125 BEECHWOOD, LLC SITE

NEW ROCHELLE, WESTCHESTER COUNTY, NEW YORK

Remedial Action Work Plan

NYSDEC BCP Number: C360232

Prepared for:

125 Beechwood LLC
c/o AMERCO Real Estate Company
2727 North Central Avenue
Phoenix, Arizona 85004

Prepared by:

PSG Engineering and Geology D.P.C.
222 Bloomingdale Road, Suite 303
White Plains, New York 10605
732-380-1700

APRIL 2025

CERTIFICATIONS

I, Kristine MacWilliams, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and Green Remediation (DER-31).

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

Kristine M. MacWilliams, P.E. April 24, 2025
NYS Professional Engineer # 096177 Date Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

REMEDIAL ACTION WORK PLAN

TABLE OF CONTENTS

Contents

ATTACHMENTS

Tables

Table 1: Remedial Investigation Sampling Summary
Table 2: Remedial Investigation Soil Results
Table 3: Remedial Investigation Groundwater Results
Table 4: Remedial Investigation Soil Vapor Results
Table 5: Remedial Investigation Indoor Air Results
Table 6: Emergency Contacts
Table 7: Estimated Schedule

Figures

Figure 1: Site Location Map
Figure 2: Topographic Map
Figure 3: Sample Location Map
Figure 4: Exceedances in Soil Samples
Figure 5: Groundwater Contour Map (January 2024)
Figure 6: VOCs in Groundwater Samples
Figure 7: SVOCs in Groundwater Samples
Figure 8: Metals in Groundwater Samples
Figure 9: 1,4-Dioxane and PFAS in Groundwater Samples
Figure 10: VOCs in Soil Vapor and Indoor Air Samples
Figure 11: Cover System Figure

Appendices

Appendix A: Green and Sustainable Remediation Requirements
Appendix B: Remedial Cost Estimate
Appendix C: Construction Health & Safety Plan (CHASP)
Appendix D: Quality Assurance Project Plan (QAPP)
Appendix E: Community Air Monitoring Plan (CAMP)
Appendix F: Citizens Participation Plan
Appendix G: Resumes of Key Personnel
Appendix H: Request to Import/Reuse Fill or Soil
Appendix I: SSDS Design Package (Vapor Intrusion Mitigation System (VIMS))

LIST OF ACRONYMS

Acronym	Definition
AST	Aboveground Storage Tank
cVOCS	Chlorinated Volatile Organic Compounds
ESA	Environmental Site Assessment
ELAP	Environmental Laboratory Accreditation Program
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations Emergency Response
NYSDEC	New York State Department of Environmental Conservation
NYSDEC DER	New York State Department of Environmental Conservation Division of Environmental Remediation
NYSDOH	New York State Department of Health
NYC DOT	New York City Department of Transportation
NYC OER	New York City Office of Environmental Remediation
OSHA	United States Occupational Health and Safety Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PE	Professional Engineer
PID	Photo Ionization Detector
QEP	Qualified Environmental Professional
RI	Remedial Investigation
SCOs	Soil Cleanup Objectives
SCG	Standards, Criteria, and Guidance
SSDS	Sub-Slab Depressurization System
SVOCs	Semi-Volatile Organic Compounds
USCS	Unified Soil Classification System
USGS	United States Geological Survey
UST	Underground Storage Tank
TAL	Target Analyte List
TCL	Target Compound List
VI	Vapor Intrusion
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

This Remedial Action Work Plan (RAWP) was prepared by PSG Engineering & Geology, D.P.C (PSG) on behalf of 125 Beechwood, LLC (Participant) to remediate the property located at 125 Beechwood Avenue in New Rochelle, New York (the Site). The Site was enrolled in the Brownfield Cleanup Program (BCP) on March 20, 2023, and was listed on the Brownfield Cleanup Agreement (BCA) under site name 125 Beechwood, LLC, NYSDEC Site No. C360232. The BCA was amended on August 14, 2023, to reflect that NYSDEC had determined the Applicant to be a Participant.

This RAWP summarizes the nature and extent of contamination as determined from RI activities performed by PSG between November 2023 and January 2024. The remedy described in this RAWP is consistent with the procedures defined in the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (DER-10) and complies with NYSDEC SCG. The remedy described in this document also complies with applicable federal, state, and local laws, regulations, and requirements. The NYSDEC and NYSDOH have not yet determined if this Site poses a significant threat to human health and the environment. The remedial investigation for this Site did not identify fish and wildlife resources.

Site Description/Physical Setting/Site History

The Site is approximately 3.17-acres and is located in New Rochelle, New York and identified as Section 2, Block 691, and Lot 005 on the New Rochelle Tax Map. The Site is bound by the Metro-North Railroad followed by the Motorcycle Center, a motor cycle repair shop, and several residential buildings to the North, by Beechwood Auto Body Inc and H&M Tech east of the Site across 2nd Street. Another industrial building, Atlas Welding & Boiler Repair Inc, is located west of the Site. South of the Site is Beechwood Avenue followed by a parking lot, also owned by 125 Beechwood LLC, single family residences, and a commercial building owned by 122 Beechwood Properties Inc.

The Site is occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner. Current operations at the Site consist of typical commercial office, self-storage, and parking operations, and associated property maintenance.

A previous Phase I Environmental Site Assessment (Phase I) was prepared for the Site by AKRF, Inc. (AKRF) in 2012. According to this previous report, the Site at 125 Beechwood Avenue was developed with the existing one- to two-story warehouse in 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corp. (aka Gries Dynacast) from 1951 through 1985, who utilized the Site for metal fabrication and die-casting and plating operations.

One 10,000-gallon fuel oil UST was closed-in-place beneath the northeastern portion of the building at 125 Beechwood Avenue. Additionally, according to the New Rochelle Building Department, the Site at 125 Beechwood Avenue was formerly equipped with two gasoline USTs and a gas pump. The gasoline USTs were reportedly installed in 1979 and 1980 and removed in 1985 from the northeastern portion of the Site in the loading dock area.

Summary of the Remedial Investigation

PSG conducted a RI at the Site between November 2023 and January 2024 to evaluate the horizontal and vertical extent of soil and groundwater contamination previously identified at the Site and to assess the potential for soil vapor intrusion. The RI included the installation of nine additional soil borings (SB-14 through SB-22), four additional permanent monitoring wells (MW-5 through MW-7D) and one temporary monitoring well, the collection of a total of 15 soil samples, nine groundwater samples, nine soil vapor samples, and seven indoor / ambient air samples.

Subsurface soils at the Site included brown fine to medium sandy silts to depths up to 18 feet below ground surface (bgs), with weathered rock observed between 4 and 22 feet bgs at different areas throughout the Site, followed by competent bedrock between 22 and 28 feet bgs. Groundwater at the Site is present at depths between approximately 5 to 13 feet bgs and generally flows to the southeast. New Rochelle Harbor is located approximately 5,800 feet to the southeast of the Site.

Soil sampling data suggest that PAH soil contamination at concentrations in exceedance of the Commercial Use SCOs is present beneath the wood block flooring in the vicinity of borings SB-14 and SB-15, where petroleum-like staining was observed. Low-level concentrations of metals and pesticides in exceedance of the Unrestricted Use SCOs were present in soil samples from other areas of the Site, but these concentrations were below the Commercial Use SCOs that

would apply to the Site. The exceedances detected in soil do not appear to have had a significant impact on groundwater quality at the Site. Additionally, Site soils are covered by the existing building and pavement, which prevent an exposure pathway to the impacted soil.

Groundwater sampling data collected during the RI indicate that cVOC concentrations in exceedance of the Ambient Water Quality Standards (AWQS) are present in overburden groundwater throughout the central portion of the Site, with the highest concentrations detected downgradient of the former basement automotive repair space (AOC-1) in monitoring well MW-2 and in the area of the former die-casting operations (AOC-2) in monitoring well MW-4. cVOC groundwater impacts decrease in overburden groundwater at the eastern and southern property boundaries, in monitoring wells MW-6 and MW-7, respectively, and cVOCs were not detected in temporary well point SB-24(TW) installed at an offsite, downgradient location, to the south of Beechwood Avenue. No VOCs were detected above the AWQS in the groundwater sample collected from the double-cased bedrock monitoring well, MW-7D. Based on this information, it appears that the cVOC groundwater impacts are delineated horizontally and vertically and are not migrating offsite.

Groundwater sampling data also identified PAHs, secondary metals, and emerging contaminants at concentrations marginally above NYSDEC AWQS. These contaminants are common in urban areas and are not likely attributed to onsite releases. Groundwater beneath the Site and surrounding areas is not used for public or private drinking purposes and, as such, potential environmental impacts related to these exceedances are unlikely.

Soil vapor and indoor air results indicate that cVOCs were identified throughout the central portion of the Site with the highest concentrations detected in the former basement automotive repair space (AOC-1) and in the area of the former die-casting operations (AOC-2). When compared to the NYSDOH Matrices, the cVOCs detected in soil vapor and indoor air require mitigation. Petroleum-related VOCs were also detected in soil vapor and indoor air samples; however, when compared to the NYSDOH Matrices, the concentrations detected would not necessarily require mitigation, but monitoring or resampling would be recommended. Since mitigation is required for the cVOC concentrations, vapor intrusion mitigation would be focused on cVOCs at the Site. In soil vapor samples VP-8 and VP-9, collected from the south side of Beechwood Avenue, no cVOCs were detected at levels that would require monitoring or

mitigation. Therefore, soil vapor impacts associated with the cVOC groundwater contamination do not appear to be migrating offsite.

Qualitative Human Health Exposure Assessment (QHHEA)

The RI was sufficient to complete a Qualitative Human Health Exposure Assessment (QHHEA), which was performed to determine whether the Site poses an existing or future health hazard to the Site's occupants or surrounding population and off-site areas. The RI was evaluated to determine whether there is a potential health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport.

Potential pathways to human receptors include direct contact (dermal absorption), ingestion, and inhalation of identified constituents of concern (COCs). Onsite and offsite direct contact and ingestion with subsurface soils and groundwater is unlikely to occur since contaminated soil at the Site is covered by impervious materials and groundwater beneath the Site and surrounding area is not used for drinking purposes. In addition, no private potable and non-potable wells exist within ½-mile of the Site. Working in accordance with a HASP and a Community Air Monitoring Plan (CAMP), as well as wearing proper personal protective equipment to prevent offsite migration of contaminations during construction, should prevent potential offsite exposures. Following remediation activities, occupants of the Site could potentially be exposed to vapor intrusion if remediation is not completed and if preventive measures are not incorporated to protect against contaminated soil vapor intrusion. However, a SSDS is planned to be installed at the Site. The SSDS would protect the building from vapor intrusion, rendering the potential vapor intrusion pathway incomplete.

Summary of the Remedy

The objective of this RAWP is to achieve a Track 4 remedy for commercial use consisting of the installation of a SSDS, groundwater monitoring, and engineering and institutional controls to prevent exposure to subsurface contaminated media. The developed remedial program would be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques would be implemented to the extent feasible in the design, implementation, and site

management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this Site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis was completed. The environmental footprint analysis was completed using the U.S. Environmental Protection Agency (EPA) Spreadsheets for Environmental Footprint Analysis (SEFA) calculator. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use were estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, were incorporated into the remedial program, as appropriate. Progress with respect to green and sustainable remediation metrics would be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial program.

To ensure environmentally responsible remediation at the Site, the following goals have been established and would be tracked during the remedial action:

- **Minimize Greenhouse Gas Emissions:** Optimize fuel use and incorporate clean energy sources to reduce emissions.
- **Reduce Energy Consumption:** Use energy-efficient equipment and practices, minimizing idle times and excess usage.
- **Effective Waste Management:** Reduce waste generation and ensure proper disposal in compliance with regulations.
- **Promote Worker Safety and Community Health:** Implement protective measures and maintain open communication with the community.
- **Sustainable Practices:** Use environmentally friendly materials and green procurement practices.

Additionally, a Climate Screening Checklist was completed for the Site to evaluate the impact of climate change on the project site and the proposed remedy. Based on the results of the Climate Screening Checklist, no further actions are required at this time.

Green and Sustainable Remediation attachments are provided in **Appendix A**.

The following remedy is proposed for the Site:

1. **Installation of a SSDS:** Installation of an active SSDS. A n active SSDS shall be installed underneath the slab of the existing structure; See **Appendix I** for the design. The SSDS would consist of centrally located extraction points including slotted vertical polyvinyl chloride (PVC) piping placed in a gas permeable ¾-inch stone. Lateral piping would be connected to vertical piping and discharged above the roofline using an active suction fan. The discharge point of the vented air should be at least 10-feet away from any windows, fresh-air intakes and/or HVAC components.

2. **Groundwater Sampling:** PSG would conduct groundwater sampling events. Groundwater monitoring would include sampling the existing monitoring wells on an annual basis. PSG would conduct the groundwater sampling events in accordance with the procedures presented in the NYSDEC-approved Remedial Investigation Work Plan (RIWP) for the Site.

3. **Engineering Controls:** The asphalt, concrete, and building slabs at the Site would be visually inspected to determine they are complete, with no significant cracks or damage, and can act as an engineering control to prevent exposure to remaining site impacts. The composite cover system consisting of the existing concrete building slabs, wood block flooring, and

asphalt pavement on exterior open areas of the Site would prevent human exposure to contaminated soils. In addition, the SSDS would be installed to prevent exposure to VOC vapors by mitigating the potential for vapor intrusion from the subsurface into the Site buildings.

4. Institutional Controls: Proposed institutional controls include the recording of an environmental easement (EE) to prevent future exposure to any remaining contamination at the Site; implementation of a Site Management Plan (SMP) for long-term management of residual contamination as required by the EE; and use restrictions limiting the use of the Site for commercial/industrial activities, restricting the use of groundwater, and restricting unauthorized excavation or disturbance of the cover system.

REMEDIAL ACTION WORK PLAN

1.0 INTRODUCTION

This RAWP was prepared by PSG on behalf of 125 Beechwood, LLC (Participant) to remediate the property located at 125 Beechwood Avenue in New Rochelle, New York (the Site). 125 Beechwood, LLC entered into a BCA with the NYSDEC on March 20, 2023, to investigate and remediate the 3.17-acre property located at 125 Beechwood Avenue in New Rochelle, Westchester County, New York (NYSDEC Site No. C360232). The BCA was amended on August 14, 2023, to reflect that NYSDEC had determined the Applicant to be a Participant. Commercial use is proposed for the property.

This RAWP summarizes the nature and extent of contamination as determined from data gathered during the RI. The remedy described in this RAWP is consistent with the procedures defined in DER-10 and complies with applicable SCGs. The remedy described in this RAWP also complies with applicable Federal, State, and local laws, regulations, and requirements. The NYSDEC and NYSDOH have not yet determined if this Site poses a significant threat to human health and the environment. Notice of that determination would be provided for public review once the determination is made. The RI for this Site did not identify fish and wildlife resources.

1.1 SITE LOCATION AND DESCRIPTION

The Site is located in the County of Westchester, in New Rochelle, New York and is identified as Section 2, Block 691, and Lot 005 on the New Rochelle Tax Map. The Site is bounded by the Metro-North Railroad to the north, Beechwood Avenue to the south, 2nd Street to the east, and Atlas Welding and Boiler Repair to the west. A Site Location Map is attached as **Figure 1**. A USGS Topographic Map (**Figure 2**) depicts the Site location.

1.2 CONTEMPLATED END USE

The Site is currently a U-Haul Moving & Storage and will continue to serve as a U-Haul Moving & Storage following the completion of remedial activities. The Remedial Action (RA) to

be performed under this RAWP is intended to make the Site protective of human health and the environment consistent with its current use. There are currently no proposed redevelopment plans for the Site.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

According to the Westchester County Geographic Information Systems – Municipal Tax Parcel Viewer Map, the Site and surrounding areas are zoned "Light Industry" for light industrial and commercial use.

North of the Site is the Metro-North Railroad followed by the Motorcycle Center, a motor cycle repair shop, and several residential buildings. Beechwood Auto Body Inc. and H&M Tech are located east of the Site across 2nd Street. Another industrial building, Atlas Welding & Boiler Repair Inc, is located west of the Site. South of the Site is Beechwood Avenue followed by a parking lot, also owned by 125 Beechwood LLC, single family residences, and a commercial building owned by 122 Beechwood Properties Inc. Residential buildings are located adjacent to the south of the Site. Other than residential properties, PSG identified no sensitive receptors within a 500-foot radius of the Site. An unnamed pond is located approximately 900 feet to the west of the Site. No daycares, hospitals, schools, senior living centers, or other potential sensitive receptors are located within 500 feet of the Site.

1.4 SITE HISTORY

1.4.1 Past Uses and Ownership

The Site at 125 Beechwood Avenue was developed with the existing one- to two-story warehouse in 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corp. (aka Gries Dynacast) from 1951 through 1985, who utilized the Site for metal fabrication and die-casting and plating operations.

1.4.2 Review of Sanborn Maps

Sanborn Maps available for this Site were reviewed prior to preparation of the RAWP and are summarized below.

1911: The Site at 125 Beechwood Avenue appears to consist of vacant undeveloped land owned by the New York, New Haven and Hartford Rail R.R. Co.

1931: The Site parcel appeared similar to the 1911 map.

1951: The Site parcel appeared similar to the 1931 map.

1990: The Site appears to be developed with the current building identified as Gries Reproducer Corp. (metal stamping). A generator room is noted on the 1990 map.

1.4.3 Summary of Previous Investigations

The following environmental work plans and reports have been prepared for the Site:

- *Phase I Environmental Site Assessment, AKRF Inc. (April 27, 2012),*
- *Phase II Subsurface Investigation Report, PSG (July 16, 2014),*
- *Additional Phase II Subsurface Investigation Report, PSG (August 22, 2014),*
- *PSG November 2021 / February 2022 Investigation,*

Salient information presented in these reports is summarized below.

Phase I Environmental Site Assessment, AKRF Inc. (April 27, 2012):

AKRF prepared this report on behalf of Zarin and Steinmetz. The assessment was performed in accordance with ASTM Standard E1527-05. The assessment consisted of a site reconnaissance, interviews with knowledgeable personnel, review of historical information, a review of federal, state, and local regulatory databases and included a limited visual asbestos survey and a limited lead-based paint survey. The assessment also included 160 Beechwood Avenue, a parking lot located adjacent to and south of the Site across Beechwood Avenue. Pertinent information contained in this report is summarized below:

- At the time of the 2012 assessment, the Site was developed with a one- to two-story

warehouse occupied by Sadek Import Co. for commercial office and warehouse use and asphalt-paved parking and drive areas.

- According to the AKRF report, the Site was developed with the existing one- to two-story warehouse in 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corp. (aka Gries Dynacast) from 1951 through 1985, which utilized the Site for metal fabrication, die-casting, and plating operations.

AKRF identified 17 recognized environmental conditions (RECs); however, upon review, PSG determined that several of these RECs did not warrant further investigation. The following relevant RECs were identified:

- The Site was historically utilized for metal fabrication, die-casting, and plating operations from 1951 through 1985. The former metal plating and die-casting process took place in the southern portion of the building at 125 Beechwood Avenue. An approximately 8,000-square foot area of wood block flooring with intermittent petroleum-like staining was observed in the southern and southeastern portion of the distribution warehouse. Wood-block flooring was reportedly used to absorb vibrations caused by the equipment.
- One 10,000-gallon fuel oil UST was closed-in-place beneath the northeastern portion of the building at 125 Beechwood Avenue. The fuel oil UST was located beneath an access door in the floor. Concrete was visible in the tank and fill line. An UST site assessment report dated August 1995 documented that visual observation of the UST during abandonment revealed no evidence of a release, and laboratory results associated with soil samples collected from three soil borings drilled along Second Street, and approximately 50 feet to the east of the UST, at a presumed downgradient location, indicated that residual detections were not indicative of an adverse impact to soil quality. Petroleum staining was observed in the boiler room in the northeast portion of the basement at 125 Beechwood Avenue near former UST supply lines associated the closed-in-place fuel oil UST.
- A network of several pipe fill caps (labeled fuel oil) and adjacent vent pipes were paired together and observed to be flush with the concrete floor in a section of the warehouse.

The fill/vent lines were likely associated with the former plating and die casting operation. Each fill and vent pipe went through to the lower level and were piped together as part of a fluid collection system that discharged into a fluid recirculation vat (Vat-1) located in the basement level on the northeastern portion of the Site. The vat contained a baffle system to remove solids and return the liquid product back upstairs into the operations area. An overflow drain within the vat was connected to the sanitary sewer system. A sump adjacent to the vat contained a pump that was piped directly into the sewer discharge pipe within Vat-1.

- According to the New Rochelle Building Department, the Site at 125 Beechwood Avenue was formerly equipped with two gasoline USTs and a gas pump. The USTs were reportedly installed in 1979 and 1980 and removed in 1985 from the northeastern portion of the Site in the loading dock area.
- A partial basement located on the northeastern portion of the building was previously rented to a tenant for the purpose of storing landscaping equipment and automobile repair. During an inspection conducted in 2009, the space contained a 275-gallon aboveground waste oil tank, three aboveground self-contained hydraulic lifts, parts cleaners, used batteries, coolant storage and staining on the concrete floor slab. The former tenant reported that he did not generate any hazardous waste. The 2012 inspection of the area revealed that the former tenant space was empty, and that the hydraulic lifts and all auto fluid storage devices were removed.
- Petroleum staining and one out-of-use AST were identified in the gas meter room in the northeast portion of the building at 125 Beechwood Avenue. A recirculation vat (Vat-2) formerly used by the metal plating and die casting tenant, an AST (capacity and contents unknown) and sump were located in the gas meter room. The sump reportedly discharged to the municipal sewer system. The AST in the gas meter room contained pressure gauges and product transfer pipes. The pipes were cut off and abandoned. The use of the tank was unable to be determined.
- Petroleum staining was identified on concrete adjacent to an air compressor blow-down vent at 125 Beechwood Avenue. Cracking was noted in the concrete.

- The building at 125 Beechwood Avenue operated a hydraulic freight elevator in the southwestern loading dock area. The pit was observed to be filled with groundwater during a 2009 inspection. A second inspection was reported in 2012 with no evidence of flooding, line failure, or hydraulic oil releases observed.
- Two Consolidated Edison (Con Ed) owned pad-mounted transformers were located adjacent to the southwestern exterior of the Site building at 125 Beechwood Avenue. Con Ed reported that the transformers were sampled between 2009 and 2011 and reportedly contained polychlorinated biphenyls (PCBs) between 23.34 and 30.82 parts per million (ppm).
- The Site at 125 Beechwood Avenue was identified on the New York (NY) Spill, Petroleum Bulk Storage (PBS), and Resource Conversation and Recovery Act (RCRA) Small Quantity Generator databases.

Phase II Subsurface Investigation Report, PSG (July 16, 2014):

PSG completed a Phase II Subsurface Investigation at the Site on behalf of 125 Beechwood, LLC, to investigate the potential impacts of petroleum hydrocarbons, VOCs, PCBs, and/or metals to soil and/or groundwater from a release or releases from the former USTs, AST, and historical operations. The scope of the Phase II included the installation of 13 borings (SB-1 through SB-13) for the collection of representative soil and groundwater samples.

Borings were advanced throughout the interior and basement of the warehouse and the exterior parking lot of the Site with terminal depths ranging between two and 19 feet bgs. Soil samples were collected from each boring at the 6-inch interval directly above the groundwater interface or terminal depth, whichever was shallower. Several borings had detectable PID readings between 10 to 162 parts per million by volume (ppmv), though no visual evidence of contamination was observed. Thirteen soil samples were collected and submitted for laboratory analysis of VOCs and low-level PAHs. Three soil samples received additional PCBs analysis, and four soil samples received additional RCRA 8 Metals analysis.

Groundwater was encountered in borings SB-1, SB-5, SB-6, SB-8, SB-9, and SB-12 and the borings were converted to temporary monitoring wells to facilitate groundwater sample collection. Six groundwater samples were collected and submitted for laboratory analysis of VOCs and PAHs, with two groundwater samples also analyzed for PCBs and one groundwater sample also analyzed for RCRA 8 Metals.

No PAHs, PCBs, or RCRA 8 metals were detected above NYSDEC SCOs in any of the soil samples collected. Acetone was detected above the SCO for Unrestricted Use and Protection of Groundwater criteria; however, acetone is a typical laboratory contaminant, and these concentrations were below the NYSDEC SCOs for Residential, Commercial, and Industrial Use. No additional VOCs were detected above their respective SCOs.

No PCBs or RCRA 8 metals were detected above NYSDEC Technical and Operation Guidance Memorandum Groundwater Standards (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS).

Several chlorinated VOCs were detected above their respective AWQS in four groundwater samples and several PAHs were identified above their respective AWQS in two groundwater samples. Specifically, tetrachloroethene (PCE), trichloroethene (TCE), and 1,1,1-trichloroethane (1,1,1-TCA), and their associated breakdown compounds were detected above their respective AWQS in groundwater samples GWSB-1, GWSB-6, and GWSB-12. The greatest concentrations were detected in GWSB-12 with concentrations of PCE at 290 microgram per liter (µg/L) and TCE at 90 µg/L, both of which exceed their respective AWQS of 5 µg/L.

Based on the findings of the July 2014 Phase II, PSG recommended the following:

- Further evaluation of the groundwater to evaluate the nature and extent of the impacts, their origin, and the potential for remedial action, and;
- The completion of a soil vapor investigation to evaluate the potential for vapor intrusion based on the VOC groundwater exceedances.

Additional Phase II Subsurface Investigation Report, PSG (August 22, 2014):

PSG completed the Additional Phase II Subsurface Investigation on behalf of 125 Beechwood, LLC, to further investigate the VOC and PAH impacts to groundwater and VOC impacts to soil vapor. The scope of the Additional Phase II included the installation of eight borings (B-1 through B-8) for the collection of representative soil, groundwater, and/or soil vapor samples. Eight soil samples were collected and placed on hold with the laboratory, pending initial sample analysis.

Borings were advanced in the approximate location of the former gasoline USTs, in the gas meter room, in the former automobile repair space, and in the former die-casting area with terminal depths ranging between three and 19 feet bgs. Soil samples were collected from each boring at the 6-inch interval directly above the groundwater interface or terminal depth, whichever was shallower. Several borings had detectable PID readings between 0.0 and 13.7 ppmv, though no visual evidence of contamination was observed.

Borings B-2, B-3, B-4, B-5, and B-8 were converted to temporary monitoring wells to facilitate groundwater sample collection. Five groundwater samples were collected and submitted for laboratory analysis of VOCs and PAHs.

Four temporary sub-slab vapor points (SG-1 through SG-4) were advanced beneath the surface to a depth of approximately 1.5 feet bgs. Air was purged from the sampling tubing using a PID for a 10-minute period, and the tubing was then connected to a 2.7-liter batch certified Summa Canister with a 60-minute flow controller. Four soil vapor samples were collected and submitted for laboratory analysis of VOCs.

Several cVOCs were detected above their respective AWQS in the five groundwater samples and several PAHs were identified above their respective AWQS in one groundwater sample.

PCE exceeded its respective AWQS in all five groundwater samples collected at concentrations ranging from 32 to 4,800 µg/L. TCE exceeded its respective AWQS in four of five groundwater samples collected at concentrations ranging from 12 to 1,000 µg/L.

The sub-slab soil vapor data were compared to EPA screening levels. 1,1-dichloroethane (DCA), 1,1-dichloroethene (DCE), benzene, chloroform, PCE, and/or TCE exceedances were

detected in the four soil vapor samples at concentrations exceeding their corresponding EPA Vapor Intrusion Screening Levels.

Based on the findings of the August 2014 Additional Phase II, PSG concluded that subsurface groundwater conditions had been impacted and soil vapor levels below the Site building could potentially contribute to a potential vapor intrusion condition. PSG recommended that additional investigation be completed to evaluate the source of VOC and PAHs impacts, and that mitigation activities be implemented to address the indoor air and vapor intrusion issues.

1.4.4 PSG November 2021 / February 2022 Investigation

Prior to submittal of the BCP application, PSG conducted an additional subsurface investigation at the Site to identify changes in contaminant levels since the completion of the 2014 investigations. Four soil samples, four groundwater samples, three soil vapor samples, three indoor air samples, and one ambient air sample were collected and submitted for laboratory analysis. Groundwater samples were collected from permanent monitoring wells that were installed onsite (MW-1 through MW-4) and soil vapor samples were collected from permanent soil vapor probes that were installed onsite (VP-1 through VP-3).

Monitoring well MW-1 was installed to the north of the Site building in the area of the former gasoline USTs and monitoring wells MW-2 through MW-4 were installed inside of the Site building at the locations illustrated on **Figure 3**. Monitoring wells were installed to terminal depths from 15 feet to 18 feet bgs due to bedrock refusal. Depth to groundwater has been observed from 8.08 to 12.49 feet below top of casing in the monitoring wells. Attempts were made to install monitoring wells on the southwestern and southeastern exterior portions of the Site along Beechwood Avenue; however, no groundwater was encountered in the boreholes prior to bedrock refusal.

Soil samples SB-1 through SB-4 were collected from the locations where monitoring wells MW-1 through MW-4 were installed on October 20, 2021. Soil samples were analyzed for VOCs. Acetone was detected above the SCO for Unrestricted Use and Protection of Groundwater criteria; however, acetone is a typical laboratory contaminant, and these concentrations were below the

NYSDEC SCOs for Residential, Commercial, and Industrial Use. No additional VOCs were detected above their respective SCOs.

On November 17-18, 2021, three soil vapor samples (VP-1 through VP-3) were collected from the permanent soil vapor probes that were installed onsite. Indoor air samples (IA-1 through IA-3) were collected at locations collocated with the soil vapor samples. Multiple cVOCs were detected in soil vapor and indoor air; however, the soil vapor results were significantly lower than the concentrations detected during the 2014 investigation. PCE was detected at a maximum concentration of 170 microgram per cubic meter (µg/m^3) in soil vapor sample VP-1 with a collocated indoor sample concentration of 6.12 µg/m^3 identified in IA-1. When compared to the NYSDOH Matrix, these results indicate that additional monitoring is warranted. No additional contaminants were detected at levels that would require monitoring or mitigation based on the NYSDOH Matrices.

The permanent groundwater monitoring wells (MW-1 through MW-4) were sampled on November 19, 2021. Multiple cVOCs were identified above the applicable AWQS; however, these contaminant concentrations were significantly lower than those identified during the 2014 investigation. 1,1,1-TCA was identified at a maximum concentration of 380 µg/L, 1,1-DCE was identified at a maximum concentration of 280 µg/L, PCE was identified at a maximum concentration of 200 µg/L, and TCE was identified at a maximum concentration of 62 µg/L.

On February 1st-2nd, 2022, an additional round of soil vapor samples (VP-1 through VP-3) were collected from the permanent soil vapor probes that were installed onsite. Indoor air samples were collected at locations collocated with the soil vapor samples. Multiple cVOCs were detected in soil vapor and indoor air at concentrations similar to those detected in November 2021. PCE was detected at a maximum concentration of 144 µg/m^3 in soil vapor sample VP-1 with a collocated indoor sample concentration of 5.08 µg/m^3 identified in IA-1. TCE was detected at a maximum concentration of 6.07 µg/m^3 in soil vapor sample VP-1 with a collocated indoor sample concentration of 0.554 µg/m^3 identified in IA-1. When compared to the NYSDOH Matrix, these results indicate that additional monitoring is warranted. No additional contaminants were detected at levels that would require monitoring or mitigation based on the NYSDOH Matrices.

A second round of groundwater samples were collected from monitoring wells MW-1 through MW-4 on February 2, 2022. Multiple chlorinated VOCs were identified above applicable NYSDEC AWQS standards at concentrations similar to those detected in November 2021. 1,1,1-TCA was identified at a maximum concentration of 280 µg/L, 1,1-DCE was identified at a maximum concentration of 160 µg/L, PCE was identified at a maximum concentration of 200 µg/L, and TCE was identified at a maximum concentration of 47 µg/L.

Figures, tables, and laboratory results from these previous investigations onsite were included as attachments to the NYSDEC-approved RIWP dated August 17, 2023**.**

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The RI was conducted in accordance with the scope of work presented in the NYSDEC-approved RIWP dated August 17, 2023. The RI was conducted between November 2023 and January 2024. The RI was submitted to NYSDEC in April 2024. The NYSDEC approved the Remedial Investigation Report (RIR) via correspondence dated July 10, 2024.

2.1 SUMMARY OF REMEDIAL INVESTIGATIONS PERFORMED

The scope of RI was developed based on previous investigations, the approved RIWP, and subsequent conversations with NYSDEC and NYSDOH.

2.1.1 Summary of RI Findings

PSG conducted a RI at the Site between November 2023 and January 2024 to evaluate the horizontal and vertical extent of soil and groundwater contamination previously identified at the Site and to assess the potential for soil vapor intrusion. The RI included the installation of nine additional soil borings (SB-14 through SB-22), four additional permanent monitoring wells (MW-5 through MW-7D) and one temporary monitoring well, the collection of a total of 15 soil samples, nine groundwater samples, nine soil vapor samples, and seven indoor / ambient air samples.

Subsurface soils at the Site included brown fine to medium sandy silts to depths up to 18 feet bgs, with weathered rock observed between 4 and 22 feet bgs at different areas throughout the Site,

followed by competent bedrock between 22 and 28 feet bgs. Groundwater at the Site is present at depths between approximately 5 to 13 feet bgs and generally flows to the southeast. New Rochelle Harbor is located approximately 5,800 feet to the southeast of the Site.

Soil sampling data suggest that PAH soil contamination at concentrations in exceedance of the Commercial Use SCOs is present beneath the wood block flooring in the vicinity of borings SB-14 and SB-15, where petroleum-like staining was observed. Low-level concentrations of metals and pesticides in exceedance of the Unrestricted Use SCO were present in soil samples from other areas of the Site, but these concentrations were below the Commercial Use SCOs that would apply to the Site. The exceedances detected in soil do not appear to have had a significant impact on groundwater quality at the Site. Additionally, Site soils are covered by the existing building and pavement, which prevent an exposure pathway to the impacted soil.

Groundwater sampling data collected during the RI indicate that cVOC concentrations in exceedance of the AWQS are present in overburden groundwater throughout the central portion of the Site, with the highest concentrations detected downgradient of the former basement automotive repair space (AOC-1) in monitoring well MW-2 and in the area of the former die-casting operations (AOC-2) in monitoring well MW-4. cVOC groundwater impacts decrease in overburden groundwater at the eastern and southern property boundaries, in monitoring wells MW-6 and MW-7, respectively, and cVOCs were not detected in temporary well point SB-24(TW) installed at an offsite, downgradient location, to the south of Beechwood Avenue. No VOCs were detected above the AWQS in the groundwater sample collected from the double-cased bedrock monitoring well, MW-7D. Based on this information, it appears that the cVOC groundwater impacts are delineated horizontally and vertically and are not migrating offsite.

Groundwater sampling data also identified PAHs, secondary metals, and emerging contaminants at concentrations marginally above NYSDEC AWQS. These contaminants are common in urban areas and are not likely attributed to onsite releases. Groundwater beneath the Site and surrounding areas is not used for public or private drinking purposes and, as such, potential environmental impacts related to these exceedances are unlikely.

