDS Suction Pit Photographs

CAUTION / CUIDADO

Zoom

# GP501 Radon Fan Pro Series

**SKU:** 28468

Be the first to review this product

RadonAway's GP501 Pro Series radon fan installs white and stays white. It provides versatility and a broad performance range for both initial installation and fan replacement. Made in the USA with U.S. and imported parts.

NOTICE

## Log In to Purchase

RadonAway is a B2B business only. You must be an approved RadonAway customer to purchase products through this website. If you are an existing RadonAway customer and need a website login, click here. If you are a professional and would like to become a RadonAway customer, click here.

Add to Wishlist

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Details Additional Info Reviews Conditions of Sale

## GP501 Radon Fan Features:

Stay-White™ housing
Five-year limited warranty

Product Categories

Radon Fans −
Pro Series −
RP Series
GP Series
XP Series
Contractor Series +
GP 500
SF180
HS Series
Fantech Fans
Energy Star® Rated Radon Fans
Low Voltage
Radon Pro Packs
HRVs / ERVs +
Radon System Components +
Mitigation Tools & Diagnostic Aids +
Sealing Products +
Crawlspace, Moisture and Radon Control +
Sump Pumps & Accessories +
Pipe Accessories +
Radon System Accessories +
Radon in Water Removal Systems +
Radon Testing +
Spruce Inline Ventilation +
Canada Fulfillment +

Seams sealed to inhibit radon leakage
Mounts on duct pipe or with integral flange
3" diameter ducts for use with 3" or 4" pipe
Electrical box for hard wire or plug in
ETL Listed - for indoor or outdoor use
4 interchangeable models

Air Purifiers
Personal Protection Equipment
New Products New
Best Sellers
On Sale

# Additional Radon Fan Information:

Downloadable Fan Specifications/Sales Sheet (PDF format)
Downloadable Fan Installation Instructions (PDF format)
Calculate your estimated annual electrical cost.
Also available through our Canadian distribution location.

1-2 day shipping in most of US
Read more...

Five year manufacturer's warranty on RadonAway fans

Free technical support for our customers

Contact Us

**Typical CFM vs. Static Pressure WC**

| Model | P/N | Fan Duct Diameter | Watts | Recommended Max Operating Pressure "WC | 1.0" | 1.5" | 2.0" | 2.5" | 3.0" | 3.5" | 4.0" |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GP201 Pro Series | 28465 | 3" | 31-65 | 1.8 | 54 | 42 | 11 | - | - | - | - |
| GP301 Pro Series | 28466 | 3" | 56-100 | 2.3 | 64 | 54 | 41 | 4 | - | - | - |
| GP401 Pro Series | 28467 | 3" | 63-128 | 3.0 | - | 61 | 52 | 44 | 22 | - | - |
| GP501 Pro Series | 28468 | 3" | 68-146 | 3.8 | - | - | - | 70 | 57 | 30 | 10 |

## Related

RadonAway® Transition Fitting
Add to Wishlist

3" x 3" White Coupling (Single)
Add to Wishlist

RadonAway® Easy Rea Manometer - BLUE
Add to Wishlist

# SSDS

## Replacement Part Log

**Dates From:_____ To:_____**

| Inspection Date | Replacement Part(s) | Part Number | Catalog Number | Manufacturer/Distributer | Cost | Installation Date |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Remarks:**

# SSDS

## Defective Equipment & Repair Log

**Dates From:_____ To:_____**

| Inspection Date | Defective Part(s) | Affected Area(s) | Cause | Repairs &/or Replacement Part(s) Installed | Installation Date |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**Remarks:**

# Sub Slab Depressurization System

## Vacuum Measurement Log

| | | Inspection Time, Date and Inspector Initials | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| **SSD-1** | "WC | | | | | | | | | | |
| | CFM | | | | | | | | | | |
| | PID | | | | | | | | | | |
| **SSD-2** | "WC | | | | | | | | | | |
| | CFM | | | | | | | | | | |
| | PID | | | | | | | | | | |
| | | | | | | | | | | | |
| **SSVI-1** | "WC | | | | | | | | | | |
| **SSVI-2** | "WC | | | | | | | | | | |
| **SSVI-3** | "WC | | | | | | | | | | |
| **SSVI-4** | "WC | | | | | | | | | | |
| **SSVI-5** | "WC | | | | | | | | | | |
| **SSVI-6** | "WC | | | | | | | | | | |
| **SSVI-7** | "WC | | | | | | | | | | |
| **SSVI-8** | "WC | | | | | | | | | | |
| **SSVI-9** | "WC | | | | | | | | | | |
| **SSVI-10** | "WC | | | | | | | | | | |
| **SSVI-11** | "WC | | | | | | | | | | |
| **SSVI-12** | "WC | | | | | | | | | | |

**Remarks:**

# APPENDIX C
# SUB-SLAB SOIL VAPOR and INDOOR AIR SAMPLING PROCEDURES

## 1 Sub-Slab Vapor Monitoring Implants (New Implant Installation Procedures)

Permanent sub-slab vapor monitoring implants will be installed, as needed, at residential, commercial and industrial buildings, in accordance with the installation protocols in Section 2.7.2 of the ***October 2006, Guidance for Evaluating Soil Vapor Intrusion in the State of New York*** NYSDOH guidance document. The implants will be installed with a rotary hammer drill, to a depth to be determined by the thickness of the concrete slab. The implants will consist of 1/8 inch brass pipe nipples with brass threaded or compression fittings, finished with a brass recessed threaded cap to the surface. A typical soil vapor monitoring implant is shown in Figure 3.

## 2 Sub-Slab Implant Locations

The procedures in this attachment apply to the sub-slab implants to be installed at residential and/or commercial properties.

## 3 Sub-Slab Implant Components

The sub-slab vapor implant assemblies will consist of a 2-inch long, 1/8-inch brass pipe nipples, having inner and outer diameters of 1/4-inch and 3/8-inch, respectively, with a 1-inch long, 1/2-inch O.D. brass coupling. A porous, inert, glass bead pack will be set inside the void space beneath the implant and around the implant tip. The implant assembly will be sealed, flush with the slab, with Portland cement or equivalent and the implant will be closed using a recessed brass socket plug.

## 4 Sub-Slab Implant Installation

The implant will be installed using a rotary hammer drill. The boring will be initially advanced to

the bottom of the concrete slab, to determine the thickness of the slab, and then advanced an additional inch into the sub-slab annulus to create an open cavity to prevent potential obstructions during sampling. The implant assembly will be inserted into the boring, followed by the installation of a porous, inert glass pack inside the boring void space and around the implant tip. The implant assembly will be sealed, flush with the slab, with Portland cement or equivalent and capped with a recessed brass socket plug. The implant will set for approximately 24 hours after installation to allow the cement seal to cure, prior to sampling.

## 5 Health and Safety Plan

A Health and Safety Plan (HASP) for the soil vapor and sub-slab vapor implant construction and sampling work is provided in the SMP.

## 6 Sampling Parameters

Based on the site environmental history and the historic trends of VOCs in soil, soil vapor and groundwater at this site, chlorinated and fuel-related VOCs are the principle compounds found in on-site soil, soil vapor and groundwater. The soil vapor, sub-slab vapor, indoor air and ambient air samples will be collected and analyzed for VOCs by USEPA Method TO-15, at a NELAP-accredited environmental laboratory.

## 7 Sampling Frequency

Investigation of the potential preferential off-site soil vapor intrusion pathway(s) will require one round of soil vapor, sub-slab vapor, ambient air and indoor air sampling during the heating season. Heating systems are generally expected to be operating routinely between November 15$^{th}$ and March 31$^{st}$, as noted in Section 2.4 of the NYSDOH ***October 2006***, ***Final NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York*** guidance document.

## 8 Sampling Procedures

Sub-slab vapor, indoor air and outdoor ambient air samples will be collected by **NAC** personnel in accordance with the sampling protocols outlined in Sections 2.7.1 and 2.7.4 of the NYSDOH ***October 2006***, ***Final NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York*** guidance document, and in accordance with the United States Environmental Protection Agency (USEPA) Compendium Method TO-15, for the collection and determination of VOCs in air collected in specially prepared canisters (Summa Canisters) and analyzed by gas chromatography and/or mass spectrometry.

Soil vapor and sub-slab vapor samples will be collected no less than 24 hours after installation of

the implants. A maximum of three implant volumes will be purged prior to sample collection to ensure a representative sample of the subsurface vapor is obtained. Samples will be contained in a laboratory prepared, Summa Canister. Flow rates for both purging and sample collection will not exceed 0.2 liters per minute to ensure against outdoor air infiltration during sampling. The sampling flow rate will be controlled by an inlet flow regulator attached to the Summa canister.

Indoor air samples will be collected concurrently with the sub-slab vapor samples. Indoor air samples will be collected at pre-determined locations adjacent to sub-slab vapor sampling points.

The sub-slab vapor and QA/QC sub-slab vapor duplicate samples will be collected over an 8-hour period (commercial properties) and over a 24 hour period (residential properties).

**NAC** will prepare a sampling log form to document site conditions encountered during sampling. The log sheet will summarize the following information:

- sample identification;
- date and time of sample collection;
- sampling depth;
- identity of samplers;
- sampling methods and devices;
- purge volumes;
- volume of soil vapor extracted;
- Summa canister vacuum prior to and after sample collection.
- Apparent moisture content of the sampling zone; and
- Chain of Custody protocols and records used to track samples from sampling point to analysis.

## 9 Tracer Gas

Tracer gas quality assurance/quality control protocols will be followed during soil vapor and sub-slab vapor sampling and by the laboratory to verify the integrity of each of the implant seals, to ensure the soil vapor and sub-slab vapor samples have not been diluted by surface air.