Soil vapor and indoor air results indicate that cVOCs were identified throughout the central portion of the Site with the highest concentrations detected in the former basement automotive repair space (AOC-1) and in the area of the former die-casting operations (AOC-2). When compared to the NYSDOH Matrices, the cVOCs detected in soil vapor and indoor air require mitigation. Petroleum-related VOCs were also detected in soil vapor and indoor air samples; however, when compared to the NYSDOH Matrices, the concentrations detected would not necessarily require mitigation, but monitoring or resampling would be recommended. Since mitigation is required for the cVOC concentrations, vapor intrusion mitigation would be focused on cVOCs at the Site. In soil vapor samples VP-8 and VP-9, collected from the south side of Beechwood Avenue, no cVOCs were detected at levels that would require monitoring or mitigation. Therefore, soil vapor impacts associated with the cVOC groundwater contamination do not appear to be migrating offsite.

Based on the results of this RI, remedial action is warranted to address impacts identified at AOC-1 and AOC-2.

The RI sampling summary, and soil, groundwater, soil vapor, and indoor air analytical data are summarized in **Tables 1 through 5**. **Figure 4** depicts soil exceedances at the Site. **Figures 6 through 9** depict groundwater exceedances at the Site. **Figure 10** depicts soil vapor and indoor air exceedances at the Site.

2.2 SIGNIFICANT THREAT

The NYSDEC and NYSDOH have not yet determined if this Site poses a significant threat to human health and the environment. Notice of that determination would be provided for public review once the determination is made.

2.3 GEOLOGICAL CONDITIONS

Based on a review of the USGS Mount Vernon, New York, 2016 Quadrangle topographic map, the Site is situated at an elevation approximately 50 to 75 feet above mean sea level, and the local topography is sloping gently to the southeast.

The Site is situated within the Appalachian Plateau physiographic province of the State of New York. The uppermost geologic formation underlying the soils at the Site is the Ordovician Age Hartland formation. The Hartland formation comprises the underlying stratigraphy and consists mostly of basal amphibolite overlain by pelitic schist. The thickness of the Hartland formation is estimated to be up to 4,000 feet. The Hartland formation covers the areas of the east Bronx and Queens, separated by Cameron's line, a tectonic fault that separates the Manhattan prong, with the Ravenswood formation in Queens, Kings, and lower Manhattan.

Subsurface soils at the Site included brown fine to medium sandy silts with crushed rock to between 6-8 feet bgs at ground level, followed by weathered rock from approximately 8 to 22 feet bgs (between 2 and 6 feet in basement areas), followed by competent bedrock which was observed between 22 and 28 feet bgs.

Groundwater at the Site is present at a depth of approximately 5 to 13 feet bgs and generally flows to the southeast. New Rochelle Harbor is located approximately 5,800 feet to the southeast of the Site. A groundwater contour map is included as **Figure 5.**

2.3 CONTAMINATION CONDITIONS

2.3.1 Conceptual Model of Site Contamination

A conceptual site model has been developed based on the findings of the site subsurface investigations. The purpose of the conceptual site model is to develop a simplified framework for understanding the distribution of impacted materials, potential migration pathways, and potentially complete exposure pathways, as discussed below.

2.3.2 Areas of Concern

Based on the investigation completed to date, PSG identified two AOCs, which were the focus of this RI. The AOCs are listed as follows:

- **AOC-1: Former Automotive Repair Space**
- **AOC-2: Former Die-Casting Area**

Based upon the previously collected data, AOC numbers 1 and 2 were identified as areas with cVOC impacts in groundwater and soil vapor. PAH impacts were also identified in soil beneath the wood block flooring at AOC-2.

2.3.3 Identification of Standards, Criteria and Guidance

The following SCGs are applicable to the project and would be used to determine whether the Remedial Action Objectives (RAOs) have been met:

- Soil – 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 - UUSCOs and CUSCOs (December 2006); 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes; 6 NYCRR Part 376 - Land Disposal Restrictions; and 6 NYCRR Part 360 - Solid Waste Management Facilities.
- Groundwater – 6 NYCRR Parts 700-706 - Water Quality Standards (June 1998), and TOGS 1.1.1 AWQSGV and Groundwater Effluent Limitations.

In addition, the following SCGs are applicable to the remedial program at the Site:

- NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation (May 2010);
- NYSDEC Draft Brownfield Cleanup Program Guide (May 2004);
- NYSDOH Generic Community Air Monitoring Plan (CAMP);
- NYSDEC DER-23 – Citizens Participation Handbook for Remedial Programs (January 2010);
- NYSDEC DER-31 – Green Remediation (January 2011)
- NYSDEC - Sampling, Analysis, and Assessment of PFAS (April 2023)
- NYSDOH - Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / revised May 2017 / revised February 2024)

- NYSDEC CP- 51 – Soil Cleanup Guidance (2010)
- TAGM 3028 - "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- DAR-1 (formerly Air Guide 1) - Guidelines for the Control of Toxic Ambient Air Contaminants (1997)
- 6 NYCRR Part 372 – Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998);
- 6 NYCRR Subpart 374-1 – Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998);
- 6 NYCRR Subpart 374-3 – Standards for Universal Waste (November 1998);
- 6 NYCRR Part 375 – Environmental Remediation Programs (December 2006);
- 6 NYCRR Part 612 – Registration of Petroleum Storage Facilities (February 1992);
- 6 NYCRR Part 613 – Handling and Storage of Petroleum (February 1992);
- 6 NYCRR Part 614 – Standards for New and Substantially Modified Petroleum Storage Tanks (February 1992);
- 40 Code of Federal Regulations (CFR) Part 280 – Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;
- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response;
- 40 CFR Part 144 – Underground Injection Control Program;
- CP-43 – Commissioner Policy on Groundwater Monitoring Well Decommissioning (December 2009)

- U.S. EPA OSWER Directive 9200.4-17 - Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (December 1997); and

Additional regulations and guidance may be applicable, relevant, and appropriate for the remedial actions and would be complied with during implementation of the remedial program. However, the list above is intended to represent the principal SCGs that would be considered in evaluating the remedial alternatives for the Site.

2.3.4 Soil Contamination

A total of 15 soil samples were collected during the RI for laboratory analysis of TCL VOCs, SVOCs, and pesticides/PCBs, TAL metals, and emerging contaminants. RI soil analytical results are summarized in **Table 2**. A Sample Location Map is provided as **Figure 3**.

Soil sampling data suggest that PAH soil contamination at concentrations in exceedance of the Unrestricted Use, Protection of Groundwater, and Commercial Use SCOs is present beneath the wood block flooring in the vicinity of borings SB-14 and SB-15, where petroleum-like staining was observed. Low-level concentrations of metals and pesticides in exceedance of the Unrestricted Use SCO were present in soil samples from other areas of the Site, but these concentrations were below the Protection of Groundwater and Commercial Use SCOs that would apply to the Site. The exceedances detected in soil do not appear to have had a significant impact on groundwater quality at the Site. Additionally, Site soils are covered by the existing building and pavement, which prevent an exposure pathway to the impacted soil.

The following is a summary of the highest detections for each AOC compared to the Soil Cleanup Objectives:

AOC-1

Soil samples from borings SB-17 and SB-18 were collected in the vicinity of AOC-1.

VOCs: No VOCs were reported above the Unrestricted Use SCOs.

SVOCs: No SVOCs were reported above the Unrestricted Use SCOs.

Metals: Hexavalent chromium was reported above the Unrestricted Use SCO in soil sample SB-18 (3.0-3.5) at a concentration of 2.39 mg/Kg.

Lead was reported above the Unrestricted Use SCO in soil sample SB-17 (0.5-2.0) at a concentration of 150 mg/Kg.

Pesticides: No pesticides were reported above the Unrestricted Use SCOs.

PCBs: No PCBs were reported above the Unrestricted Use SCOs.

Emerging Contaminants: Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) were either non-detect or were detected at concentrations below the Unrestricted Use Guidance Values. 1,4-Dioxane was not reported above the Unrestricted Use SCO.

AOC-2

Soil samples from borings SB-14 through SB-16 and SB-19 through SB-22 were collected in the vicinity of AOC-2.

VOCs: No VOCs were reported above the Unrestricted Use SCOs.

SVOCs: Benzo(a)anthracene was reported above the Unrestrictedand Protection of Groundwater Use SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 4.2 mg/Kg, in soil sample SB-14 (7.5-8.0) at a concentration of 1.2 mg/Kg, and in soil sample SB-15 (0.5-2.0) at a concentration of 1.1 mg/Kg.

Benzo(a)pyrene was reported above the Unrestricted, CommercialUse SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 3.8 mg/Kg. Benzo(a)pyrene was reported above the Unrestricted and Commercial SCOs in soil sample SB-15 (0.5-2.0) at a concentration of 1.1 mg/Kg.

Benzo(b)fluoranthene was reported above the Unrestrictedand Protection of Groundwater SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 4.9 mg/Kg. Benzo(b)fluoranthene was reported above the UnrestrictedSCOs in soil sample SB-14 (7.5-8.0) at a concentration of 1.4 mg/Kg, and in soil sample SB-15 (0.5-2.0) at a concentration of 1.2 mg/Kg.

Benzo(k)fluoranthene was reported above the Unrestricted Use SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 1.7 mg/Kg.

Chrysene was reported above the Unrestricted and Protection of Groundwater Use SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 4.7 mg/Kg. Chrysene was reported above the Unrestrictedand Protection of Groundwater Use SCOs in soil sample SB-14 (7.5-8.0) at a concentration of 1.3 mg/Kg, and in soil sample SB-15 (0.5-2.0) at a concentration of 1.1 mg/Kg.

Dibenzo(a,h)anthracene was reported above the UnrestrictedUse SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 0.58 mg/Kg.

Indeno(1,2,3-cd)pyrene was reported above the UnrestrictedUse SCOs in soil sample SB-14 (0.5-2.0) at a concentration of 2.3 mg/Kg, in soil sample SB-14 (7.5-8.0) at a concentration of 0.65 mg/Kg, and in soil sample SB-15 (0.5-2.0) at a concentration of 0.66 mg/Kg.

Metals: Lead was reported above the Unrestricted Use SCOs in soil sample SB-19 (1.0-2.0) at a concentration of 98.5 mg/Kg, in soil sample SB-19 (5.5-6.0) at a concentration of 191 mg/Kg, and in soil sample SB-14 (7.5-8.0) at a concentration of 99 mg/Kg.

Mercury was reported above the Unrestricted Use SCOs in soil sample SB-19 (5.5-6.0) at a concentration of 0.325 mg/Kg and in soil sample SB-14 (7.5-8.0) at a concentration of 0.236 mg/Kg.

Nickel was reported above the Unrestricted Use SCOs in soil sample SB-22 (0.5-2.0) at a concentration of 37.7 mg/Kg, in soil sample SB-19 (5.5-6.0) at a concentration of 31.4 mg/Kg, in soil sample SB-15 (7.5-8.0) at a concentration of 41 mg/Kg, and in soil sample SB-20 (0.5-2.0) at a concentration of 35.9 mg/Kg.

Zinc was reported above the Unrestricted Use SCOs in soil sample SB-19 (5.5-6.0) at a concentration of 135 mg/Kg, in soil sample SB-14 (0.5-2.0) at a concentration of 146 mg/Kg, and in soil sample SB-14 (7.5-8.0) at a concentration of 121 mg/Kg.

Pesticides: 4,4-DDD was reported above the Unrestricted Use SCOs in soil sample SB-16 (8.5-9.0) at a concentration of 0.0193 mg/Kg.

PCBs: No PCBs were reported above the Unrestricted Use SCOs.

Emerging Contaminants: PFOA and PFOS were either non-detect or were detected at concentrations below the Unrestricted Use Guidance Values. 1,4-Dioxane was not reported above the Unrestricted Use SCO.

2.3.5 Groundwater Contamination

The following is a summary of groundwater samples collected from the temporary and permanent groundwater monitoring wells which contained elevated levels of contaminants above NYSDEC AWQS or PFOA/PFOS ambient water quality guidance values as defined in the April 2023 NYSDEC-issued sampling protocol ("Sampling, Analysis, and Assessment of PFAS") document.

Monitoring wells MW-1 and MW-2 are located to the north (upgradient) and south (downgradient) of the former auto repair space located in the basement (AOC-1), monitoring wells MW-3, MW-4, MW-7, and MW-7D, are located within the former die-casting area (AOC-2), monitoring wells MW-5 and MW-6 are located upgradient and cross gradient to AOC-1 and AOC-2, and temporary well point SB-24(TW) was advanced at a location downgradient of the Site across Beechwood Avenue.

Groundwater sampling data collected during the RI indicate that cVOC concentrations in exceedance of the AWQS are present in overburden groundwater throughout the central portion of the Site, with the highest concentrations detected downgradient of the former basement automotive repair space (AOC-1) in monitoring well MW-2 and in the area of the former die-casting operations (AOC-2) in monitoring well MW-4. cVOC groundwater impacts decrease in

overburden groundwater at the eastern and southern property boundaries, in monitoring wells MW-6 and MW-7, respectively, and cVOCs were not detected in temporary well point SB-24(TW) installed at an offsite, downgradient location, to the south of Beechwood Avenue. No VOCs were detected above the AWQS in the groundwater sample collected from the double-cased bedrock monitoring well, MW-7D. Groundwater sampling data also identified PAHs, secondary metals, and emerging contaminants at concentrations marginally above NYSDEC AWQS.

The following constituents were detected above the NYSDEC AWQS:

VOCs:

MW-1

PCE was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 27 µg/L. 1,1,1-TCA was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 20 µg/L. 1,1-DCE was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 9 µg/L.

MW-2

1,1-DCA was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 79 µg/L. PCE was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 280 µg/L. 1,2-DCA was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 1.5 µg/L. 1,1,1-TCA was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 680 µg/L. 1,1-DCE was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 420 µg/L. TCE was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 30 µg/L. Cis-1,2- DCE was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 48 µg/L.

MW-3

1,1- DCA was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 9.2 µg/L. PCE was reported above the NYSDEC AWQS in groundwater sample

MW-3 at a concentration of 12 µg/L. 1,1,1-TCA was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 27 µg/L. Vinyl chloride was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 4.7 µg/L. 1,1- DCE was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 24 µg/L. TCE was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 5.3 µg/L. Cis-1,2- DCE was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 5 µg/L.

MW-4

1,1-DCA was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 59 µg/L. PCE was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 180 µg/L. 1,2-DCA was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 0.9 µg/L. 1,1,1-TCA was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 310 µg/L. 1,1- DCE was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 140 µg/L. TCE was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 55 µg/L. Cis-1,2- DCE was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 40 µg/L.

MW-5

PCE was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 44 µg/L. TCE was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 6.7 µg/L. Cis-1,2-DCE was reported above the NYSDEC in groundwater sample MW-5 at a concentration of 27 µg/L.

MW-6

Chloroform was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 9.7 µg/L.

MW-7

PCE was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 7.7 µg/L. 1,1,1-TCA was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 13 µg/L. 1,1- DCE was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 9.2 µg/L.

MW-7D

No VOCs were detected above the NYSDEC AWQS in groundwater sample MW-7D.

SVOCs:

MW-1

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 0.03 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-1 at a concentration of 0.02 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 0.03 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 0.01 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 0.02 µg/L.

MW-2

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 0.03 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-2 at a concentration of 0.04 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 0.07 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 0.02 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 0.04 µg/L. Indeno(1,2,3-cd)pyrene was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 0.04 µg/L.

MW-3

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 0.05 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-3 at a concentration of 0.06 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 0.08 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 0.04 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 0.06 µg/L. Indeno(1,2,3-cd)pyrene was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 0.05 µg/L.

MW-4

No SVOCs were detected above the method detection limit in groundwater sample MW-4.

MW-5

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 0.02 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-5 at a concentration of 0.02 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 0.03 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 0.01 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 0.03 µg/L. Indeno(1,2,3-cd)pyrene was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 0.02 µg/L.

MW-6

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 0.04 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-6 at a concentration of 0.03 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 0.05 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 0.02 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater

sample MW-6 at a concentration of 0.04 µg/L. Indeno(1,2,3-cd)pyrene was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 0.03 µg/L.

MW-7

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 0.03 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-7 at a concentration of 0.02 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 0.03 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 0.02 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 0.03 µg/L. Indeno(1,2,3-cd)pyrene was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 0.02 µg/L.

MW-7D

Benzo(a)anthracene was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 0.02 µg/L. Benzo(a)pyrene was reported above the NYSDEC AWQS in groundwater MW-7D at a concentration of 0.02 µg/L. Benzo(b)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 0.03 µg/L. Benzo(k)fluoranthene was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 0.01 µg/L. Chrysene was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 0.02 µg/L. Indeno(1,2,3-cd)pyrene was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 0.01 µg/L.

Total Metals:

MW-1

Iron was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 622 µg/L. Manganese was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 805.8 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 328,000 µg/L.

MW-2

Iron was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 2,970 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 23,100 µg/L.

MW-3

Iron was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 17,200 µg/L. Manganese was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 741.1 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 32,300 µg/L.

MW-4

Iron was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 2,730 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 24,400 µg/L.

MW-5

Iron was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 4,400 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 23,200 µg/L.

MW-6

Iron was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 5,420 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 76,400 µg/L.

MW-7

Iron was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 3,090 µg/L. Manganese was reported above the NYSDEC AWQS in groundwater

sample MW-7 at a concentration of 889 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 34,800 µg/L.

MW-7D

Iron was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 983 µg/L. Manganese was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 441.3 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 25,700 µg/L.

Metals (Dissolved):

MW-1

Manganese was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 746 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-1 at a concentration of 329,000 µg/L.

MW-2

Sodium was reported above the NYSDEC AWQS in groundwater sample MW-2 at a concentration of 23,500 µg/L.

MW-3

Iron was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 2,060 µg/L. Manganese was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 602.1 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-3 at a concentration of 32,900 µg/L.

MW-4

Sodium was reported above the NYSDEC AWQS in groundwater sample MW-4 at a concentration of 24,600 µg/L.

MW-5

Sodium was reported above the NYSDEC AWQS in groundwater sample MW-5 at a concentration of 23,100 µg/L.

MW-6

Sodium was reported above the NYSDEC AWQS in groundwater sample MW-6 at a concentration of 83,400 µg/L.

MW-7

Manganese was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 815 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-7 at a concentration of 34,500 µg/L.

MW-7D

Manganese was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 465.2 µg/L. Sodium was reported above the NYSDEC AWQS in groundwater sample MW-7D at a concentration of 28,600 µg/L.

PCBs/Pesticides: PCBs and pesticides were not detected above the method detection limit in any of the groundwater samples collected.

Emerging Contaminants:

MW-1

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-1 at a concentration of 0.00788 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-1 at a concentration of 0.0127 µg/L.

MW-2

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-2 at a concentration of 0.0132 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-2 at a concentration of 0.0114 µg/L. 1,4-Dioxane was

detected above the ambient water quality guidance value in groundwater sample MW-2 at a concentration of 7.39 µg/L.

MW-3

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-3 at a concentration of 0.0158 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-3 at a concentration of 0.0149 µg/L. 1,4-Dioxane was detected above the ambient water quality guidance value in groundwater sample MW-3 at a concentration of 1.02 µg/L.

MW-4

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-4 at a concentration of 0.012 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-4 at a concentration of 0.0163 µg/L. 1,4-Dioxane was detected in groundwater sample MW-4 at a concentration of 14.7 µg/L.

MW-5

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-5 at a concentration of 0.0284 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-5 at a concentration of 0.0104 µg/L.

MW-7

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-7 at a concentration of 0.0168 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-7 at a concentration of 0.0129 µg/L.

MW-7D

PFOA was detected above the ambient water quality guidance value in groundwater sample MW-7D at a concentration of 0.0177 µg/L. PFOS was detected above the ambient water quality guidance value in groundwater sample MW-7D at a concentration of 0.0137 µg/L. 1,4-Dioxane

was detected above the ambient water quality guidance value in groundwater sample MW-7D at a concentration of 0.4 µg/L.

Offsite

VOCs: VOCs were not detected above the NYSDEC AWQS in groundwater sample SB-24(TW).

SVOCs: No groundwater samples were collected for SVOCs offsite.

Metals: No groundwater samples were collected for metals offsite.

Metals (Dissolved): No groundwater samples were collected for dissolved metals offsite.

PCBs/Pesticides: No groundwater samples were collected for PCBs and pesticides offsite.

Emerging Contaminants: No groundwater samples were collected for Emerging Contaminants offsite.

2.3.6 Soil Vapor and Indoor Air Contamination

Soil vapor and indoor air results indicate that cVOCs were identified throughout the central portion of the Site with the highest concentrations detected in the former basement automotive repair space (AOC-1) and in the area of the former die-casting operations (AOC-2). When compared to the NYSDOH Matrices, the cVOCs detected in soil vapor and indoor air require mitigation. Petroleum-related VOCs were also detected in soil vapor and indoor air samples; however, when compared to the NYSDOH Matrices, the concentrations detected would not necessarily require mitigation, but monitoring or resampling would be recommended. Since mitigation is required for the cVOC concentrations, vapor intrusion mitigation would be focused on cVOCs at the Site. In soil vapor samples VP-8 and VP-9, collected from the south side of Beechwood Avenue, no cVOCs were detected at levels that would require monitoring or mitigation. Therefore, soil vapor impacts associated with the cVOC groundwater contamination do not appear to be migrating offsite.

Soil vapor samples VP-7, VP-8, and VP-9 were collected outside of the building to the north and south of Beechwood Avenue. Since the soil vapor samples were collected from exterior areas,

collocated indoor air samples were not collected. In soil vapor sample VP-7, which was collected adjacent to the building on the north side of Beechwood Avenue, 1,1-DCE was detected at a concentration 78.1 µg/m3, which when compared to the NYSDOH Matrix, requires mitigation. In soil vapor samples VP-8 and VP-9, collected from the south side of Beechwood Avenue, no cVOCs were detected at levels that would require monitoring or mitigation when compared to the NYSDOH Matrix.

In interior soil vapor samples (VP-1 through VP-6) and collocated indoor air samples (IA-1 through IA-6), multiple chlorinated and petroleum-related VOCs were detected in soil vapor and indoor air. When compared to the NYSDOH Matrices, the following results indicate that monitoring and/or mitigation is warranted:

1,1-DCE was detected at a maximum concentration of 2,400 µg/m^3 in soil vapor sample VP-6 and a maximum concentration of 8.17 µg/m^3 in indoor air sample IA-4.

Methylene chloride was detected at a maximum concentration of 15.2 µg/m^3 in indoor air sample IA-2.

Cis-1,2-Dichlorethene was detected at a maximum concentration of 51.5 µg/m^3 in soil vapor sample VP-5, and a maximum concentration of 1.2 µg/m^3 in indoor air sample IA-4.

1,1,1-TCA was detected at a maximum concentration of 17,200 µg/m^3 in soil vapor sample VP-6 and a maximum concentration of 14 µg/m^3 in indoor air sample IA-4.

Carbon tetrachloride was detected at a maximum concentration of 0.51 µg/m^3 in indoor air sample IA-2.

TCE was detected at a maximum concentration of 1,870 µg/m^3 in soil vapor sample VP-6 and a maximum concentration of 0.983 µg/m^3 in indoor air sample IA-4.

PCE was detected at a maximum concentration of 7,730 µg/m3 in soil vapor sample VP-6 and a maximum concentration of 13.4 µg/m^3 in indoor air sample IA-1.

Ethylbenzene was detected at a maximum concentration of 153 µg/m3 in soil vapor sample VP-2 and a maximum concentration of 33.2 µg/m^3 in indoor air sample IA-1.

2.3.7 Potential Sources of Contamination

Sources of contamination at the site primarily include contaminants related to historical industrial operations at the Site.

The Site was developed with the existing one- to two-story warehouse in approximately 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corporation (aka Gries Dynacast) from 1951 through 1985, who utilized the central portion of the Site building for metal fabrication and die-casting and plating operations.

Gries Dynacast was listed in the RCRA database as a Small Quantity Generator of hazardous waste generating 17,550 pounds of solid waste that exhibited the characteristic of reactivity in 1986, presumably following the cessation of operations in 1985. No information is known on the use, storage or disposal of hazardous materials prior to the 1985, for a period of approximately 34 years of operation.

It is likely that the historic metal fabrication, die-casting, plating operations and associated use of hazardous materials is the source of the majority of onsite contamination.

2.3.8 Receptor Populations

The human receptors for current site conditions include employees and visitors. During construction and remediation activities, receptors would include construction and remediation workers. Under future conditions, receptors would likely include employees and visitors.

2.4 ENVIRONMENTAL AND PUBLIC HEALTH ASSESSMENTS

2.4.1 Qualitative Human Health Exposure Assessment

The objective of the Qualitative Human Health Exposure Assessment (QHHEA) is to identify potential receptors and pathways for human exposure to the COCs that are present at, or migrating from, the Site. An identified pathway indicates that the potential for exposure exists.

The RI was sufficient to complete a QHHEA, which was performed to determine whether the

Site poses an existing or future health hazard to the Site's occupants or surrounding population. The RI was evaluated to determine whether there is a potential health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. The QHHEA was prepared in accordance with Appendix 3B and Section 3.3 (b) 8 of the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation dated May 2010.

The Site is currently a U-Haul Moving & Storage, which is capped by a large two-story building, with asphalt paved areas throughout most of the remaining areas of the Site. Site occupation is limited to public and staff occupancy.

Potential pathways to human receptors include direct contact (dermal absorption), ingestion, and inhalation of identified COCs. An evaluation of potential exposure pathways is provided below.

The pathway for direct contact and ingestion with subsurface soils is incomplete in the current and future condition as contaminated subsurface soils are covered by impervious building structures, asphalt, and concrete, which were observed to be in good condition with minimal fractures, breaks, and open areas. There is no complete pathway for exposure to contaminated groundwater, as groundwater is not used for drinking water in New Rochelle.

Vapor intrusion to indoor air presents a potential exposure pathway in the current condition at the Site building. A SSDS would be installed at the on-site building to mitigate the vapor intrusion exposure pathway in the future condition. The SSDS would be equipped with alarms that provide notification if the vacuum drops below an acceptable level.

According to the Westchester County Geographic Information Systems – Municipal Tax Parcel Viewer Map, the Site and surrounding areas are zoned "Light Industry" for light industrial and commercial use. No daycares, hospitals, or schools were identified within a 500-foot radius of the Site.

North of the Site is the Metro-North Railroad followed by the Motorcycle Center, a motorcycle repair shop, and several residential buildings. Beechwood Auto Body Inc and H&M Tech are located east of the Site across 2nd Street. Another industrial building, Atlas Welding &

Boiler Repair Inc, is located west of the Site. South of the Site is Beechwood Avenue followed by a parking lot, also owned by 125 Beechwood LLC, single family residences, and a commercial building owned by 122 Beechwood Properties Inc. New Rochelle Harbor is located approximately 5,800 feet to the southeast of the Site.

Soil vapor samples collected by PSG at the southern (VP-8 and VP-9), eastern (VP-3), and western (VP-1) property boundaries indicated no elevated concentrations of cVOCs.

The soil vapor samples collected from beneath the northern portion of the Site building (VP-4 and VP-5) indicated elevated cVOC concentrations. No sensitive receptors are present in close proximity to the elevated soil vapor concentrations identified in the northern portion Site, with the exception of potentially occupied commercial and residential properties located approximately 200 feet to the north of the Site, at an upgradient location, across the unpaved railroad tracks. These properties appear to be fully developed with asphalt and concrete-paved parking lots and building structures, which would, combined with the presence of the unpaved ground adjacent to the northern property boundary and southerly groundwater flow direction at the Site, cause the soil vapor intrusion pathway to be incomplete.

In addition, groundwater beneath the Site and surrounding area is not used for drinking purposes and no private potable and non-potable wells exist within ½-mile of the Site.

Installation of the extraction points for the SSDS would require coring through the concrete or wood block building slab in thirty-seven locations and excavating approximately one to two cubic feet of soil by hand and then backfilling with three-quarter inch bluestone gravel. Thus, there is a potential pathway for remediation workers engaged in the excavation of historic fill/soil at the Site to be exposed to SVOCs and metals through inhalation, ingestion, and dermal contact. In addition, there is a potential pathway for workers excavating soil to be exposed to cVOCs in soil vapor through inhalation.

However, all such work would be undertaken in accordance with a HASP and a CAMP, and workers would be required to wear proper personal protective equipment to prevent such exposure and minimize the potential hazards to on-site workers.

Following remediation activities, an active SSDS would be installed at the Site and would be effectively protecting the building from vapor intrusion and rendering the potential vapor intrusion pathway incomplete.

2.5 INTERIM REMEDIAL ACTION

No IRMs are proposed at the Site.

2.6 REMEDIAL ACTION OBJECTIVES

Based on the results of the RI, the following RAOs have been identified for this Site.

2.6.1 Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

2.6.2 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding the AWQS.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to regional background conditions.
- Remove the source of ground or surface water contamination.

2.6.3 Soil Vapor

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

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

This section presents an analysis of remedial actions to achieve compliance with NYCRR Part 375 under a Track 4 cleanup using the site-specific SCOs. Residual soil contamination would be managed under the proposed site cover system. The proposed Track 4 cleanup includes a combination of techniques control the spread of contaminants, prevent contact with contaminants, restrict the use of the property, and provide for the proper management of the site into the future.

No active remediation is proposed for the sitewide COCs identified above the Commercial Use SCOs. COCs identified above the Commercial Use SCOs are summarized in **Table 2**.

3.1 EVALUATION OF REMEDIAL ALTERNATIVES

The following is a detailed description of the alternatives analyzed to address impacted media at the Site:

Alternative 1:

- Removal of all soil exceeding Track 1 Unrestricted Use SCOs throughout the Site and confirmation that Track 1 Unrestricted Use SCOs have been achieved with post-excavation endpoint sampling.
    - Based on the results of the Remedial Investigation, it is expected that this alternative could be achieved by excavating PAHs, metals, and pesticide exceedances throughout the Site. Excavation would extend to approximately

10 feet bgs at AOC-2, where low levels of contamination were detected in soil above weathered bedrock.

- Treatment of cVOC impacted groundwater at the Site, including the injection of 3-D Microemulsion® (3DME), colloidal zero-valent iron (ZVI), and Sulfidated-MicroZVI (S-MicroZVI®) into the subsurface throughout the site. The current monitoring well network would be sampled pre- and post-injection. Groundwater monitoring would continue on a quarterly basis thereafter until NYSDEC AWQS levels are achieved.
- Installation of an active SSDS system at the Site for vapor intrusion mitigation.
- CAMP would be conducted during all ground intrusive work.
- Recording of an EE to prevent future exposure to any remaining contamination at the Site.
- Implementation of a Site Management Plan (SMP) for long-term management of residual contamination as required by the EE.
- Establishment of Engineering and Institutional Controls for implementation and management of EC/ICs as applicable.
- Monitored natural attenuation of groundwater at the Site. Groundwater monitoring would continue on a quarterly basis thereafter until NYSDEC AWQS levels are achieved.

Alternative 2:

- Use of the existing building slabs and asphalt pavement on exterior open areas of the Site as a composite cover system.
- Installation of an active SSDS system at the Site for vapor intrusion mitigation.
- CAMP would be conducted during all ground intrusive work.
- Recording of an EE to prevent future exposure to any remaining contamination at the Site.
- Implementation of a Site Management Plan (SMP) for long-term management of residual contamination as required by the EE.

- Establishment of institutional controls including an EE limiting the use of the Site for commercial/industrial activities, restrictions on unauthorized excavation or disturbance of the cover system..
- Monitored natural attenuation of groundwater at the Site. Groundwater monitoring would continue on an annual basis thereafter until NYSDEC AWQS levels are achieved.

The remedial alternatives were compared to the following criteria:

- Protection of human health and the environment
    - Alternative 1 would be protective of human health and the environment by removing all soil exceeding Track 1 Unrestricted Use SCOs and by treating groundwater, thus eliminating potential for direct contact with contaminated soil and eliminating the risk of contaminants leaching into groundwater. Also establishing institutional and engineering controls and installing an active SSDS. The institutional controls would ensure that the engineering controls remain intact and protective of public health. The active SSDS would mitigate cVOC impacted soil vapors from entering the building indoor air.
    - Alternative 2 would be protective of human health and the environment by establishing institutional and engineering controls, including a composite cover system and an active SSDS. The composite cover system would prevent direct contact with contaminated soil and the institutional controls would ensure that the engineering controls remain intact and protective of public health. The active SSDS would mitigate cVOC impacted soil vapors from entering the building indoor air.
- Compliance with standards, criteria, and guidelines (SCGs)
    - Alternative 1 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil and groundwater through removal of soil to achieve Track 1 Unrestricted Use SCOs and treatment of groundwater at the

Site. The active SSDS would mitigate cVOC impacted soil vapors from entering the building indoor air.

  - Alternative 2 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil and groundwater through capping of soil to meet Track 4 Site-Specific SCOs and monitored natural attenuation. The active SSDS would mitigate cVOC impacted soil vapors from entering the building indoor air.

- Short-term effectiveness and impacts
  - Alternative 1 has short-term effectiveness as it requires excavation of contaminated soil and treatment of cVOC impacted groundwater. Additionally, Alternative 1 has short-term effectiveness for protecting the surrounding communities by decreasing the risk of contact with on-Site contaminants. However, impacts related to excavation would include short-term dust generation, increased truck traffic, fossil fuel use, and greenhouse gas emissions. Alternative 1 is estimated to require the removal of 1,300 to 1,900 cubic yards of soil. In contrast, Alternative 2 would not involve the removal of any soil other than soil for the installation of the extraction points for the SSDS. Due to the excavation required for Alternative 1, these short-term impacts would be significantly greater compared to Alternative 2.

- Long-term effectiveness and permanence
  - Alternative 1 would achieve long-term effectiveness and permanence related to on-Site contamination by permanently removing all impacted soil above Track 1 Unrestricted Use SCOs and maintaining the active SSDS systems. Removal of on-Site contaminant sources would also prevent future groundwater contamination.
  - Alternative 2 would achieve long-term effectiveness and permanence related to on-Site contamination by utilizing a composite cover system across the Site,

maintenance of the active SSDS systems, maintaining use restrictions, and placing an EE on the Site.

- Reduction of toxicity, mobility, or volume of contaminated material
  - Alternative 1 would permanently eliminate the toxicity, mobility, and volume of contaminants from on-Site soil by removing all soil in excess of Track 1 Unrestricted Use SCOs and treating groundwater at the Site.
  - While Alternative 1 would remove a greater total mass of contaminants from the Site. under Alternative 2 all soil remaining at the Site would meet Track 4 Site-specific SCOs and exposure would be minimized through the composite cover system.
- Implementability (technical and administrative feasibility):
  - The techniques, materials and equipment to implement Alternatives 1 and 2 are readily available and have been proven to be effective in remediating the contaminants present on the Site. They use standard equipment and technologies that are well established in the industry. There are no special difficulties associated with any of the activities proposed.
  - Due to the presence of the current building and operating business at the Site and current and proposed commercial use, Alternative 1 would not be technically feasible.
- Cost effectiveness
  - Impacted soil in excess of Track 1 Unrestricted Use SCOs varies but, for Alternative 1, excavation would extend to approximately 10 feet bgs at AOC-2, where low levels of contamination were detected in soil above weathered bedrock. The in-situ groundwater treatment area for Alternative 1 would be approximately 36,000 square feet. Alternative 1 would cost roughly $1.5 million to $2 million, making it cost-prohibitive.

- With Alternative 2 all soil remaining at the Site would meet Track 4 Site-specific SCOs, exposure would be minimized through the composite cover system, SSDS installation, and monitored natural attenuation. The estimated costs for Alternative 2 range from $246,000 to $334,000 (refer to **Appendix B**). Alternative 2 is significantly more cost effective.

- Community Acceptance
  - This RAWP will be subject to a public review providing the opportunity for detailed public input on the remedial alternatives and selected remedy. Any public comments will be considered by NYSDEC and NYSDOH prior to approval of this plan.
  - Under both alternatives, the overall goals of the remedial program (to protect public health and the environment and eliminate potential contaminant exposures) have historically been broadly supported by surrounding communities.
  - Alternative 1 would be more disruptive to the surrounding community due to noise and truck traffic related to extensive soil excavation.

- Green and Sustainable Remediation (including climate resiliency)
  - Remedies for both alternatives would be implemented in an energy-efficient manner, use cleaner and more energy-efficient equipment and construction techniques, and use more sustainable materials when possible.
  - The remedial plan for Alternative 1 would take into consideration the shortest trucking routes during off-Site disposal of historic fill and other soils.
  - As Alternative 1 would require excavation and active groundwater treatment compared to Alternative 2, it would have a higher short-term impact on the climate due to the increased carbon footprint, waste and dust generation, and truck traffic.

- Land use
    - Following remediation, the Site will meet either Track 1 Unrestricted Use or Track 4 Site-Specific SCOs, both of which are protective of public health and the environment for its current and planned commercial use. The proposed use is compliant with the property's zoning and is consistent with recent development patterns.
    - The Site is not located in an area impacted by comprehensive community master plans, local waterfront revitalization plans, or other applicable land use plans.
    - The Site is located in a potential environmental justice area (PEJA); however, the proposed use of the Site would not cause or increase a disproportionate burden on the surrounding community.
    - The Site is not in close proximity to important cultural resources, including federal or state historic or heritage sites or Native American religious sites, natural resources, waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species.
    - The Site does not lie in a Federal Emergency Management Agency (FEMA)-designated flood plain.
    - Groundwater in the surrounding area is not used for potable uses and groundwater at the Site would not impact groundwater recharge areas or other areas identified by the NYSDEC groundwater remediation and protection program.

3.2 SUMMARY OF SELECTED REMEDIAL ACTIONS

The preferred remedial action alternative is Alternative 2. The preferred remedial action achieves protection of public health and the environment for the intended use of the property and will achieve all of the remedial action objectives established for the project and address applicable

SCGs. The preferred remedial action is cost-effective and implementable in terms of technical and administrative feasibility, would be accepted by the community, would include elements of green and sustainable remediation, and would require reduced has a fossil fuel use and greenhouse gas emissions. Finally, the preferred remedial action is appropriate for the current and proposed land uses of the Site and surrounding area.

Due to the heterogeneous nature of the distribution of COCs in sitewide soils, remediation to the Track 1 Unrestricted Use SCOs would not be practical or feasible considering the current use of the Site. However, potential cVOC vapors would be removed via an active SSDS to prevent further impacts to the indoor air. A composite cover system consisting of the existing building slabs and asphalt pavement on exterior areas of the Site would prevent exposure to contaminated soils, while the SSDSs would prevent soil vapor contamination inside the buildings. Proposed institutional controls would include an environmental easement limiting the use of the Site for commercial/industrial activities, and imposing restrictions on unauthorized excavation or disturbance of the cover system.

The objective of the RA for groundwater would be to monitor groundwater impacts until they naturally attenuate. Proposed institutional controls include restricting the use of groundwater at the Site.

The RAOs for soil vapor include preventing soil vapor from entering Site buildings or migrating offsite.

The objective of this RAWP is to achieve a Track 4 remedy for commercial use via the installation of a SSDS, monitored natural attenuation, engineering controls, and institutional controls to prevent exposure to contaminated media. The components of the RA would include the following:

1. **SSDS Installation:** An active SSDS would be designed and installed beneath the footprint of on-site building. This active SSDS would operate while groundwater contaminants attenuate, and until the onsite soil vapor intrusion condition is no longer present.
2. **Groundwater Sampling:**

PSG would conduct periodic groundwater sampling events to monitor the attenuation of contamination. Groundwater monitoring would include sampling the existing monitoring wells on an annual basis. PSG would conduct the groundwater sampling events in accordance with the procedures presented in the NYSDEC-approved RIWP for the Site. All wells would be sampled in accordance with the EPA low-flow groundwater purging and sampling procedures (revised September 19, 2017). Groundwater samples would be collected from the monitoring wells using the following methodology:

- A headspace reading would be collected using a PID;
- Depth to water would be measured using a water level indicator;
- Field parameters including pH, ORP, specific conductivity, dissolved oxygen, temperature, and depth to water would be collected for approximately 15 to 30 minutes or until field parameters stabilize;
- Upon stabilization of field parameters, dedicated tubing would be used to obtain each groundwater sample;
- Sample containers would be placed into a chilled cooler and maintained at low temperatures (below 4-degress Celsius) for transport to the laboratory.
- Samples would be analyzed for TCL VOCs via EPA Method 8260, TCL SVOCs via EPA Method 8270, Total and Dissolved Metals via EPA method 6010/7471, and PFAS via EPA Method 1633.

3. **Engineering Controls:** The asphalt, concrete, and building slabs at the Site would be visually inspected to determine they are complete, with no significant cracks or damage, and can act as an engineering control to prevent exposure to remaining site impacts. Once confirmed, a composite cover system consisting of the existing building slabs and asphalt pavement on exterior open areas of the Site would prevent human exposure to contaminated soils.

4. **Institutional Controls – Environmental Easement:** Proposed institutional controls include the recording of an environmental easement to prevent future exposure to any remaining contamination at the Site; publication of a Site Management Plan (SMP) for long-term management of residual contamination as required by the EE; and use restrictions limiting the use of the Site for commercial/industrial activities, restricting the use of groundwater, and restricting unauthorized excavation or disturbance of the cover system.

5. **Green and Sustainable Remediation:** As part of the remedial program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis was conducted using an accepted calculator to evaluate the remedy against green and sustainable remediation principles. Key metrics such as water consumption, greenhouse gas emissions, energy use, waste reduction, and material use were estimated. Goals were established for these metrics, and considerations for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice were integrated into the remedial program.

Progress with respect to green and sustainable remediation metrics would be tracked during implementation of the remedial action and reported in the FER, including a comparison to the goals established during the remedial program. To ensure environmentally responsible remediation at the Site, the following goals have been established and would be tracked during the remedial action:

- **Minimize Greenhouse Gas Emissions:** Optimize fuel use and incorporate clean energy sources to reduce emissions.
- **Reduce Energy Consumption:** Use energy-efficient equipment and practices, minimizing idle times and excess usage.
- **Effective Waste Management:** Reduce waste generation and ensure proper disposal in compliance with regulations.
- **Promote Worker Safety and Community Health:** Implement protective measures and maintain open communication with the community.
- **Sustainable Practices:** Use environmentally friendly materials and green procurement practices.

Additionally, a Climate Screening Checklist was completed for the Site to evaluate the impact of climate change on the project site and the proposed remedy. Based on the results of the Climate Screening Checklist, no further actions are required at this time. Copies of the climate screening checklist and environmental footprint analysis are included in **Appendix A**. An itemized and detailed summary of estimated remedial action costs is included in **Appendix B**.

3.3 ZONING

According to the Westchester County Zoning Map, the Site is located within a LI (light industry) zoning area. Typical uses include manufacturing, industrial, warehouse and public utilities.

3.3.1 Surrounding Property Uses

The surrounding land uses include railroad, recreation open space (Beechwood Cemetery), residential, commercial, and industrial properties. The northern Site border is an active railroad line, owned by the Consolidated Rail Corp. Commercial buildings are located beyond 2nd Street to the east of the Site. Residential homes border the Site to the south.

The current, intended, and reasonably anticipated future land use of the Site and its surroundings are compatible with the selected remedy.

3.3.2 Citizen Participation

The Citizen Participation Plan (CPP) outlines how members of the affected and interested public are provided with information about how NYSDEC will inform and involve them during the investigation and remediation of the Site. Information such as project contacts, document repositories, site contact lists, and community participation activities are provided in the CPP, included in **Appendix F**.

3.3.3 Environmental Justice Concerns

The Site is located in a Potential Environmental Justice area. NYSDEC's Office of Environmental Justice acts as an advocate on behalf of these areas, which are disproportionately affected by environmental burdens.

3.3.4 Land Use Designations

There are no federal or state land use designations.

3.3.5 Population Growth Patterns

The population growth patterns and projections support the current and proposed land use.

3.3.6 Accessibility to Existing Infrastructure

New Rochelle's water supply is obtained from the upstate Catskill and Delaware watersheds of the New York City water system. New Rochelle has two connections to the City system from which we take our water. Water and sewer service would be provided by New Rochelle Public Works, and electric and natural gas services would be supplied by Consolidated Edison and Just Energy, respectively. The property is nearby New Rochelle subway and bus routes.

3.3.7 Proximity to Cultural Resources

The only National Register listed sites located within 0.5 mile of the Site is the Knickerbocker Press Building, which is located approximately 0.15 miles to the southeast of the Site. The First Presbyterian Church and the Lewis Pintard House is also located approximately 0.45 miles to the east southeast of the Site. No State listed Sites are located within ½-mile of the Site. The proposed remedy is not anticipated to adversely impact these cultural resources.

3.3.8 Proximity to Natural Resources

Potential wetlands on or near the Site were evaluated by reviewing the National Wetlands Inventory and NYSDEC regulated wetlands. Based on these documents no mapped wetlands are listed on the Site.

The Site is located within a light industrial/residential area of New Rochelle. The future Site use is commercial with the majority of the site covered by buildings and asphalt pavement, providing little or no wildlife habitat or food value. As such, no unacceptable ecological risks are anticipated under the current or reasonably anticipated future use scenario. The RI demonstrated that COCs were released into the environment at the Site; therefore, the Site can be considered to have been affected by one or more discharges or spill events. The NYSDEC's decision key contained in Appendix 3C of DER-10 was utilized to evaluate whether or not performance of a Fish and Wildlife Resources Impact Analysis was needed. The Site currently contains no ecological resources. The NYSDEC's Environmental Resources Management Resource Mapper indicates that the Site and adjacent properties are not located in any state regulated freshwater wetlands, water bodies, significant natural communities, rare plants and rare animal areas, or unique geological features areas. Evidence of onsite ecological resources was not observed during the RI. There is no evidence that contamination present at the Site has the potential to migrate to and impact any potential offsite ecological resources. Therefore, a Fish and Wildlife Resources Impact Analysis was not needed based on NYSDEC guidance.

3.3.9 Off-Site Groundwater Impacts

Municipal water supply wells are not present in this area of New Rochelle; therefore, groundwater from the Site cannot affect municipal water supply wells or recharge areas.

3.3.10 Proximity to Floodplains

According to the National Flood Insurance Rate map for the City of New Rochelle published by FEMA (Community Panel Nos. 36119C0341F and 36119C0343F, effective date September

28, 2007), the Site is located in Zone X, which is designated for areas determined to be outside the 0.2% annual chance of flood and in an area of minimal flood hazard.

3.3.11 Geography and Geology of the Site

The Site geography and geology is described in Section 2.3 of this RAWP.

3.3.12 Current Institutional Controls.

There are currently no institutional controls in place at the Site.

4.0 REMEDIAL ACTION PROGRAM

4.1 GOVERNING DOCUMENTS

The primary documents governing the remedial action are summarized in this section. Where referenced, copies of the full plan are provided in the appendices.

4.1.1 Standards, Criteria and Guidance Applicable to Remedial Actions

The following SCGs are applicable to the project and would be used to determine whether the Remedial Action Objectives (RAOs) have been met:

- Soil – 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 - UUSCOs and CUSCOs (December 2006); 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes; 6 NYCRR Part 376 - Land Disposal Restrictions; and 6 NYCRR Part 360 - Solid Waste Management Facilities.
- Groundwater – 6 NYCRR Parts 700-706 - Water Quality Standards (June 1998), and TOGS 1.1.1 AWQSGV and Groundwater Effluent Limitations.

In addition, the following SCGs are applicable to the remedial program at the Site:

- NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation (May 2010);

- NYSDEC Draft Brownfield Cleanup Program Guide (May 2004);
- NYSDOH Generic Community Air Monitoring Plan (CAMP);
- NYSDEC DER-23 – Citizens Participation Handbook for Remedial Programs (January 2010);
- NYSDEC DER-31 – Green Remediation (January 2011)
- NYSDEC - Sampling, Analysis, and Assessment of PFAS (April 2023)
- NYSDOH - Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / revised May 2017 / revised February 2024)
- NYSDEC CP- 51 – Soil Cleanup Guidance (2010)
- TAGM 3028 - "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- DAR-1 (formerly Air Guide 1) - Guidelines for the Control of Toxic Ambient Air Contaminants (1997)
- 6 NYCRR Part 372 – Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998);
- 6 NYCRR Subpart 374-1 – Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998);
- 6 NYCRR Subpart 374-3 – Standards for Universal Waste (November 1998);
- 6 NYCRR Part 375 – Environmental Remediation Programs (December 2006);
- 6 NYCRR Part 612 – Registration of Petroleum Storage Facilities (February 1992);
- 6 NYCRR Part 613 – Handling and Storage of Petroleum (February 1992);

- 6 NYCRR Part 614 – Standards for New and Substantially Modified Petroleum Storage Tanks (February 1992);
- 40 Code of Federal Regulations (CFR) Part 280 – Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;
- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response;
- 40 CFR Part 144 – Underground Injection Control Program;
- CP-43 – Commissioner Policy on Groundwater Monitoring Well Decommissioning (December 2009); and
- U.S. EPA OSWER Directive 9200.4-17 - Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (December 1997).

4.1.1.1 Green and Sustainable Remediation and Climate Resiliency

PSG would design and implement green/sustainable elements to be included within the remedy to achieve Best Management Practices (BMPs) which would reduce the environmental footprint of the remedy. The core elements of the BMPs of green remediation are related to energy, air & atmosphere, water, land & ecosystems, and materials & waste. The green/sustainable elements proposed by PSG would be less disruptive to the environment, generate less waste, increase reuse and recycling, and emit fewer pollutants to the atmosphere. A list of proposed green/sustainable elements is as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;

- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this Site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

In addition to the above, PSG would prepare a Green Remediation Implementation Plan to detail procedures and tracking of these items and complete a Climate Screening of the Site to identify potential changes in climate hazards.

4.1.2 Site Specific Health & Safety Plan

All remedial work performed under this plan would be in compliance with governmental requirements, including Site and worker safety requirements mandated by the Federal OSHA.

The Participant and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an appropriate Health and Safety Plan and for the appropriate performance of work according to that plan and applicable laws.

The HASP and requirements defined in this RAWP pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion. The Site Safety Coordinator will be Anthony Cauterucci.

A Site-specific Construction Health and Safety Plan (CHASP), is included as **Appendix C**. The CHASP will address Site-specific contaminants and will apply only to remedial and construction-related work on-Site. Contractors operating on the Site are required to adhere to their

own plans that, at a minimum, meet the requirements of the CHASP. Remedial work performed under this plan would be in compliance with governmental requirements, including Site and worker safety requirements mandated by OSHA. The CHASP provides a mechanism for establishing on-Site safe working conditions, safety organization, procedures, and PPE requirements during implementation of the remedy. The CHASP meets the requirements of 29 CFR 1910 and 29 CFR 1926 (which includes 29 CFR 1910.120 and 29 CFR 1926.65). The CHASP includes, but is not limited to, the following components:

- Organization and identification of key personnel
- Training requirements
- Medical surveillance requirements
- List of Site hazards
- Excavation safety
- Work zone descriptions
- Personal safety equipment and protective clothing requirements
- Decontamination requirements
- Standard operating procedures
- Protective measure plan
- CAMP
- Safety Data Sheets

The Participant and associated parties preparing the remedial documents submitted to the State and those performing the construction work are responsible for the preparation of an appropriate CHASP and for the appropriate performance of work according to that plan and applicable laws.

The CHASP and requirements defined in this RAWP pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion. The PSG Site Health and Safety Officer will be the onsite field technician. If required for Site workers, confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses. PSG personnel will not enter confined spaces.

4.1.3 Quality Assurance Project Plan (QAPP)

The Remedial Engineer (RE) has prepared a Quality Assurance Project Plan (QAPP) that describes the quality control components that would ensure that the proposed remedy accomplishes the remedial goals, remedial action objectives, and is completed in accordance with the design specifications. The NYSDEC-approved QAPP is provided as **Appendix D** and includes:

- Responsibilities of key personnel and their organizations for the proposed remedy;
- Qualifications of the quality assurance officer;
- Proposed sampling requirements including methodologies, quantity, volume, locations, frequency, acceptance, and rejection criteria and end-point sampling; and
- Description of the reporting requirements for quality assurance activities including weekly quality assurance review reports, periodic quality assurance and quality control audits, and other report and data submissions.

4.1.4 Soil/Materials Management Plan (SMMP)

A Soil/Materials Management Plan (SMMP), which includes detailed plans for managing soil/materials that are disturbed at the Site, including excavation, handling, storage, transport, and disposal is further described in Section 5.4. The SMMP also includes controls that would be applied to these efforts to assure effective, nuisance-free performance in compliance with applicable federal, state, and local laws and regulations.

4.1.5 Community Air Monitoring Plan (CAMP)

A CAMP was prepared for the Site in accordance with the NYSDOH Generic CAMP (**Appendix E**) and is further discussed in Section 5.4.

4.1.6 Contractors Site Operations Plan (SOP);

The RE will review all plans and submittals for this remedial project, including contractor and sub-contractor document submittals, and confirms that they are in compliance with this RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner.

4.1.7 Citizen Participation Plan

A certification of mailing will be sent by the Participant to the NYSDEC project manager following the distribution of all Fact Sheets and notices that includes: (1) certification that the Fact Sheets were mailed, (2) the date they were mailed; (3) a copy of the Fact Sheet, (4) a list of recipients (contact list); and (5) a statement that the repository was inspected, including the date of inspection, and that it contained all of applicable project documents.

No changes will be made to approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing.

A draft Citizen Participation Plan for this project is attached in **Appendix F.**

Document repositories have been established at the following location and contain all applicable project documents:

New Rochelle Public Library

1 Library Plaza, New Rochelle, New York 10801

(914) 632-7878

Monday	9:00 AM – 8:00 PM
Tuesday	9:00 AM – 8:00 PM
Wednesday	10:00 AM – 6:00 PM
Thursday	9:00 AM – 8:00 PM
Friday	9:00 AM – 5:00 PM
Saturday	10:00 AM – 2:00 PM
Sunday	Closed

4.2 GENERAL REMEDIAL CONSTRUCTION INFORMATION

4.2.1 Project Organization

Key personnel involved in the remedial action will include the following:

- Project Engineer: Kristine MacWilliams, P.E.
- Professional Geologist: David Lent, P.G.
- Project Manager: Anthony Cauterucci, CHMM
- Field Operations Leader: Peter Cerny, Project Scientist
- Field Staff: John Piarulli, Project Scientist; Nate Rodiger, Project Scientist
- DUSR Preparer: Donald Anné, Senior Chemist, Alpha Geoscience

Resumes of key personnel involved in the remedial action are included in **Appendix G**.

4.2.2 Remedial Engineer

The RE for this project will be Kristine MacWilliams. The RE is a registered professional engineer licensed by the State of New York. The RE will have primary direct responsibility for implementation of the remedial program for the Site. The RE will certify in the FER that the remedial activities were observed by qualified environmental professionals under her supervision and that the remediation requirements set forth in the RAWP and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with RAWP.

The RE will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import of back fill material, and management of waste transport and disposal. The RE will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The RE will review all pre-remedial plans submitted by contractors for compliance with this RAWP and will certify compliance in the FER.

4.2.3 Remedial Action Construction Schedule

A schedule for performance of the remedial work is provided as **Table 7**. The schedule is broken down into remedial action elements based on elapsed time from approval by NYSDEC. A revised schedule will follow with a submission to NYSDEC of actual dates after the approval has been provided.

4.2.4 Work Hours

The hours for operation of remedial construction will conform to the New Rochelle Department of Buildings construction code requirements or according to specific variances issued by that agency. NYSDEC will be notified by the Participant of any variances issued by the Department of Buildings.

4.2.5 Site Security

Site security will be maintained by utilizing and maintaining the existing building walls. During any future site work, temporary safety barricades (traffic cones, traffic barrels, caution tape, and/or traffic cone bars) will be utilized to prevent the public from entering work areas.

4.2.6 Traffic Control

Drivers of trucks leaving the Site with waste would be instructed to proceed without stopping in the vicinity of the Site to prevent neighborhood impacts.

4.2.7 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during on-Site remedial related construction, sampling would be performed on product, sediment, and surrounding soils, etc. Chemical analytical work would be for full scan parameters (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs, and emerging contaminants).

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work would be promptly communicated by phone to NYSDEC's Project Manager. These findings would be also included in periodic electronic media reports.

4.2.8 Worker Training and Monitoring

Worker Training and Monitoring will include HAZWOPER, site safety training and medical monitoring for Site workers.

4.2.9 Agency Approvals

No permits or governmental approvals, except this RAWP, will be required for remedy elements.

4.2.11 Pre-Construction Meeting with NYSDEC

This meeting will take place prior to the start of construction activities and be attended by the Participant, PE of record, consultant, and applicable contractor(s).

4.2.12 Emergency Contact Information

An emergency contact sheet with names and phone numbers is included in **Table 6**. That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency.

4.3 SITE PREPARATION

4.3.1 Mobilization

Mobilization would include the delivery of equipment and materials to the Site. Site workers would receive Site orientation and training in accordance with the Site-specific HASP, CAMP, and established policies and procedures to be followed during the implementation of remedial activities. The remediation contractor and associated subcontractors will each receive a copy of the RAWP, HASP, and CAMP and will be briefed on their contents.

4.3.2 Composite Cover, Erosion, and Sedimentation Controls

Erosion and sediment controls would be implemented if necessary. BMP for soil erosion would be selected to minimize erosion and sedimentation off Site from the start of the remediation to the completion of the project. A Stormwater Pollution Prevention Plan (SWPPP) is not necessary because the project would disturb less than one acre, and stormwater discharge, if required, would be to a combined sewer in accordance with the New York State generic sewer discharge permit.

4.3.3 Utility Marker and Easements Layout

The Participant and its contractors would be solely responsible for the identification of utilities that might be affected by work under the RAWP and implementation of all required, appropriate, or necessary health and safety measures during performance of work under this RAWP. The Participant and its contractors would be solely responsible for safe execution of all invasive and other work performed under this RAWP. The Participant and its contractors would obtain any local, State or Federal permits or approvals pertinent to such work that may be required to perform work under this RAWP. PSG understands that approval of this RAWP by NYSDEC does not constitute satisfaction of these requirements.

The presence of utilities and easements on the Site has been investigated by PSG. It has been determined that no risk or impediment to the planned work under this RAWP is posed by utilities or easements on the Site.

4.3.4 Stabilized Construction Entrance(s)

Based on the scope of work proposed in this RAWP, a stabilized construction entrance is not required.

4.3.5 Equipment and Material Staging

Equipment and materials staging areas would be designated during the remediation activities, in coordination with the facility manager to facilitate remediation work and prevent cross-contamination.

4.3.6 Decontamination Area

A temporary decontamination area lined with polyethylene sheeting would be constructed for steam- cleaning or washing excavation and drilling equipment, when appropriate. The location of the decontamination area would be coordinated with the facility manager. At a minimum, the decontamination pad would have a 30-mil low-permeability liner and be bermed and sloped to a collection sump to contain and collect fluids, and have side walls to mitigate, to the extent practicable, errant overspray, especially when decontaminating large equipment.

4.3.7 Site Security

Site security would be maintained by utilizing and maintaining the existing building walls. In addition, safety barricades would be installed around remedial work areas, as needed, to protect facility employees and visitors.

4.3.8 Demobilization

Following the completion of remedial activities at the Site, equipment and remedial structures would be decontaminated and dismantled and removed from the Site. Wastes generated during remedial activities (i.e., polyethylene sheeting and investigation derived waste (IDW)) would be properly disposed.

4.4 REPORTING

All periodic Reports will be included in the FER.

4.4.1 Daily Reports

Daily reports will be submitted to NYSDEC and NYSDOH Project Managers by the end of each day following the reporting period and will include:

- An update of progress made during the reporting day;
- Locations of work and quantities of material imported and exported from the Site;
- References to alpha-numeric map for Site activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP finding, including excursions; and
- An explanation of notable Site conditions.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to the RAWP or other sensitive or time critical information. However, such conditions will also be included in the daily reports. Emergency conditions and changes to the RAWP will be addressed directly to NYSDEC Project Manager via personal communication.

Daily Reports will include a description of daily activities keyed to an alpha-numeric map for the Site that identifies work areas. These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

A Site map that shows a predefined alpha-numeric grid for use in identifying locations described in reports submitted to NYSDEC will be included in the daily report.

The NYSDEC assigned project number will appear on all reports.

PSG notes that the NYSDEC and NYSDOH will be immediately notified of any CAMP exceedances, including measures on how the CAMP exceedances were addressed.

4.4.2 Monthly Reports

Monthly reports will be submitted to NYSDEC and NYSDOH Project Managers within one week following the end of the month of the reporting period and will include:

- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed;
- Description of approved activity modifications, including changes of work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and,
- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

4.4.3 Other Reporting

Photographs will be taken of all remedial activities and submitted to NYSDEC in digital (JPEG) format. Photos will illustrate all remedial program elements and will be of acceptable quality. Representative photos of the Site prior to any remedial actions will be provided. Representative photos will be provided of each contaminant source, source area and Site structures before, during and after remediation. Photos will be included in the monthly reports as needed, and a comprehensive collection of photos will be included in the Final Engineering Report.

Progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the FER, including a comparison to the goals established during the remedial program. Regular updates to the metrics used via the EPA SEFA, or other approved method will be included.

Job-site record keeping for all remedial work will be appropriately documented. These records will be maintained on-Site at all times during the project and be available for inspection by NYSDEC and NYSDOH staff.

4.4.4 Complaint Management Plan

Complaints from the public regarding nuisance or other Site conditions will be reported directly to the NYSDEC project manager and included in the monthly reports.

4.4.5 Deviations from the Remedial Action Work Plan

PSG will notify the NYSDEC and NYSDOH project managers and request approval for deviations from the approved RAWP. This notification will be provided via email correspondence, and at a minimum, will include a description of RAWP deviation, reasons for deviating from the approved RAWP, and the effect of the deviations on the overall remedy.

5.0 REMEDIAL ACTION: SUB-SLAB DEPRESSURIZATION SYSTEM

An SSDS would be implemented to prevent impacts to indoor air quality at the Site and prevent further migration of sub-slab soil vapors. The SSDS is likely to reduce cVOC concentrations in the sub-slab soil vapor, and also reduce the potential for VI and indoor air contamination. The SSDS would be constructed by PSG. SSDS construction would be observed by a QEP and supervised by a PE. The SSDS Design Package is included as Appendix I.

The SSDS consists of thirty-seven sub-slab vapor extraction points installed through the concrete floor, wood floor, and concrete basement walls each evenly distributed throughout the building. It should be noted that during SSDS diagnostic testing, no pathways or short circuiting were observed from the wood block floor area when a pressure field was applied, and therefore sealing of the wood block floor area is not proposed as a part of the selected remedy. The concrete slab, floor slab, and basement walls would be cored to expose the subsurface areas where pits would be excavated by hand removing approximately one to two cubic feet of soil and then backfilled and compacted with three-quarter inch bluestone gravel. From each extraction pit, two-inch diameter PVC piping would be routed with an open-ended section of pipe from the extraction

pit below to the top of the floor or through the concrete wall and then run horizontally to a common point and manifolded together. Additionally, three sumps located in the basement area on the northern portion of the Site would be sealed, vented, and manifolded to the SSDS. The thirty-seven points and three sump extraction points are distributed to three separate system blowers, each serving a distinct system: System-1, System-2, and System-3. Points EP-1 through EP-10 and sump extraction points SP-1 through SP-3 are manifolded to form System-1, EP-11 through EP-24 constitute System-2, and EP-25 through EP-37 make up System-3. Once manifolded, the vapor conveyance piping would be routed through the wall of the building and connected to the three exterior wall-mounted vapor extraction blowers on the lower roof, located on the southwestern portion of the building at least 10-feet away from any windows, fresh-air intakes and/or HVAC components.

The two-inch diameter PVC extraction piping would be transitioned to three-inch diameter PVC approximately 20 feet before passing through the exterior wall. All horizontal piping would be pitched to allow condensation to drain back to each extraction point and all PVC would be assembled using compatible PVC primer and cement on all joints and fittings to ensure an air-tight seal. A label with pertinent system installation and operating information would be attached to the riser pipe. Once installation of all the subsurface piping is complete, the slabs/walls would be restored to existing slab grade with non-shrink concrete and/or joint sealer.

The extraction fans would be installed on the lower roof and plumbed from the system extraction piping. An exterior-rated electrical disconnect and dedicated circuit breaker would be installed by a third-party provider engaged by PSG or directly by the Participant, to power the extraction fan. Three OBAR Systems, Inc. GBR89 compact radial blowers/fans capable of producing the necessary vacuum and air flow would be installed to extract air from the sub-slab and discharge it to the atmosphere through a discharge stack plumbed and mounted above the roof-top parapet. At approximately two feet above the roof-top parapet and greater than 10 feet from the nearest building opening, the discharge end point would be fitted with a rain guard and bird screen.

Based on the configuration of the extraction points, 25 permanent vacuum monitoring points (VMPs), identified as VMP-1 through VMP-25, would be installed across the extraction area floor slab to facilitate monitoring of the SSDS. The VMPs would be fitted with removable threaded plugs for convenient access. The system shall run continuously until future sampling indicates the vapor concern no longer exists. Additionally, an Obar GBR25 Differential Pressure Gauge and alarm device would be fitted to each of the three systems on the influent pipe allowing for easy system operation monitoring.

The VMPs would be necessary to optimize the operation of the SSDSs. The VMPs would also allow for periodic monitoring to confirm that VI is not occurring near the outer limits of the SSDS radius of influence (ROI) and to assess when/if the potential for VI is no longer present, as would be described in the SMP. Monitoring points would be installed through the slabs at the locations shown on **Figure V-101** included in **Appendix I**. The monitoring points would provide locations to confirm establishment of a downward pressure gradient across the slabs when the SSDSs are operating and allow for sub-slab vapor sampling. Each monitoring point would be constructed using a stainless steel screen connected to inert tubing. The screens would be installed through the slab and into the underlying soil at a depth of approximately six inches below the slabs. The top of the tubing would be equipped with a valve for monitoring purposes. Each monitoring point annulus would be gravel-packed to approximately six inches below grade and a bentonite seal would be installed above the gravel pack and in contact with the building slab. Each monitoring point would be protected by installing a steel protective manhole encased in concrete at the top of the slab.

The SSDS would be placed online with oversight by the QEP. The SSDS would be monitored until system vacuums and airflows are stabilized. Valve adjustments may be made to operating equipment to optimize SSDS performance. Additional monitoring would be conducted on a weekly basis during the one-month startup period.

A calibrated PID would be utilized to monitor initial SSDS effluent emissions. Effluent samples would also be collected to evaluate SSDS emissions compliance following system startup. During the startup period, effluent samples would be collected on a weekly basis from the effluent

sampling port located between the blower and the effluent stack pipe utilizing a SUMMA® canister. Each sample would be transported via overnight courier to a NYSDOH ELAP-certified laboratory for analysis of VOCs by EPA Method T0-15. The analytical results would be compared to NYSDEC's DAR-1 guidance to evaluate system emissions and determine emissions treatment requirements. In the event that effluent treatment is required (carbon canisters or other), then sampling would be performed between the blower and the effluent treatment to monitor system performance and also downstream of the effluent treatment to monitor emissions compliance.

Following SSDS startup, the performance of the SSDS with respect to sub-slab depressurization would be verified by monitoring the pressure beneath the building at the monitoring points to confirm that a downward pressure gradient is established. Monitoring would be performed during the startup period. Monitoring would be performed using a differential pressure gauge with a sensitivity of 0.01" water column (WC). The SSDS operating parameters may be adjusted during the startup period as needed to ensure that a downward pressure gradient is established across the building slabs. The results of the startup period sub-slab pressure monitoring would be reported in the FER.

Periodic sub-slab pressure monitoring would be continued following the startup of the SSDS to confirm that a downward pressure gradient remains established while the SSDS is running. Additional VI monitoring would be conducted following termination of the SSDS operation to confirm the post-remedial conditions. Procedures for sub-slab pressure and VI monitoring during and following SSDS operation would be provided in the Monitoring Plan in the SMP.

All SSDS observations will be recorded in a system logbook that will be kept at the Site for operator reference. The logbook will include operating logs for recording system parameters from the various gauges and figures showing the SSDS piping and monitoring point layout and equipment configuration. SSDS performance observations to be recorded will include obtaining pressure readings at the designated monitoring points to evaluate the SSDS ROIs.

Excavated soil would be staged on-Site in 55-gallon drums, pending disposal to an approved off-site disposal facility. Prior to conducting the excavations, PSG would complete waste characterization sampling and obtain a Contained-In Determination from the NYSDEC. Soil and

materials management on-Site and off-Site will be conducted in accordance with the Soil Management Plan as described below.

5.1 SOIL CLEANUP OBJECTIVES

The following SCOs are proposed for the Site:

- Soils impacted by COCs, including SVOCs, metals, and pesticides would be addressed via engineering and institutional controls. A Track 4 remedy is proposed for soils using site-specific concentrations identified during the RI, which are listed in **Table 2**. A spider map that depicts the exceedances of SCOs detected during the RI is included as **Figure 4**.

5.2 REMEDIAL PERFORMANCE EVALUATION

Soil excavation for the purpose of remediation is not proposed as a part of the selected remedy; therefore, the collection of post-excavation confirmation samples is not warranted.

The SMP in the FER will include a monitoring plan for groundwater to evaluate Site-wide performance of the monitored natural attenuation remedy and collection and analysis of soil vapor, indoor air, and stack discharge samples to monitor the performance of the SSDS.

5.3 Soil/Materials Management Plan

5.3.1 Soil Screening Methods

Visual, olfactory, and PID soil screening and assessment would be performed during the scope of work for the remedy. A PSG geologist would supervise the site work under the supervision of the RE.

Visual, olfactory and PID soil screening and assessment would be performed by a QEP or experienced field geologist under the direction of the RE during all remedial and development excavations into known or potentially contaminated material. Soil screening would be performed

regardless of when the invasive work is done and would include all excavation and invasive work performed during the remedy.

Screening would be performed by QEPs. Resumes will be provided for all personnel responsible for field screening (i.e. those representing the RE) of invasive work for unknown contaminant sources during remediation and development work.

5.3.2 Stockpile Methods

Soil excavated during the installation of extraction points for the SSDS would be directly loaded into DOT-approved drums and stored onsite, until transportation and disposal are arranged. Excavated soils would be containerized at the end of each day and would not be stored outside of a container overnight. Waste profiles, and hazardous waste determination, would be generated based on the Site sampling results and the soil would be disposed of as hazardous or non-hazardous pending the onsite sampling results and the requirements of the disposal facility. No soil stockpiles are proposed to be generated as a part of the selected remedy.

5.3.3 Materials Excavation and Load Out

The Field Operations Leader and Project Manager, under the supervision of the PE of record, overseeing the soil removal for SSDS extraction point installation would:

- Oversee all soil excavation activities completed onsite;
- Oversee the load-out of excavated material in drums;
- Ensure that there is a party responsible for the safe execution of invasive and other work performed under this work plan;
- Ensure that remedial activities would not interfere with, or otherwise impair or compromise human health or the environment;
- Ensure that utilities and easements that may be present on the Site have been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;

- Ensure that any loaded outbound trucks are inspected and cleaned, if necessary, before leaving the Site; and
- Ensure that all egress points for truck and equipment transport from the Site would be kept clean of Site-derived materials during Site work.