## 10 Laboratory Analyses

The soil vapor, sub-slab vapor, indoor air and outdoor ambient air sample containers (Summa Canisters) will be submitted to an NELAP-accredited environmental laboratory and analyzed for VOCs by United States Environmental Protection Agency (USEPA) compendium method TO-15. The minimum detection limits for the TO-15 analytes will not exceed 0.5 mcg/$m^3$ and the

laboratory analyses will be reported in mcg/$m^3$. The indoor air sample detection limits for trichloroethene, carbon tetrachloride and vinyl chloride will be 0.25 micrograms per cubic meter (mcg/$m^3$) or less and the NYSDOH Air Guideline Value for TCE mitigation will be 2 mcg/$m^3$. The laboratory analyses will be tabulated and reported to NYSDEC.

The laboratory will report the data in accordance with the NYSDEC ASP Category B (CAT B) deliverable format and an electronic data deliverable (EDD) containing the sampling data and CAT B QA/QC data will be submitted to NYSDEC in XML format in accordance with USEPA Superfund Analytical Services/Contract Laboratory Program (AS/CLP).

The laboratory soil vapor sampling and QA/QC data will be submitted along with a Data Usability Summary Report (DUSR), prepared by an independent third party. The qualifications of the third party will be submitted to NYSDEC prior to sampling.

## 11 Quality Assurance Project Plan

The quality assurance (QA) objective is to develop and implement procedures for sampling, laboratory analyses, field measurements and reporting that will provide quality data consistent with its intended use. Soil vapor samples and sub-slab vapor samples will be collected no less than 24 hours after construction. Prior to sampling, tracer gas testing will verify the integrity of the seal for each soil vapor monitoring implant. Additional tracer gas testing will be performed by the laboratory to confirm the field tracer gas testing results. The soil vapor samples, sub-slab vapor samples, indoor air samples and outdoor ambient air samples will be collected following standard sampling protocols. The sampling methodology, canister certification, preservation requirements, holding times and protocols for filed duplicate samples will be consistent with the NYSDEC Analytical Services Protocol (ASP).

## 12 Quality Control Requirements

Field quality control will be maintained during all field activities. All field quality control procedures will be followed according to this Quality Assurance Project Plan and documented in bound ledgers.

## 13 Field Measurements

Measurement data generated during field activities that are incidental to collection of samples for analytical testing or unrelated to sampling will be recorded in a bound field ledger book. These activities may include:

- Weather conditions, including precipitation, outdoor temperature, barometric pressure, wind speed and direction should be noted at least 24 to 48 hours prior to sampling;

- Prepare a sampling site map which will include the site building(s), sampling locations, location of potential interferences, compass orientations, building footings and paved areas;

- Record building ventilation conditions, such as an active heating system, at the time of sampling; and

- Record pertinent observations, such as odors and readings from field instrumentation, such as a photoionization detector.

The general QA objective for this measurement data is to use standard procedures to obtain reproducible and comparable measurements at a degree of accuracy consistent with the intended use of the data. Field measurements will be recorded in bound field log book. and sample documentation will conform with the standard sampling handling requirements.

## 14 Tracer Gas Testing

Tracer gas field testing, using helium gas, will be performed on all implants prior to the initial sampling round to verify the integrity of each implant seal and to limit the possibility of sample dilution from surface air. Subsequent tracer gas frequency will depend on the results from this initial test.

The tracer gas field test will consist of sealing the area surrounding the implant with plastic sheeting and then introduce the tracer gas underneath the sheeting, so that the area where the probe intersects the ground is immersed in the tracer gas. A helium detector will be connected to the soil vapor/sub-slab vapor implants, in accordance with Section 2.7.5 of the NYSDOH ***October 2006, Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*** document, and tracer gas concentrations in the well will be recorded in the sampling log sheet. This procedure will be duplicated at each implant, prior to sample collection. The laboratory will confirm the field tracer gas tests by first analyzing approximately 85 to 90% of each sample canister for VOC's via USEPA method TO-15 and then use a helium detector to analyze the remaining contents in the Summa Canisters.

The sampling logs with the recorded field tracer gas test measurements and the tracer gas measurements reported by the laboratory will be submitted to NYSDEC with the initial sampling round report. NYSDEC will review the field and laboratory tracer gas test results to determine if

the bentonite/cement grout seal for each implant will require repairs and/or replacement to reduce the infiltration of ambient air and if additional tracer gas field/laboratory testing is required in the subsequent soil vapor sampling round.

## 15 Sample Collection

The soil vapor and sub-slab vapor samples will be collected as follows for laboratory analyses;

- Enter the designated sample identification along with the collection date and time and the name of the sample collector into a bound field log book. Record the equipment used to collect the sample;

- Prepare the sampling area for application of the tracer gas to the implant seal and collection of the vapor sample by connection the implant to a metal bellows type pump. Plastic sheeting will be used to seal the sampling area;

- Review the laboratory decontamination records for each of the "cleaned" Summa canisters prior to sampling;

- Evacuate a maximum of three implant volumes prior to sample collection. Adjust the flow rate to less than 0.2 liters per minute during evacuation and sample collection. Record flow rate, evacuation volume, sample volume and duration into a bound field log book;

- Label the sample summa canister(s), record the sample ID used for each sample, sample time and sample analyses in the field log book and in the laboratory chain of custody. Preserve the sample, as instructed in USEPA compendium method TO-15 and complete the laboratory chain of custody form;

- After equipment decontamination, properly discard the plastic sheeting and other expendable sampling materials; and

- Deliver the sample Summa canister to the analytical laboratory. Retain a signed copy of the chain of custody form(s).

## 16 Field Duplicate

A field duplicate from one of the permanent soil vapor implants and a field duplicate from one of the sub-slab vapor implants will be collected and submitted to the analytical laboratory to provide a means to assess the quality of the data resulting from the field sampling program. The duplicate

samples will be analyzed for sampling and analytical reproducibility and will be collected using the same procedures, the same equipment and in the same types of containers as the required samples. The duplicate samples will be preserved in the same manner and submitted for the same analyses as the samples. The duplicate samples will be collected for each sampling round and the laboratory analyses will be reported to NYSDEC.

## 17 Outdoor Air Samples

An outdoor ambient air sample will be collected at a frequency of once per day during the soil vapor sampling round. The samples will be collected and analyzed for VOCs by USEPA method TO-15. The laboratory results will be reported as part of the NYSDEC CAT B deliverables package.

## 18 Laboratory Analyses

The samples will be delivered to a NELAP certified environmental laboratory, for VOC and tracer gas detection. VOCs in the collected soil vapor samples will be analyzed by USEPA Method TO-15. The sampling data with the NYSDEC CAT B deliverables package will be submitted to NYSDEC EQUIS format.

All data quality objectives (DQOs) and acceptance criteria shall be consistent with the NYSDEC Analytical Services Protocol (ASP). The minimum reporting limits for target VOC analytes will be 0.5 mcg/$m^3$ or less, to allow for easy comparison of the results to regulatory and/or background level concentrations**.**

## 19 Reporting

A report will be prepared upon the completion of the sub-slab soil vapor and indoor air sampling. The report will include a description of the sub-slab monitoring implant locations and if needed, installation work, the implant construction logs, the sampling work performed with field tracer gas test results, the tabulated sampling data with laboratory tracer gas test results and conclusions. The laboratory analyses will be included as an appendix to the report in EQUIS format.

The report will be submitted to NYSDEC and NYSDOH for review.

**NICHOLAS A. ANDRIANAS, P.E.**
**NAC CONSULTANTS, INC.**
28 Henry Street
Kings Park, New York 11754
631-269-2680
Fax 631-269-2685

December 4, 2020

Mr. Kevin J. Lumpe
Director of Construction & Environmental
Alkier Steel
999 South Oyster Bay Road
Bethpage, New York 11714

**Re: Sub-Slab Depressurization System**
**Start-up Report**
**255 East 2nd Street**
**Mineola, New York**

Dear Mr. Lumpe:

This report presents the results of the sub-slab depressurization system (SSDS) pilot test, installation, and start-up performed at the above referenced location. This report is a supplement to the July 30, 2020 SSDS pilot test, start-up and indoor air sampling report prepared for the tenant spaces presently occupied by Hitachi and Standard Tinsmith. The July 30, 2020 report is attached for your convenience. The SSDS was designed by **NAC CONSULTANTS, INC** (**NAC**). The SSDS was started up prior to the tenant's (Lasership) move into the western space. The pilot test was performed by **NAC** on July 29, 2020. The SSDS was installed and started up prior to Lasership's occupancy in the space. SSDS start-up testing was performed by **NAC** on November 19, 2020. The benchmark for sub-slab vacuum response of the SSDS is 0.010 inches of water column (WC) throughout the building footprint. The SSDS meets the design objective. The site map and tenant spaces are shown on Figure 1.

## SSDS Pilot Test

The objective of the SSDS pilot test was to determine the vacuum capture radius at the benchmark for vacuum response of the SSDS at 0.010 inches (in) water column (wc). **NAC** performed the pilot test for the SSDS on July 29, 2020. Two temporary sub-slab depressurization pits (TSSD)

pits and temporary sub-slab vapor implants (TSSV) were installed in the vacant tenant space to be occupied by Lasership. The locations of the TSSD wells for the pilot test are shown on Figures 2 and 3. Two test runs were performed at the two TSSD wells using a model GP-501 inline blower. The pilot test data are provided in Tables 1 and 2. Run 1 was conducted at the northwestern most space. One TSSD was connected to a GP-501 inline blower and run for 1 hour prior to sub-slab vacuum data collection at four (4) TSSVs. The background and Run 1 sub-slab vacuum data are provided in Table 1. The TSSV and TSSD locations are shown on Figure 2. Run 2 was performed near the center of the vacant tenant space. One TSSD was connected to a GP-501 inline blower and run for 1 hour prior to sub-slab vacuum data collection at six (6) TSSVs. The background and run 2 data are provided in Table 2 and the TSSV and TSSD locations are provided on Figure 3. Based on the pilot test results, a capture radius of 45 feet was determined at the benchmark for vacuum response of 0.010" WC. The data are provided in Tables 1 and 2.

## System Installation

The full scale SSDS was installed prior to Lasership's present occupancy in the building. **NAC** designed the full-scale system based on a 45 feet capture radius and the system layout is shown on Figure 4. The full scale SSDS for the Lasership tenant space consists of 28 (SSD-1 through SSD-28) Radonaway, GP501 Radon Fan Pro Series blowers individually connected to sub-slab depressurization suction pits located in the building as shown on Figure 4. All suction pits, except numbers 4 and 8, are 3 ft by 3 ft by 1 ft deep installed below the building slab. The concrete slab was sawcut and removed to install the suction pits. The concrete floor slab was replaced over the pits. The pits are fabricated of steel with angle iron framed number 13 expanded metal with ½-inch by 1-inch openings attached to the angle iron frame supports. The suction pits were installed on a 3-inch thick concrete support slab placed approximately 2 feet below the existing floor slab. Pea gravel was backfilled around the suction pit. A galvanized metal deck was installed on the top of the suction pit to support the concrete building slab. Suction pits numbers 4 and 8 were installed in the office area. Based on construction constraints and the small size of the office building area, the suctions pit numbers 4 and 8 consist of 2-1/2 feet of 20 slot well screen set in pea gravel to a depth of 2 feet below the concrete floor slab. A 4-inch diameter, Schedule 40 PVC pipe connects

each suction pit to a roof mounted blower and the piping is back pitched to the suction pit to minimize condensate accumulation in the piping. The SSDS suction pit layout is shown on Figure 4. The typical SSDS suction pit construction is shown on Figure 5. Photographs of the suction pits are attached.

The SSDS blowers discharge to the atmosphere through stacks installed at the roof above the highest roof elevation and discharge at least 20 feet from any air handler unit intake or building opening. The schematic of the roof mounted blower is shown on Figure 6. The SSDS was operational before the tenant space was occupied. Twenty permanent sub-slab vapor implants were installed in the Lasership tenant space to routinely measure sub-slab vacuum.

## Start-up

On November 19, 2020, **NAC** performed start-up tests on the SSDS installed in the Lasership tenant space. Vacuum and flow measurement sampling ports were installed in the accessible SSD suction point piping to determine the vacuum at the suction point and the air flow rate at the individual SSD suction points. The startup data are provided in Table 3. Sub-slab vapor implants (SSVI) were installed throughout the Lasership space to confirm that the SSDS achieves the 0.010" WC benchmark. Data collected at the sub-slab vapor implants are provided in Table 3. The start-up data confirm that the SSDS provides the required sub-slab vacuum at the -0.010" WC benchmark in the Lasership space. Vacuum contours at -0.010" WC and -0.100" WC, and the SSD pit locations are shown on Figure 4.

## Conclusions

The SSDS placed in operation in the Lasership space in November 2020 and the SSDS placed in operation at the Hitachi and Standard Tinsmith spaces in July 2020 at 255 East Second Street meet the mitigation objective of the sub-slab depressurization to prevent soil vapor intrusion into the entire building by creating vacuum below the building slab and within the building foundation footprint. The Site Management Plan for 255 East Second Street, Mineola, New York will be

modified to include the SSDS in place for the entire 255 East Second Street building. The existing SVE system installed by the prior facility owner should be decommissioned and removed, because the system achieved asymptotic VOC removal after five years in operation and the soil vapor migration into the building will be controlled by the SSDS now installed throughout the entire 255 East Second Street building. The O&M plan will be updated in corporate the SSDS throughout the building and to delete the operation of the SVE system.

Sincerely,
NAC CONSULTANTS, INC.

Nicholas A. Andrianas, P.E.

Enclosure

**SSDS Pilot Test Data**
**255 East 2nd Street**
**Mineola, New York**
**July 29th, 2020**
**Table 1**

## Run 1 Pilot Test Start- 10:15

| Background Data | | | | |
|---|---|---|---|---|
| | TSSV-1 | TSSV-2 | TSSV-3 | TSSV-4 |
| " WC | -0.010 | -0.002 | 0.000 | 0.000 |

| GP- 501 Data Collected at 11:15 | |
|---|---|
| "WC | -3.547 |
| CFM | 30.000 |

| Run 1 Data Collected @ 11:25 | | | | |
|---|---|---|---|---|
| | TSSV-1 | TSSV-2 | TSSV-3 | TSSV-4 |
| " WC | -0.045 | -0.038 | -0.046 | -0.008 |

Notes:
"WC- Inches water column
SVE system on Site was in operation during the Pilot test
Barometric Pressure @ 10:51 29.94 "Hg and falling

**SSDS Pilot Test Data**
**255 East 2nd Street**
**Mineola, New York**
**July 29th, 2020**
**Table 2**

## Run 1 Pilot Test Start- 12:00

| Background Data | | | | | | |
|---|---|---|---|---|---|---|
| | TSSV-1 | TSSV-2 | TSSV-3 | TSSV-4 | TSSV-5 | TSSV-6 |
| " WC | -0.035 | -0.018 | -0.005 | -0.010 | -0.020 | -0.005 |

| GP- 501 Data Collected at 13:00 | |
|---|---|
| "WC | -3.674 |
| CFM | 20.000 |

| Run 1 Data Collected @ 13:10 | | | | | | |
|---|---|---|---|---|---|---|
| | TSSV-1 | TSSV-2 | TSSV-3 | TSSV-4 | TSSV-5 | TSSV-6 |
| " WC | -0.103 | -0.032 | -0.065 | -0.016 | -0.048 | -0.005 |

Notes:
"WC- Inches water column
SVE system on Site was in operation during the Pilot test
Barometric Pressure @ 12:51 29.93 "Hg and falling

SSDS Start-up Results
255 East 2nd Street
Mineola, New York
November 19, 2020
Table 3

| Sub-Slab Vapor Implants | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **SSVI-1** | **SSVI-2** | **SSVI-3** | **SSVI-4** | **SSVI-5** | **SSVI-6** | **SSVI-7** | **SSVI-8** | **SSVI-9** | **SSVI-10** |
| **"WC** | -0.054 | -0.075 | -0.179 | -0.418 | -0.010 | -0.030 | -0.083 | -0.019 | -0.066 | -0.035 |
| | | | | | | | | | | |
| | **SSVI-11** | **SSVI-12** | **SSVI-13** | **SSVI-14** | **SSVI-15** | **SSVI-16** | **SSVI-17** | **SSVI-18** | **SSVI-19** | **SSVI-20** |
| **"WC** | -0.068 | -0.106 | -0.468 | -0.066 | -0.064 | -0.025 | -0.061 | -0.049 | -0.171 | -0.099 |
| | | | | | | | | | | |
| | **TSSVI-1** | | | | | | | | | |
| **"WC** | -0.053 | | | | | | | | | |

Notes:
"WC- Inches Water Coulmn
SSVI- sub-slab vapor implant
TSSVI- temporary sub-slab vapor implant
Data collected using a Fluke Digitial Manonmeter
Data collected on November 19, 2020

| Sub-Slab Depressurization Suction Pits | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **SSD-1** | **SSD-2** | **SSD-3** | **SSD-4** | **SSD-5** | **SSD-6** | **SSD-7** | **SSD-8** | **SSD-9** | **SSD-10** |
| **"WC** | -3.866 | -4.228 | -3.956 | -1.389 | -3.510 | -4.280 | -3.956 | -3.109 | -4.156 | -3.866 |
| **CFM** | 15 | 10 | 10 | 70 | 30 | 10 | 10 | 50 | 10 | 20 |
| | | | | | | | | | | |
| | **SSD-11** | **SSD-12** | **SSD-13** | **SSD-14** | **SSD-15** | **SSD-16** | **SSD-17** | **SSD-18** | **SSD-19** | **SSD-20** |
| **"WC** | -2.801 | -4.204 | -4.174 | -4.106 | N/A | -4.215 | -4.058 | -3.158 | -4.104 | -4.118 |
| **CFM** | 60 | 10 | 10 | 10 | N/A | 10 | 10 | 50 | 10 | 10 |
| | | | | | | | | | | |
| | **SSD-21** | **SSD-22** | **SSD-23** | **SSD-24** | **SSD-25** | **SSD-26** | **SSD-27** | **SSD-28** | | |
| **"WC** | -4.319 | -4.264 | -4.266 | -4.300 | -4.275 | -3.359 | -3.545 | -3.903 | | |
| **CFM** | 10 | 10 | 10 | 10 | 10 | 42 | 30 | 10 | | |

Notes:
"WC- Inches Water Coulmn
CFM- Cubic Feet per Minute
Data collected using a Fluke Digitial Manonmeter
Data collected on November 19, 2020