The RE or a QEP under his/her supervision would oversee all invasive work and the excavation and load-out of all excavated material.

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

The presence of utilities and easements on the Site has been investigated by the RE. It has been determined that no risk or impediment to the planned work under this RAWP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site would be securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Vehicles leaving the Site would not be overloaded. The RE's representative would make reasonable efforts to ensure that vehicles are not loaded beyond their NYSDOT weight rating and that all material is secured.

The Participant and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work and the integrity of structures that may be affected by excavations (such as building foundations and bridge footings).

5.3.4 Materials Transport Off-Site

Loaded vehicles leaving the Site would comply with all applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with local, state, and federal laws.

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

5.3.5 Materials Disposal Off-Site

Disposal locations will be established at a later date. Prior to disposal location selection, the PE of record will oversee waste characterization activities to properly characterize all wastes at the Site. All disposal locations will be approved by the NYSDEC Project Manager, and the PE of record will ensure all wastes generated during remediation are properly disposed of.

The total quantity of material expected to be disposed off-Site is approximately 1 cubic yard (five 55-gallon drums) of non-hazardous waste generated during the installation of the extraction points for the SSDSs.

All soil excavated and removed from the Site would be treated as contaminated and regulated material and would be disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC's Project Manager. Unregulated off-Site management of materials from this Site is prohibited without formal NYSDEC approval.

Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360.15 Registration Facility).

The following documentation would be obtained and reported by the RE for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the RE or BCP Participant to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter would state that material to be disposed is contaminated material generated at an environmental remediation Site in New York State. The letter would provide the project identity and the name and phone number of the RE. The letter would include as an attachment a summary of all chemical data for the material being transported (including RI data);

and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents would be included in the FER.

Non-hazardous historic fill and contaminated soils taken off-Site would be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360.2.

Historic fill and contaminated soils from the Site are prohibited from being disposed at Part 360.15 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 2 DMM. This material is prohibited from being sent or redirected to a Part 360-15 Registration Facility. In this case, as dictated by DMM, special procedures would include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter would provide the project identity and the name and phone number of the Remedial Engineer. The letter would include as an attachment a summary of all chemical data for the material being transported.

The FER would include an accounting of the destination of all material removed from the Site during this remedial action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. This information would also be presented in a tabular form in the FER.

Bill of Lading system or equivalent would be used for off-Site movement of non-hazardous wastes and contaminated soils. This information would be reported in the FER. A manifest system for off-Site transportation of exported materials would be employed.

Hazardous wastes derived from on-Site would be stored, transported, and disposed of in full compliance with applicable local, State, and Federal regulations.

Appropriately licensed haulers would be used for material removed from this Site and would be in full compliance with all applicable local, State and Federal regulations.

Waste characterization would be performed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC would be reported in the FER. All data available for soil/material to be disposed at a given facility would be submitted to the disposal facility with suitable explanation prior to shipment and receipt.

5.3.6 Materials Reuse On-Site

The proposed remedial actions do not anticipate materials reuse on-Site.

5.3.7 Fluids Management

Liquids (if any) to be removed from the Site, including dewatering fluids, would be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations.

The dewatering fluid would be pretreated as necessary to meet the NYSDEC and local authority discharge criteria. All liquids to be removed from the Site, including dewatering fluids, would be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations.

Dewatered fluids would not be recharged back to the land surface or subsurface of the Site. Dewatering fluids would be managed off-Site.

Discharge of water generated during remedial construction to surface waters (i.e. a local pond, stream, river and/or storm sewer) is prohibited without a SPDES permit. It is not anticipated that this project will require surface discharge of water or sewer discharge.

5.3.8 Backfill from Off-Site Sources

This Section presents the requirements for imported fill materials to be used below the cover layer and within the SSDS extraction points. All materials proposed for import onto the Site would be approved by the Remedial Engineer and would be in compliance with provisions in this RAWP prior to receipt at the Site. A process would be established to evaluate sources of backfill to be imported to the Site, and would include an examination of source location, current and historical use(s), and any applicable documentation. Material from industrial sites, spill sites, environmental remediation sites or other potentially contaminated sites shall not be imported to the Site.

The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

- Clean soil from a licensed sand and gravel pit;
- Clean soil from construction projects at non-industrial sites in compliance with NYSDEC regulations;
- Clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations; and/or
- Clean recycled concrete aggregate (RCA) from facilities permitted or registered by the regulations of NYSDEC.

All materials received for import to the Site would be tested in accordance with NYSDEC DER-10, be approved by the Site's QEP and NYSDEC project manager and would be in compliance with provisions in this RAWP. A "Request to Import/Reuse Fill Material" form would be filed with the NYSDEC project manager for review and approval prior to import to the site. A copy of the form is presented in **Appendix H**. Source Screening and Testing Inspection of imported fill material would include visual, olfactory and PID screening for evidence of contamination. Materials imported to the Site would be subject to inspection, as follows:

- Trucks with imported fill material would be in compliance with NYSDEC and DOT regulations and would enter the Site at designated locations;

- The Project Manager would be responsible to ensure that each truck load of imported material is inspected for evidence of contamination; and
- Fill material would be free of solid waste including pavement materials, debris, stumps, roots, and other organic matter, as well as ashes, oil, perishables or foreign matter.

Once it is determined that the import material meets imported backfill or cover soil chemical requirements, identified as the lower of the protection of groundwater or commercial SCOs, and is non-hazardous and lacks petroleum contamination, the material would be loaded onto trucks for delivery to the Site.

RCA, if utilized, would be imported from facilities permitted or registered by NYSDEC. A Project Manager is responsible to ensure that the facility is compliant with NYSDEC registration and permitting requirements for the period of acquisition of RCA. RCA would be subject to sieve and/or chemical testing per DER-10. RCA imported to the Site must be derived from recognizable and uncontaminated concrete. RCA material is not acceptable for and would not be used as cover material.

All materials proposed for import onto the Site would be approved by the RE and would be in compliance with provisions in this RAWP prior to receipt at the Site.

Material from industrial sites, spill sites, other environmental remediation sites or other potentially contaminated sites would not be imported to the Site. Solid waste would not be imported onto the Site.

The FER would include the following certification by the RE: “I certify that all import of soils from off-Site, including source evaluation, approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan”.

All imported soils would meet NYSDEC approved backfill or cover soil quality objectives for this Site. Non-compliant soils would not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved RAWP or its approval by NYSDEC would be construed as an approval for this purpose.

Soils that meet ‘general fill’ requirements under 6 NYCRR Part 360.13, but do not meet backfill or cover soil objectives for this Site, would not be imported onto the Site without prior approval by NYSDEC. Nothing in this RAWP would be construed as an approval for this purpose.

5.3.9 Stormwater Pollution Prevention

Applicable laws and regulations pertaining to stormwater pollution prevention would be addressed during the remedial work. The need for erosion and sediment control measures are not anticipated during the remedial actions. However, if necessary, the following measures would be implemented:

Silt fences and barriers, and hay bale checks would be installed around the entire perimeter of the remedial action area and inspected once a week and after every storm event to ensure that they are operating appropriately. Discharge locations would be inspected to determine whether erosion control measures are effective in preventing significant impacts to receptors. Necessary repairs shall be made immediately. Accumulated sediments would be removed as required to keep the barrier and hay bale check functional. Undercutting or erosion of the silt fence toe anchor would be repaired immediately with appropriate backfill materials. Manufacturer’s recommendations would be followed for replacing silt fencing damaged due to weathering.

Barriers and hay bale checks would be installed and inspected once a week and after every storm event. Results of inspections would 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 would 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 would be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the RAWP 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.

5.3.10 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during on-Site remedial excavation or development related construction, sampling would be performed on product, sediment and surrounding soils, etc. Chemical analytical work would be for full scan parameters (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides, PCBs, and PFAS). Analyses would not be otherwise limited without NYSDEC approval.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work would be promptly communicated by phone to NYSDEC's Project Manager. These findings would be also included in periodic electronic media reports.

5.3.10.1 Extreme Storm Preparedness and Response Contingency Plan

Damage from flooding or storm surge can include dislocation of soil and stockpiled materials, dislocation of site structures and construction materials and equipment, and dislocation of support of excavation structures. Damage from wind during an extreme storm event can create unsafe or unstable structures, damage safety structures and cause downed power lines creating dangerous site conditions and loss of power. In the event of emergency conditions caused by an extreme storm event, the enrollee would undertake the following steps for site preparedness prior to the event and response after the event.

5.3.10.2 Storm Preparedness

Preparations in advance of an extreme storm event would include the following if applicable: containerized hazardous materials and fuels would be removed from the property; loose materials would be secured to prevent dislocation and blowing by wind or water; heavy equipment would be removed from excavated areas, trenches and depressions on the property to high ground or removed from the property; an inventory of the property with photographs would be performed to

establish conditions for the site and equipment prior to the event; stockpile covers for soil and fill would be secured by adding weights such as sandbags for added security and worn or ripped stockpile covers would be replaced with competent covers; stockpiled hazardous wastes would be removed from the property; stormwater management systems would be inspected and fortified, including, as necessary: clean and reposition silt fences, hay bales; clean storm sewer filters and traps; and secure and protect pumps and hosing.

5.3.10.3 Storm Response

At the conclusion of an extreme storm event, as soon as it is safe to access the property, a complete inspection of the property would be performed. A site inspection report would be submitted to NYSDEC at the completion of site inspection and after the site security is assessed. Site conditions would be compared to the inventory of site conditions and material performed prior to the storm event and significant differences would be noted. Damage from storm conditions that result in acute public safety threats, such as downed power lines or imminent collapse of buildings, structures or equipment would be reported to public safety authorities via appropriate means such as calling 911. Petroleum spills would be reported to NYSDEC within 2 hours of identification and consistent with State regulations. Public safety structures, such as construction security fences would be repaired promptly to eliminate public safety threats. Debris would be collected and removed. Dewatering would be performed in compliance with existing laws and regulations and consistent with emergency notifications, if any, from proper authorities. Eroded areas of soil including unsafe slopes would be stabilized and fortified. Dislocated materials would be collected and appropriately managed. Support of excavation structure would be inspected and fortified as necessary. Impacted stockpiles would be contained and damaged stockpile covers would be replaced. Stormwater control systems and structures would be inspected and maintained as necessary. If soil or fill materials are discharged off site to adjacent properties, property owners and the NYSDEC would be notified, and corrective measure plan designed to remove and clean dislocated material would be submitted to the NYSDEC and implemented following approval by NYSDEC and granting of site access by the property owner. Impacted offsite areas may require characterization based on site conditions, at the discretion of the NYSDEC. If onsite petroleum

spills are identified, a qualified environmental professional would determine the nature and extent of the spill and report to NYSDEC's spill hotline at DEC 800-457-7362 within statutory defined timelines. If the source of the spill is ongoing and can be identified, it should be stopped if this can be done safely. Potential hazards would be addressed immediately, consistent with guidance issued by NYSDEC.

5.3.10.4 Storm Response Reporting

A site inspection report would be submitted to NYSDEC at the completion of site inspection. Site conditions would be compared to the inventory of site conditions and material performed prior to the storm event and significant differences would be noted. The site inspection report would be sent to the NYSDEC project manager and would include the site name, address, tax block and lot, site primary and alternate contact name and phone number. Damage and soil release assessment would include: whether the project had stockpiles; whether stockpiles were damaged; photographs of damage and notice of plan for repair; report of whether soil from the site was dislocated and whether any of the soil left the site; estimates of the volume of soil that left the site, nature of impact, and photographs; description of erosion damage; description of equipment damage; description of damage to the remedial program or the construction program, such as damage to the support of excavation; presence of onsite or offsite exposure pathways caused by the storm; presence of petroleum or other spills and status of spill reporting to NYSDEC; description of corrective actions; schedule for corrective actions. This report should be completed and submitted to the NYSDEC project manager with photographs within 24 hours of the time of safe entry to the property after the storm event.

5.3.11 Community Air Monitoring Plan

PSG would provide one (1) OSHA 40-hour HAZWOPER trained field technician who would serve as the Environmental Health and Safety Officer on-site during the soil excavation and soil load out activities who would implement and document the CAMP. Air Monitoring would be completed in accordance with OSHA requirements for on-Site occupational receptors and in accordance with NYSDEC guidelines.

5.3.11.1 Air Monitoring Stations

PSG would maintain up to two (2) air monitoring stations daily at the Site to monitor air conditions during construction work hours while soil excavation work is being completed. Monitoring would occur during soil excavation and soil loading activities on a standard 8-hour work shift allowing preparation and setup time prior to the work shift and breakdown time after the work shift.

The primary station would be equipped with a DustTrak Air Monitor designed to continuously evaluate dust particles in the air at a location downwind of the excavation area and would be set with a 15-minute high-level alarm, a weather monitoring station, and 5-gas meter with detectors for total VOCs, lower & upper explosive limits, oxygen, carbon dioxide, and hydrogen sulfide concentrations.

One additional station would be equipped with a DustTrak Monitor only and would be placed in a location along the perimeter of the work area at an upwind location, which would be determined based on daily published prevailing wind directions provided NOAA (https://www.climate.gov/teaching/resources/wind-map).

On-site duties for the Environmental Health and Safety Officer would include:

- Setting up CAMP equipment daily before the excavation work shift;
- Monitoring CAMP equipment throughout the day to assure levels are within acceptable ranges;
- Monitoring the breathing zone air with a PID to assure levels are within acceptable ranges;
- Monitoring of excavation health and safety onsite to ensure proper procedures are being followed, including familiarizing all onsite subcontractors with environmental health and safety requirements, overseeing proper decontamination procedures as required, and enforcing best practices onsite; and

CAMP equipment break-down, data uploading, and monthly report preparation.

5.3.11.2 Community Air Monitoring

Using a nationwide network of monitoring sites, the United States Department of Environmental Protection (USEPA) has developed ambient air quality trends for particle pollution, also called Particulate Matter (PM). PM_{10} describes inhalable particles, with diameters that are generally 10 micrometers and smaller.

5.3.11.3 Community Air Monitoring (CAM) Dust Monitoring Outlier Corrective Action Triggers

The Contractor shall provide a written Emergency Response Plan which includes means and methods to address any elevated fugitive dust particles and CAMP dust monitoring results reported by PSG. All equipment would be calibrated at least daily and be capable of calculating 15-minute running average concentrations.

VOC action levels are specified below:

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor 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 vapors identified, corrective actions taken to abate emissions, 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate action levels are summarized below:

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work must be stopped, and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

5.3.11.4 Reporting

All data from CAMP and an overall health and safety summary would be provided in a monthly report to all applicable parties including construction staff, the Client, and PSG staff. Exceedances observed in the CAMP would be reported to NYSDEC and NYSDOH Project Managers and included in the Monthly Report.

5.3.12 Odor, Dust, and Nuisance Control Plan

The FER would include the following certification by the RE: "I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology defined in the RAWP."

5.3.12.1 Dust Control

Dust management during invasive on-Site work would include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas, and stockpiles where disturbance is occurring or is planned to occur within the day of disturbance;
- Use of properly anchored tarps to cover stockpiles if needed; and
- Exercise extra care during dry and high-wind periods.

This dust control plan is capable of controlling emissions of dust. If nuisance dust emissions are identified, work would be halted, and the source of dust would be identified and remediated. Work would not resume until all nuisance dust emissions have been abated. Implementation of all dust controls, including halt of work, would be the responsibility of a combination of the construction contractor conducting the excavation and loading activities and PSG technicians and Project Manager.

5.3.12.2 Noise Control

Noise control would be exercised during the soil excavation work. Excavation work would conform, at a minimum, to local and state noise control standards.

5.4.12.3 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-Site. If nuisance odors are identified, work would be halted, and the source of odors would be identified and corrected. Work would not resume until all nuisance odors have been abated. NYSDEC and NYSDOH would be notified of all odor events and of all other complaints about the project.

Implementation of all odor controls, including the halt of work, would be the responsibility of the Participant's RE, who would be responsible for certifying the FER.

All necessary means would be employed to prevent on- and off-Site nuisances. At a minimum, procedures would include: (a) limiting the area of open excavations; (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 would 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.

Where odor nuisances have developed during remedial work and cannot be corrected, or where the release of nuisance odors cannot otherwise be avoided due to on-Site conditions or close proximity to sensitive receptors, odor control would be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems.

5.3.12.4 Dust Control Plan

A dust suppression plan that addresses dust management during invasive on-Site work, would include, at a minimum, the items listed below:

- If needed, dust suppression would be achieved using a dedicated on-Site water truck. The truck would be equipped with water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles, and
- On-Site roads would be limited in total area to minimize the area required for water truck sprinkling.

5.3.12.5 Other Nuisances

A plan would be developed and utilized by the contractor for all remedial work and would conform, at a minimum, to state and local noise control standards.

5.4 RA INVESTIGATION DERIVED WASTE

Soils generated from the SSDS installation would be containerized in DOT-approved shipping containers and stored onsite, until transportation and disposal are arranged. Excavated soils would be containerized at the end of each day and would not be stored outside of a container overnight. Waste profiles, and hazardous waste determination, would be generated based on the Site sampling results and the soil would be disposed of as hazardous or non-hazardous pending the onsite sampling results and the requirements of the disposal facility.

Liquids derived from the purging of permanent monitoring well development would be containerized in DOT-approved shipping containers and stored onsite until laboratory results are received, and transportation and disposal are arranged. Waste profiles and hazardous waste determination would be generated based on the sample results derived from the wells and the requirements of the disposal facility. All waste would be managed per the requirements of 6 NYCRR Part 360, 364, and 370 as applicable. IDW shall be handled only by licensed waste haulers and would only be transported to permitted, authorized disposal facilities once a waste profile has been created and approved. PSG would provide the NYSDEC the disposal facility's information and the waste hauler's permits once they are secured and would provide copies of disposal manifests in subsequent reporting.

If any ground intrusive activities are to occur an onsite cover system as defined by DER-10 would be in place prior to occupancy or use by the public.

Disposable sampling equipment including, spoons, gloves, bags, paper towels, etc. that came in contact with environmental media were double bagged and disposed as municipal trash in a facility trash dumpster as non-hazardous trash.

6.0 RESIDUAL CONTAMINATION TO REMAIN ON-SITE

Since residual contaminated soil and groundwater/soil vapor would exist beneath the Site after the remedy is complete, ECs and ICs are required to protect human health and the environment. These ECs and ICs are described hereafter. Long-term management of EC/ICs and of residual

contamination would be executed under a Site specific SMP that would be developed and included in the FER.

ECs would be implemented to protect public health and the environment by appropriately managing residual contamination. The Site would have EC systems. These are: the SSDS in the building, and a composite cover system consisting of asphalt paved areas, concrete covered walkways, and building slabs.

7.0 ENGINEERING CONTROLS: COMPOSITE COVER SYSTEM

Exposure to residual contaminated soils would be prevented by the existing composite cover system on the Site. This composite cover system is comprised of asphalt paved areas, concrete covered walkways, and building slabs. Should Site redevelopment occur in the future, green remediation BMPs for designing and installing a conventional cover system would be considered. Green remediation BMPs for designing and installing a conventional cover system include:

- Design in ways that mimic rather than alter the site's natural setting, to improve the cover's long-term performance and protect ecosystem services;
- Design a cover accounting for potential effects of climate change, which could involve changes in onsite soil development or increased vulnerability to flooding;
- Use of uncontaminated soil or sediment from onsite excavation instead of imported soil/sediment for the cover's frost prevention and erosion control layers; similarly, uncontaminated sand, gravel, and rocks from onsite instead of offsite areas may be used for drainage;
- Application of low impact development strategies such as installing earthen berms to manage stormwater;
- Selection of geotextile fabric or drainage tubing composed of 100% recycled materials rather than virgin materials for lining, erosion control, and drainage;
- Selection of materials with biobased content for daily activities during cover construction;

- Use of clean fuel and emission control technologies for routine field vehicles and machinery such as backhoes and bulldozers to reduce fuel consumption and emission of air pollutants such as GHGs and particulate matter; and
- Consideration of onsite solar and wind resources to power equipment.

An Excavation Plan would be included in the SMP and would outline the procedures to be followed if the Site cover system and underlying residual contamination are disturbed after the remedial action is complete.

The components of the site cover system would be documented in the FER. Maintenance of this site cover system would be described in the SMP.

8.0 ENGINEERING CONTROLS: SUB-SLAB DEPRESSURIZATION SYSTEM

An active SSDS would be installed as an engineering control. The SSDS consists of thirty-seven sub-slab vapor extraction points installed through installed through the concrete floor, wood floor, and concrete basement walls, each evenly distributed throughout the building. From each extraction pit, two-inch diameter PVC piping would be routed with an open-ended section of pipe from the extraction pit below to the top of the floor or through the concrete wall and then run horizontally to a common point and manifolded together. Additionally, three sumps located in the basement area on the northern portion of the Site would be sealed, vented, and manifolded to the SSDS. The thirty-seven points and three sump extraction points are distributed to three separate system blowers, each serving a distinct system: System-1, System-2, and System-3. Once manifolded, the vapor conveyance piping would be routed through the wall of the building and connected to the three exterior wall-mounted vapor extraction blowers on the lower roof, located on the southwestern portion of the building at least 10-feet away from any windows, fresh-air intakes and/or HVAC components and be complete with a check valve, to prevent air flow into the SSDS, and rain cap. At least 25 sub-slab vapor monitoring points would be installed to facilitate monitoring of the SSDS and collection of sub-slab vapor samples.

The design details, product specifications, and preliminary location and layout of the active SSDS are included in **Appendix I**. The location and layout of the SSDS might be altered to

accommodate structural, electrical, sewer, utility, and other aspects of building construction. Under Alternatives 1 and 4 cleanup scenario, the SSDS would be a permanent EC.

9.0 CRITERIA FOR COMPLETION OF REMEDIATION/TERMINATION OF REMEDIAL SYSTEMS

9.1 Composite Cover System

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

The composite cover system would consist of the existing concrete and wood building slabs and concrete and asphalt hardscape throughout the Site. The cover system would serve as the protection of human health by preventing contact with residual contaminated Site soil. Additionally the composite cover system will help prevent infiltration of surface water to groundwater in areas where Protection of Groundwater SCO exceedances exist. A layout of the cover system is included as on **Figure 11**.

9.2 Sub-Slab Depressurization System (SSDS)

A SSDS would be installed and would not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue any active SSD system may be submitted by the property owner based on confirmatory data that justifies such request. Systems would remain in place and operational until permission to discontinue use is granted in writing by NYSDEC and NYSDOH.

9.3 Groundwater Monitoring

Groundwater monitoring activities to assess the natural attenuation, would continue, as determined by NYSDOH and NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards or have become asymptotic over an extended period. Monitoring would continue until permission to discontinue is granted in writing by NYSDEC and NYSDOH.

Monitoring activities would be outlined in the Monitoring Plan of the SMP. It is anticipated that, following remediation, a minimum of eight annual monitoring events would be performed.

10.0 INSTITUTIONAL CONTROLS

After the remedy is complete, the Site would have residual contamination remaining in place. ECs for the residual contamination have been incorporated into the remedy to render the overall Site remedy protective of public health and the environment. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a Site Management Plan.

All as-built drawings, diagrams, calculation and manufacturer documentation for treatment systems would be presented in the FER. A Site-specific EE would be recorded with Westchester County to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the EE and the grantor's successors and assigns adhere to all ECs/ICs placed on this Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the EE. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the EE and grantor's successors and assigns.

10.1 ENVIRONMENTAL EASEMENT

An EE, as defined in Article 71 Title 36 of the Environmental Conservation Law, is required when residual contamination is left on-Site after the remedial action is complete. As part of this remedy, an Environmental Easement approved by NYSDEC would be filed and recorded with the Westchester County Clerk's Office. The EE would be submitted as part of the FER.

The EE renders the Site a Controlled Property. The EE must be recorded with the office of the Westchester County Clerk before the Certificate of Completion can be issued by NYSDEC. A series of ICs are required under this remedy to implement, maintain, and monitor these EC systems,

prevent future exposure to residual contamination by controlling disturbances of the subsurface soil and restricting the use of the Site to commercial use only. These ICs are requirements or restrictions placed on the Site that are listed in, and required by, the EE. ICs can, generally, be subdivided between controls that support ECs, and those that place general restrictions on Site usage or other requirements. ICs in both of these groups are closely integrated with the SMP, which provides all of the methods and procedures to be followed to comply with this remedy.

Compliance with all elements of the Site Management Plan is required by the Grantor of the Environmental Easement, and the Grantor's successors and assigns.

- Compliance with the EE by the Grantee and the Grantee's successors and adherence of all elements of the SMP is required;
- All ECs would be operated and maintained as specified in the SMP;
- A composite cover system consisting of asphalt covered roads, concrete covered sidewalks, and concrete and wood building slabs would be inspected, certified and maintained as required in the SMP;
- A soil vapor mitigation system consisting of a SSDS under all building structures would be inspected, certified, operated and maintained as required by the SMP;
- All ECs on the Controlled Property would be inspected and certified at a frequency and in a manner defined in the SMP;
- An Excavation Work Plan which details the provisions for management of future excavations in areas of remaining contamination is required;
- Groundwater, soil vapor, indoor air, and other environmental or public health monitoring would be performed as defined in the SMP;
- Data and information pertinent to site management for the Site would be reported at the frequency and in a manner defined in the SMP;

- On-Site environmental monitoring devices, including but not limited to, groundwater monitor wells, and soil vapor probes, and differential pressure gauges, would be protected and replaced as necessary to ensure proper functioning in the manner specified in the SMP; and
- ECs would not be discontinued without an amendment or extinguishment of the Environmental Easement.

Note: Institutional Controls may be modified, added or deleted from this list as warranted by Site conditions and deemed necessary by NYSDEC.

Adherence to these ICs for the Site is mandated by the EE and would be implemented under the SMP. The Controlled Property (Site) would also have a series of ICs in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming on the Controlled Property are prohibited;
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the Controlled Property that would disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the SMP;
- The Controlled Property may be used for restricted commercial and industrial use only, provided the long-term ECs/ICs included in the SMP are employed;
- The Controlled Property may not be used for a higher level of use, such as restricted residential use without an amendment or extinguishment of the EE;
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health

and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This [time period] statement must be certified by an expert that the NYSDEC finds acceptable.

10.2 SITE MANAGEMENT PLAN

Site management is the last phase of remediation and begins with the approval of the FER and issuance of the Certificate of Completion for the remedial action. The SMP is submitted as part of the FER but would be written in a manner that allows its removal and use as a complete and independent document. Site management continues in perpetuity or until released in writing by NYSDEC. The property owner is responsible to ensure that all Site management responsibilities defined in the EE and the SMP are performed.

The SMP is intended to provide a detailed description of the procedures required to manage residual contamination left in place at the Site following completion of the remedial action in accordance with the BCA with the NYSDEC. This includes: (1) development, implementation, and management of all Engineering and Institutional Controls; (2) development and implementation of monitoring systems and a Monitoring Plan; (3) development of a plan to operate and maintain any treatment, collection, containment, or recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual); (4) submittal of Site Management Reports, performance of inspections and certification of results, and demonstration of proper communication of Site information to NYSDEC; and (5) defining criteria for termination of treatment system operation.

To address these needs, this SMP would include four plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems; and (4) a Site Management Reporting Plan for submittal of data, information, recommendations, and certifications to NYSDEC. The SMP would be prepared in accordance with the requirements in NYSDEC DER-

10 Technical Guidance for Site Investigation and Remediation and the guidelines provided by NYSDEC.

Site management activities, reporting, and EC/IC certification would be scheduled on a certification period basis. The certification period would be annually. The Site Management Plan would be based on the certifying period relative to the date of issuance of the Certificate of Completion. The first submission would be due 16 months after the issuance of the Certificate of Completion, and annually (or at another frequency as approved by NYSDEC) thereafter.

The SMP in the FER would include a monitoring plan for groundwater to evaluate Site-wide performance of the monitored natural attenuation remedy and collection and analysis of soil vapor, indoor air, and stack discharge samples to monitor the performance of the SSDS.

No exclusions for handling of residual contaminated soils would be provided in the SMP. All handling of residual contaminated material would be subject to provisions contained in the SMP.

11.0 FINAL ENGINEERING REPORT

A FER would be submitted to NYSDEC following implementation of the RA defined in this RAWP. The FER provides the documentation that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The FER would provide a comprehensive account of the locations and characteristics of all material removed from the Site. The FER would include as-built drawings for all constructed elements, calculation and manufacturer documentation for treatment systems, certifications, manifests, bills of lading as well as the complete SMP (formerly the Operation and Maintenance Plan). The FER would provide a description of the changes in the remedial action from the elements provided in the RAWP and associated design documents. The FER would provide a tabular summary of all performance evaluation sampling results and all material characterization results and other sampling, and chemical analysis performed as part of the remedial action. The FER would provide test results demonstrating that all mitigation and remedial systems are functioning properly. The FER would be prepared in conformance with DER-10.

Where determined to be necessary by NYSDEC, a Financial Assurance Plan would be implemented to ensure the sufficiency of revenue to perform long-term operations, maintenance and monitoring tasks defined in the SMP and EE. This determination would be made by NYSDEC in the context of the FER review.

The FER would include written and photographic documentation of all remedial work performed under this remedy.

The FER would include an itemized tabular description of actual costs incurred during all aspects of the Remedial Action.

The FER would provide a thorough summary of all residual contamination that exceeds the SCOs defined for the Site in the RAWP and must provide an explanation for why the material was not removed as part of the remedial action. Residual contamination includes all contamination that exceeds the Track 4 Site-Specific SCOs in 6NYCRR Part 375-6. A table that shows residual contamination in excess of Site SCOs and a map that shows residual contamination in excess of Site SCOs would be included in the FER.

The FER would include an accounting of the destination of all material removed from the Site, including excavated contaminated soil, historic fill, solid waste, hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. It would provide an accounting of the origin and chemical quality of all material imported onto the Site.

The FER would include a discussion of the green remediation practices/technologies employed throughout the remedial program. A final footprint analysis using a DER accepted model, and any tracking methods used through the construction including restoration activities would be included in the FER.

Before approval of a FER and issuance of a Certificate of Completion, all project reports would be submitted in digital form on electronic media (PDF).

11.1 CERTIFICATIONS

The following certification would appear in front of the Executive Summary of the FER. The certification would be signed by the RE Kristine MacWilliams who is a Professional Engineer registered in New York State. This certification would be appropriately signed and stamped. The certification would include the following statements:

I, Kristine M. MacWilliams, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the 125 Beechwood, LLC Site (NYSDEC BCA Index No. C360232-01-23 Site No. C360232).

I certify that the Site description presented in this FER is identical to the Site descriptions presented in the Environmental Easement, the Site Management Plan, and the Brownfield Cleanup Agreement for 125 Beechwood, LLC Site and related amendments.

I certify that the Remedial Action Work Plan dated [month day year] and Stipulations [if any] in a letter dated [month day year] and approved by the NYSDEC were implemented and that all requirements in those documents have been substantively complied with.

I certify that the remedial activities were observed by qualified environmental professionals under my supervision and that the remediation requirements set forth in the Remedial Action Work Plan and any other relevant provisions of ECL 27-1419 have been achieved.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and all operation and maintenance requirements applicable to the Site are contained in an Environmental Easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded. A Site Management Plan has been submitted by the Participant for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the NYSDEC.

I certify that the export of all contaminated soil, fill, water or other material from the property was performed in accordance with the Remedial Action Work Plan, and were taken to facilities licensed to accept this material in full compliance with all Federal, State and local laws.

I certify that all import of soils from off-Site, including source approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan.

I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology and soil screening methodology defined in the Remedial Action Work Plan.

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

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

12.0 SCHEDULE

The Remedial Action field work is anticipated to start in November 2025 and be completed in April 2026. Post-remediation monitoring is expected to begin following completion of the remedial action and continue on a periodic basis until contaminant concentrations are found to be below NYSDEC standards or have become asymptotic over an extended period. **Table 7** depicts an estimated project schedule.