Standard Tin Smith Teant Space - Hitachi Tenant Space - Lasership Tenant Space -

**Figure 1**
**Tenant Spaces**
**255 East 2nd Street**
**Mineola, New York**

**Figure 2**
**Pilot Test Run 1 Locations**
**255 East 2nd Street**
**Mineola, New York**

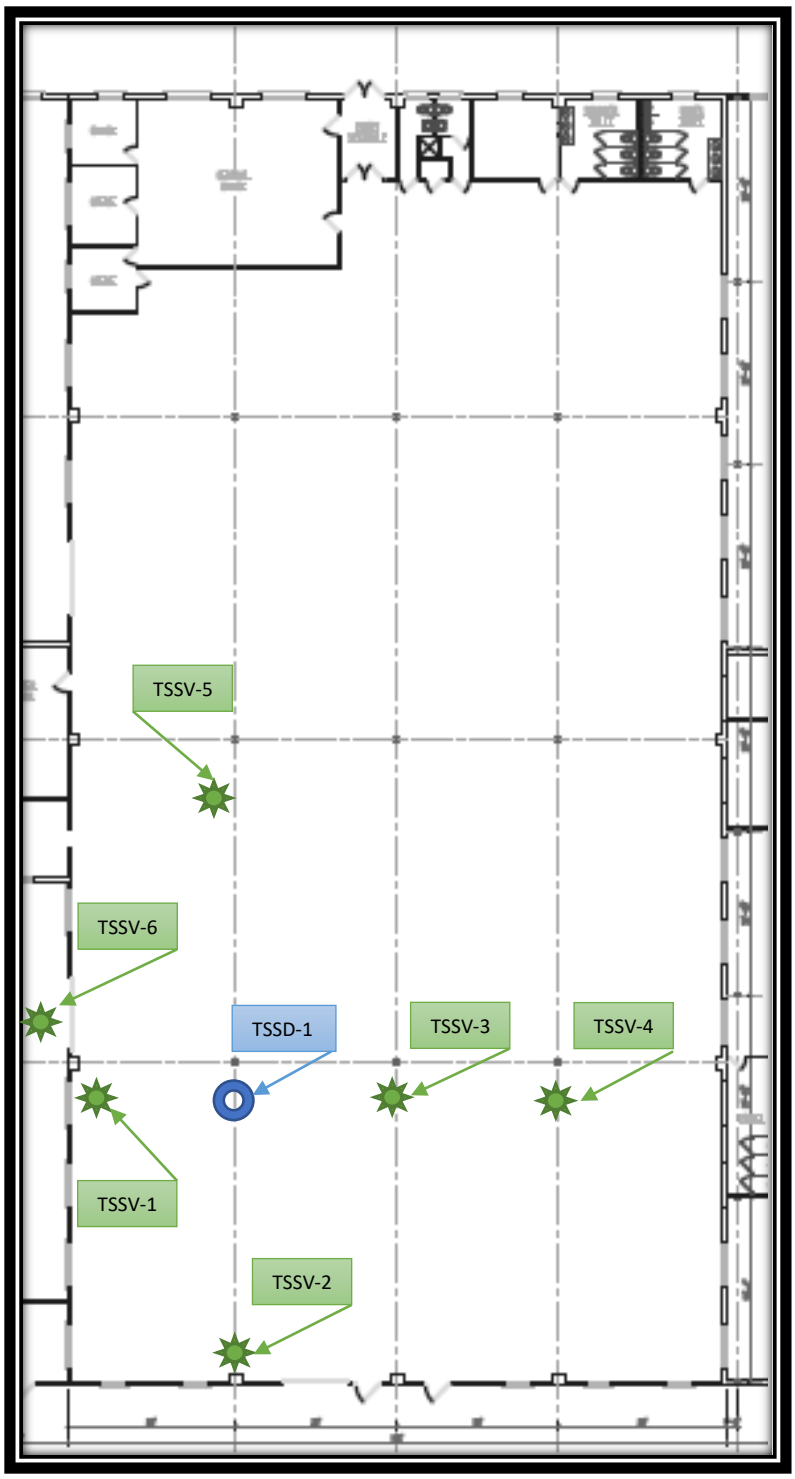



**Figure 3**
**Pilot Test Run 2 Locations**
**255 East 2nd Street**
**Mineola, New York**

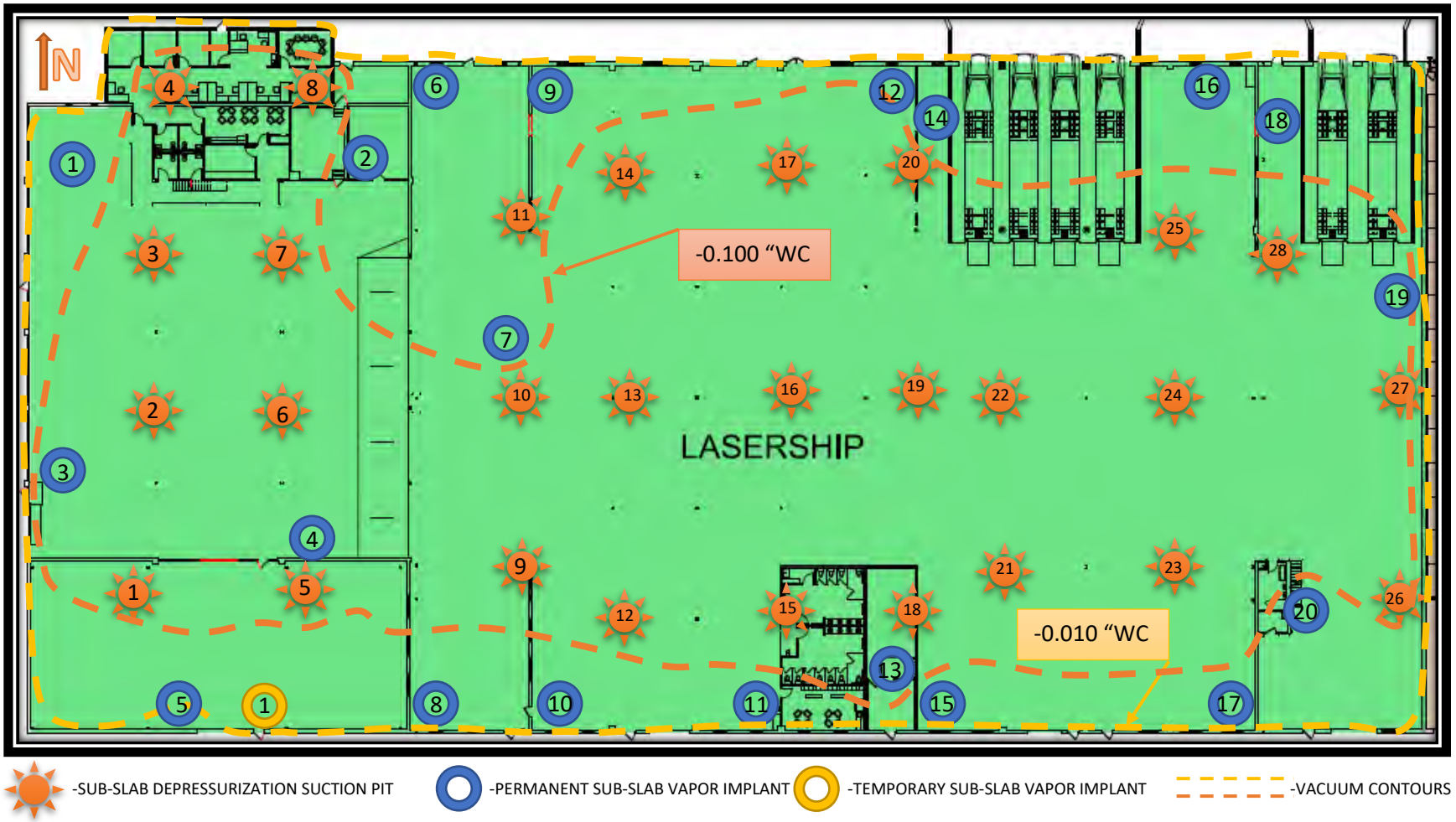



**FIGURE 4**

SSDS START-UP LAYOUT

255 EAST 2ND STREET

MINEOLA, NEW YORK

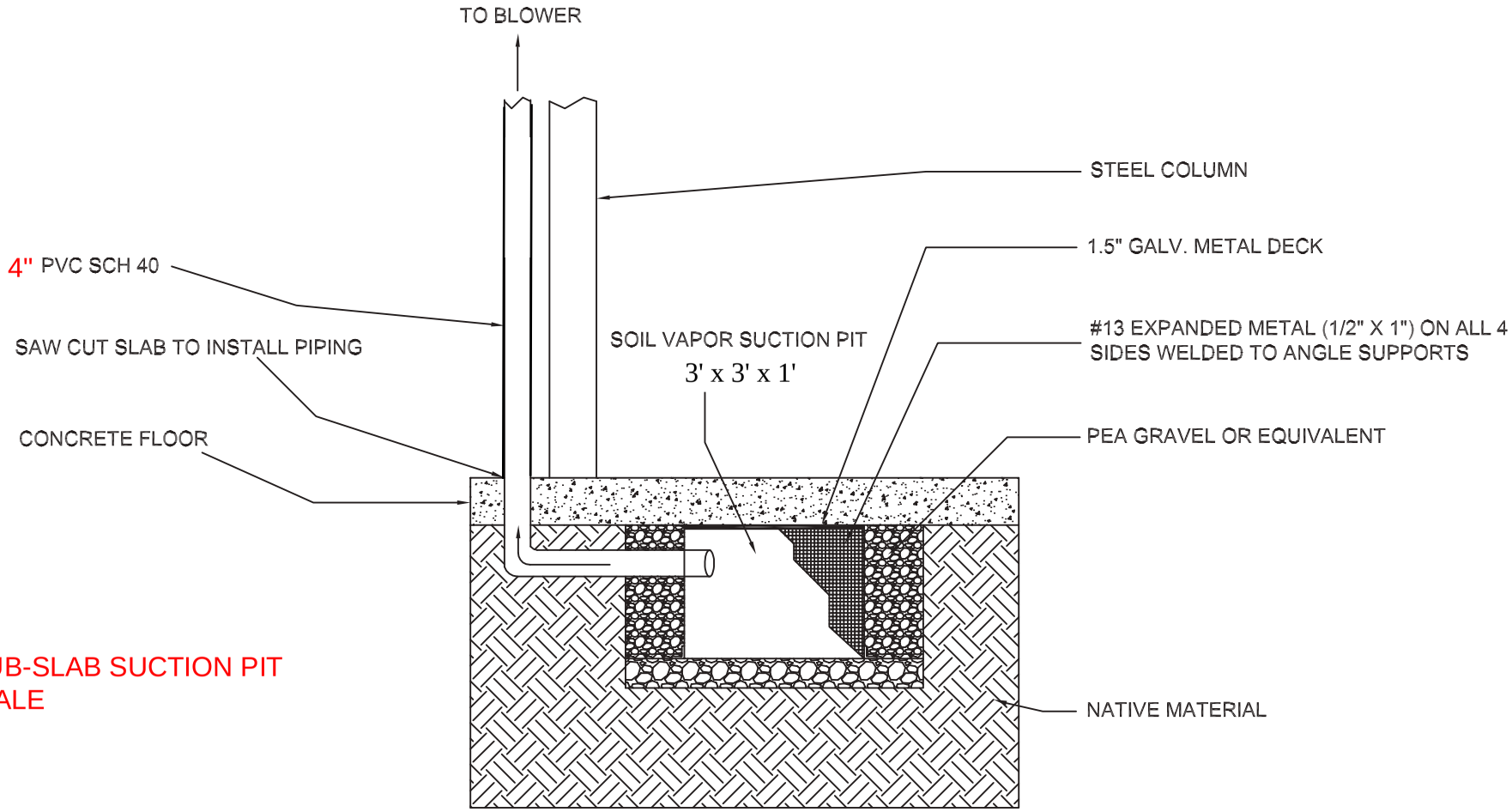
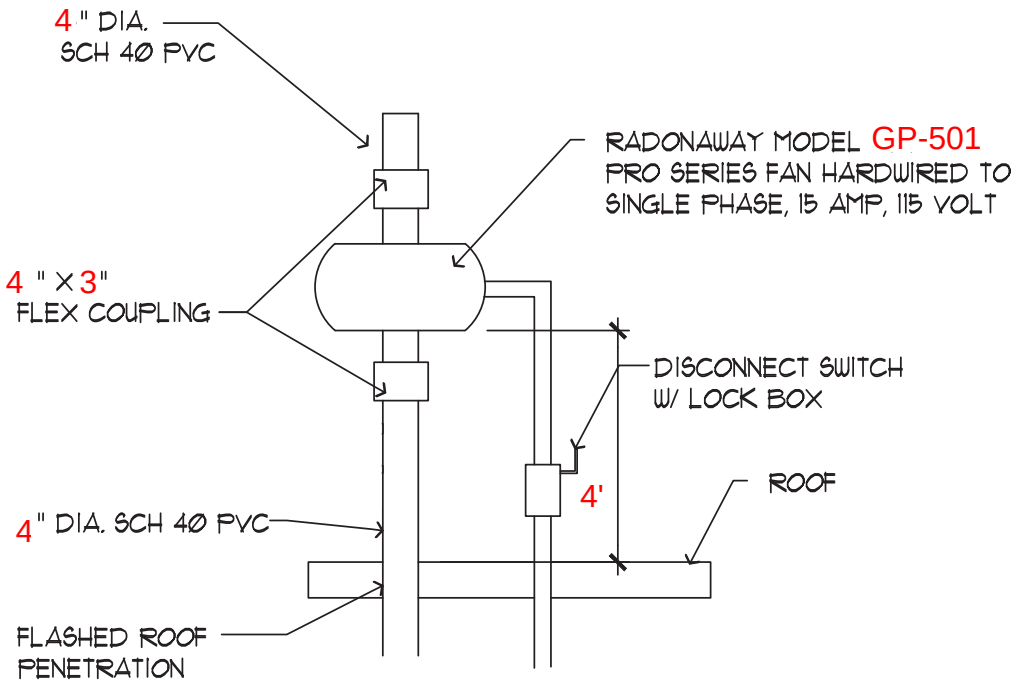



FIGURE 5
TYPICAL SUB-SLAB SUCTION PIT
NOT TO SCALE




TYPICAL SSDS BLOWER
ROOF DETAIL **Figure 6**

SCALE: NOT TO SCALE

ECOBAT

**NICHOLAS A. ANDRIANAS, P.E.**
**NAC CONSULTANTS, INC.**
28 Henry Street
Kings Park, New York 11754
631-269-2680
Fax 631-269-2685

July 30, 2020

Mr. Kevin J. Lumpe
Director of Construction & Environmental
Alkier Steel
999 South Oyster Bay Road
Bethpage, New York 11714

**Re: Sub-Slab Depressurization System**
**Pilot Test, Start-up, and Indoor Air Sampling Report**
**255 East 2nd Street**
**Mineola, New York**

Dear Mr. Lumpe:

This report presents the results of the sub-slab depressurization system (SSDS) pilot test, sub-slab depressurization system (SSDS) installation, SSDS start-up, and indoor air sampling performed in the two currently tenant-occupied spaces at the above referenced site. In addition, there is a SVE system installed at the south side of the facility and the system was found to be shut down by the previous owner. The SVE was repaired and brought online in the fall of 2019 by Alkier Steel. The operating vacuum and air flowrate for the SVE system are provided in this report.

The SSDS was designed by **NAC CONSULTANTS, INC**, (**NAC**). The SSDS was started up prior to tenant occupancy in the eastern spaces of the building. This section of the building has a footprint of approximately 36,000 square feet with spread footing foundations around the perimeter. The tenant spaces are shown on Figure 1. The pilot test was performed by **NAC** in October and November 2019. The SSDS start-up and indoor air sampling was performed by **NAC** on July 18, 2020.

## SSDS Pilot Test

The objective of the SSDS pilot test was to determine the vacuum capture radius at the benchmark

for vacuum response of the SSDS is 0.010 inches (in) water column (wc). **NAC** performed the pilot test for the SSDS in October and November 2019. Two temporary sub-slab depressurization wells (TSSD) wells and sub-slab temporary implants were installed in the tenant spaces. The locations of the TSSD wells for the pilot test are shown on Figure 2. Three pilot test runs were completed at the two TSSD wells using a Radonaway model HP-220 and a Radonaway model GP-501 inline blower. The pilot test data are provided in Table 1. Based on the pilot test results, a capture radius of 40 feet was determined, based on a benchmark for vacuum response of 0.010 in wc.

## System Installation

The full scale SSDS was installed prior to tenants occupying the spaces. The spaces are shown on Figure 1. **NAC** designed the full-scale system based on a 40 foot capture radius established by the pilot test. The SSDS for the present two tenants in the eastern section of the building consists of 9 Radonaway, GP501 Radon Fan Pro Series blowers individually connected to sub-slab depressurization suction pits located in the building as shown on Figure 2. The suction pits are 3 ft by 3 ft by 1 ft deep and are installed below the building slab. The concrete slab was sawcut and removed to install the suction pits. The concrete floor slab was replaced over the pits. The pits are fabricated of steel with angle iron framed number 13 expanded metal with ½-inch by 1-inch openings attached to the angle iron frame supports. The suction pits were installed on a 3 inch thick concrete support slab placed approximately 2 feet below the existing floor slab. Pea gravel was backfilled around the suction pit. A galvanized metal deck was installed on the top of the suction pit to support the concrete building slab. A 4 inch diameter, Schedule 40 PVC pipe connects each suction pit to a roof mounted blower and the piping is back pitched to the suction pit to minimize condensate accumulation in the piping. The SSDS suction pit layout is shown on Figure 2. The typical SSDS suction pit construction is shown on Figure 3. Photographs of the suction pits are attached.

The SSDS blowers discharge to the atmosphere through stacks installed at the roof above the highest roof elevation and at least 20 feet from any air handler unit intake or building opening. The schematic of the roof mounted blower is shown on Figure 4. There are three SSD suction pits

(SSD-5, SSD-6, and SSD-7) in the Standard Tinsmith tenant space. There are six SSD suction points (SSD-1, SSD-2, SSD-3, SSD-4, SSD-8, and SSD-9) in the Hitachi tenant space. The SSDS was operational before the tenant spaces were occupied.

## SSDS Start-up

On July 18th, 2020, **NAC** performed SSDS start-up tests on SSDS installed in the Standard Tinsmith and Hitachi tenant spaces at the east end of the building. Standard Tinsmith distributes and fabricates sheet metal products. Incidental chemical usage was observed in Standard Tinsmith. Hitachi warehouses parts and bagged dry chemicals. Both companies were closed on the day of the testing and sampling.

Vacuum and flow measurement sampling ports were installed in the accessible SSD suction point piping to determine the vacuum at the suction point and the air flow rate at the individual SSD points. The startup data are provided in Table 2. Temporary sub-slab vapor points (TSSV) were installed throughout the space to determine that the SSDS was achieving the -0.010" WC benchmark throughout both tenant spaces. The vacuum measurements collected from the TSSV-1 through TSSV-12 are provided in Table 2. The start-up vacuum data confirm that the SSDS provides adequate capture at the -0.010" WC benchmark throughout both tenant spaces. Vacuum contours (-0.010" WC and -0.100" WC), TSSV locations, and SSDS suction point locations are shown on Figure 2.

## SVE System

There is an existing SVE system installed at the former A. K. Allen facility. The system was shut down by the former owner. The SMP and related correspondence reports that the SVE system was installed to remediate soil at the south side of the property outside the building and to control VOC soil vapor migration to occupants in the building. The SMP states that the SVE was operated for a period of five years and that asymptotic VOC removal conditions were met in June 2013, therefore the SVE system met the soil remediation objective.

The SVE system is located in a metal shed in the southern parking lot. SVE wells were connected to a moisture knock-out drum, a 7-horsepower blower and a series of two vapor-phase, 400-pound carbon units. **NAC** and Alkier Steel repaired the SVE system and it is presently in operation. It was placed in service in the fall of 2019, prior to installation of the SSDS and occupancy of the building. Vacuum and air flow measurements were obtained at the system on July 18, 2020. The blower vacuum was -30.0 inches WC and the air flow rate was 236 CFM. The SVE system data are provided in Table 2. Based on the blower size, the SVE appears to be operating at greater than the design vacuum and flow rate.

The Site Management Plan for 255 East Second Street, Mineola, New York will be modified to include a sub-slab depressurization system (SSDS) for the occupied space in the building. The mitigative objective of the sub-slab depressurization (SSDS) system is to prevent soil vapor intrusion into the building by creating negative pressure below the building slab and within the building foundation footprint. The SVE system should be decommissioned, because the system achieved asymptotic VOC removal after five years in operation and the soil vapor migration into the building will be controlled by the SSDS installed in each occupied tenant space.

**Indoor Air Sampling**

On July 18, 2020 **NAC** collected indoor air samples for TO-15 laboratory analyses in both the Standard Tinsmith and Hitachi tenant spaces. The sampling round consisted of three indoor air samples (IA-1 through IA-6) for each tenant space and one outdoor ambient air (AA-1) sample located upwind (southeast corner) of the Site. Samples IA-5 and IA-2 correspond to samples IA-7 and IA-8 respectively collected in a prior sampling round conducted by ERM during the due diligence period. Indoor air sampling locations are shown on Figure 1. The sampling data are provided in Table 3 and the laboratory report is attached.

The sampling results for trichloroethene (TCE), tetrachloroethene (PCE), and methylene chloride were compared to the *New York State Department of Health FINAL Guidance for Evaluating Soil Vapor Intrusion in the State of New York October 2006* and subsequent updated indoor air quality (IAQ) guidelines. Table 4 presents the comparison.