TABLES

PSG

Table 1
Sampling Summary
125 Beechwood, LLC
125 Beechwood Avenue
New Rochelle, New York 10801

MATRIX	Sample ID	SAMPLE DEPTH*	ANALYTCAL PARAMETERS	TOTAL DEPTH
SOIL	**SB-14 (0.5-2.0)[1]**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	8'/bedrock refusal
	SB-14 (7.5-8.0)	7.5-8.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
SOIL	**SB-15 (0.5-2.0)**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	8'/bedrock refusal
	SB-15 (7.5-8.0)[2]	7.5-8.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
SOIL	**SB-16 (0.5-2.0)**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	9'/bedrock refusal
	SB-16 (8.5-9.0)	8.5-9.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
SOIL	**SB-17 (0.5-2.0)**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	2'/bedrock refusal
SOIL	**SB-18 (0.5-2.0)**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	3.5'/bedrock refusal
	SB-18 (3.0-3.5)	3.0-3.5	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
SOIL	**SB-19 (1.0-2.0)**	1.0-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	6'/bedrock refusal
	SB-19 (5.5-6.0)	5.5-6.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
SOIL	**SB-20 (0.5-2.0)**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	9'/bedrock refusal
	SB-20 (8.5-9.0)	8.5-9.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
SOIL	**SB-21**	No sample due to shallow refusal	-	2'/bedrock refusal
SOIL	**SB-22 (A)**	0.5-2.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	6'/bedrock refusal
	SB-22 (B)	5.5-6.0	VOCs, SVOCs, TAL metals, PCBs, pesticides, and EC	
GROUNDWATER	**MW-1**	8-18'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	18'
GROUNDWATER	**MW-2**	11-17'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	17'
GROUNDWATER	**MW-3**	12-18'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	18'
GROUNDWATER	**MW-4**	12-15'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	15'
GROUNDWATER	**MW-5**	5-22'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	22'
GROUNDWATER	**MW-6**	4-9'	VOCs, SVOCs, TAL metals (total/dissolved) (not enough volume for all parameters)	9'
GROUNDWATER	**MW-7[2]**	13-28'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	28'
GROUNDWATER	**MW-7D[1]**	40-50'	VOCs, SVOCs, TAL metals (total/dissolved), PCBs, pesticides, and EC	50'
GROUNDWATER	**SB-23**	No sample due to dry temporary well point	-	4'/bedrock refusal
GROUNDWATER	**SB-24(TW)**	8.5-9'	VOCs (not enough volume for all parameters)	9'/bedrock refusal
SOIL VAPOR	**VP-1**	0.5-1.0	TO-15	1'
SOIL VAPOR	**VP-2**	0.5-1.0	TO-15	1'
SOIL VAPOR	**VP-3**	0.5-1.0	TO-15	1'
SOIL VAPOR	**VP-4**	0.5-1.0	TO-15	1'
SOIL VAPOR	**VP-5**	0.5-1.0	TO-15	1'
SOIL VAPOR	**VP-6**	0.5-1.0	TO-15	1'
SOIL VAPOR	**VP-7**	3.0-5.0	TO-15	5'
SOIL VAPOR	**VP-8**	3.0-4.0	TO-15	4'
SOIL VAPOR	**VP-9**	3.0-5.0	TO-15	5'
INDOOR AIR	**IA-1**	5	TO-15	-
INDOOR AIR	**IA-2**	5	TO-15	-
INDOOR AIR	**IA-3**	5	TO-15	-
INDOOR AIR	**IA-4**	5	TO-15	-
INDOOR AIR	**IA-5**	5	TO-15	-
INDOOR AIR	**IA-6**	5	TO-15	-
AMBIENT AIR	**AA-1**	5	TO-15	-

* For Indoor and Ambient Air Samples 'Sample Depth' indicates height above ground surface
1 Matrix Spike/Matrix Spike Duplicate
2 Duplicate Sample DUP-1

Table 2 - Remedial Investigation Soil Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION									SB-22(A)		SB-22(B)		SB-19 (1.0-2.0)		SB-19 (5.5-6.0)		SB-18 (0.5-2.0)		SB-18 (3.0-3.5)		SB-17 (0.5-2.0)		SB-14 (0.5-2.0)		SB-14 (7.5-8.0)		SB-15 (0.5-2.0)		SB-15 (7.5-8.0)		SB-16 (0.5-2.0)		SB-16 (8.5-9.0)		SB-20 (0.5-2.0)		SB-20 (8.5-9.0)		DUP-1	
SAMPLING DATE									11/16/2023		11/16/2023		12/6/2023		12/6/2023		12/6/2023		12/6/2023		12/6/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023	
LAB SAMPLE ID									L2368746-01		L2368746-02		L2372145-01		L2372145-02		L2372145-03		L2372145-04		L2372145-05		L2372641-01		L2372641-02		L2372641-03		L2372641-04		L2372641-05		L2372641-06		L2372641-07		L2372641-08		L2372641-09	
SAMPLE TYPE									SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)									0.5-2.0		5.5-6.0		1.0-2.0		5.5-6.0		0.5-2.0		3.0-3.5		0.5-2.0		0.5-2.0		7.5-8.0		0.5-2.0		7.5-8.0		0.5-2.0		8.5-9.0		0.5-2.0		8.5-9.0			
	NY-RESC	NY-RESER	NY-RESGW	NY-RESI	NY-RESR	NY-RESRR	NY-UNRES	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																																								
Solids, Total								%	78		92.2		88.6		87		90.4		92.3		92		72.8		88.3		93.7		94.8		90.6		85.6		91.4		89.1		94.2	
Chromium, Hexavalent	400	1	19	800	22	110	1	mg/kg	0.885	J	0.304	J	0.722	J	0.609	J	0.885	U	2.39		0.185	J	0.536	J	0.204	J	0.363	J	0.454	J	0.883	U	0.934	U	0.372	J	0.191	J	0.287	J
Organochlorine Pesticides by GC																																								
Delta-BHC	500	0.04	0.25	1000	100	100	0.04	mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00174	U	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Lindane	9.2	6	0.1	23	0.28	1.3	0.1	mg/kg	0.000806	U	0.000714	U	0.00073	U	0.000725	U	0.000725	U	0.000698	U	0.000688	U	0.000907	U	0.000746	U	0.000701	U	0.0007	U	0.0007	U	0.000738	U	0.000702	U	0.000721	U	0.000704	U
Alpha-BHC	3.4	0.04	0.02	6.8	0.097	0.48	0.02	mg/kg	0.000806	U	0.000714	U	0.00073	U	0.000725	U	0.000725	U	0.000698	U	0.000688	U	0.000907	U	0.000746	U	0.000701	U	0.0007	U	0.0007	U	0.000738	U	0.000702	U	0.000721	U	0.000704	U
Beta-BHC	3	0.6	0.09	14	0.072	0.36	0.036	mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00174	U	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Heptachlor	15	0.14	0.38	29	0.42	2.1	0.042	mg/kg	0.000967	U	0.000857	U	0.000876	U	0.00087	U	0.00087	U	0.000837	U	0.000825	U	0.00109	U	0.000895	U	0.000841	U	0.00084	U	0.00084	U	0.000885	U	0.000842	U	0.000865	U	0.000845	U
Aldrin	0.68	0.14	0.19	1.4	0.019	0.097	0.005	mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00174	U	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Heptachlor epoxide								mg/kg	0.00363	U	0.00322	U	0.00328	U	0.00326	U	0.00326	U	0.00314	U	0.00309	U	0.00408	U	0.00336	U	0.00315	U	0.00315	U	0.00315	U	0.00332	U	0.00316	U	0.00324	U	0.00317	U
Endrin	89	0.014	0.06	410	2.2	11	0.014	mg/kg	0.000806	U	0.000714	U	0.00073	U	0.000725	U	0.000725	U	0.000698	U	0.000688	U	0.000907	U	0.000746	U	0.000701	U	0.0007	U	0.0007	U	0.000738	U	0.000702	U	0.000721	U	0.000704	U
Endrin aldehyde								mg/kg	0.00242	U	0.00214	U	0.00219	U	0.00217	U	0.00217	U	0.00209	U	0.00206	U	0.00272	U	0.00224	U	0.0021	U	0.0021	U	0.0021	U	0.00221	U	0.0021	U	0.00216	U	0.00211	U
Endrin ketone								mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00174	U	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Dieldrin	1.4	0.006	0.1	2.8	0.039	0.2	0.005	mg/kg	0.00121	U	0.00107	U	0.00109	U	0.00109	U	0.00109	U	0.00105	U	0.00103	U	0.00136	U	0.00112	U	0.00105	U	0.00105	U	0.00105	U	0.00111	U	0.00105	U	0.00108	U	0.00106	U
4,4'-DDE	62	0.0033	17	120	1.8	8.9	0.0033	mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00291		0.00174	U	0.00167	U	0.00165	U	0.00129	J	0.00186		0.00168	U	0.00168	U	0.00168	U	0.00221		0.00168	U	0.00173	U	0.00169	U
4,4'-DDD	92	0.0033	14	180	2.6	13	0.0033	mg/kg	0.00193	U	0.00184		0.00175	U	0.00212		0.00174	U	0.00167	U	0.00165	U	0.00102	J	0.00226		0.00168	U	0.00168	U	0.00168	U	0.0193		0.00168	U	0.00173	U	0.00169	U
4,4'-DDT	47	0.0033	136	94	1.7	7.9	0.0033	mg/kg	0.00193	U	0.0024		0.00175	U	0.00203	IP	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Endosulfan I	200		102	920	4.8	24	2.4	mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00174	U	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Endosulfan II	200		102	920	4.8	24	2.4	mg/kg	0.00193	U	0.00171	U	0.00175	U	0.00174	U	0.00174	U	0.00167	U	0.00165	U	0.00218	U	0.00179	U	0.00168	U	0.00168	U	0.00168	U	0.00177	U	0.00168	U	0.00173	U	0.00169	U
Endosulfan sulfate	200		1000	920	4.8	24	2.4	mg/kg	0.000806	U	0.000714	U	0.00073	U	0.000725	U	0.000725	U	0.000698	U	0.000688	U	0.000907	U	0.000746	U	0.000701	U	0.0007	U	0.0007	U	0.000738	U	0.000702	U	0.000721	U	0.000704	U
Methoxychlor								mg/kg	0.00363	U	0.00322	U	0.00328	U	0.00326	U	0.00326	U	0.00314	U	0.00309	U	0.00408	U	0.00336	U	0.00315	U	0.00315	U	0.00315	U	0.00332	U	0.00316	U	0.00324	U	0.00317	U
Toxaphene								mg/kg	0.0363	U	0.0322	U	0.0328	U	0.0326	U	0.0326	U	0.0314	U	0.0309	U	0.0408	U	0.0336	U	0.0315	U	0.0315	U	0.0315	U	0.0332	U	0.0316	U	0.0324	U	0.0317	U
cis-Chlordane	24	1.3	2.9	47	0.91	4.2	0.094	mg/kg	0.00242	U	0.00214	U	0.00219	U	0.00217	U	0.00217	U	0.00209	U	0.00206	U	0.00272	U	0.000994	J	0.0021	U	0.0021	U	0.0021	U	0.00221	U	0.0021	U	0.00216	U	0.00211	U
trans-Chlordane								mg/kg	0.00242	U	0.00214	U	0.00219	U	0.00217	U	0.00217	U	0.00209	U	0.00206	U	0.00272	U	0.00119	JIP	0.0021	U	0.0021	U	0.0021	U	0.00221	U	0.0021	U	0.00216	U	0.00211	U
Chlordane								mg/kg	0.0161	U	0.0143	U	0.0146	U	0.0145	U	0.0145	U	0.014	U	0.0138	U	0.0181	U	0.0149	U	0.014	U	0.014	U	0.014	U	0.0148	U	0.014	U	0.0144	U	0.0141	U
Perfluorinated Alkyl Acids by EPA 1633																																								
Perfluorobutanoic Acid (PFBA)								mg/kg	0.000087	J	0.000792	U	0.000773	U	0.000782	U	0.000752	U	0.000774	U	0.00076	U	0.000796	U	0.00079	U	0.000776	U	0.000784	U	0.000774	U	0.000776	U	0.000774	U	0.0008	U	0.000786	U
Perfluoropentanoic Acid (PFPeA)								mg/kg	0.000196	J	0.000396	U	0.000386	U	0.000391	U	0.000376	U	0.000387	U	0.00038	U	0.000398	U	0.000395	U	0.000388	U	0.000392	U	0.000387	U	0.000388	U	0.000387	U	0.0004	U	0.000393	U
Perfluorobutanesulfonic Acid (PFBS)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorohexanoic Acid (PFHxA)								mg/kg	0.000228		0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluoroheptanoic Acid (PFHpA)								mg/kg	0.00014	J	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorohexanesulfonic Acid (PFHxS)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorooctanoic Acid (PFOA)	0.5		0.0008	0.6	0.0066	0.033	0.00066	mg/kg	0.000338		0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)								mg/kg	0.000801	U	0.000792	U	0.000773	U	0.000782	U	0.000752	U	0.000774	U	0.00076	U	0.000796	U	0.00079	U	0.000776	U	0.000784	U	0.000774	U	0.000776	U	0.000774	U	0.0008	U	0.000786	U
Perfluoroheptanesulfonic Acid (PFHpS)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorononanoic Acid (PFNA)								mg/kg	0.000139	J	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorooctanesulfonic Acid (PFOS)	0.44		0.001	0.44	0.0088	0.044	0.00088	mg/kg	0.00082		0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorodecanoic Acid (PFDA)								mg/kg	0.000318		0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)								mg/kg	0.000801	U	0.000792	U	0.000773	U	0.000782	U	0.000752	U	0.000774	U	0.00076	U	0.000796	U	0.00079	U	0.000776	U	0.000784	U	0.000774	U	0.000776	U	0.000774	U	0.0008	U	0.000786	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluoroundecanoic Acid (PFUnA)								mg/kg	0.00009	J	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorodecanesulfonic Acid (PFDS)								mg/kg	0.000035	JF	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorooctanesulfonamide (PFOSA)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000186	J	0.000426		0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorododecanoic Acid (PFDoA)								mg/kg	0.000107	J	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorotridecanoic Acid (PFTrDA)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Perfluorotetradecanoic Acid (PFTeDA)								mg/kg	0.0002	U	0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
PFOA/PFOS, Total								mg/kg	0.00116		0.000198	U	0.000193	U	0.000195	U	0.000188	U	0.000193	U	0.00019	U	0.000199	U	0.000198	U	0.000194	U	0.000196	U	0.000194	U	0.000194	U	0.000194	U	0.0002	U	0.000196	U
Polychlorinated Biphenyls by GC																																								
Aroclor 1016	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
Aroclor 1221	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
Aroclor 1232	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
Aroclor 1242	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
Aroclor 1248	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
Aroclor 1254	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.00797	J	0.0551	U	0.0289	J	0.0784		0.0277	J	0.0153	J	0.0495	U	0.0502	U	0.0512	U	0.0404	J	0.0505	U	0.0514	U	0.0514	U
Aroclor 1260	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0294	J	0.0195	J	0.0137	J	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0296	J	0.0505	U	0.0514	U	0.0514	U
Aroclor 1262	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
Aroclor 1268	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.0533	U	0.0551	U	0.0516	U	0.0513	U	0.0666	U	0.0561	U	0.0495	U	0.0502	U	0.0512	U	0.0569	U	0.0505	U	0.0514	U	0.0514	U
PCBs, Total	1	1	3.2	25	1	1	0.1	mg/kg	0.059	U	0.0513	U	0.0549	U	0.00797	J	0.0551	U	0.0583	J	0.0979	J	0.0414	J	0.0153	J	0.0495	U	0.0502	U	0.0512	U	0.07	J	0.0505	U	0.0514	U	0.0514	U
Semivolatile Organics by GC/MS																																								
Acenaphthene	500	20	98	1000	100	100	20	mg/kg	0.17	U	0.14	U	0.15	U	0.15	U	0.14	U	0.019	J	0.13	J	1.2		0.14	J	0.18		0.14	U	0.14	U	0.15	U	0.14	U	0.15	U	0.14	U
1,2,4-Trichlorobenzene								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Hexachlorobenzene	6		3.2	12	0.33	1.2	0.33	mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.14	U	0.11	U	0.11	U	0.1	U	0.11	U	0.12	U	0.11	U	0.11	U	0.1	U
Bis(2-chloroethyl)ether								mg/kg	0.19	U	0.16	U	0.17	U	0.17	U	0.16	U	0.16	U	0.16	U	0.2	U	0.17	U	0.16	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U	0.16	U
2-Chloronaphthalene								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
1,2-Dichlorobenzene	500		1.1	1000	100	100	1.1	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
1,3-Dichlorobenzene	280		2.4	560	17	49	2.4	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
1,4-Dichlorobenzene	130	20	1.8	250	9.8	13	1.8	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
3,3'-Dichlorobenzidine								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2,4-Dinitrotoluene								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2,6-Dinitrotoluene								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Fluoranthene	500		1000	1000	100	100	100	mg/kg	0.13	U	0.11	U	0.08	J	0.11	U	0.11	U	0.21		0.74		12		2.6		2.1		0.07	J	0.18		0.74		0.11	U	0.11	U	0.23	
4-Chlorophenyl phenyl ether								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18		0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
4-Bromophenyl phenyl ether								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Bis(2-chloroisopropyl)ether								mg/kg	0.25	U	0.21	U	0.22	U	0.23	U	0.22	U	0.21	U	0.22	U	0.27	U	0.22	U	0.21	U	0.21	U	0.22	U	0.23	U	0.22	U	0.22	U	0.21	U
Bis(2-chloroethoxy)methane								mg/kg	0.23	U	0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.19	U	0.24	U	0.2	U	0.19	U	0.19	U	0.2	U	0.21	U	0.2	U	0.2	U	0.19	U
Hexachlorobutadiene								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Hexachlorocyclopentadiene								mg/kg	0.6	U	0.51	U	0.53	U	0.54	U	0.52	U	0.51	U	0.51	U	0.64	U	0.53	U	0.5	U	0.5	U	0.52	U	0.55	U	0.52	U	0.53	U	0.5	U
Hexachloroethane								mg/kg	0.17	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U	0.14	U	0.18	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U	0.14	U
Isophorone								mg/kg	0.19	U	0.16	U	0.17	U	0.17	U	0.16	U	0.16	U	0.16	U	0.2	U	0.17	U	0.16	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U	0.16	U
Naphthalene	500		12	1000	100	100	12	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.042	J	0.69		0.12	J	0.11	J	0.18	U	0.18	U	0.16	J	0.18	U	0.18	U	0.18	U
Nitrobenzene								mg/kg	0.19	U	0.16	U	0.17	U	0.17	U	0.16	U	0.16	U	0.16	U	0.2	U	0.17	U	0.16	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U	0.16	U
NDPA/DPA								mg/kg	0.17	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U	0.14	U	0.18	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U	0.14	U
n-Nitrosodi-n-propylamine								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Bis(2-ethylhexyl)phthalate								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.067	J	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Butyl benzyl phthalate								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.061	J	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Di-n-butylphthalate								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18		0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Di-n-octylphthalate								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Diethyl phthalate								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Dimethyl phthalate								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Benzo(a)anthracene	5.6		1	11	1	1	1	mg/kg	0.13	U	0.11	U	0.048	J	0.11	U	0.11	U	0.11		0.38		4.2		1.2		1.1		0.037	J	0.096	J	0.41		0.11	U	0.11	U	0.1	
Benzo(a)pyrene	1	2.6	22	1.1	1	1	1	mg/kg	0.17	U	0.14	U	0.046	J	0.15	U	0.14	U	0.097	J	0.34		3.8		1		1.1		0.14	U	0.11	J	0.42		0.14	U	0.15	U	0.1	J
Benzo(b)fluoranthene	5.6		1.7	11	1	1	1	mg/kg	0.13	U	0.11	U	0.056	J	0.11	U	0.11	U	0.11		0.39		4.9		1.4		1.2		0.044	J	0.12		0.48		0.11	U	0.11	U	0.12	
Benzo(k)fluoranthene	56		1.7	110	1	3.9	0.8	mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.046	J	0.14		1.7		0.42		0.51		0.1	U	0.041	J	0.19		0.11	U	0.11	U	0.05	J
Chrysene	56		1	110	1	3.9	1	mg/kg	0.13	U	0.11	U	0.049	J	0.11	U	0.11	U	0.11		0.41		4.7		1.3		1.1		0.038	J	0.098	J	0.5		0.11	U	0.11	U	0.11	
Acenaphthylene	500		107	1000	100	100	100	mg/kg	0.17	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U	0.14	U	0.12	J	0.17		0.12	J	0.14	U	0.14	U	0.18		0.14	U	0.15	U	0.14	U
Anthracene	500		1000	1000	100	100	100	mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.18		2.3		0.46		0.41		0.1	U	0.11	U	0.11	J	0.11	U	0.11	U	0.1	U
Benzo(ghi)perylene	500		1000	1000	100	100	100	mg/kg	0.17	U	0.14	U	0.029	J	0.15	U	0.14	U	0.053	J	0.19		1.9		0.59		0.54		0.024	J	0.065	J	0.24		0.14	U	0.15	U	0.066	J
Fluorene	500	30	386	1000	100	100	30	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.088	J	1.5		0.19		0.17	J	0.18	U	0.18	U	0.03	J	0.18	U	0.18	U	0.18	U
Phenanthrene	500		1000	1000	100	100	100	mg/kg	0.13	U	0.11	U	0.028	J	0.11	U	0.11	U	0.12		0.61		12		2.1		1.4		0.026	J	0.082	J	0.23		0.11	U	0.11	U	0.1	
Dibenzo(a,h)anthracene	0.56		1000	1.1	0.33	0.33	0.33	mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.051	J	0.58		0.16		0.15		0.1	U	0.11	U	0.064	J	0.11	U	0.11	U	0.1	U
Indeno(1,2,3-cd)pyrene	5.6		8.2	11	0.5	0.5	0.5	mg/kg	0.17	U	0.14	U	0.033	J	0.15	U	0.14	U	0.058	J	0.21		2.3		0.65		0.66		0.025	J	0.07	J	0.27		0.14	U	0.15	U	0.071	J
Pyrene	500		1000	1000	100	100	100	mg/kg	0.13	U	0.11	U	0.079	J	0.11	U	0.11	U	0.19		0.65		7.8		2.2		1.9		0.061	J	0.15		0.8		0.11	U	0.11	U	0.21	
Biphenyl								mg/kg	0.48	U	0.41	U	0.42	U	0.43	U	0.41	U	0.4	U	0.41	U	0.08	J	0.42	U	0.4	U	0.4	U	0.41	U	0.44	U	0.41	U	0.42	U	0.4	U
4-Chloroaniline								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2-Nitroaniline								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
3-Nitroaniline								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
4-Nitroaniline								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Dibenzofuran	350		210	1000	14	59	7	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.042	J	0.9		0.14	J	0.085	J	0.18	U	0.18	U	0.036	J	0.18	U	0.18	U	0.18	U
2-Methylnaphthalene								mg/kg	0.25	U	0.21	U	0.22	U	0.23	U	0.22	U	0.21	U	0.027	J	0.29		0.044	J	0.052	J	0.21	U	0.22	U	0.056	J	0.22	U	0.22	U	0.21	U
1,2,4,5-Tetrachlorobenzene								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Acetophenone								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2,4,6-Trichlorophenol								mg/kg	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.14	U	0.11	U	0.11	U	0.1	U	0.11	U	0.12	U	0.11	U	0.11	U	0.1	U
p-Chloro-m-cresol								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2-Chlorophenol								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2,4-Dichlorophenol								mg/kg	0.19	U	0.16	U	0.17	U	0.17	U	0.16	U	0.16	U	0.16	U	0.2	U	0.17	U	0.16	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U	0.16	U
2,4-Dimethylphenol								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2-Nitrophenol								mg/kg	0.46	U	0.38	U	0.4	U	0.41	U	0.39	U	0.38	U	0.39	U	0.49	U	0.4	U	0.38	U	0.38	U	0.39	U	0.42	U	0.39	U	0.4	U	0.38	U
4-Nitrophenol								mg/kg	0.3	U	0.25	U	0.26	U	0.27	U	0.25	U	0.25	U	0.25	U	0.32	U	0.26	U	0.25	U	0.24	U	0.25	U	0.27	U	0.25	U	0.26	U	0.25	U
2,4-Dinitrophenol								mg/kg	1	U	0.86	U	0.89	U	0.91	U	0.87	U	0.85	U	0.86	U	1.1	U	0.9	U	0.85	U	0.84	U	0.87	U	0.92	U	0.87	U	0.89	U	0.84	U
4,6-Dinitro-o-cresol								mg/kg	0.55	U	0.46	U	0.48	U	0.49	U	0.47	U	0.46	U	0.47	U	0.58	U	0.48	U	0.46	U	0.46	U	0.47	U	0.5	U	0.47	U	0.48	U	0.46	U
Pentachlorophenol	6.7	0.8	0.8	55	2.4	6.7	0.8	mg/kg	0.17	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U	0.14	U	0.18	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U	0.14	U
Phenol	500	30	0.33	1000	100	100	0.33	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
2-Methylphenol	500		0.33	1000	100	100	0.33	mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
3-Methylphenol/4-Methylphenol	500		0.33	1000	34	100	0.33	mg/kg	0.3	U	0.26	U	0.26	U	0.27	U	0.26	U	0.26	U	0.26	U	0.32	U	0.27	U	0.25	U	0.25	U	0.26	U	0.28	U	0.26	U	0.27	U	0.25	U
2,4,5-Trichlorophenol								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Benzoic Acid								mg/kg	0.68	U	0.58	U	0.6	U	0.62	U	0.59	U	0.58	U	0.58	U	0.73	U	0.6	U	0.57	U	0.57	U	0.59	U	0.62	U	0.59	U	0.6	U	0.57	U
Benzyl Alcohol								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.28		0.22	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U
Carbazole								mg/kg	0.21	U	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.068	J	1.6		0.3		0.14	J	0.18	U	0.18	U	0.032	J	0.18	U	0.18	U	0.18	U
1,4-Dioxane	130	0.1	0.1	250	9.8	13	0.1	mg/kg	0.032	U	0.027	U	0.028	U	0.028	U	0.027	U	0.027	U	0.027	U	0.034	U	0.028	U	0.026	U	0.026	U	0.027	U	0.029	U	0.027	U	0.028	U	0.026	U

Table 2 - Remedial Investigation Soil Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION	NY-RESC	NY-RESER	NY-RESGW	NY-RESI	NY-RESR	NY-RESRR	NY-UNRES	Units
Total Metals								
Aluminum, Total								mg/kg
Antimony, Total								mg/kg
Arsenic, Total	16	13	16	16	16	16	13	mg/kg
Barium, Total	400	433	820	10000	350	400	350	mg/kg
Beryllium, Total	590	10	47	2700	14	72	7.2	mg/kg
Cadmium, Total	9.3	4	7.5	60	2.5	4.3	2.5	mg/kg
Calcium, Total								mg/kg
Chromium, Total								mg/kg
Cobalt, Total								mg/kg
Copper, Total	270	50	1720	10000	270	270	50	mg/kg
Iron, Total								mg/kg
Lead, Total	1000	63	450	3900	400	400	63	mg/kg
Magnesium, Total								mg/kg
Manganese, Total	10000	1600	2000	10000	2000	2000	1600	mg/kg
Mercury, Total	2.8	0.18	0.73	5.7	0.81	0.81	0.18	mg/kg
Nickel, Total	310	30	130	10000	140	310	30	mg/kg
Potassium, Total								mg/kg
Selenium, Total	1500	3.9	4	6800	36	180	3.9	mg/kg
Silver, Total	1500	2	8.3	6800	36	180	2	mg/kg
Sodium, Total								mg/kg
Thallium, Total								mg/kg
Vanadium, Total								mg/kg
Zinc, Total	10000	109	2480	10000	2200	10000	109	mg/kg
Volatile Organics by EPA 5035								
Methylene chloride	500	12	0.05	1000	51	100	0.05	mg/kg
1,1-Dichloroethane	240		0.27	480	19	26	0.27	mg/kg
Chloroform	350	12	0.37	700	10	49	0.37	mg/kg
Carbon tetrachloride	22		0.76	44	1.4	2.4	0.76	mg/kg
1,2-Dichloropropane								mg/kg
Dibromochloromethane								mg/kg
1,1,2-Trichloroethane								mg/kg
Tetrachloroethene	150	2	1.3	300	5.5	19	1.3	mg/kg
Chlorobenzene	500	40	1.1	1000	100	100	1.1	mg/kg
Trichlorofluoromethane								mg/kg
1,2-Dichloroethane	30	10	0.02	60	2.3	3.1	0.02	mg/kg
1,1,1-Trichloroethane	500		0.68	1000	100	100	0.68	mg/kg
Bromodichloromethane								mg/kg
trans-1,3-Dichloropropene								mg/kg
cis-1,3-Dichloropropene								mg/kg
1,3-Dichloropropene, Total								mg/kg
1,1-Dichloropropene								mg/kg
Bromoform								mg/kg
1,1,2,2-Tetrachloroethane								mg/kg
Benzene	44	70	0.06	89	2.9	4.8	0.06	mg/kg
Toluene	500	36	0.7	1000	100	100	0.7	mg/kg
Ethylbenzene	390		1	780	30	41	1	mg/kg
Chloromethane								mg/kg
Bromomethane								mg/kg
Vinyl chloride	13		0.02	27	0.21	0.9	0.02	mg/kg
Chloroethane								mg/kg
1,1-Dichloroethene	500		0.33	1000	100	100	0.33	mg/kg
trans-1,2-Dichloroethene	500		0.19	1000	100	100	0.19	mg/kg
Trichloroethene	200	2	0.47	400	10	21	0.47	mg/kg
1,2-Dichlorobenzene	500		1.1	1000	100	100	1.1	mg/kg
1,3-Dichlorobenzene	280		2.4	560	17	49	2.4	mg/kg
1,4-Dichlorobenzene	130	20	1.8	250	9.8	13	1.8	mg/kg
Methyl tert butyl ether	500		0.93	1000	62	100	0.93	mg/kg
p/m-Xylene								mg/kg
o-Xylene								mg/kg
Xylenes, Total	500	0.26	1.6	1000	100	100	0.26	mg/kg
cis-1,2-Dichloroethene	500		0.25	1000	59	100	0.25	mg/kg
1,2-Dichloroethene, Total								mg/kg
Dibromomethane								mg/kg
Styrene								mg/kg
Dichlorodifluoromethane								mg/kg
Acetone	500	2.2	0.05	1000	100	100	0.05	mg/kg
Carbon disulfide								mg/kg
2-Butanone	500	100	0.12	1000	100	100	0.12	mg/kg
Vinyl acetate								mg/kg
4-Methyl-2-pentanone								mg/kg
1,2,3-Trichloropropane								mg/kg
2-Hexanone								mg/kg
Bromochloromethane								mg/kg
2,2-Dichloropropane								mg/kg
1,2-Dibromoethane								mg/kg
1,3-Dichloropropane								mg/kg
1,1,1,2-Tetrachloroethane								mg/kg
Bromobenzene								mg/kg
n-Butylbenzene	500		12	1000	100	100	12	mg/kg
sec-Butylbenzene	500		11	1000	100	100	11	mg/kg
tert-Butylbenzene	500		5.9	1000	100	100	5.9	mg/kg
o-Chlorotoluene								mg/kg
p-Chlorotoluene								mg/kg
1,2-Dibromo-3-chloropropane								mg/kg
Hexachlorobutadiene								mg/kg
Isopropylbenzene								mg/kg
p-Isopropyltoluene								mg/kg
Naphthalene	500		12	1000	100	100	12	mg/kg
Acrylonitrile								mg/kg
n-Propylbenzene	500		3.9	1000	100	100	3.9	mg/kg
1,2,3-Trichlorobenzene								mg/kg
1,2,4-Trichlorobenzene								mg/kg
1,3,5-Trimethylbenzene	190		8.4	380	47	52	8.4	mg/kg
1,2,4-Trimethylbenzene	190		3.6	380	47	52	3.6	mg/kg
1,4-Dioxane	130	0.1	0.1	250	9.8	13	0.1	mg/kg
p-Diethylbenzene								mg/kg
p-Ethyltoluene								mg/kg
1,2,4,5-Tetramethylbenzene								mg/kg
Ethyl ether								mg/kg
trans-1,4-Dichloro-2-butene								mg/kg

LOCATION	SB-22(A)		SB-22(B)		SB-19 (1.0-2.0)		SB-19 (5.5-6.0)		SB-18 (0.5-2.0)		SB-18 (3.0-3.5)		SB-17 (0.5-2.0)		SB-14 (0.5-2.0)		SB-14 (7.5-8.0)	
SAMPLING DATE	11/16/2023		11/16/2023		12/6/2023		12/6/2023		12/6/2023		12/6/2023		12/6/2023		12/7/2023		12/7/2023	
LAB SAMPLE ID	L2368746-01		L2368746-02		L2372145-01		L2372145-02		L2372145-03		L2372145-04		L2372145-05		L2372641-01		L2372641-02	
SAMPLE TYPE	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)	0.5-2.0		5.5-6.0		1.0-2.0		5.5-6.0		0.5-2.0		3.0-3.5		0.5-2.0		0.5-2.0		7.5-8.0	
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Total Metals																		
Aluminum, Total	10200		6220		7090		13500		5010		5210		9380		13000		10400	
Antimony, Total	4.93	U	4.22	U	0.773	J	1.24	J	4.21	U	0.395	J	0.535	J	1.72	J	1.37	J
Arsenic, Total	1.62		2.9		3.61		8.62		1.47		1.87		3.89		2.51		2.32	
Barium, Total	57.4		32.8		105		150		34.6		57.7		85.7		119		113	
Beryllium, Total	0.853		0.56		0.356	J	0.646		0.224	J	0.246	J	0.442		1.84		1.5	
Cadmium, Total	0.987	U	0.843	U	0.236	J	0.28	J	0.841	U	0.831	U	0.414	J	0.22	J	0.192	J
Calcium, Total	974		601		8590		2580		1200		13500		1770		5140		3530	
Chromium, Total	25		19.5		27.6		33		13.7		12.4		25.9		27.1		22.8	
Cobalt, Total	6.77		3.66		6.4		10.8		4.68		4.83		7.88		9.27		7.85	
Copper, Total	14.1		9.77		17.9		37		12.8		11.9		27.4		35		18.7	
Iron, Total	12600		11700		10800		20900		12600		11000		20000		19800		16100	
Lead, Total	6.92		4.16	J	98.5		191		3.27	J	5.41		150		60.9		99	
Magnesium, Total	3040		1750		2830		4620		2410		6610		3490		5320		4400	
Manganese, Total	123		93.9		204		598		319		374		200		330		281	
Mercury, Total	0.09	U	0.082	U	0.15		0.325		0.084	U	0.071	U	0.061	J	0.165		0.236	
Nickel, Total	37.7		21.3		20.8		31.4		18.1		18.6		20.4		20.6		18.9	
Potassium, Total	794		682		1230		2830		1360		1650		1940		4190		3560	
Selenium, Total	1.97	U	1.69	U	0.583	J	1.03	J	1.68	U	1.66	U	0.492	J	2.16	U	1.75	U
Silver, Total	0.493	U	0.422	U	0.431	U	0.449	U	0.421	U	0.415	U	0.414	U	0.541	U	0.439	U
Sodium, Total	107	J	62.2	J	192		188		34	J	102	J	76	J	94.2	J	92.8	J
Thallium, Total	1.97	U	1.69	U	0.765	J	1.15	J	0.594	J	0.677	J	0.715	J	0.818	J	0.669	J
Vanadium, Total	26.9		28		19.9		35.7		15		12.8		34.8		36.7		28.9	
Zinc, Total	34.3		19.7		78.8		135		21.7		27.6		86		146		121	
Volatile Organics by EPA 5035																		
Methylene chloride	0.0052	U	0.005	U	0.0052	U	0.0051	U	0.0049	U	0.0047	U	0.0044	U	0.0064	U	0.0064	U
1,1-Dichloroethane	0.001	U	0.001	U	0.001	U	0.001	U	0.0072		0.0032		0.0059		0.00049	J	0.0013	U
Chloroform	0.0015	U	0.0015	U	0.0016	U	0.0015	U	0.0015	U	0.0014	U	0.0013	U	0.0019	U	0.0019	U
Carbon tetrachloride	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
1,2-Dichloropropane	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
Dibromochloromethane	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
1,1,2-Trichloroethane	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
Tetrachloroethene	0.00038	J	0.0005	U	0.00052	U	0.00051	U	0.023		0.011		0.0049		0.0012		0.00044	J
Chlorobenzene	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
Trichlorofluoromethane	0.0041	U	0.004	U	0.0042	U	0.0041	U	0.0039	U	0.0038	U	0.0035	U	0.0051	U	0.0051	U
1,2-Dichloroethane	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
1,1,1-Trichloroethane	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.074		0.033		0.0051		0.0014		0.00024	J
Bromodichloromethane	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
trans-1,3-Dichloropropene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
cis-1,3-Dichloropropene	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
1,3-Dichloropropene, Total	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
1,1-Dichloropropene	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
Bromoform	0.0041	U	0.004	U	0.0042	U	0.0041	U	0.0039	U	0.0038	U	0.0035	U	0.0051	U	0.0051	U
1,1,2,2-Tetrachloroethane	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
Benzene	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
Toluene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.004		0.0012	J
Ethylbenzene	0.001	U	0.001	U	0.00072	J	0.001	U	0.00098	U	0.00015	J	0.00088	U	0.0013	U	0.0013	U
Chloromethane	0.0041	U	0.004	U	0.0042	U	0.0041	U	0.0039	U	0.0038	U	0.0035	U	0.0051	U	0.0051	U
Bromomethane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
Vinyl chloride	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
Chloroethane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,1-Dichloroethene	0.001	U	0.001	U	0.001	U	0.001	U	0.035		0.015		0.0027		0.0013	U	0.0013	U
trans-1,2-Dichloroethene	0.0015	U	0.0015	U	0.0016	U	0.0015	U	0.0015	U	0.0014	U	0.00012	J	0.0019	U	0.0019	U
Trichloroethene	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.0025		0.0011		0.0022		0.00045	J	0.00064	U
1,2-Dichlorobenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,3-Dichlorobenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,4-Dichlorobenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
Methyl tert butyl ether	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
p/m-Xylene	0.0021	U	0.002	U	0.0023		0.002	U	0.002	U	0.0006	J	0.0018	U	0.0026	U	0.0026	U
o-Xylene	0.001	U	0.001	U	0.00062	J	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.00077	J	0.00076	J
Xylenes, Total	0.001	U	0.001	U	0.0029	J	0.001	U	0.00098	U	0.0006	J	0.00088	U	0.00077	J	0.00076	J
cis-1,2-Dichloroethene	0.001	U	0.001	U	0.001	U	0.001	U	0.0048		0.0022		0.0032		0.0013	U	0.0013	U
1,2-Dichloroethene, Total	0.001	U	0.001	U	0.001	U	0.001	U	0.0048		0.0022		0.0033	J	0.0013	U	0.0013	U
Dibromomethane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
Styrene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
Dichlorodifluoromethane	0.01	U	0.01	U	0.01	U	0.01	U	0.0098	U	0.0094	U	0.0088	U	0.013	U	0.013	U
Acetone	0.01	U	0.01	U	0.028		0.01	U	0.0098	U	0.0062	J	0.012		0.023		0.029	
Carbon disulfide	0.01	U	0.01	U	0.01	U	0.01	U	0.0098	U	0.0094	U	0.0088	U	0.013	U	0.013	U
2-Butanone	0.01	U	0.01	U	0.0039	J	0.01	U	0.0098	U	0.0094	U	0.0088	U	0.013	U	0.013	U
Vinyl acetate	0.01	U	0.01	U	0.01	U	0.01	U	0.0098	U	0.0094	U	0.0088	U	0.013	U	0.013	U
4-Methyl-2-pentanone	0.01	U	0.01	U	0.01	U	0.01	U	0.0098	U	0.0094	U	0.0088	U	0.013	U	0.013	U
1,2,3-Trichloropropane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
2-Hexanone	0.01	U	0.01	U	0.01	U	0.01	U	0.0098	U	0.0094	U	0.0088	U	0.013	U	0.013	U
Bromochloromethane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
2,2-Dichloropropane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,2-Dibromoethane	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
1,3-Dichloropropane	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,1,1,2-Tetrachloroethane	0.00052	U	0.0005	U	0.00052	U	0.00051	U	0.00049	U	0.00047	U	0.00044	U	0.00064	U	0.00064	U
Bromobenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
n-Butylbenzene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
sec-Butylbenzene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
tert-Butylbenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
o-Chlorotoluene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
p-Chlorotoluene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,2-Dibromo-3-chloropropane	0.0031	U	0.003	U	0.0031	U	0.0031	U	0.0029	U	0.0028	U	0.0026	U	0.0038	U	0.0039	U
Hexachlorobutadiene	0.0041	U	0.004	U	0.0042	U	0.0041	U	0.0039	U	0.0038	U	0.0035	U	0.0051	U	0.0051	U
Isopropylbenzene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
p-Isopropyltoluene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
Naphthalene	0.0041	U	0.004	U	0.0042	U	0.0041	U	0.0039	U	0.0038	U	0.0035	U	0.0034	J	0.0089	
Acrylonitrile	0.0041	U	0.004	U	0.0042	U	0.0041	U	0.0039	U	0.0038	U	0.0035	U	0.0051	U	0.0051	U
n-Propylbenzene	0.001	U	0.001	U	0.001	U	0.001	U	0.00098	U	0.00094	U	0.00088	U	0.0013	U	0.0013	U
1,2,3-Trichlorobenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,2,4-Trichlorobenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,3,5-Trimethylbenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,2,4-Trimethylbenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,4-Dioxane	0.082	U	0.08	U	0.084	U	0.082	U	0.078	U	0.075	U	0.071	U	0.1	U	0.1	U
p-Diethylbenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
p-Ethyltoluene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
1,2,4,5-Tetramethylbenzene	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
Ethyl ether	0.0021	U	0.002	U	0.0021	U	0.002	U	0.002	U	0.0019	U	0.0018	U	0.0026	U	0.0026	U
trans-1,4-Dichloro-2-butene	0.0052	U	0.005	U	0.0052	U	0.0051	U	0.0049	U	0.0047	U	0.0044	U	0.0064	U	0.0064	U