The concentrations of 1,1,1-TCA, 1,1-DCE, and vinyl chloride were non-detect in the indoor and the outdoor ambient air samples. Carbon tetrachloride was also found in indoor and outdoor ambient air concentrations at similar low concentrations. The PCE concentrations in samples IA-1 (0.37 mcg/$m^3$), IA-2 (0.62 mcg/$m^3$), IA-5 (0.84 mcg/$m^3$) and IA-6 (0.64 mcg/$m^3$) were similar to the ambient air concentration found in sample AA-1 (0.62 mcg/$m^3$). The PCE concentration in sample IA-3 was non-detect. The PCE concentration at IA-4 (8.81 ug/m3) was found to be less than the NYSDOH guideline (30 mcg/$m^3$). The TCE concentrations were non-detect in samples IA-1, IA-2, IA-4, IA-5, IA-6 and the ambient air sample. The TCE concentration in sample IA-3 (0.23 mcg/$m^3$) was less than the NYSDOH guideline (2 mcg/$m^3$).

The concentrations of methylene chloride found in samples IA-4, IA-5 and IA-6 collected in the Standard Tinsmith tenant space were greater than the NYSDOH guideline (60 mcg/$m^3$). Methylene chloride was not found at concentrations of concern in either sub-slab vapor or indoor air collected during the due diligence investigation prior to Standard Tinsmith's occupancy in the building. Standard Tinsmith fabricates spiral sheet metal duct. Minor petroleum product incidental spillage and small spray can and bottled degreasing chemical cleaners were observed in the Standard Tinsmith tenant space and likely contribute to elevated methylene chloride concentrations found in the indoor air samples its' space.

**Conclusions**

The SSDS startup test results confirm that the system meets the design objective to control sub-slab vapor migration to indoor air. Nine SSDS suction point and blowers provide the required vacuum field beneath the footprint of the tenant spaces in accordance with NYSDOH guidance. Indoor air concentrations of VOCs appear to be related to ambient air and to tenant chemical usage. Sampling of sub-slab vapors and indoor air sampling should be performed in accordance an updated Site Management Plan (SMP) and SSDS operation and maintenance (O&M) plan for the site.

The SVE system should be decommissioned, because the system achieved asymptotic VOC

removal after five years in operation and the soil vapor migration into the building will be controlled by the SSDS installed in each tenant occupied space.

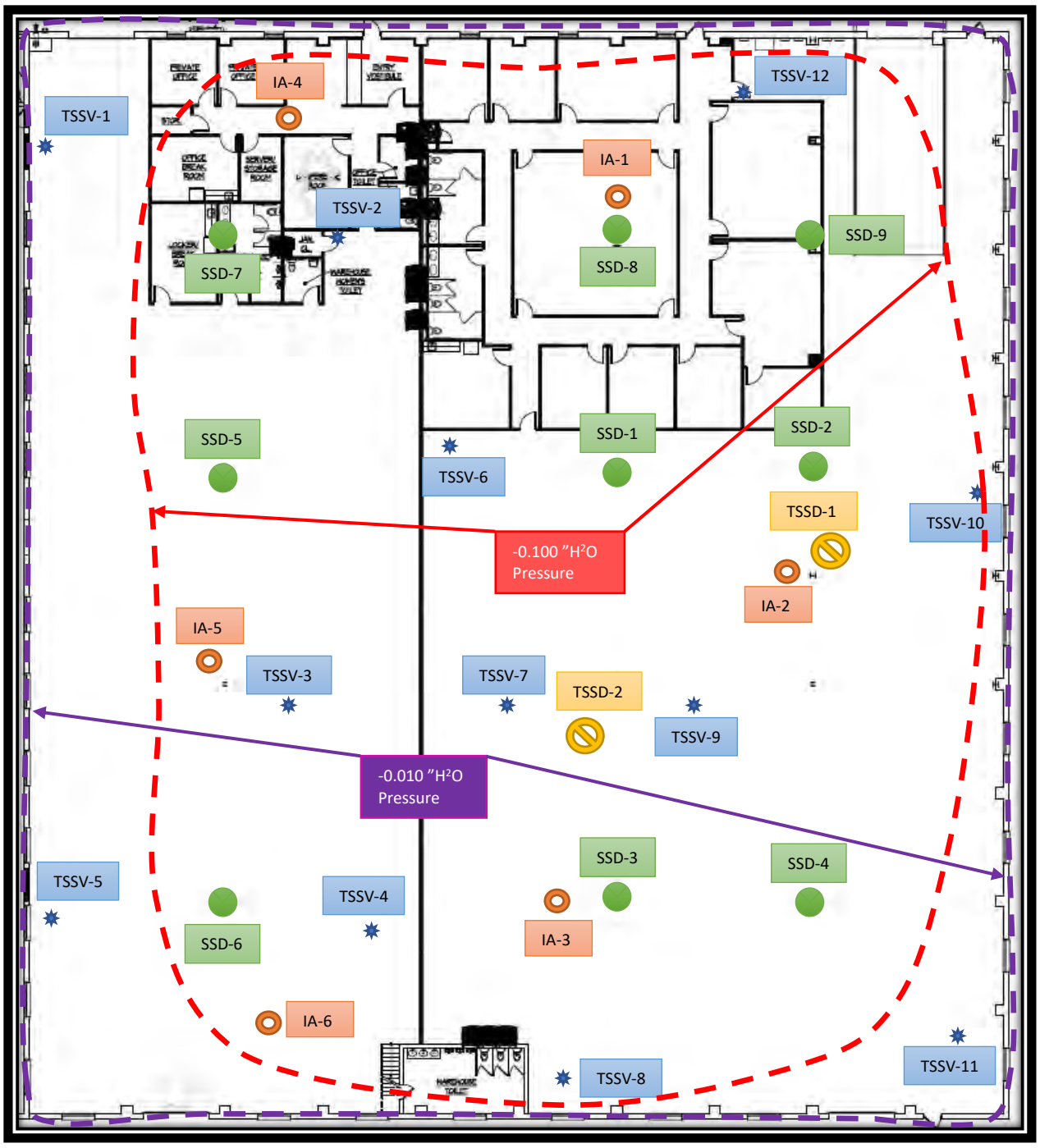
Sincerely,

Nicholas A. Andrianas, P.E.

Enclosure

Standard Tinsmith Tenant Space - Hitachi Tenant Space - Vacant Tenant Space -

**Figure 1**
**Tenant Spaces**
**255 East 2nd Street**
**Mineola, New York**




Ambient Air - Temporary Sub-Slab Vapor Implant - SSD Well - TSSD WELL -

-0.010 "H2O Pressure Contour - -0.100 "H2O Pressure Contour -

**Figure 2**
**Start-up Testing Locations**
**255 East 2nd Street**
**Mineola, New York**

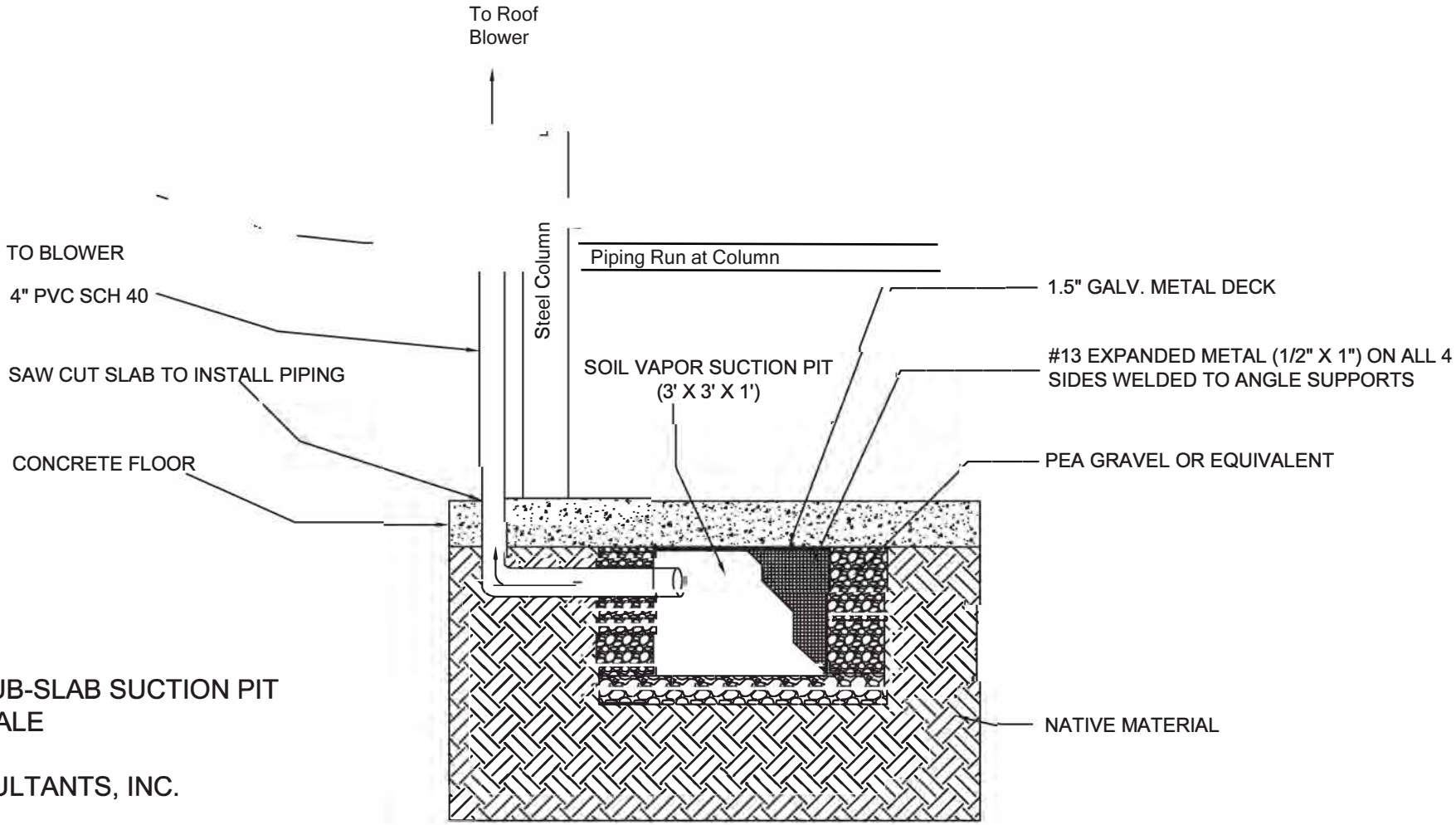
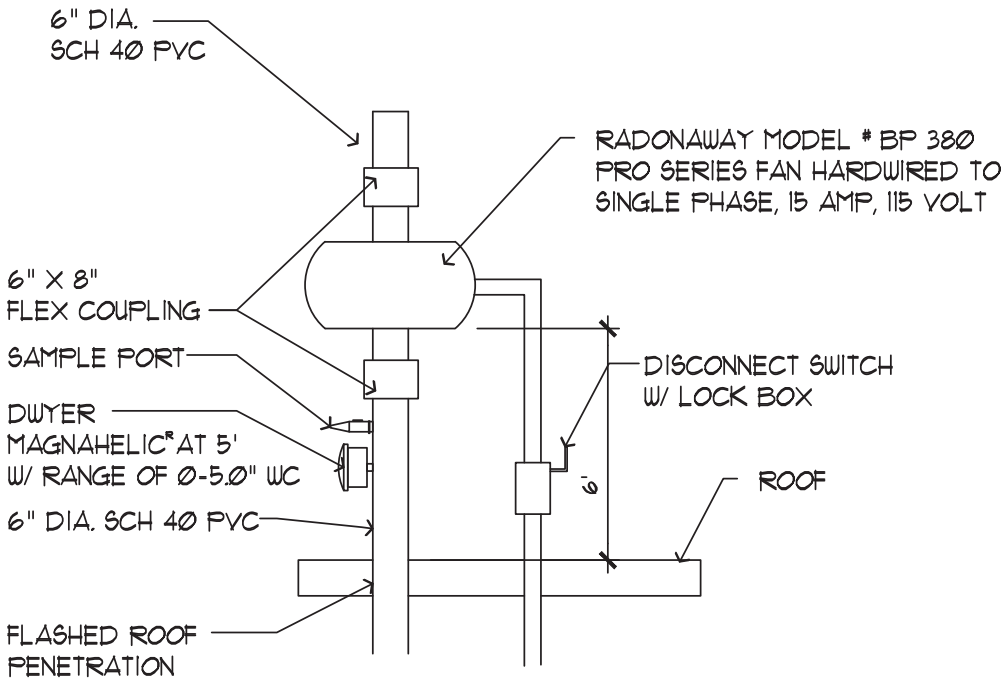