LOCATION	SB-15 (0.5-2.0)		SB-15 (7.5-8.0)		SB-16 (0.5-2.0)		SB-16 (8.5-9.0)		SB-20 (0.5-2.0)		SB-20 (8.5-9.0)		DUP-1	
SAMPLING DATE	12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023		12/7/2023	
LAB SAMPLE ID	L2372641-03		L2372641-04		L2372641-05		L2372641-06		L2372641-07		L2372641-08		L2372641-09	
SAMPLE TYPE	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)	0.5-2.0		7.5-8.0		0.5-2.0		8.5-9.0		0.5-2.0		8.5-9.0			
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Total Metals														
Aluminum, Total	8720		6810		10600		11700		9010		8180		6290	
Antimony, Total	0.585	J	0.38	J	0.633	J	0.795	J	0.605	J	0.476	J	0.356	J
Arsenic, Total	1.11		0.688	J	2.27		2.44		0.817	J	0.191	J	0.803	J
Barium, Total	68.6		47.5		43.3		71.6		68.8		69.6		43.3	
Beryllium, Total	1.18		0.874		0.955		1.44		1.1		1.41		0.862	
Cadmium, Total	0.101	J	0.822	U	0.854	U	0.099	J	0.86	U	0.867	U	0.819	U
Calcium, Total	909		1040		826		2320		1330		838		775	
Chromium, Total	21.6		17.2		16		27.1		22.3		22.9		16.3	
Cobalt, Total	7.2		10.6		5.64		7.66		6.94		5.25		7.29	
Copper, Total	46.5		41.9		21.4		16.8		28.9		19.1		39.8	
Iron, Total	15300		12300		14700		18000		16100		13700		11100	
Lead, Total	23.2		7.28		24.8		19.1		5.72		3.04	J	12.7	
Magnesium, Total	3920		2780		2000		4420		3430		4820		2660	
Manganese, Total	362		442		196		229		309		306		322	
Mercury, Total	0.055	J	0.053	J	0.075		0.174		0.079		0.09		0.059	J
Nickel, Total	28		41		10.3		19.8		35.9		15.7		34.9	
Potassium, Total	2510		1530		635		2500		2470		3720		1620	
Selenium, Total	1.68	U	1.64	U	1.71	U	1.79	U	1.72	U	1.73	U	1.64	U
Silver, Total	0.42	U	0.411	U	0.427	U	0.449	U	0.43	U	0.433	U	0.41	U
Sodium, Total	31.2	J	13.3	J	55.5	J	45	J	84.9	J	37.9	J	10.4	J
Thallium, Total	0.379	J	0.259	J	1.71	U	0.522	J	0.407	J	0.497	J	1.64	U
Vanadium, Total	22.1		15.6		23		29.6		23.4		24.3		15	
Zinc, Total	39.7		24.4		34		46		32.4		30.1		23	
Volatile Organics by EPA 5035														
Methylene chloride	0.006	U	0.0056	U	0.0059	U	0.005	U	0.0062	U	0.0048	U	0.006	U
1,1-Dichloroethane	0.00088	J	0.0011	U	0.0012	U	0.00026	J	0.0012	U	0.00096	U	0.00027	J
Chloroform	0.0018	U	0.0017	U	0.0018	U	0.0015	U	0.0018	U	0.0014	U	0.0018	U
Carbon tetrachloride	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
1,2-Dichloropropane	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Dibromochloromethane	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
1,1,2-Trichloroethane	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Tetrachloroethene	0.039		0.0062		0.00059	U	0.00019	J	0.00062	U	0.00048	U	0.01	
Chlorobenzene	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
Trichlorofluoromethane	0.0048	U	0.0045	U	0.0047	U	0.004	U	0.005	U	0.0038	U	0.0048	U
1,2-Dichloroethane	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
1,1,1-Trichloroethane	0.0054		0.001		0.00059	U	0.00053		0.00062	U	0.00048	U	0.0019	
Bromodichloromethane	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
trans-1,3-Dichloropropene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
cis-1,3-Dichloropropene	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
1,3-Dichloropropene, Total	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
1,1-Dichloropropene	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
Bromoform	0.0048	U	0.0045	U	0.0047	U	0.004	U	0.005	U	0.0038	U	0.0048	U
1,1,2,2-Tetrachloroethane	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
Benzene	0.0002	J	0.00056	U	0.00019	J	0.0005	U	0.00062	U	0.00048	U	0.0006	U
Toluene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Ethylbenzene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Chloromethane	0.0048	U	0.0045	U	0.0047	U	0.004	U	0.005	U	0.0038	U	0.0048	U
Bromomethane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
Vinyl chloride	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Chloroethane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,1-Dichloroethene	0.0031		0.00033	J	0.0012	U	0.00029	J	0.0012	U	0.00096	U	0.00091	J
trans-1,2-Dichloroethene	0.0018	U	0.0017	U	0.0018	U	0.0015	U	0.0018	U	0.0014	U	0.0018	U
Trichloroethene	0.024		0.0026		0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0058	
1,2-Dichlorobenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,3-Dichlorobenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,4-Dichlorobenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
Methyl tert butyl ether	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
p/m-Xylene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
o-Xylene	0.00068	J	0.00065	J	0.00068	J	0.00058	J	0.0007	J	0.00052	J	0.0007	J
Xylenes, Total	0.00068	J	0.00065	J	0.00068	J	0.00058	J	0.0007	J	0.00052	J	0.0007	J
cis-1,2-Dichloroethene	0.0013		0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.00038	J
1,2-Dichloroethene, Total	0.0013		0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.00038	J
Dibromomethane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
Styrene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Dichlorodifluoromethane	0.012	U	0.011	U	0.012	U	0.0099	U	0.012	U	0.0096	U	0.012	U
Acetone	0.012	U	0.0065	J	0.012	U	0.0099	U	0.012	U	0.0096	U	0.0058	J
Carbon disulfide	0.012	U	0.011	U	0.012	U	0.0099	U	0.012	U	0.0096	U	0.012	U
2-Butanone	0.012	U	0.011	U	0.012	U	0.0099	U	0.012	U	0.0096	U	0.012	U
Vinyl acetate	0.012	U	0.011	U	0.012	U	0.0099	U	0.012	U	0.0096	U	0.012	U
4-Methyl-2-pentanone	0.012	U	0.011	U	0.012	U	0.0099	U	0.012	U	0.0096	U	0.012	U
1,2,3-Trichloropropane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
2-Hexanone	0.012	U	0.011	U	0.012	U	0.0099	U	0.012	U	0.0096	U	0.012	U
Bromochloromethane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
2,2-Dichloropropane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,2-Dibromoethane	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
1,3-Dichloropropane	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,1,1,2-Tetrachloroethane	0.0006	U	0.00056	U	0.00059	U	0.0005	U	0.00062	U	0.00048	U	0.0006	U
Bromobenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
n-Butylbenzene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
sec-Butylbenzene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
tert-Butylbenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
o-Chlorotoluene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
p-Chlorotoluene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,2-Dibromo-3-chloropropane	0.0036	U	0.0034	U	0.0035	U	0.003	U	0.0037	U	0.0029	U	0.0036	U
Hexachlorobutadiene	0.0048	U	0.0045	U	0.0047	U	0.004	U	0.005	U	0.0038	U	0.0048	U
Isopropylbenzene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
p-Isopropyltoluene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
Naphthalene	0.0048	U	0.0045	U	0.0047	U	0.004	U	0.005	U	0.0038	U	0.0048	U
Acrylonitrile	0.0048	U	0.0045	U	0.0047	U	0.004	U	0.005	U	0.0038	U	0.0048	U
n-Propylbenzene	0.0012	U	0.0011	U	0.0012	U	0.00099	U	0.0012	U	0.00096	U	0.0012	U
1,2,3-Trichlorobenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,2,4-Trichlorobenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,3,5-Trimethylbenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,2,4-Trimethylbenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,4-Dioxane	0.096	U	0.09	U	0.094	U	0.079	U	0.099	U	0.077	U	0.095	U
p-Diethylbenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
p-Ethyltoluene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
1,2,4,5-Tetramethylbenzene	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
Ethyl ether	0.0024	U	0.0022	U	0.0023	U	0.002	U	0.0025	U	0.0019	U	0.0024	U
trans-1,4-Dichloro-2-butene	0.006	U	0.0056	U	0.0059	U	0.005	U	0.0062	U	0.0048	U	0.006	U

Legend
NY-RESC: New York Commercial Criteria
NY-RESER: New York Ecological Resources Criteria
NY-RESGW: New York Protection of Groundwater Criteria
NY-RESI: New York Industrial Criteria
NY-RESR: New York Residential Criteria
NY-RESRR: New York Restricted-Residential Criteria
NY-UNRES: New York Unrestricted use Criteria
* PFOA/PFOS comparison values are NYSDEC guidance values per Sampling, Analysis, and Assessment of PFAS, April 2023
J: Presumptive evidence of compound
U: Not Detected at the reported detection limit for the sample
1 Indicates an exceedance of the Unrestricted Use NY Soil Clenaup Objectives
1 Indicates an exceedance of the Industrial Use NY Soil Clenaup Objectives
1 Indicates an exceedance of the Protection of Ecological Resources Use NY Soil Clenaup Objectives
1 Indicates a non-detect result; however the method detection limit is above one of more NY Soil Cleanup Objectives

Table 3 - Groundwater Analytical Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION			MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-7D		SB-24(TW)		DUP-1		FIELD BLANK		TRIP BLANK	
SAMPLING DATE			1/5/2024		1/5/2024		1/4/2024		1/5/2024		1/4/2024		1/4/2024		1/5/2024		1/4/2024		11/16/2023		1/4/2024		1/5/2024		1/3/2024	
LAB SAMPLE ID			L2400982-01		L2400982-02		L2400982-03		L2400982-04		L2400982-05		L2400982-06		L2400982-07		L2400982-08		L2368746-03		L2400982-09		L2400982-10		L2400982-11	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,4 Dioxane by 8270E-SIM																										
1,4-Dioxane	0.35	ug/l	0.253		7.39		1.02		14.7		0.115	J	-	-	0.298		0.4		-	-	0.334		0.134	U	-	-
Dissolved Metals																										
Aluminum, Dissolved		ug/l	10.7		10	U	10	U	16.2		20.4		206		56		4.64	J	-	-	9	J	10	U	-	-
Antimony, Dissolved	3	ug/l	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	-	-	4	U	4	U	-	-
Arsenic, Dissolved	25	ug/l	0.2297	J	0.5	U	1.757		0.5	U	0.5	U	0.6298		0.5	U	0.2424	J	-	-	0.5	U	0.5	U	-	-
Barium, Dissolved	1000	ug/l	77.73		57.94		69.51		72.19		27.27		60.75		68.96		122.1		-	-	66.41		0.5	U	-	-
Beryllium, Dissolved	3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Cadmium, Dissolved	5	ug/l	0.5901		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U	-	-
Calcium, Dissolved		ug/l	42600		46900		66800		48500		32900		68400		54900		71200		-	-	53800		100	U	-	-
Chromium, Dissolved	50	ug/l	0.2144	J	1	U	0.202	J	1.188		0.2151	J	0.8972	J	0.2577	J	1	U	-	-	1	U	1	U	-	-
Cobalt, Dissolved		ug/l	6.401		0.5197		1.668		2.035		0.2035	J	0.5793		3.864		1.168		-	-	3.697		0.5	U	-	-
Copper, Dissolved	200	ug/l	4.363		0.4216	J	1	U	1	U	0.7344	J	3.902		1	U	1	U	-	-	1	U	1	U	-	-
Iron, Dissolved	300	ug/l	34.8	J	50	U	2060		27.8	J	99.7		296		199		198		-	-	105		50	U	-	-
Lead, Dissolved	25	ug/l	1	U	1	U	1	U	1	U	1	U	0.6177	J	1	U	1	U	-	-	1	U	1	U	-	-
Magnesium, Dissolved	35000	ug/l	19500		21700		21500		22600		13200		33200		22700		24800		-	-	22500		70	U	-	-
Manganese, Dissolved	300	ug/l	746		31.17		602.1		8.689		24.12		49.29		815		465.2		-	-	782.6		1	U	-	-
Mercury, Dissolved	0.7	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U	-	-
Nickel, Dissolved	100	ug/l	23.19		5.402		5.129		2.434		1.329	J	6.811		18.65		1.674	J	-	-	17.83		2	U	-	-
Potassium, Dissolved		ug/l	11800		8250		6730		6630		6300		3760		6780		9950		-	-	6660		100	U	-	-
Selenium, Dissolved	10	ug/l	5	U	5	U	5	U	5	U	5	U	6.24		5	U	5	U	-	-	5	U	5	U	-	-
Silver, Dissolved	50	ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	-	-	0.4	U	0.4	U	-	-
Sodium, Dissolved	20000	ug/l	329000		23500		32900		24600		23100		83400		34500		28600		-	-	34100		63	J	-	-
Thallium, Dissolved	0.5	ug/l	1	U	0.1972	J	0.1486	J	1	U	1	U	1	U	1	U	1	U	-	-	1	U	0.3024	J	-	-
Vanadium, Dissolved		ug/l	5	U	5	U	5	U	5	U	5	U	2.205	J	5	U	5	U	-	-	5	U	5	U	-	-
Zinc, Dissolved	2000	ug/l	83.5		10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U	-	-
General Chemistry																										
Chromium, Hexavalent	50	ug/l	4	J	3	J	5	J	10	U	10	U	10	U	10	U	10	U	-	-	3	J	3	J	-	-
Total Metals																										
Aluminum, Total		ug/l	219		1420		4830		1300		1720		2700		1170		125		-	-	1240		10	U	-	-
Antimony, Total	3	ug/l	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	-	-	4	U	4	U	-	-
Arsenic, Total	25	ug/l	0.4123	J	0.3698	J	4.941		0.1692	J	0.1681	J	1.911		0.239	J	0.3328	J	-	-	0.2111	J	0.5	U	-	-
Barium, Total	1000	ug/l	82.77		75.22		141.7		88.84		51.88		80.31		82.4		127.6		-	-	79.17		0.383	J	-	-
Beryllium, Total	3	ug/l	0.5	U	0.5	U	0.2302	J	0.5	U	0.2406	J	0.146	J	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Cadmium, Total	5	ug/l	0.59		0.0752	J	0.0985	J	0.2	U	0.2	U	0.0914	J	0.0654	J	0.2	U	-	-	0.2	U	0.2	U	-	-
Calcium, Total		ug/l	42600		45200		65600		46900		33200		68200		54100		70000		-	-	50900		100	U	-	-
Chromium, Total	50	ug/l	0.9811	J	5.803		22.08		6.295		3.666		14.92		4.037		0.5338	J	-	-	4.749		1	U	-	-
Cobalt, Total		ug/l	6.959		2.631		6.48		3.748		1.572		2.76		5.432		1.202		-	-	5.28		0.5	U	-	-
Copper, Total	200	ug/l	6.254		6.746		20.06		7.427		6.763		21.93		6.21		0.642	J	-	-	6.298		1	U	-	-
Iron, Total	300	ug/l	622		2970		17200		2730		4400		5420		3090		983		-	-	3340		50	U	-	-
Lead, Total	25	ug/l	0.7365	J	2.107		17.09		2.622		2.679		22.32		2.047		1	U	-	-	2.062		1	U	-	-
Magnesium, Total	35000	ug/l	19800		22000		23800		22700		14200		30900		23600		24400		-	-	21900		70	U	-	-
Manganese, Total	300	ug/l	805.8		121.2		741.1		200		67.81		138.2		889		441.3		-	-	841		1	U	-	-
Mercury, Total	0.7	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.099	J	0.2	U	0.2	U	-	-	0.2	U	0.2	U	-	-
Nickel, Total	100	ug/l	27.2		11.61		24.64		10.21		4.858		12.42		29.53		1.853	J	-	-	28.64		2	U	-	-
Potassium, Total		ug/l	11800		8260		7510		6990		7050		3800		6970		9080		-	-	6660		100	U	-	-
Selenium, Total	10	ug/l	5	U	5	U	5	U	5	U	5	U	3.42	J	5	U	5	U	-	-	5	U	5	U	-	-
Silver, Total	50	ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	-	-	0.4	U	0.4	U	-	-
Sodium, Total	20000	ug/l	328000		23100		32300		24400		23200		76400		34800		25700		-	-	32300		100	U	-	-
Thallium, Total	0.5	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	-	-	1	U	1	U	-	-
Vanadium, Total		ug/l	5	U	4.835	J	18.44		3.493	J	3.495	J	8.705		3.165	J	5	U	-	-	3.288	J	5	U	-	-
Zinc, Total	2000	ug/l	98.73		8.401	J	37.07		10.83		10.98		26.7		6.506	J	4.864	J	-	-	6.768	J	10	U	-	-

Table 3 - Groundwater Analytical Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION			MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-7D		SB-24(TW)		DUP-1		FIELD BLANK		TRIP BLANK	
SAMPLING DATE			1/5/2024		1/5/2024		1/4/2024		1/5/2024		1/4/2024		1/4/2024		1/5/2024		1/4/2024		11/16/2023		1/4/2024		1/5/2024		1/3/2024	
LAB SAMPLE ID			L2400982-01		L2400982-02		L2400982-03		L2400982-04		L2400982-05		L2400982-06		L2400982-07		L2400982-08		L2368746-03		L2400982-09		L2400982-10		L2400982-11	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Organochlorine Pesticides by GC																										
Delta-BHC	0.04	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Lindane	0.05	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Alpha-BHC	0.01	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Beta-BHC	0.04	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Heptachlor	0.04	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Aldrin	0	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Heptachlor epoxide	0.03	ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Endrin	0	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
Endrin aldehyde	5	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
Endrin ketone	5	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
Dieldrin	0.004	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
4,4'-DDE	0.2	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
4,4'-DDD	0.3	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
4,4'-DDT	0.2	ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
Endosulfan I		ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Endosulfan II		ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
Endosulfan sulfate		ug/l	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-	0.029	U	0.029	U	-	-
Methoxychlor	35	ug/l	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	-	-	0.143	U	0.143	U	-	-	0.143	U	0.143	U	-	-
Toxaphene	0.06	ug/l	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	-	-	0.143	U	0.143	U	-	-	0.143	U	0.143	U	-	-
cis-Chlordane		ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
trans-Chlordane		ug/l	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-	0.014	U	0.014	U	-	-
Chlordane	0.05	ug/l	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	-	-	0.143	U	0.143	U	-	-	0.143	U	0.143	U	-	-
Perfluorinated Alkyl Acids by EPA 1633																										
Perfluorobutanoic Acid (PFBA)		ug/l	0.00728		0.00657		0.00532	J	0.0055	J	0.0082		-	-	0.00622		0.00534	J	-	-	0.0062		0.00589	U	-	-
Perfluoropentanoic Acid (PFPeA)		ug/l	0.00299		0.00666		0.00558		0.00645		0.00405		-	-	0.00662		0.00617		-	-	0.0059		0.00295	U	-	-
Perfluorobutanesulfonic Acid (PFBS)		ug/l	0.00301		0.00331		0.00586		0.00512		0.00432		-	-	0.00809		0.00757		-	-	0.00804		0.00147	U	-	-
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
Perfluorohexanoic Acid (PFHxA)		ug/l	0.00306		0.00611		0.0063		0.00618		0.00474		-	-	0.00861		0.00535		-	-	0.00705		0.00147	U	-	-
Perfluoropentanesulfonic Acid (PFPeS)		ug/l	0.00102	J	0.00101	J	0.000372	J	0.00131	J	0.000491	J	-	-	0.0014	U	0.000396	J	-	-	0.00051	J	0.00147	U	-	-
Perfluoroheptanoic Acid (PFHpA)		ug/l	0.00202		0.00401		0.0043		0.00284		0.00583		-	-	0.00474		0.00498		-	-	0.00494		0.00147	U	-	-
Perfluorohexanesulfonic Acid (PFHxS)		ug/l	0.00264		0.00578		0.00386		0.0091		0.00275		-	-	0.00298		0.00407		-	-	0.00407		0.00147	U	-	-
Perfluorooctanoic Acid (PFOA)	0.0067	ug/l	0.00788		0.0132		0.0158		0.012		0.0284		-	-	0.0168		0.0177		-	-	0.0178		0.00147	U	-	-
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
Perfluoroheptanesulfonic Acid (PFHpS)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.000667	J	0.00142	U	-	-	0.000386	J	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluorononanoic Acid (PFNA)		ug/l	0.00142	J	0.000707	J	0.0011	J	0.00139	U	0.00237		-	-	0.00118	J	0.00162		-	-	0.00108	J	0.00147	U	-	-
Perfluorooctanesulfonic Acid (PFOS)	0.0027	ug/l	0.0127		0.0114		0.0149		0.0163		0.0104		-	-	0.0129		0.0137		-	-	0.0148		0.00147	U	-	-
Perfluorodecanoic Acid (PFDA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
Perfluorononanesulfonic Acid (PFNS)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluoroundecanoic Acid (PFUnA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluorodecanesulfonic Acid (PFDS)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluorooctanesulfonamide (PFOSA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluorododecanoic Acid (PFDoA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluorotridecanoic Acid (PFTrDA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Perfluorotetradecanoic Acid (PFTeDA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
Perfluorododecanesulfonic Acid (PFDoS)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)		ug/l	0.00589	U	0.0056	U	0.00562	U	0.00556	U	0.00569	U	-	-	0.00561	U	0.00556	U	-	-	0.00574	U	0.00589	U	-	-
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)		ug/l	0.00147	U	0.0014	U	0.0014	U	0.00139	U	0.00142	U	-	-	0.0014	U	0.00139	U	-	-	0.00144	U	0.00147	U	-	-
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)		ug/l	0.0147	U	0.014	U	0.014	U	0.0139	U	0.0142	U	-	-	0.014	U	0.0139	U	-	-	0.0144	U	0.0147	U	-	-
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)		ug/l	0.0147	U	0.014	U	0.014	U	0.0139	U	0.0142	U	-	-	0.014	U	0.0139	U	-	-	0.0144	U	0.0147	U	-	-
Perfluoro-3-Methoxypropanoic Acid (PFMPA)		ug/l	0.00294	U	0.0028	U	0.00281	U	0.00278	U	0.00284	U	-	-	0.00281	U	0.00278	U	-	-	0.00287	U	0.00295	U	-	-
Perfluoro-4-Methoxybutanoic Acid (PFMBA)		ug/l	0.00294	U	0.0028	U	0.00281	U	0.00278	U	0.00284	U	-	-	0.00281	U	0.00278	U	-	-	0.00287	U	0.00295	U	-	-
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)		ug/l	0.00294	U	0.0028	U	0.00281	U	0.00278	U	0.00284	U	-	-	0.00281	U	0.00278	U	-	-	0.00287	U	0.00295	U	-	-
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)		ug/l	0.00294	U	0.0028	U	0.00281	U	0.00278	U	0.00284	U	-	-	0.00281	U	0.00278	U	-	-	0.00287	U	0.00295	U	-	-
3-Perfluoropropyl Propanoic Acid (3:3FTCA)		ug/l	0.00736	U	0.007	U	0.00703	U	0.00695	U	0.00711	U	-	-	0.00702	U	0.00694	U	-	-	0.00718	U	0.00737	U	-	-
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)		ug/l	0.0368	U	0.035	U	0.0351	U	0.0347	U	0.0356	U	-	-	0.0351	U	0.0347	U	-	-	0.0359	U	0.0368	U	-	-
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)		ug/l	0.0368	U	0.035	U	0.0351	U	0.0347	U	0.0356	U	-	-	0.0351	U	0.0347	U	-	-	0.0359	U	0.0368	U	-	-
Polychlorinated Biphenyls by GC																										
Aroclor 1016	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1221	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1232	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1242	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1248	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1254	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1260	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1262	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
Aroclor 1268	0.09	ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-
PCBs, Total		ug/l	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-	0.071	U	0.071	U	-	-

Table 3 - Groundwater Analytical Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION			MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-7D		SB-24(TW)		DUP-1		FIELD BLANK		TRIP BLANK	
SAMPLING DATE			1/5/2024		1/5/2024		1/4/2024		1/5/2024		1/4/2024		1/4/2024		1/5/2024		1/4/2024		11/16/2023		1/4/2024		1/5/2024		1/3/2024	
LAB SAMPLE ID			L2400982-01		L2400982-02		L2400982-03		L2400982-04		L2400982-05		L2400982-06		L2400982-07		L2400982-08		L2368746-03		L2400982-09		L2400982-10		L2400982-11	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS																										
1,2,4-Trichlorobenzene	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Bis(2-chloroethyl)ether	1	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
1,2-Dichlorobenzene	3	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
1,3-Dichlorobenzene	3	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
1,4-Dichlorobenzene	3	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
3,3'-Dichlorobenzidine	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2,4-Dinitrotoluene	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2,6-Dinitrotoluene	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
4-Chlorophenyl phenyl ether		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
4-Bromophenyl phenyl ether		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
Bis(2-chloroisopropyl)ether	5	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
Bis(2-chloroethoxy)methane	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Hexachlorocyclopentadiene	5	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	20	U	20	U	-	-
Isophorone	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Nitrobenzene	0.4	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
NDPA/DPA	50	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
n-Nitrosodi-n-propylamine		ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Bis(2-ethylhexyl)phthalate	5	ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	-	-	3	U	3	U	-	-
Butyl benzyl phthalate	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Di-n-butylphthalate	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Di-n-octylphthalate	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Diethyl phthalate	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Dimethyl phthalate	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Biphenyl		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
4-Chloroaniline	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2-Nitroaniline	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
3-Nitroaniline	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
4-Nitroaniline	5	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Dibenzofuran		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
1,2,4,5-Tetrachlorobenzene	5	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U	-	-
Acetophenone		ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2,4,6-Trichlorophenol		ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
p-Chloro-m-cresol		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
2-Chlorophenol		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
2,4-Dichlorophenol	1	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2,4-Dimethylphenol	50	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2-Nitrophenol		ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U	-	-
4-Nitrophenol		ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U	-	-
2,4-Dinitrophenol	10	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	20	U	20	U	-	-
4,6-Dinitro-o-cresol		ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	10	U	10	U	-	-
Phenol	1	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2-Methylphenol		ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
3-Methylphenol/4-Methylphenol		ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
2,4,5-Trichlorophenol		ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	5	U	-	-
Benzoic Acid		ug/l	50	U	50	U	6.3	J	50	U	6.2	J	50	U	50	U	8.6	J	-	-	6.3	J	50	U	-	-
Benzyl Alcohol		ug/l	2	U	2	U	0.91	J	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
Carbazole		ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	2	U	-	-
Semivolatile Organics by GC/MS-SIM																										
Acenaphthene	20	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.02	J	0.02	J	0.1	U	-	-	0.1	U	0.1	U	-	-
2-Chloronaphthalene	10	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U	-	-
Fluoranthene	50	ug/l	0.02	J	0.04	J	0.08	J	0.1	U	0.03	J	0.13		0.13		0.09	J	-	-	0.13		0.1	U	-	-
Hexachlorobutadiene	0.5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Naphthalene	10	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1		0.1	U	0.1	U	0.07	J	-	-	0.1	U	0.1	U	-	-
Benzo(a)anthracene	0.002	ug/l	0.03	J	0.03	J	0.05	J	0.1	U	0.02	J	0.04	J	0.03	J	0.02	J	-	-	0.03	J	0.1	U	-	-
Benzo(a)pyrene	0	ug/l	0.02	J	0.04	J	0.06	J	0.1	U	0.02	J	0.03	J	0.02	J	0.02	J	-	-	0.02	J	0.1	U	-	-
Benzo(b)fluoranthene	0.002	ug/l	0.03	J	0.07	J	0.08	J	0.1	U	0.03	J	0.05	J	0.03	J	0.03	J	-	-	0.04	J	0.1	U	-	-
Benzo(k)fluoranthene	0.002	ug/l	0.01	J	0.02	J	0.04	J	0.1	U	0.01	J	0.02	J	0.02	J	0.01	J	-	-	0.02	J	0.1	U	-	-
Chrysene	0.002	ug/l	0.02	J	0.04	J	0.06	J	0.1	U	0.03	J	0.04	J	0.03	J	0.02	J	-	-	0.04	J	0.1	U	-	-
Acenaphthylene		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	-	-
Anthracene	50	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.02	J	0.03	J	0.03	J	0.02	J	-	-	0.03	J	0.1	U	-	-
Benzo(ghi)perylene		ug/l	0.02	J	0.04	J	0.05	J	0.1	U	0.02	J	0.03	J	0.02	J	0.01	J	-	-	0.03	J	0.1	U	-	-
Fluorene	50	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.03	J	0.02	J	0.02	J	-	-	0.02	J	0.02	J	-	-
Phenanthrene	50	ug/l	0.1	U	0.1	U	0.03	J	0.1	U	0.04	J	0.1	J	0.19		0.05	J	-	-	0.19		0.05	J	-	-
Dibenzo(a,h)anthracene		ug/l	0.1	U	0.1	U	0.02	J	0.1	U	0.1	U	0.01	J	0.1	U	0.1	U	-	-	0.02	J	0.1	U	-	-
Indeno(1,2,3-cd)pyrene	0.002	ug/l	0.1	U	0.04	J	0.05	J	0.1	U	0.02	J	0.03	J	0.02	J	0.01	J	-	-	0.03	J	0.1	U	-	-
Pyrene	50	ug/l	0.02	J	0.1	U	0.08	J	0.1	U	0.04	J	0.1		0.1	J	0.08	J	-	-	0.1	J	0.1	U	-	-
2-Methylnaphthalene		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.06	J	-	-	0.1	U	0.1	U	-	-
Pentachlorophenol	1	ug/l	0.8	U	0.8	U	0.07	J	0.8	U	0.11	J	0.8	U	0.05	J	0.31	J	-	-	0.05	J	0.8	U	-	-
Hexachlorobenzene	0.04	ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.01	J	-	-	0.8	U	0.8	U	-	-
Hexachloroethane	5	ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U	-	-

Table 3 - Groundwater Analytical Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION			MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-7D		SB-24(TW)		DUP-1		FIELD BLANK		TRIP BLANK	
SAMPLING DATE			1/5/2024		1/5/2024		1/4/2024		1/5/2024		1/4/2024		1/4/2024		1/5/2024		1/4/2024		11/16/2023		1/4/2024		1/5/2024		1/3/2024	
LAB SAMPLE ID			L2400982-01		L2400982-02		L2400982-03		L2400982-04		L2400982-05		L2400982-06		L2400982-07		L2400982-08		L2368746-03		L2400982-09		L2400982-10		L2400982-11	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by GC/MS																										
Methylene chloride	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethane	5	ug/l	2.7		79		9.2		59		2.5	U	2.5	U	2.5		1.8	J	2.5	U	2.2	J	2.5	U	2.5	U
Chloroform	7	ug/l	2.5	U	6.2	U	2.5	U	0.86	J	2.5	U	9.7		2.5	U	1.3	J	2.5	U	2.5	U	2.5	U	2.5	U
Carbon tetrachloride	5	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	ug/l	1	U	2.5	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	1	ug/l	1.5	U	3.8	U	1.5	U	0.92	J	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Tetrachloroethene	5	ug/l	27		280		12		180		44		0.5	U	7.7		0.5	U	0.5	U	8.2		0.5	U	0.5	U
Chlorobenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichlorofluoromethane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	0.6	ug/l	0.5	U	1.5		0.5	U	0.9		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	ug/l	20		660		27		310		1.4	J	2.5	U	13		2.5	U	2.5	U	12		2.5	U	2.5	U
Bromodichloromethane	50	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.4	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.4	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropene, Total		ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromoform	50	ug/l	2	U	5	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	5	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	1	ug/l	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Ethylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloromethane		ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromomethane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Vinyl chloride	2	ug/l	1	U	0.38	J	4.7		0.13	J	0.98	J	1	U	1	U	1	U	1	U	0.11	J	1	U	1	U
Chloroethane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethene	5	ug/l	9		420		24		140	E	0.51		0.5	U	9.2		0.27	J	0.5	U	7.8		0.5	U	0.5	U
trans-1,2-Dichloroethene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichloroethene	5	ug/l	1.3		30		5.3		55		6.7		0.5	U	1.7		0.3	J	0.5	U	1.7		0.5	U	0.5	U
1,2-Dichlorobenzene	3	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	3	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	3	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	10	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Xylenes, Total		ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	5	ug/l	2	J	48		5		40		27		2.5	U	1.9	J	2	J	2.5	U	1.6	J	2.5	U	2.5	U
1,2-Dichloroethene, Total		ug/l	2	J	48		5		40		27		2.5	U	1.9	J	2	J	2.5	U	1.6	J	2.5	U	2.5	U
Dibromomethane	5	ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	0.04	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Acrylonitrile	5	ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Dichlorodifluoromethane	5	ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	50	ug/l	5	U	12	U	5	U	5	U	5	U	3.1	J	5	U	2.2	J	5	U	5	U	5	U	5	U
Carbon disulfide	60	ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	50	ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl acetate		ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone		ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	50	ug/l	5	U	12	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2,2-Dichloropropane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	0.0006	ug/l	2	U	5	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,3-Dichloropropane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1,1,2-Tetrachloroethane	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromobenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Butylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
sec-Butylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
tert-Butylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Chlorotoluene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Chlorotoluene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	0.04	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Hexachlorobutadiene	0.5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Isopropyltoluene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Naphthalene	10	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Propylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,3-Trichlorobenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trichlorobenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3,5-Trimethylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trimethylbenzene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dioxane		ug/l	250	U	620	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U
p-Diethylbenzene		ug/l	2	U	5	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
p-Ethyltoluene		ug/l	2	U	5	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2,4,5-Tetramethylbenzene	5	ug/l	2	U	5	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl ether		ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
trans-1,4-Dichloro-2-butene	5	ug/l	2.5	U	6.2	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U

Legend

NY-AWQS	New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.
J:	Presumptive evidence of compound
U:	Not Detected at the reported detection limit for the sample
1	Indicates an exceedance of the NY AWQS / Guidance Value
1	Indicates a non-detect result; however the method detection limit is above the NY AWQS / Guidace Value

Table 4 - Remedial Investigation Soil Vapor Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION								VP-7		VP-8		VP-9		VP-1		VP-2		VP-3		VP-4		VP-5		VP-6	
SAMPLING DATE								11/16/2023		11/16/2023		11/16/2023		11/28/2023		11/28/2023		11/28/2023		11/28/2023		11/28/2023		11/28/2023	
LAB SAMPLE ID								L2368880-01		L2368880-02		L2368880-03		L2370191-01		L2370191-02		L2370191-03		L2370191-04		L2370191-05		L2370191-06	
SAMPLE TYPE								SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR		SOIL VAPOR	
SAMPLE DEPTH (ft.)																									
	NY-SSC-A	NY-SSC-B	NY-SSC-C	NY-SSC-D	NY-SSC-E	NY-SSC-F	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																									
Dichlorodifluoromethane							ug/m3	2.19		2.21		2.18		2.3		7.07	U	2.15		2.47	U	2.38		65.3	U
Chloromethane							ug/m3	2.58		0.898		1.41		0.797		2.95	U	0.568		1.07		0.545		27.3	U
Freon-114							ug/m3	1.4	U	1.4	U	1.4	U	1.4	U	10	U	1.4	U	3.49	U	1.4	U	92.3	U
Vinyl chloride			6				ug/m3	1.6		0.511	U	0.511	U	0.511	U	3.66	U	0.511	U	1.28	U	0.511	U	33.7	U
1,3-Butadiene							ug/m3	20.7		33.4		17.7		0.442	U	7.19		0.442	U	1.11	U	31.4		29.2	
Bromomethane							ug/m3	2.05		0.777	U	0.777	U	0.777	U	5.55	U	0.777	U	1.94	U	0.777	U	51.3	U
Chloroethane							ug/m3	0.528	U	0.528	U	0.528	U	0.528	U	3.77	U	0.528	U	1.32	U	0.66		34.8	U
Ethanol							ug/m3	15.1		11.5		25.1		131		230		50.3		23.6	U	298		620	U
Vinyl bromide							ug/m3	0.874	U	0.874	U	0.874	U	0.874	U	6.25	U	0.874	U	2.19	U	0.874	U	57.7	U
Acetone							ug/m3	32.3		33.5		45.1		16.7		5060		254		23.6		2490		1960	
Trichlorofluoromethane							ug/m3	1.18		1.16		1.12	U	1.27		8.04	U	1.14		2.81	U	1.3		74.2	U
Isopropanol							ug/m3	2.34		1.5		1.95		1.58		149		3.17		3.07	U	230		80.9	U
1,1-Dichloroethene	6						ug/m3	78.1		0.793	U	0.793	U	0.793	U	5.67	U	0.793	U	630		1670		2400	
Tertiary butyl Alcohol							ug/m3	8.43		9.52		9.06		1.52	U	121		1.52	U	3.79	U	173		99.7	U
Methylene chloride		100					ug/m3	1.74	U	3.79		4.41		3.08		12.4	U	1.74	U	4.34	U	2.11		114	U
3-Chloropropene							ug/m3	0.626	U	0.626	U	0.626	U	0.626	U	4.48	U	0.626	U	1.57	U	0.626	U	41.3	U
Carbon disulfide							ug/m3	10.3		15.1		1.3		0.623	U	8.59		2.55		3.3		1.98		41.1	U
Freon-113							ug/m3	2.05		1.53	U	1.53	U	1.53	U	11	U	1.53	U	9.04		142		101	U
trans-1,2-Dichloroethene							ug/m3	0.793	U	0.793	U	0.793	U	0.793	U	5.67	U	0.793	U	1.98	U	1.85		52.3	U
1,1-Dichloroethane							ug/m3	2.41		0.809	U	0.809	U	0.809	U	5.79	U	0.809	U	60.7		212		90.7	
Methyl tert butyl ether							ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	5.16	U	0.721	U	1.8	U	0.721	U	47.6	U
2-Butanone							ug/m3	4.48		4.63		6.34		10.1		372		58.4		3.69	U	475		413	
cis-1,2-Dichloroethene	6						ug/m3	0.793	U	0.793	U	0.793	U	0.793	U	5.67	U	0.793	U	17.6		51.5		52.3	U
Ethyl Acetate							ug/m3	1.8	U	1.8	U	1.8	U	1.8	U	12.9	U	1.8	U	4.5	U	2.67		119	U
Chloroform							ug/m3	0.977	U	0.977	U	0.977	U	0.977	U	6.98	U	1.47		2.44	U	10.9		91.3	
Tetrahydrofuran							ug/m3	1.47	U	1.47	U	1.49		1.47	U	319		57.2		3.69	U	1.47	U	330	
1,2-Dichloroethane							ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	5.79	U	0.809	U	2.02	U	0.809	U	53.4	U
n-Hexane					200		ug/m3	4.3		9.59		95.9		68		30.6		10.7		4.9		103		57.4	
1,1,1-Trichloroethane		100					ug/m3	73.1		2.88		10.7		3.3		225		5.62		1010		5890		17200	
Benzene				60			ug/m3	3.67		4.5		3.15		34.8		34.5		9.17		2.45		48.6		61.3	
Carbon tetrachloride	6						ug/m3	1.26	U	1.26	U	1.26	U	1.26	U	9	U	1.26	U	3.15	U	1.26	U	83	U
Cyclohexane				60			ug/m3	0.761		1.03		1.12		23.2		4.92	U	1.06		1.72	U	23.2		62.3	
1,2-Dichloropropane							ug/m3	0.924	U	0.924	U	0.924	U	0.924	U	6.61	U	0.924	U	2.31	U	0.924	U	61	U
Bromodichloromethane							ug/m3	1.34	U	1.34	U	1.34	U	1.34	U	9.58	U	1.34	U	3.35	U	1.34	U	88.4	U
1,4-Dioxane							ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	5.15	U	0.721	U	1.8	U	0.721	U	47.6	U
Trichloroethene	6						ug/m3	1.07	U	1.07	U	1.07	U	2.33		20.6		1.07	U	15.6		158		1870	
2,2,4-Trimethylpentane				60			ug/m3	5.23		8.73		8.5		37.8		6.68	U	0.934	U	2.34	U	0.934	U	61.7	U
Heptane					200		ug/m3	2.08		3.9		19.6		70.5		29		9.88		2.66		110		54.1	U
cis-1,3-Dichloropropene							ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	6.49	U	0.908	U	2.27	U	0.908	U	59.9	U
4-Methyl-2-pentanone							ug/m3	2.05	U	2.05	U	2.05	U	2.05	U	50		2.05	U	5.12	U	364		135	U
trans-1,3-Dichloropropene							ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	6.49	U	0.908	U	2.27	U	0.908	U	59.9	U
1,1,2-Trichloroethane							ug/m3	1.09	U	1.09	U	1.09	U	1.09	U	7.8	U	1.09	U	2.73	U	1.09	U	72	U
Toluene						300	ug/m3	8.97		13.5		10.3		218		193		98.4		12.9		269		226	
2-Hexanone							ug/m3	0.82	U	0.82	U	0.82	U	0.82	U	34.5		4.03		2.05	U	118		54.1	U
Dibromochloromethane							ug/m3	1.7	U	1.7	U	1.7	U	1.7	U	12.2	U	1.7	U	4.26	U	1.7	U	112	U
1,2-Dibromoethane							ug/m3	1.54	U	1.54	U	1.54	U	1.54	U	11	U	1.54	U	3.84	U	1.54	U	101	U
Tetrachloroethene		100					ug/m3	4.79		5.5		3.8		29.6		34		1.67		24.8		2260		7730	
Chlorobenzene							ug/m3	0.921	U	0.921	U	0.921	U	0.921	U	6.59	U	0.921	U	2.3	U	0.921	U	60.8	U
Ethylbenzene				60			ug/m3	1.71		2.6		1.98		63.9		153		27.8		4.03		76.9		57.3	U
p/m-Xylene					200		ug/m3	6.04		9.77		7.08		180		360		87.7		13.7		222		172	
Bromoform							ug/m3	2.07	U	2.07	U	2.07	U	2.07	U	14.8	U	2.07	U	5.17	U	2.07	U	136	U
Styrene							ug/m3	2.01		3.79		2.3		0.852	U	6.09	U	0.852	U	2.13	U	0.852	U	56.2	U
1,1,2,2-Tetrachloroethane							ug/m3	1.37	U	1.37	U	1.37	U	1.37	U	9.82	U	1.37	U	3.43	U	1.37	U	90.6	U
o-Xylene				60			ug/m3	1.92		3		2.2		50.8		65.2		17		3.7		49.5		57.3	U
4-Ethyltoluene							ug/m3	0.983	U	0.983	U	0.983	U	14.5		11.5		6.54		2.46	U	15.6		64.9	U
1,3,5-Trimethylbenzene				60			ug/m3	0.983	U	1.38		0.983	U	10.7		7.03	U	2.4		2.46	U	6.15		64.9	U
1,2,4-Trimethylbenzene				60			ug/m3	2.23		4.55		2.86		42.3		19.9		11		9.24		27.8		64.9	U
Benzyl chloride							ug/m3	1.04	U	1.04	U	1.04	U	1.04	U	7.4	U	1.04	U	2.59	U	1.04	U	68.3	U
1,3-Dichlorobenzene							ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	8.6	U	1.2	U	3.01	U	1.2	U	79.4	U
1,4-Dichlorobenzene							ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	8.6	U	1.2	U	3.01	U	1.2	U	79.4	U
1,2-Dichlorobenzene							ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	8.6	U	1.2	U	3.01	U	1.2	U	79.4	U
1,2,4-Trichlorobenzene							ug/m3	1.48	U	1.48	U	1.48	U	1.48	U	10.6	U	1.48	U	3.71	U	1.48	U	98	U
Hexachlorobutadiene							ug/m3	2.13	U	2.13	U	2.13	U	2.13	U	15.3	U	2.13	U	5.33	U	2.13	U	141	U

Legend

NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-SSC-C: New York DOH Matrix C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-SSC-D: New York DOH Matrix D Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-SSC-E: New York DOH Matrix E Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-SSC-F: New York DOH Matrix F Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
J: Presumptive evidence of compound
U: Not detected at the reported detection limit for the sample
1: Indicates an exceedance of the NY Matrix Value
1: Indicates a non-detect result; however, the method detection limit is above the NY Matrix Value

Table 5 - Remedial Investigation Indoor/Ambient Results
125 Beechwood Ave., New Rochelle, NY
BCP Site No. C360232

LOCATION								IA-1		IA-2		IA-3		IA-4		IA-5		IA-6		AA-1	
SAMPLING DATE								11/28/2023		11/28/2023		11/28/2023		11/28/2023		11/28/2023		11/28/2023		11/28/2023	
LAB SAMPLE ID								L2370191-07		L2370191-08		L2370191-09		L2370191-10		L2370191-11		L2370191-12		L2370191-13	
SAMPLE TYPE								AIR		AIR		AIR		AIR		AIR		AIR		AIR	
SAMPLE DEPTH (ft.)																					
	NY-IAC-A	NY-IAC-B	NY-IAC-C	NY-IAC-D	NY-IAC-E	NY-IAC-F	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air																					
Dichlorodifluoromethane							ug/m3	1.88		1.91		1.82		1.89		1.92		1.95		1.83	
Chloromethane							ug/m3	1.1		1.03		0.966		0.849		1.04		1.19		1.01	
Freon-114							ug/m3	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Vinyl chloride			0.2				ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Butadiene							ug/m3	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U
Bromomethane							ug/m3	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Chloroethane							ug/m3	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Ethanol							ug/m3	79.9		28.8		9.72		9.42	U	45.2		245		9.42	U
Vinyl bromide							ug/m3	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Acetone							ug/m3	175		49.4		96.2		48.7		49.6		25.2		4.42	
Trichlorofluoromethane							ug/m3	1.16		1.29		1.12	U	1.12	U	1.12	U	1.12	U	1.12	U
Isopropanol							ug/m3	14.1		6.05		2.7		1.37		5.41		21.4		1.23	U
1,1-Dichloroethene	0.2						ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tertiary butyl Alcohol							ug/m3	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U
Methylene chloride		3					ug/m3	3.79		15.2		1.74	U	3.65		2.9		2.55		1.74	U
3-Chloropropene							ug/m3	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
Carbon disulfide							ug/m3	27.8		71		7.88		4.3		0.623	U	0.623	U	0.623	U
Freon-113							ug/m3	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
trans-1,2-Dichloroethene							ug/m3	0.876		0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
1,1-Dichloroethane							ug/m3	0.809	U	0.809	U	0.809	U	2.2		0.809	U	0.809	U	0.809	U
Methyl tert butyl ether							ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2-Butanone							ug/m3	6.43		1.47	U	1.47	U	1.47	U	1.52		1.47	U	1.47	U
cis-1,2-Dichloroethene	0.2						ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Acetate							ug/m3	2.4		1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Chloroform							ug/m3	1.96		4.3		0.977	U	0.977	U	0.977	U	0.977	U	0.977	U
Tetrahydrofuran							ug/m3	6.84		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
1,2-Dichloroethane							ug/m3	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
n-Hexane					6		ug/m3	9.48		1.86		1.66		1.35		2.03		1.34		0.705	U
1,1,1-Trichloroethane		3					ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene				2			ug/m3	4.06		1.35		0.965		1.4		1.2		0.77		0.639	U
Carbon tetrachloride	0.2						ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane				2			ug/m3	8.23		0.792		0.688	U	0.688	U	0.967		0.688	U	0.688	U
1,2-Dichloropropane							ug/m3	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
Bromodichloromethane							ug/m3	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
1,4-Dioxane							ug/m3	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Trichloroethene	0.2						ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,2,4-Trimethylpentane				2			ug/m3	4.95		0.934	U	0.934	U	0.934	U	0.976		0.934	U	0.934	U
Heptane					6		ug/m3	5.82		1.15		0.844		0.82	U	1.22		0.82	U	0.82	U
cis-1,3-Dichloropropene							ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
4-Methyl-2-pentanone							ug/m3	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
trans-1,3-Dichloropropene							ug/m3	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
1,1,2-Trichloroethane							ug/m3	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
Toluene						10	ug/m3	13.6		2.96		2.34		3.23		3.77		1.86		0.754	U
2-Hexanone							ug/m3	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
Dibromochloromethane							ug/m3	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
1,2-Dibromoethane							ug/m3	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
Tetrachloroethene		3					ug/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene							ug/m3	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Ethylbenzene				2			ug/m3	33.2		2.18		1.19		3.4		3.61		0.99		0.869	U
p/m-Xylene					6		ug/m3	9.51		4.56		3.89		10.3		6.52		1.74	U	1.74	U
Bromoform							ug/m3	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
Styrene							ug/m3	1.19		0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U
1,1,2,2-Tetrachloroethane							ug/m3	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
o-Xylene				2			ug/m3	3.34		1.49		1.55		3.38		2.04		0.869	U	0.869	U
4-Ethyltoluene							ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,3,5-Trimethylbenzene				2			ug/m3	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,2,4-Trimethylbenzene				2			ug/m3	3.6		1.57		1.73		1.94		1.8		0.983	U	0.983	U
Benzyl chloride							ug/m3	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
1,3-Dichlorobenzene							ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene							ug/m3	3.51		1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2-Dichlorobenzene							ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2,4-Trichlorobenzene							ug/m3	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
Hexachlorobutadiene							ug/m3	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Volatile Organics in Air by SIM																					
Vinyl chloride			0.2				ug/m3	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U
1,1-Dichloroethene	0.2						ug/m3	0.301		0.373		0.079	U	8.17		0.785		0.456		0.079	U
cis-1,2-Dichloroethene	0.2						ug/m3	0.079	U	0.079	U	0.079	U	1.2		0.127		0.258		0.079	U
1,1,1-Trichloroethane		3					ug/m3	0.758		0.966		0.109	U	14		2		2		0.109	U
Carbon tetrachloride	0.2						ug/m3	0.465		0.51		0.409		0.421		0.421		0.415		0.384	
Trichloroethene	0.2						ug/m3	0.489		0.441		0.118		0.983		0.435		0.79		0.107	U
Tetrachloroethene		3					ug/m3	13.4		3.45		0.99		10.2		5.21		4.24		0.136	U

Legend

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-IAC-D: New York DOH Matrix D Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-IAC-E: New York DOH Matrix E Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
NY-IAC-F: New York DOH Matrix F Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
J: Presumptive evidence of compound
U: Not Detected at the reported detection limit for the sample
1: Indicates an exceedance of the NY Matrix Value

TABLE 6
Emergency Contacts
NYSDEC BCP Site C360232 - 125 Beechwood LLC
125 Beechwood Avenue
New Rochelle, New York

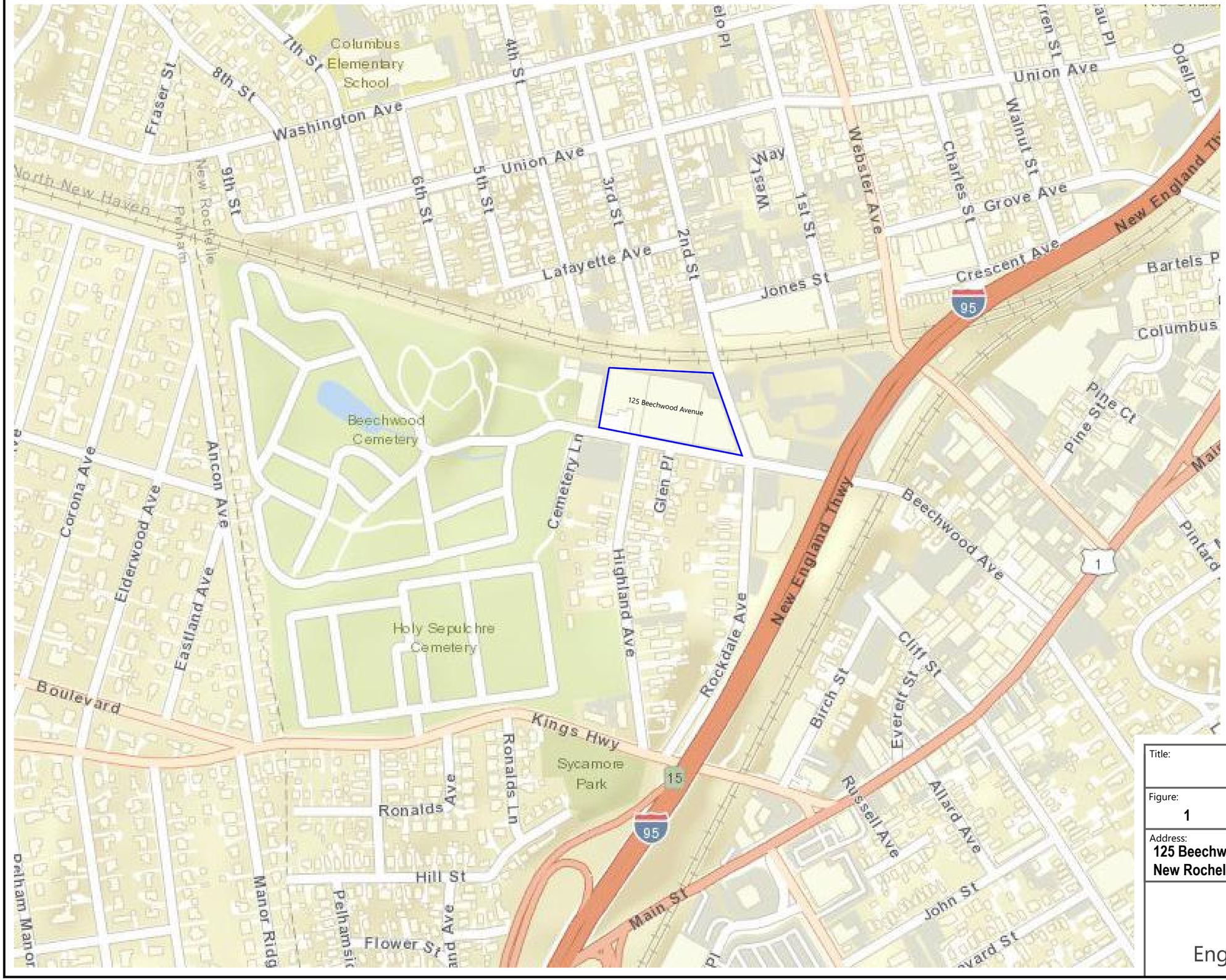
Contact	Firm or Agency	Telephone Number
Police	New Rochelle Police Department	911
Fire	New Rochelle Fire Department	911
Hospital	Montefiore New Rochelle Hospital	(914)632-5000
Ambluance	Montefiore New Rochelle Hospital	911
Remedial Engineer	Kristine MacWilliams	(704) 893-8761
Project Manager	Anthony Cauterucci	(551) 455-3406
NYSDEC Site Contact	Emily Barry	(845) 633-5457
NYSDEC Spills Hotline	NYSDEC	(800) 457-7362
NYSDOH Site Contact	Mark Sergott	(518) 402-7860
One Call Center	New York 811	(800) 272-4480
Poison Control Center	NYC Health Dept	(212) 764-7667
Chemtrec	Chemtrec	(800) 262-8200
National Response Center	US EPA	(800) 424-8802

TABLE 7
Estimated Schedule
NYSDEC BCP Site C360232 - 125 Beechwood LLC
125 Beechwood Avenue
New Rochelle, New York

ACTIVITY	PLANNED START DATE
Draft RAWP Submittal	3/28/2025
Initial NYSDEC Public Comment Period	5/19/2025 to 7/3/2025
Send Fact Sheet to Contact List	5/19/2025
Revised Draft Submittal	7/18/2025
NYSDEC RAWP Approval	8/29/2025
Second NYSDEC Public Comment Period	9/1/2025 to 10/17/2025
VIMS Installation	11/3/2025 to 4/30/2026
Draft FER/SMP/EE Submittal	8/31/2026
NYSDEC/NYSDOH Review	10/1/2026
Final FER/SMP/EE Submittal	11/1/2026
NYSDEC Approval, Establishment of EE, and Issuance of Certificate of Completion	12/31/2026
Commence Post-Remediation Monitoring	3/30/2027

FIGURES

PSG



Legend and Notes:

Site Boundary

N

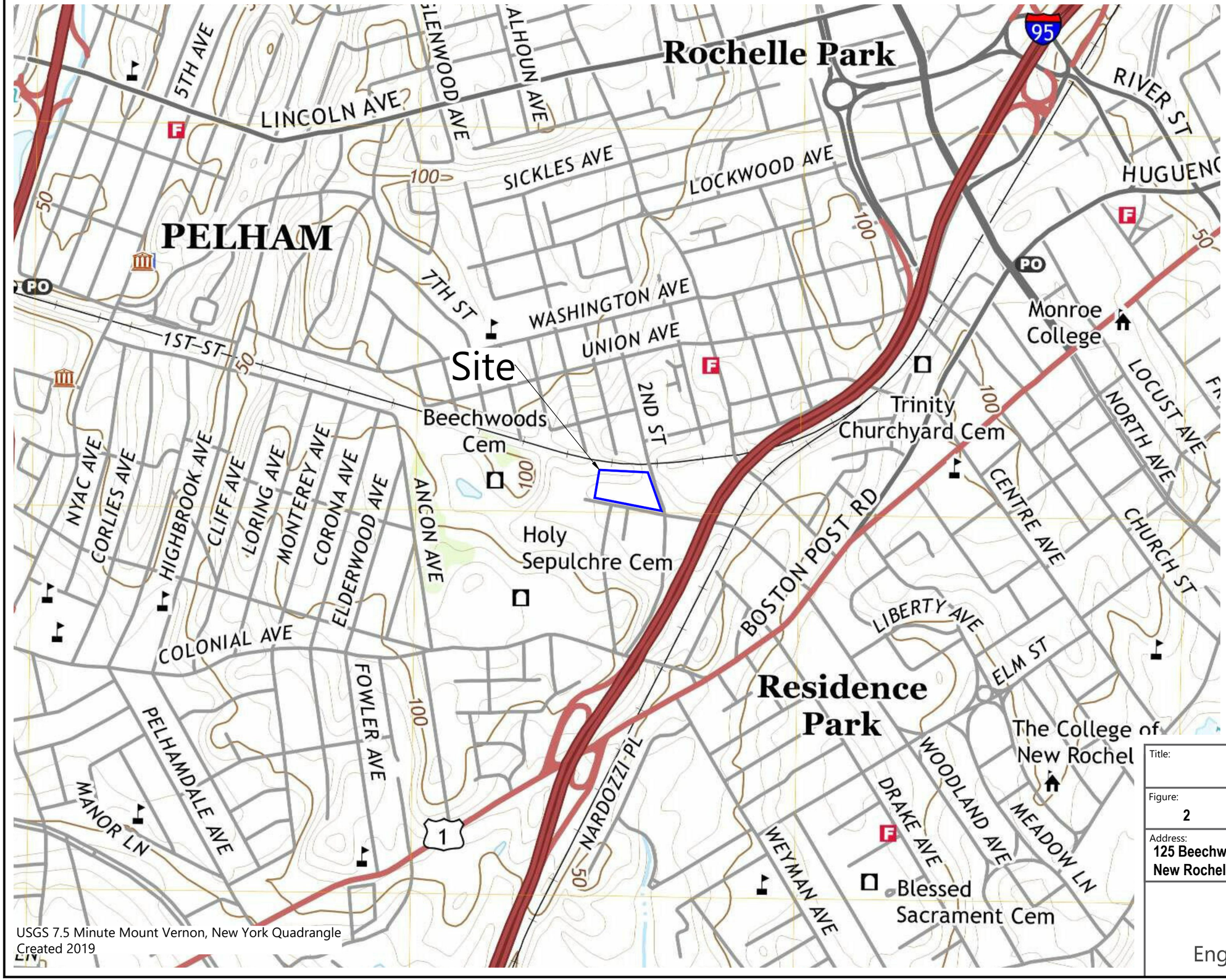
200' 0' 200' 400'

Approximate Scale

Title: **Site Location Map**			
Figure: **1**	Prepared By: **AS**	Date: **March 2024**	Project Number: **21393176-EN**
Address: **125 Beechwood Avenue, New Rochelle, New York 10801**			

PSG

Engineering and Geology, D.P.C.



USGS 7.5 Minute Mount Vernon, New York Quadrangle
Created 2019

Legend and Notes:

Site Boundary

N

400' 0' 400' 800'

Approximate Scale

Title: **Topographic Map**			
Figure: **2**	Prepared By: **AS**	Date: **March 2024**	Project Number: **21393176-EN**
Address: **125 Beechwood Avenue, New Rochelle, New York 10801**			

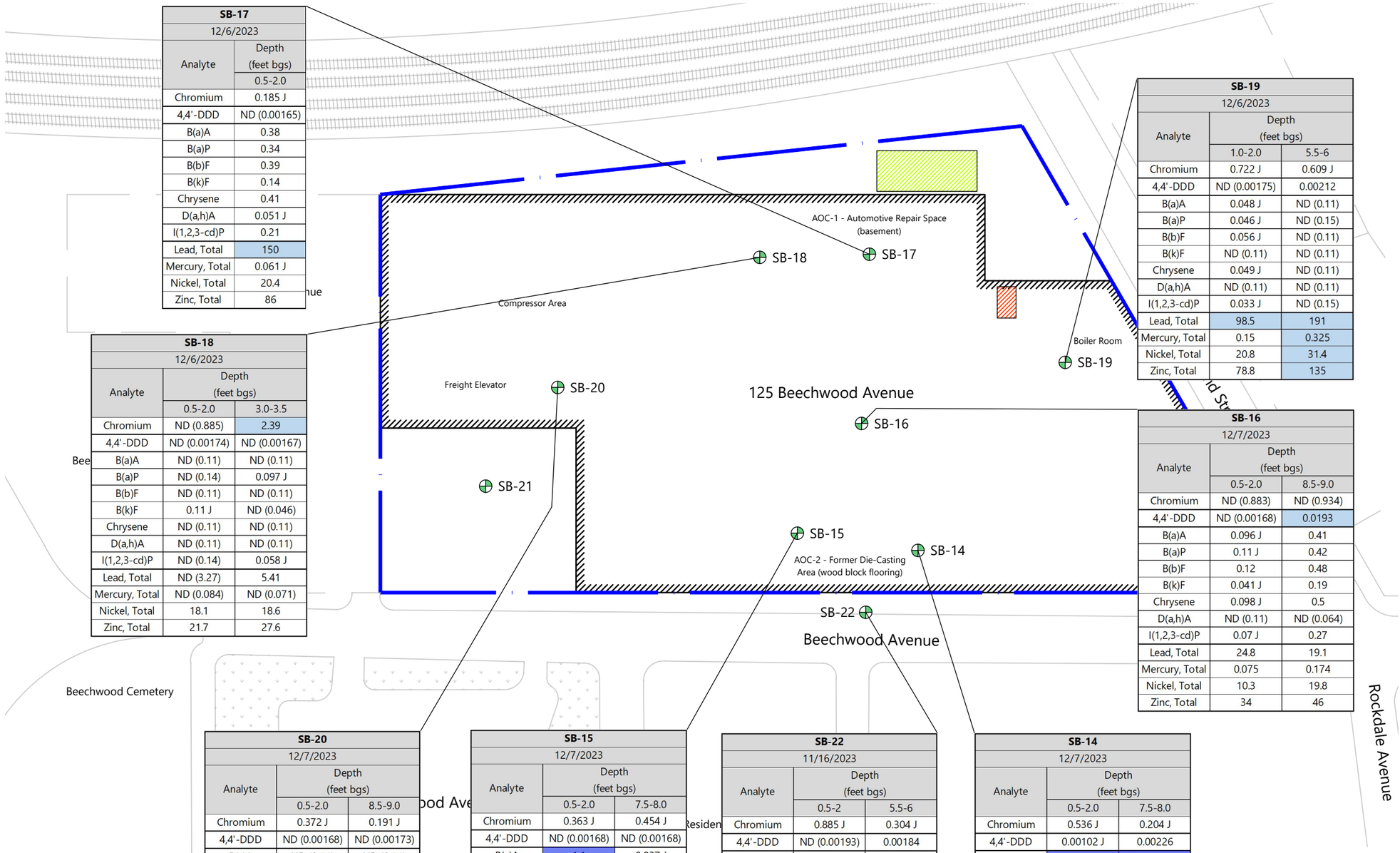
PSG
Engineering and Geology, D.P.C.

Legend and Notes:

- Site Boundary
- Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
- Approximate Location of Former Gasoline USTs
- Previously Installed Monitoring Well Location
- Previously Installed Vapor Probe / Air Sample Location
- RI Monitoring Well Location
- RI Vapor Probe/ Air Sample Location
- RI Soil Boring Location
- RI Temporary Well Location
- RI Vapor Probe

Title: **Sample Location Map**			
Figure: **3**	Prepared By: **AS**	Date: **March 2024**	Project Number: **21393176-EN**
Address: **125 Beechwood Avenue, New Rochelle, New York 10801**			

PSG
Engineering and Geology, D.P.C.