FIGURE 3
TYPICAL SUB-SLAB SUCTION PIT
NOT TO SCALE

NAC CONSULTANTS, INC.




# TYPICAL SSDS BLOWER ROOF DETAIL

SCALE: NOT TO SCALE

**255 East 2nd Street**
**Mineola, New York**
**Table 1 - Pilot Test Data**
**November 1st, 2019**

**RUN 1 HP-220**

| Location | Vacuum Measurement ("H2O) | Distance from SSD | CFM |
|---|---|---|---|
| TSSD-2 | -1.974 | | 50 |
| TSSV-1 | -0.020 | 20' | |
| TSSV-2 | -0.013 | 30' | |
| TSSV-3 | -0.053 | 20' | |
| TSSV-4 | -0.008 | 40' | |
| TSSV-5 | N/A | 10' | |
| TSSV-6 | N/A | 40' | |
| TSSV-7 | N/A | 50' | |

**RUN 2 GP-501**

| Location | Vacuum Measurement ("H2O) | Distance from SSD | CFM |
|---|---|---|---|
| TSSD-2 | -2.858 | | 58 |
| TSSV-1 | -0.034 | 20' | |
| TSSV-2 | -0.020 | 30' | |
| TSSV-3 | -0.087 | 20' | |
| TSSV-4 | -0.016 | 40' | |
| TSSV-5 | -0.110 | 10' | |
| TSSV-6 | -0.011 | 40' | |
| TSSV-7 | -0.009 | 50' | |

**RUN 3 GP-501**

| Location | Vacuum Measurement ("H2O) | Distance from SSD | CFM |
|---|---|---|---|
| TSSD-1 | -3.844 | | 14 |
| TSSV-8 | -0.005 | 25' | |
| TSSV-9 | -0.005 | 40' | |
| TSSV-10 | -0.010 | 35' | |
| TSSV-11 | -0.010 | 30' | |
| TSSV-12 | -0.013 | 30' | |
| TSSV-13 | -0.024 | 15' | |

**255 East 2nd Street**
**Mineola, New York**
**Table 2 - Start-Up Performance Data**
**July 18, 2020**

| Location | Vacuum Measurement ("H2O) | CFM |
|---|---|---|
| SSD-1 | -3.956 | 15 |
| SSD-2 | -3.988 | 13 |
| SSD-3 | -3.524 | 40 |
| SSD-4 | -3.745 | 35 |
| SSD-5 | -3.204 | 48 |
| SSD-6 | -3.508 | 42 |
| TSSV-1 | -0.012 | |
| TSSV-2 | -0.374 | |
| TSSV-3 | -0.235 | |
| TSSV-4 | -0.262 | |
| TSSV-5 | -0.012 | |
| TSSV-6 | -0.322 | |
| TSSV-7 | -0.560 | |
| TSSV-8 | -0.142 | |
| TSSV-9 | -1.142 | |
| TSSV-10 | -0.102 | |
| TSSV-11 | -0.083 | |
| TSSV-12 | -0.244 | |

**255 East 2nd Street**
**Mineola, New York**
**Table 3 - SVE System Data**
**July 18, 2020**

| Location | Vacuum/Pressure Measurement ("H2O) | CFM |
|---|---|---|
| KO DRUM | -14.000 | - |
| BLOWER INTAKE | -30.000 | - |
| BLOWER EXHAUST | 14.000 | - |
| LEAD-LAG | 7.088 | - |
| SYSTEM EXHAUST | 0.075 | 236 |

**255 East 2nd Street**
**Mineola, New York**
**Table 4 -Indoor Air Sampling Data**
**July 18, 2020**

| Sample ID | AA-1 | IA-1 | IA-2 | IA-3 | IA-4 | IA-5 | IA-6 | NYSDOH Indoor Air Guidelines |
|---|---|---|---|---|---|---|---|---|
| Sampling Date | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | July 18, 2020 | |
| Concentration | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 |
| Parameter | | | | | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | ND | ND | - |
| 1,1-Dichloroethene | ND | ND | ND | ND | ND | ND | ND | - |
| Carbon Tetrachloride | 0.63 | 0.61 | 0.61 | 0.6 | 0.61 | 0.62 | 0.64 | - |
| Cis-1,2-Dichloroethene | ND | ND | ND | ND | 0.38 | ND | ND | - |
| Methylene Chloride | ND | 15.8 | 12.8 | 28.4 | 103 | 139 | 1,420 | 60 |
| Tetrachloroethene | 0.62 | 0.37 | 0.62 | ND | 8.81 | 0.084 | 0.64 | 30 |
| Trichloroethene | ND | ND | ND | 0.23 | ND | ND | ND | 2 |
| Vinyl Chloride | ND | ND | ND | ND | ND | ND | ND | - |

**NYSDEC IHWDS NO. 1-30-100**

**FORMER A.K. ALLEN COMPANY, INC. FACILITY**

**255 EAST 2ND STREET**

**MINEOLA, NEW YORK**

# SSDS Suction Pit Photographs

CAUTION
CAUTION

# GP501 Radon Fan Pro Series

**SKU:** 28468

Be the first to review this product

RadonAway's GP501 Pro Series radon fan installs white and stays white. It provides versatility and a broad performance range for both initial installation and fan replacement. Made in the USA with U.S. and imported parts.

NOTICE

## Log In to Purchase

RadonAway is a B2B business only. You must be an approved RadonAway customer to purchase products through this website. If you are an existing RadonAway customer and need a website login, click here. If you are a professional and would like to become a RadonAway customer, click here.

Add to Wishlist Add to Compare

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## Product Categories

- Radon Fans +
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- Mitigation Tools & Diagnostic Aids +
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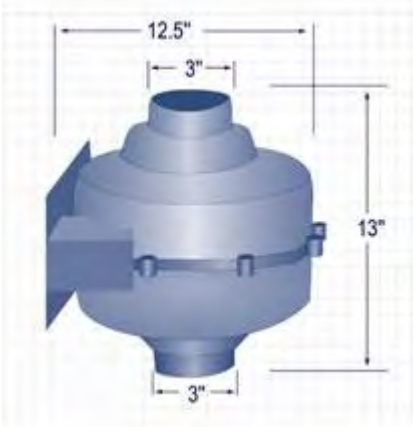
- Sump Pumps & Accessories +
- Pipe Accessories +
- Radon System Accessories +
- Radon in Water Removal Systems +
- Radon Testing +
- Spruce Inline Ventilation +
- Canada Fulfillment +
- Air Purifiers
- Personal Protection Equipment
- New Products New
- Best Sellers
- On Sale

Details | Additional Info | Reviews | Conditions of Sale

# GP501 Radon Fan Features:




Stay-White™ housing
Five-year limited warranty
Seams sealed to inhibit radon leakage
Mounts on duct pipe or with integral flange
3" diameter ducts for use with 3" or 4" pipe
Electrical box for hard wire or plug in
ETL Listed - for indoor or outdoor use
4 interchangeable models

# Additional Radon Fan Information:

Downloadable Fan Specifications/Sales Sheet (PDF format)
Downloadable Fan Installation Instructions (PDF format)
Calculate your estimated annual electrical cost.
Also available through our Canadian distribution location.

**Typical CFM vs. Static Pressure WC**

| Model | P/N | Fan Duct Diameter | Watts | Recommended Max Operating Pressure "WC | 1.0" | 1.5" | 2.0" | 2.5" | 3.0" | 3.5" | 4.0" |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GP201 Pro Series | 28465 | 3" | 31-65 | 1.8 | 54 | 42 | 11 | - | - | - | - |

1-2 day shipping in most of US Read more...

Five year manufacturer's warranty on RadonAway fans

Free technical support for our customers

Contact Us

**Typical CFM vs. Static Pressure WC**

| Model | P/N | Fan Duct Diameter | Watts | Recommended Max Operating Pressure "WC | 1.0" | 1.5" | 2.0" | 2.5" | 3.0" | 3.5" | 4.0" |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GP301 Pro Series | 28466 | 3" | 56-100 | 2.3 | 64 | 54 | 41 | 4 | - | - | - |
| GP401 Pro Series | 28467 | 3" | 63-128 | 3.0 | - | 61 | 52 | 44 | 22 | - | - |
| GP501 Pro Series | 28468 | 3" | 68-146 | 3.8 | - | - | - | 70 | 57 | 30 | 10 |

## Related

RadonAway® Transition Fitting
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3" x 3" White Coupling (Single)
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RadonAway® Easy Read Manometer - BLUE
Add to Wishlist

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## APPENDIX M SITE INSPECTION FORMS

# PROPERTY INSPECTION FORM

## A. SITE NAME AND LOCATION

Site Name: _____

Street Address: _____

Municipality: _____

(Township, Borough or City) County: _____ Zip Code: _____

NYSDEC IHWDS No.: _____

Municipal Block and Lot Numbers of the entire Site: _____

## B. CONTACT PERSON

Changed Since Last Submission_____ Effective Date of Change: _____

Business Name: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

## C. CURRENT OWNER OF THE SITE

Changed Since Last Submission_____Effective Date of Change: _____

If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section K), check box and proceed to the next section.

Full Legal Name of the Owner: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: _____ Fax: _____

Mailing Address: _____

Municipality: _____ State: _____ Zip Code: _____

Email Address: _____

**D. CURRENT OPERATOR OF THE SITE**

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section K), check box and proceed to the next section.

Full Legal Name of the Operator: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: Fax: _____ Mailing Address: _____

_____ Municipality: _____

_____ State: _____ Zip Code: _____

Email Address: _____

**E. CURRENT LESSEE OF THE SITE**

☐ Changed Since Last Submission Effective Date of Change: _____

☐ If same as Person Responsible for Monitoring the Protectiveness of the Remedial Action (Section K), check box and proceed to the next section.

Full Legal Name of the Lessee: _____

First Name of Contact: _____ Last Name of Contact: _____

Title: _____

Phone Number: _____ Ext.: Fax: _____ Mailing Address: _____

_____ Municipality: _____

_____ State: _____ Zip Code: _____

Email Address: _____

**SECTION F. LAND USE, CHANGES, AND DISTURBANCES**

1. Site Use(s) at the time the Deed Notice/DER was Filed *(check all that apply)*

| | | | |
|---|---|---|---|
| Industrial | Child Care Facility | Park or Recreational Use | Other: _____ |
| Residential | Hospital | Vacant | |
| Commercial | Landfill | Government Facility | |

2. Current Site Use(s) *(check all that apply)*

| | | | |
|---|---|---|---|
| Industrial | Child Care Facility | Park or Recreational Use | Other: _____ |
| Residential | Hospital | Vacant | |
| Commercial | Landfill | Government Facility | |
| School | Agricultural | Road/Right of Way | |

3. Intended Future Site Use(s), If Known *(check all that apply)*

| | | | |
|---|---|---|---|
| Industrial | Child Care Facility | Park or Recreational Use | Future site use unknown |
| Residential | Hospital | Vacant | Other: _____ |
| Commercial | Landfill | Government Facility | |
| School | Agricultural | Road/Right of Way | |

4. Describe the current site operations and the status of any planned future land use(s) for the site, particularly if the proposed use is residential, school, or licensed child care facility:

5. Since the last Property Inspection Report was filed or the last submittal of the Site Management Plan whichever is most recent, has the site use changed? ☐ Yes ☐ No

If "Yes," indicate the type of remedy used:

6. Has there been a zoning change or is a zoning change pending? ..... ☐ Yes ☐ No

If "Yes," briefly describe the zoning change or the pending zoning change:

. Have you conducted periodic inspections to determine if disturbances of the engineering control(s) have taken place since the SMP was filed or the last submittal of the Property Inspection Report, whichever is more recent? ..... ☐ Yes ☐ No

*If "Yes," attach all inspection reports/logs that have been completed since the last submittal of the SMP or Property Inspection Report.*

7. Have disturbances of the engineering control(s) taken place since the SMP was filed or the last submittal of the Property Inspection Report, whichever is more recent?

If "Yes," :

a) Provide the following information: Date of Disturbance: _____

Duration of Disturbance: Months _____ Days _____

8. Check the appropriate box(es) to indicate if any of the following have rendered the engineering control(s) **not** protective of public health, safety and of the environment (check all that apply):

☐ An evaluation all relevant soil standards, criteria, and guidance levels related to soil that have been modified subsequent to the filing of the SMP or the last submittal of the Property Inspection Report, whichever is more recent; A change in property use since the

☐ SMP was filed;

☐ A zoning change or the pending zoning change;

☐ Land disturbance(s) of the engineering control(s).

If any of the boxes above are checked the person responsible for monitoring the site protection measures shall modify the SMP/Environmental Easement to reflect the current conditions.

**SECTION G. VAPOR INTRUSION**

1. Are volatile organic compounds included in the SMP ..... ☐ Yes ☐ No
*If "Yes," complete this section, otherwise proceed to the next section*
2. Were there any changes in property use that increased the risk of vapor intrusion? ..... ☐ Yes ☐ No
3. Did you investigate the vapor intrusion pathway? ..... ☐ Yes ☐ No

If "Yes,":

Attach a scaled site map indicating the location of all structures investigated for vapor intrusion.

a) Did the investigation indicate that a soil vapor conditions exists?..... ☐ Yes ☐ No

If "Yes," provide the sampling data and date of sampling

Did the investigation indicate that a Vapor Concern (VC) condition exists?..... ☐ Yes ☐ No

b) Was public notification conducted to notify all applicable parties of the increased vapor intrusion risk? ..... ☐ Yes ☐ No ☐ N/A

4. Provide a written explanation of either how the vapor intrusion pathway was investigated *or* the reasons for not evaluating the vapor intrusion pathway. ☐

5. Have any vapor intrusion engineering controls/mitigation systems been installed as a result of this soil contamination?..... ☐ Yes ☐ No

If “Yes,” indicate the type of engineering control that was implemented: *(check all that apply)*

- ☐ Subsurface Depressurization System
- ☐ Subsurface Ventilation System
- ☐ Soil Vapor Extraction System
- ☐ HVAC Positive Pressure
- ☐ Other (specify): _____

Attach a operation, maintenance, and monitoring (OMM) Plan for the vapor intrusion engineering control(s)/mitigation system(s) The OMM Plan should clearly identify the building(s) and/or structure(s) and vapor intrusion engineering control(s)/mitigation system(s) that are in place (e.g., active or passive), including the address and block and lot of each impacted property.

**Summary of Green Remediation Metrics for Site Management**

Site Name: _____ Site Code: _____
Address: _____ City: _____
State: _____ Zip Code: _____ County: _____

**Initial Report Period (Start Date of period covered by the Initial Report submittal)**
Start Date: _____

**Current Reporting Period**
Reporting Period From: _____ To: _____

**Contact Information**
Preparer's Name: _____ Phone No.: _____
Preparer's Affiliation: _____

**I. Energy Usage:** Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

| | **Current Reporting Period** | **Total to Date** |
|---|---|---|
| Fuel Type 1 (e.g. natural gas (cf)) | | |
| Fuel Type 2 (e.g. fuel oil, propane (gals)) | | |
| Electricity (kWh) | | |
| **Of that Electric usage, provide quantity:** | | |
| Derived from renewable sources (e.g. solar, wind) | | |
| **Other energy sources** (e.g. geothermal, solar thermal (Btu)) | | |

*Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.*

**II. Solid Waste Generation:** Quantify the management of solid waste generated on- site.

| | **Current Reporting Period (tons)** | **Total to Date (tons)** |
|---|---|---|
| **Total waste generated on-site** | | |
| OM&M generated waste | | |
| **Of that total amount, provide quantity:** | | |
| Transported off-site to landfills | | |
| Transported off-site to other disposal facilities | | |
| Transported off-site for recycling/reuse | | |
| Reused on-site | | |

*Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.*

**III. Transportation/Shipping:** Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

| | **Current Reporting Period (miles)** | **Total to Date (miles)** |
|---|---|---|
| Standby Engineer/Contractor | | |
| Laboratory Courier/Delivery Service | | |
| Waste Removal/Hauling | | |

*Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.*

**IV. Water Usage:** Quantify the volume of water used on-site from various sources.

| | **Current Reporting Period (gallons)** | **Total to Date (gallons)** |
|---|---|---|
| Total quantity of water used on-site | | |
| **Of that total amount, provide quantity:** | | |
| Public potable water supply usage | | |
| Surface water usage | | |
| On-site groundwater usage | | |
| Collected or diverted storm water usage | | |

*Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.*

**V. Land Use and Ecosystems:** Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

| | **Current Reporting Period (acres)** | **Total to Date (acres)** |
|---|---|---|
| Land disturbed | | |
| Land restored | | |

*Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.*

| **Description of green remediation programs reported above**<br>(Attach additional sheets if needed) |
|---|
| Energy Usage: |
| Waste Generation: |
| Transportation/Shipping: |
| Water usage: |
| Land Use and Ecosystems: |
| Other: |

| **CONTRACTOR CERTIFICATION** |
|---|
| I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of _____ (**Contractor Name**), which is responsible for the work documented on this form. According to my knowledge and belief, all of the information provided in this form is accurate and the site management program complies with the DER-10, DER-31, and CP-49 policies.<br><br>_____<br>**Date** **Contractor** |

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