SB-17

12/6/2023	
Analyte	Depth (feet bgs)
	0.5-2.0
Chromium	0.185 J
4,4'-DDD	ND (0.00165)
B(a)A	0.38
B(a)P	0.34
B(b)F	0.39
B(k)F	0.14
Chrysene	0.41
D(a,h)A	0.051 J
I(1,2,3-cd)P	0.21
Lead, Total	150
Mercury, Total	0.061 J
Nickel, Total	20.4
Zinc, Total	86

SB-18

12/6/2023		
Analyte	Depth (feet bgs)	
	0.5-2.0	3.0-3.5
Chromium	ND (0.885)	2.39
4,4'-DDD	ND (0.00174)	ND (0.00167)
B(a)A	ND (0.11)	ND (0.11)
B(a)P	ND (0.14)	0.097 J
B(b)F	ND (0.11)	ND (0.11)
B(k)F	0.11 J	ND (0.046)
Chrysene	ND (0.11)	ND (0.11)
D(a,h)A	ND (0.11)	ND (0.11)
I(1,2,3-cd)P	ND (0.14)	0.058 J
Lead, Total	ND (3.27)	5.41
Mercury, Total	ND (0.084)	ND (0.071)
Nickel, Total	18.1	18.6
Zinc, Total	21.7	27.6

SB-19

12/6/2023		
Analyte	Depth (feet bgs)	
	1.0-2.0	5.5-6
Chromium	0.722 J	0.609 J
4,4'-DDD	ND (0.00175)	0.00212
B(a)A	0.048 J	ND (0.11)
B(a)P	0.046 J	ND (0.15)
B(b)F	0.056 J	ND (0.11)
B(k)F	ND (0.11)	ND (0.11)
Chrysene	0.049 J	ND (0.11)
D(a,h)A	ND (0.11)	ND (0.11)
I(1,2,3-cd)P	0.033 J	ND (0.15)
Lead, Total	98.5	191
Mercury, Total	0.15	0.325
Nickel, Total	20.8	31.4
Zinc, Total	78.8	135

SB-16

12/7/2023		
Analyte	Depth (feet bgs)	
	0.5-2.0	8.5-9.0
Chromium	ND (0.883)	ND (0.934)
4,4'-DDD	ND (0.00168)	0.0193
B(a)A	0.096 J	0.41
B(a)P	0.11 J	0.42
B(b)F	0.12	0.48
B(k)F	0.041 J	0.19
Chrysene	0.098 J	0.5
D(a,h)A	ND (0.11)	ND (0.064)
I(1,2,3-cd)P	0.07 J	0.27
Lead, Total	24.8	19.1
Mercury, Total	0.075	0.174
Nickel, Total	10.3	19.8
Zinc, Total	34	46

SB-20

12/7/2023		
Analyte	Depth (feet bgs)	
	0.5-2.0	8.5-9.0
Chromium	0.372 J	0.191 J
4,4'-DDD	ND (0.00168)	ND (0.00173)
B(a)A	ND (0.11)	ND (0.11)
B(a)P	ND (0.14)	ND (0.15)
B(b)F	ND (0.11)	ND (0.11)
B(k)F	ND (0.11)	ND (0.11)
Chrysene	ND (0.11)	ND (0.11)
D(a,h)A	ND (0.11)	ND (0.11)
I(1,2,3-cd)P	ND (0.14)	ND (0.15)
Lead, Total	5.72	3.04 J
Mercury, Total	0.079	0.09
Nickel, Total	35.9	15.7
Zinc, Total	32.4	30.1

SB-15

12/7/2023		
Analyte	Depth (feet bgs)	
	0.5-2.0	7.5-8.0
Chromium	0.363 J	0.454 J
4,4'-DDD	ND (0.00168)	ND (0.00168)
B(a)A	1.1	0.037 J
B(a)P	1.1	ND (0.14)
B(b)F	1.2	0.044 J
B(k)F	0.51	ND (0.1)
Chrysene	1.1	0.038 J
D(a,h)A	0.15	ND (0.1)
I(1,2,3-cd)P	0.66	0.025 J
Lead, Total	23.2	7.28
Mercury, Total	0.055 J	0.053 J
Nickel, Total	28	41
Zinc, Total	39.7	24.4

SB-22

11/16/2023		
Analyte	Depth (feet bgs)	
	0.5-2	5.5-6
Chromium	0.885 J	0.304 J
4,4'-DDD	ND (0.00193)	0.00184
B(a)A	ND (0.13)	ND (0.11)
B(a)P	ND (0.17)	ND (0.14)
B(b)F	ND (0.13)	ND (0.11)
B(k)F	ND (0.13)	ND (0.11)
Chrysene	ND (0.13)	ND (0.11)
D(a,h)A	ND (0.13)	ND (0.11)
I(1,2,3-cd)P	ND (0.17)	ND (0.14)
Lead, Total	6.92	4.16 J
Mercury, Total	ND (0.09)	ND (0.082)
Nickel, Total	37.7	21.3
Zinc, Total	34.3	19.7

SB-14

12/7/2023		
Analyte	Depth (feet bgs)	
	0.5-2.0	7.5-8.0
Chromium	0.536 J	0.204 J
4,4'-DDD	0.00102 J	0.00226
B(a)A	4.2	1.2
B(a)P	3.8	1
B(b)F	4.9	1.4
B(k)F	1.7	0.42
Chrysene	4.7	1.3
D(a,h)A	0.58	0.16
I(1,2,3-cd)P	2.3	0.65
Lead, Total	60.9	99
Mercury, Total	0.165	0.236
Nickel, Total	20.6	18.9
Zinc, Total	146	121

Legend and Notes:

- Site Boundary
- Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
- Approximate Location of Former Gasoline USTs
- Soil Boring Location
- 1 — Indicates an exceedance of the Unrestricted Use NY Soil Cleanup Objectives
- 1 — Indicates an exceedance of the Commercial Use NY Soil Cleanup Objectives
- 1 — Indicates an exceedance of the Industrial Use NY Soil Cleanup Objectives
- 1 — Indicates an exceedance of the Protection of Groundwater NY Soil Cleanup Objectives

- UST = Underground Storage Tank
- SVOCs = Semi Volatile Organic Compounds
- B(a)A = Benzo(a)Anthracene
- B(a)P = Benzo(a)Pyrene
- B(b)F = Benzo(b)Fluoranthene
- B(k)F = Benzo(k)Flouranthene
- D(a,h)A = Dibenzo(a,h)Anthracene
- I(1,2,3-cd)P = Indeno(1,2,3-cd)Pyrene
- Concentrations presented in µg/l (micrograms per liter)
- ND = not detected above indicated laboratory Reporting Limit (RL)
- J = estimated concentration

N

35' 0' 35' 70'

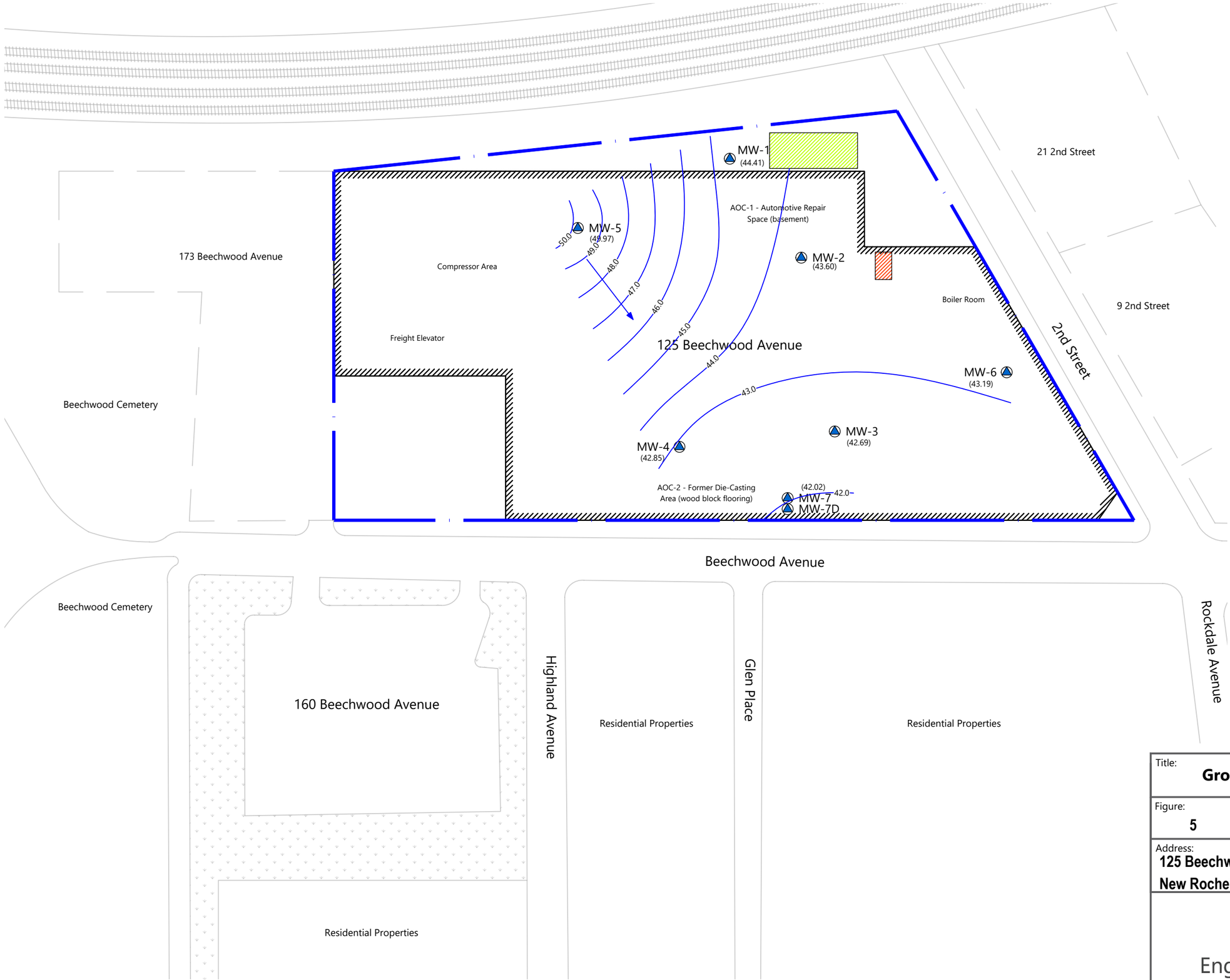
Approximate Scale

Title: **Exceedances in Soil Samples**

Figure:	Prepared By:	Date:	Project Number:
4	AS	February 2024	21393176-EN

Address:
125 Beechwood Avenue
New Rochelle, New York 10801

PSG
Engineering and Geology, D.P.C.



Legend and Notes:

- Site Boundary
- Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
- Approximate Location of Former Gasoline USTs
- Monitoring Well Location
- Water Level Contour (FT AMSL)
- Horizontal Direction of Groundwater Flow

- UST = Underground Storage Tank
- Wells Gauged on January 4, 2024
- Elevations and Contours in Feet Above Mean Sea Level (FT AMSL)
- Contour Interval = 1.0 FT

N

35' 0' 35' 70'

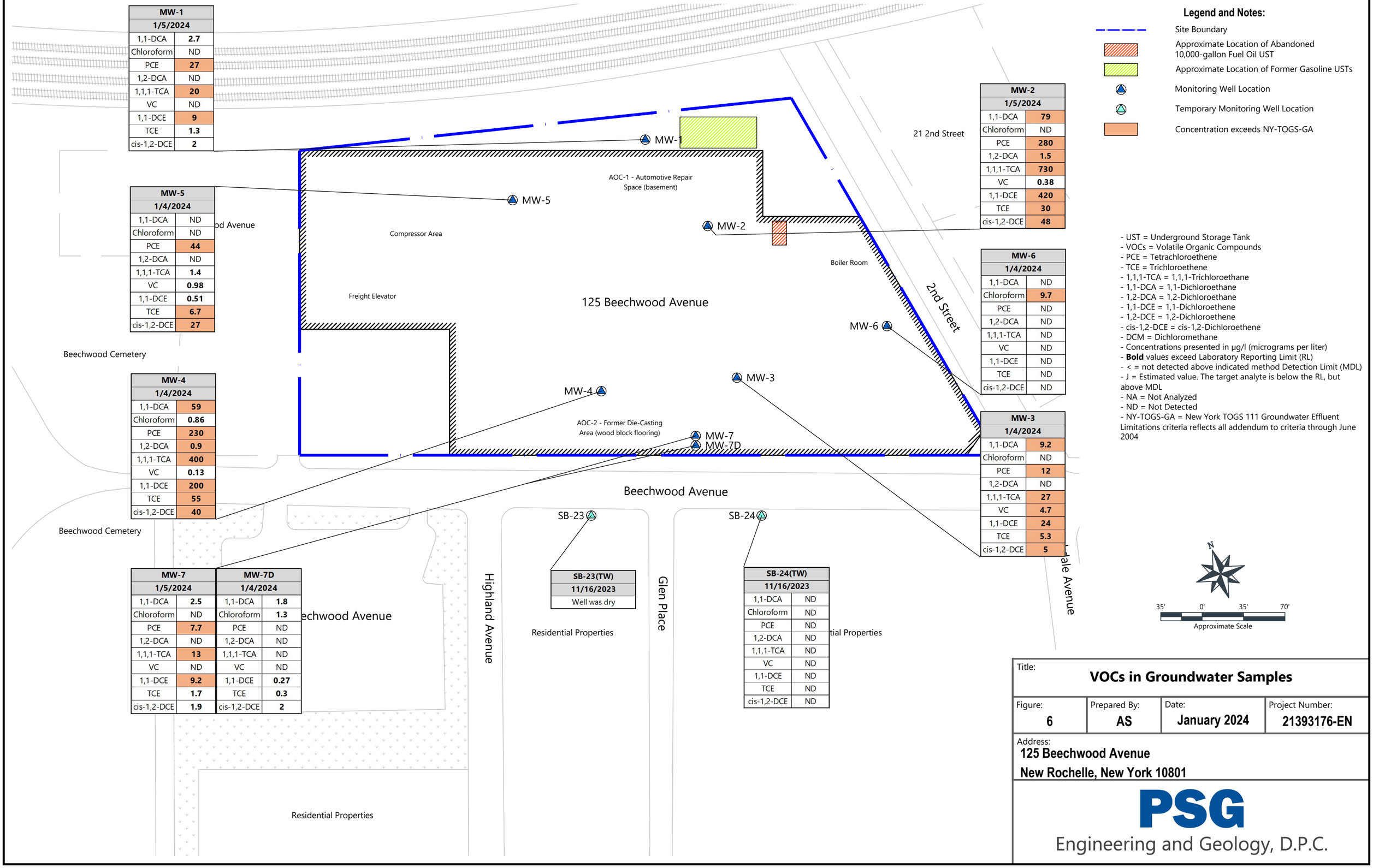
Approximate Scale

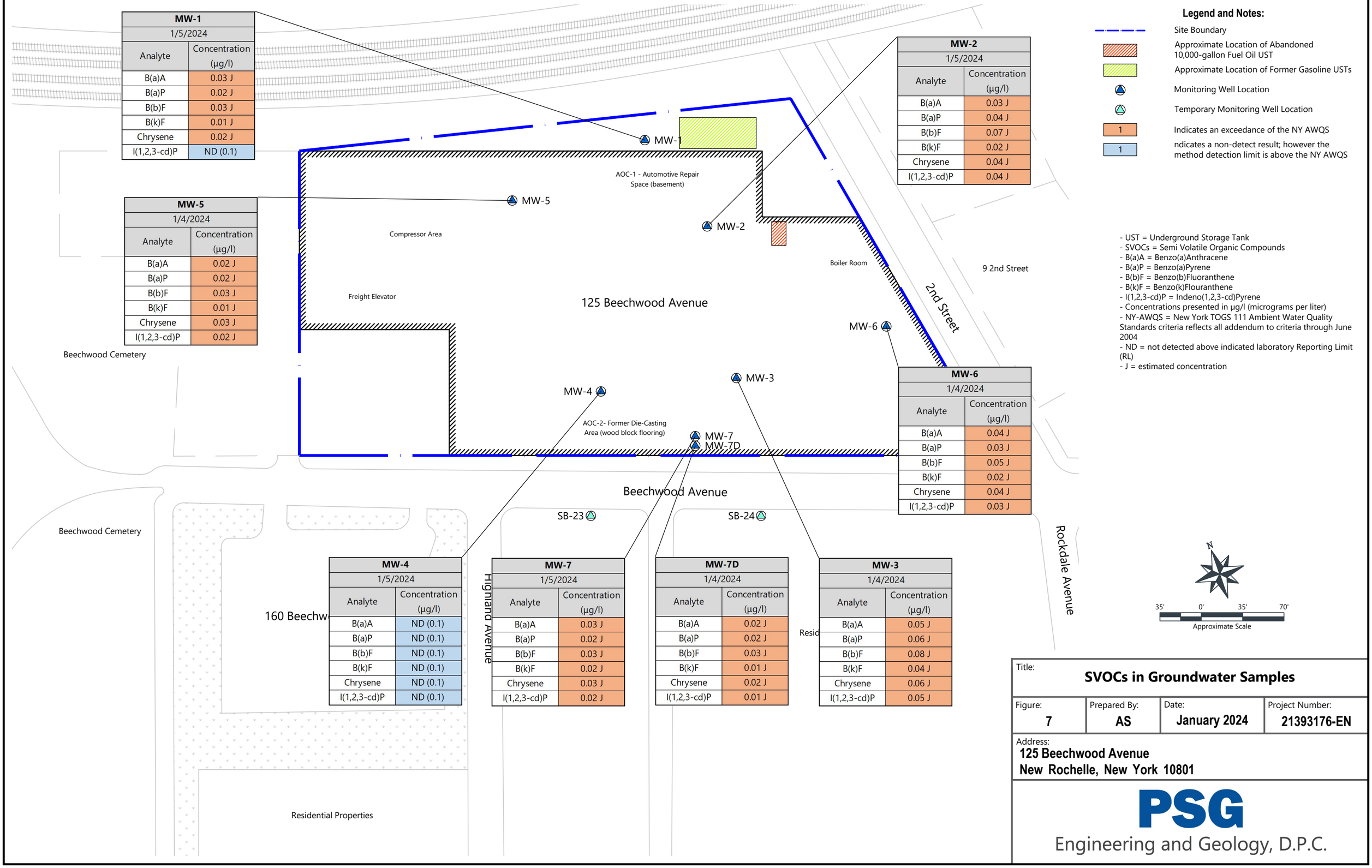
Title: **Groundwater Contour Map** (**Januar**y 2024)

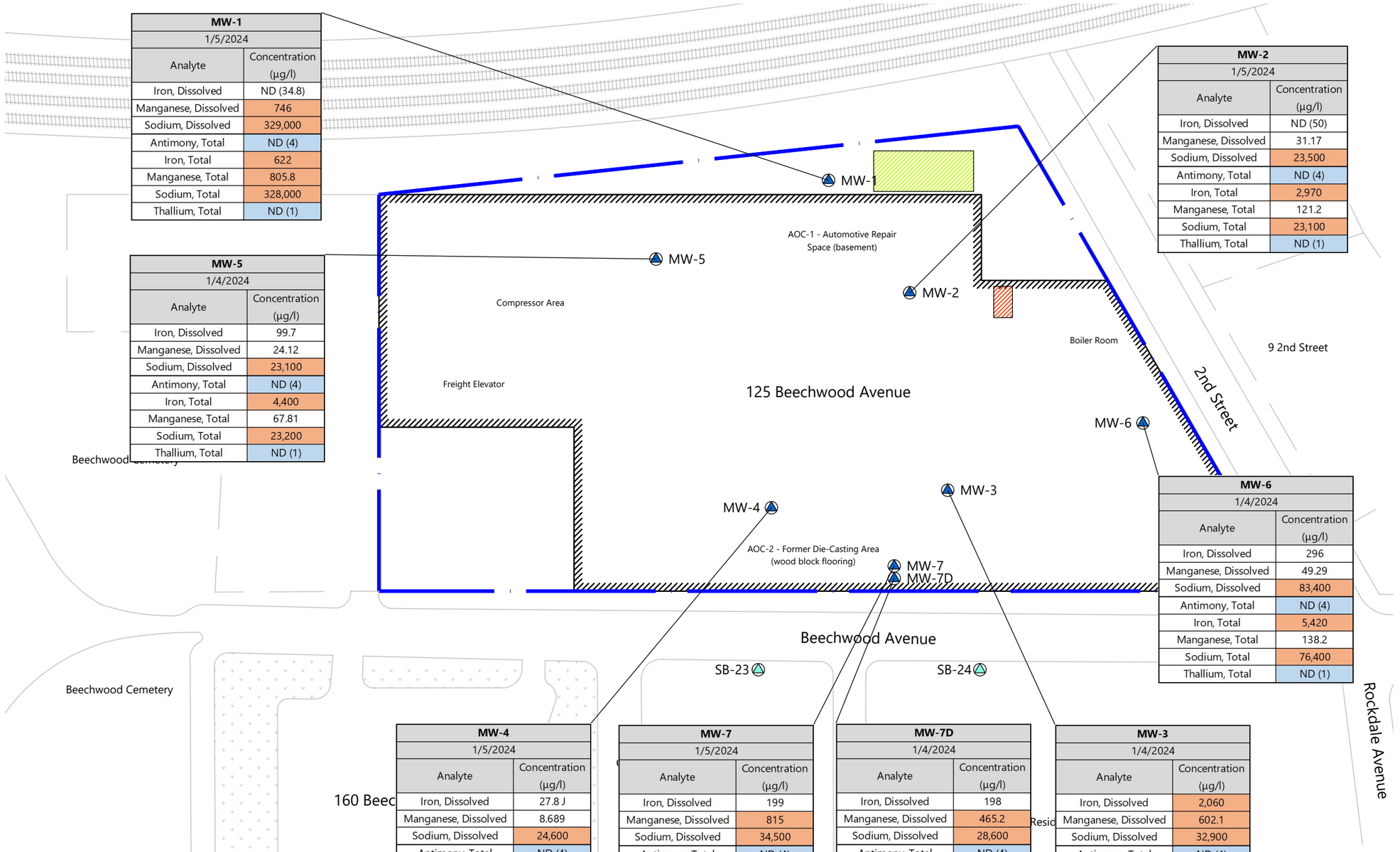
Figure:	Prepared By:	Date:	Project Number:
5	AS	January 2024	21393176-EN

Address:
125 Beechwood Avenue
New Rochelle, New York 10801

PSG
Engineering and Geology, D.P.C.


MW-1
1/5/2024
1,1-DCA 2.7
Chloroform ND
PCE 27
1,2-DCA ND
1,1,1-TCA 20
VC ND
1,1-DCE 9
TCE 1.3
cis-1,2-DCE 2
MW-2
1/5/2024
1,1-DCA 79
Chloroform ND
PCE 280
1,2-DCA 1.5
1,1,1-TCA 730
VC 0.38
1,1-DCE 420
TCE 30
cis-1,2-DCE 48
MW-5
1/4/2024
1,1-DCA ND
Chloroform ND
PCE 44
1,2-DCA ND
1,1,1-TCA 1.4
VC 0.98
1,1-DCE 0.51
TCE 6.7
cis-1,2-DCE 27
MW-6
1/4/2024
1,1-DCA ND
Chloroform 9.7
PCE ND
1,2-DCA ND
1,1,1-TCA ND
VC ND
1,1-DCE ND
TCE ND
cis-1,2-DCE ND
MW-4
1/4/2024
1,1-DCA 59
Chloroform 0.86
PCE 230
1,2-DCA 0.9
1,1,1-TCA 400
VC 0.13
1,1-DCE 200
TCE 55
cis-1,2-DCE 40
MW-3
1/4/2024
1,1-DCA 9.2
Chloroform ND
PCE 12
1,2-DCA ND
1,1,1-TCA 27
VC 4.7
1,1-DCE 24
TCE 5.3
cis-1,2-DCE 5
MW-7
1/5/2024
1,1-DCA 2.5
Chloroform ND
PCE 7.7
1,2-DCA ND
1,1,1-TCA 13
VC ND
1,1-DCE 9.2
TCE 1.7
cis-1,2-DCE 1.9
MW-7D
1/4/2024
1,1-DCA 1.8
Chloroform 1.3
PCE ND
1,2-DCA ND
1,1,1-TCA ND
VC ND
1,1-DCE 0.27
TCE 0.3
cis-1,2-DCE 2
SB-23(TW)
11/16/2023
Well was dry
SB-24(TW)
11/16/2023
1,1-DCA ND
Chloroform ND
PCE ND
1,2-DCA ND
1,1,1-TCA ND
VC ND
1,1-DCE ND
TCE ND
cis-1,2-DCE ND
MW-1
MW-5
MW-2
MW-6
MW-4
MW-3
MW-7
MW-7D
SB-23
SB-24
AOC-1 - Automotive Repair Space (basement)
AOC-2 - Former Die-Casting Area (wood block flooring)
Compressor Area
Freight Elevator
Boiler Room
125 Beechwood Avenue
21 2nd Street
2nd Street
Beechwood Avenue
Beechwood Cemetery
Residential Properties
Highland Avenue
Glen Place
Legend and Notes:
Site Boundary
Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
Approximate Location of Former Gasoline USTs
Monitoring Well Location
Temporary Monitoring Well Location
Concentration exceeds NY-TOGS-GA
- UST = Underground Storage Tank
- VOCs = Volatile Organic Compounds
- PCE = Tetrachloroethene
- TCE = Trichloroethene
- 1,1,1-TCA = 1,1,1-Trichloroethane
- 1,1-DCA = 1,1-Dichloroethane
- 1,2-DCA = 1,2-Dichloroethane
- 1,1-DCE = 1,1-Dichloroethene
- 1,2-DCE = 1,2-Dichloroethene
- cis-1,2-DCE = cis-1,2-Dichloroethene
- DCM = Dichloromethane
- Concentrations presented in µg/l (micrograms per liter)
- Bold values exceed Laboratory Reporting Limit (RL)
- < = not detected above indicated method Detection Limit (MDL)
- J = Estimated value. The target analyte is below the RL, but above MDL
- NA = Not Analyzed
- ND = Not Detected
- NY-TOGS-GA = New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004
N
35' 0' 35' 70'
Approximate Scale
Title: VOCs in Groundwater Samples
Figure: 6
Prepared By: AS
Date: January 2024
Project Number: 21393176-EN
Address: 125 Beechwood Avenue New Rochelle, New York 10801
PSG
Engineering and Geology, D.P.C.


MW-1
1/5/2024
Analyte | Concentration (µg/l)
B(a)A | 0.03 J
B(a)P | 0.02 J
B(b)F | 0.03 J
B(k)F | 0.01 J
Chrysene | 0.02 J
I(1,2,3-cd)P | ND (0.1)
MW-2
1/5/2024
Analyte | Concentration (µg/l)
B(a)A | 0.03 J
B(a)P | 0.04 J
B(b)F | 0.07 J
B(k)F | 0.02 J
Chrysene | 0.04 J
I(1,2,3-cd)P | 0.04 J
MW-5
1/4/2024
Analyte | Concentration (µg/l)
B(a)A | 0.02 J
B(a)P | 0.02 J
B(b)F | 0.03 J
B(k)F | 0.01 J
Chrysene | 0.03 J
I(1,2,3-cd)P | 0.02 J
MW-6
1/4/2024
Analyte | Concentration (µg/l)
B(a)A | 0.04 J
B(a)P | 0.03 J
B(b)F | 0.05 J
B(k)F | 0.02 J
Chrysene | 0.04 J
I(1,2,3-cd)P | 0.03 J
MW-4
1/5/2024
Analyte | Concentration (µg/l)
B(a)A | ND (0.1)
B(a)P | ND (0.1)
B(b)F | ND (0.1)
B(k)F | ND (0.1)
Chrysene | ND (0.1)
I(1,2,3-cd)P | ND (0.1)
MW-7
1/5/2024
Analyte | Concentration (µg/l)
B(a)A | 0.03 J
B(a)P | 0.02 J
B(b)F | 0.03 J
B(k)F | 0.02 J
Chrysene | 0.03 J
I(1,2,3-cd)P | 0.02 J
MW-7D
1/4/2024
Analyte | Concentration (µg/l)
B(a)A | 0.02 J
B(a)P | 0.02 J
B(b)F | 0.03 J
B(k)F | 0.01 J
Chrysene | 0.02 J
I(1,2,3-cd)P | 0.01 J
MW-3
1/4/2024
Analyte | Concentration (µg/l)
B(a)A | 0.05 J
B(a)P | 0.06 J
B(b)F | 0.08 J
B(k)F | 0.04 J
Chrysene | 0.06 J
I(1,2,3-cd)P | 0.05 J
Legend and Notes:
Site Boundary
Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
Approximate Location of Former Gasoline USTs
Monitoring Well Location
Temporary Monitoring Well Location
1
Indicates an exceedance of the NY AWQS
1
ndicates a non-detect result; however the method detection limit is above the NY AWQS
- UST = Underground Storage Tank
- SVOCs = Semi Volatile Organic Compounds
- B(a)A = Benzo(a)Anthracene
- B(a)P = Benzo(a)Pyrene
- B(b)F = Benzo(b)Fluoranthene
- B(k)F = Benzo(k)Flouranthene
- I(1,2,3-cd)P = Indeno(1,2,3-cd)Pyrene
- Concentrations presented in µg/l (micrograms per liter)
- NY-AWQS = New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004
- ND = not detected above indicated laboratory Reporting Limit (RL)
- J = estimated concentration
MW-1
MW-5
MW-2
MW-6
MW-4
MW-3
MW-7
MW-7D
SB-23
SB-24
AOC-1 - Automotive Repair Space (basement)
Compressor Area
Boiler Room
Freight Elevator
125 Beechwood Avenue
AOC-2- Former Die-Casting Area (wood block flooring)
9 2nd Street
2nd Street
Beechwood Avenue
Beechwood Cemetery
Residential Properties
Highland Avenue
Rockdale Avenue
160 Beechw
Resid
N
35' 0' 35' 70'
Approximate Scale
Title:
SVOCs in Groundwater Samples
Figure: 7
Prepared By: AS
Date: January 2024
Project Number: 21393176-EN
Address:
125 Beechwood Avenue
New Rochelle, New York 10801
PSG
Engineering and Geology, D.P.C.



MW-1	
1/5/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	ND (34.8)
Manganese, Dissolved	746
Sodium, Dissolved	329,000
Antimony, Total	ND (4)
Iron, Total	622
Manganese, Total	805.8
Sodium, Total	328,000
Thallium, Total	ND (1)

MW-2	
1/5/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	ND (50)
Manganese, Dissolved	31.17
Sodium, Dissolved	23,500
Antimony, Total	ND (4)
Iron, Total	2,970
Manganese, Total	121.2
Sodium, Total	23,100
Thallium, Total	ND (1)

MW-5	
1/4/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	99.7
Manganese, Dissolved	24.12
Sodium, Dissolved	23,100
Antimony, Total	ND (4)
Iron, Total	4,400
Manganese, Total	67.81
Sodium, Total	23,200
Thallium, Total	ND (1)

MW-6	
1/4/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	296
Manganese, Dissolved	49.29
Sodium, Dissolved	83,400
Antimony, Total	ND (4)
Iron, Total	5,420
Manganese, Total	138.2
Sodium, Total	76,400
Thallium, Total	ND (1)

MW-4	
1/5/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	27.8 J
Manganese, Dissolved	8.689
Sodium, Dissolved	24,600
Antimony, Total	ND (4)
Iron, Total	2,730
Manganese, Total	200
Sodium, Total	24,400
Thallium, Total	ND (1)

MW-7	
1/5/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	199
Manganese, Dissolved	815
Sodium, Dissolved	34,500
Antimony, Total	ND (4)
Iron, Total	3,090
Manganese, Total	889
Sodium, Total	34,800
Thallium, Total	ND (1)

MW-7D	
1/4/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	198
Manganese, Dissolved	465.2
Sodium, Dissolved	28,600
Antimony, Total	ND (4)
Iron, Total	983
Manganese, Total	441.3
Sodium, Total	25,700
Thallium, Total	ND (1)

MW-3	
1/4/2024	
Analyte	Concentration (µg/l)
Iron, Dissolved	2,060
Manganese, Dissolved	602.1
Sodium, Dissolved	32,900
Antimony, Total	ND (4)
Iron, Total	17,200
Manganese, Total	741.1
Sodium, Total	32,300
Thallium, Total	ND (1)

Legend and Notes:

- Site Boundary
- Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
- Approximate Location of Former Gasoline USTs
- Monitoring Well Location
- Temporary Monitoring Well Location
- 1 — Indicates an exceedance of the NY AWQS
- 1 — Indicates a non-detect result; however the method detection limit is above the NY AWQS

- UST = Underground Storage Tank
- Concentrations presented in µg/l (micrograms per liter)
- NY-AWQS = New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004
- ND = not detected above indicated laboratory Reporting Limit (RL)
- J = estimated concentration

N

35' 0' 35' 70'

Approximate Scale

Title: **Metals in Groundwater Samples**

Figure:	Prepared By:	Date:	Project Number:
8	AS	February 2024	21393176-EN

Address:
125 Beechwood Avenue
New Rochelle, New York 10801

PSG
Engineering and Geology, D.P.C.

MW-1	
1/5/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	0.253
PFOA	0.00788
PFOS	0.0127

MW-2	
1/5/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	7.39
PFOA	0.0132
PFOS	0.0114

MW-5	
1/4/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	0.115
PFOA	0.0284
PFOS	0.0104

MW-6	
1/4/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	NA
PFOA	NA
PFOS	NA

MW-4	
1/5/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	14.7
PFOA	0.012
PFOS	0.0163

MW-7	
1/5/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	0.298
PFOA	0.0168
PFOS	0.0129

MW-7D	
1/4/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	0.4
PFOA	0.0177
PFOS	0.0137

MW-3	
1/4/2024	
Analyte	Concentration (µg/l)
1,4-Dioxane	1.02
PFOA	0.0158
PFOS	0.0149

MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-7D
SB-23
SB-24

Automotive Repair Space (basement)
Compressor Area
Freight Elevator
Boiler Room
125 Beechwood Avenue
9 2nd Street
2nd Street
Former Die-Castinng Area (wood block flooring)
Beechwood Avenue
Beechwood Cemetery
160 Beechwo
Highland Avenue
Rockdale Avenue
Residential Properties
Resid

Legend and Notes:

- Site Boundary
- Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
- Approximate Location of Former Gasoline USTs
- Monitoring Well Location
- Temporary Monitoring Well Location
- 1 — Exceedance of the AWQS/Guidance Value

- UST = Underground Storage Tank
- PFOA = Perfluorooctanoic Acid
- PFOS = Perfluorooctanesulfonic Acid
- Concentrations presented in µg/l (micrograms per liter)
- NY-AWQS = New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004
- ND = not detected above indicated laboratory Reporting Limit (RL)
- J = estimated concentration

N

35' 0' 35' 70'

Approximate Scale

Title:
1,4-Dioxane and PFAS in Groundwater Samples

Figure:	Prepared By:	Date:	Project Number:
9	AS	February 2024	21393176-EN

Address:
125 Beechwood Avenue
New Rochelle, New York 10801

PSG
Engineering and Geology, D.P.C.

VP1/IA-1		
11/28/2023		
Analyte	Soil Vapor (µg/m³)	Air (µg/m³)
1,1-DCE	ND (0.793)	0.301
Methylene chloride	3.08	3.79
cis-1,2-DCE	ND (0.793)	ND (0.079)
1,1,1-TCA	3.3	0.758
Carbon tetrachloride	ND (1.26)	0.465
TCE	2.33	0.489
PCE	29.6	13.4
Benzene	34.8	4.06
Ethylbenzene	63.9	33.2
Cyclohexane	23.2	8.23
2,2,4-Trimethylpentane	37.8	4.95
1,2,4-Trimethylbenzene	42.3	3.6
1,3,5-Trimethylbenzene	10.7	ND (0.983)
o-Xylene	50.8	3.34
m&p-Xylene	180	9.51
Heptane	70.5	5.82
n-Hexane	68	9.48
Toluene	218	13.6

VP5/IA-5		
11/28/2023		
Analyte	Soil Vapor (µg/m³)	Air (µg/m³)
1,1-DCE	1,670	0.785
Methylene chloride	2.11	2.9
cis-1,2-DCE	51.5	0.127
1,1,1-TCA	5,890	2
Carbon tetrachloride	ND (1.26)	0.421
TCE	158	0.435
PCE	2,260	5.21
Benzene	48.6	1.2
Ethylbenzene	76.9	3.61
Cyclohexane	23.2	0.967
2,2,4-Trimethylpentane	ND (0.934)	0.976
1,2,4-Trimethylbenzene	27.8	1.8
1,3,5-Trimethylbenzene	6.15	ND (0.983)
o-Xylene	49.5	2.04
m&p-Xylene	222	6.52
Heptane	110	1.22
n-Hexane	103	2.03
Toluene	269	3.77

VP4/IA-4		
11/28/2023		
Analyte	Soil Vapor (µg/m³)	Air (µg/m³)
1,1-DCE	630	8.17
Methylene chloride	ND (4.34)	3.65
cis-1,2-DCE	17.6	1.2
1,1,1-TCA	1,010	14
Carbon tetrachloride	ND (3.15)	0.421
TCE	15.6	0.983
PCE	24.8	10.2
Benzene	2.45	1.4
Ethylbenzene	4.03	3.4
Cyclohexane	ND (1.72)	ND (0.688)
2,2,4-Trimethylpentane	ND (2.34)	ND (0.934)
1,2,4-Trimethylbenzene	9.24	1.94
1,3,5-Trimethylbenzene	ND (2.46)	ND (0.983)
o-Xylene	3.7	3.38
m&p-Xylene	13.7	10.3
Heptane	2.66	ND (0.82)
n-Hexane	4.9	1.35
Toluene	12.9	3.23

VP6/IA-6		
11/28/2023		
Analyte	Soil Vapor (µg/m³)	Air (µg/m³)
1,1-DCE	2,400	0.456
Methylene chloride	ND (137)	2.55
cis-1,2-DCE	ND (137)	0.258
1,1,1-TCA	17,200	2
Carbon tetrachloride	ND (137)	0.415
TCE	1,870	0.79
PCE	7,730	4.24
Benzene	61.3	0.77
Ethylbenzene	ND (57.3)	0.99
Cyclohexane	62.3	ND (0.688)
2,2,4-Trimethylpentane	ND (61.7)	ND (0.934)
1,2,4-Trimethylbenzene	ND (64.9)	ND (0.983)
1,3,5-Trimethylbenzene	ND (64.9)	ND (0.983)
o-Xylene	57.3	ND (0.869)
m&p-Xylene	172	1.74
Heptane	ND (54.1)	ND (0.82)
n-Hexane	57.4	1.34
Toluene	226	1.86

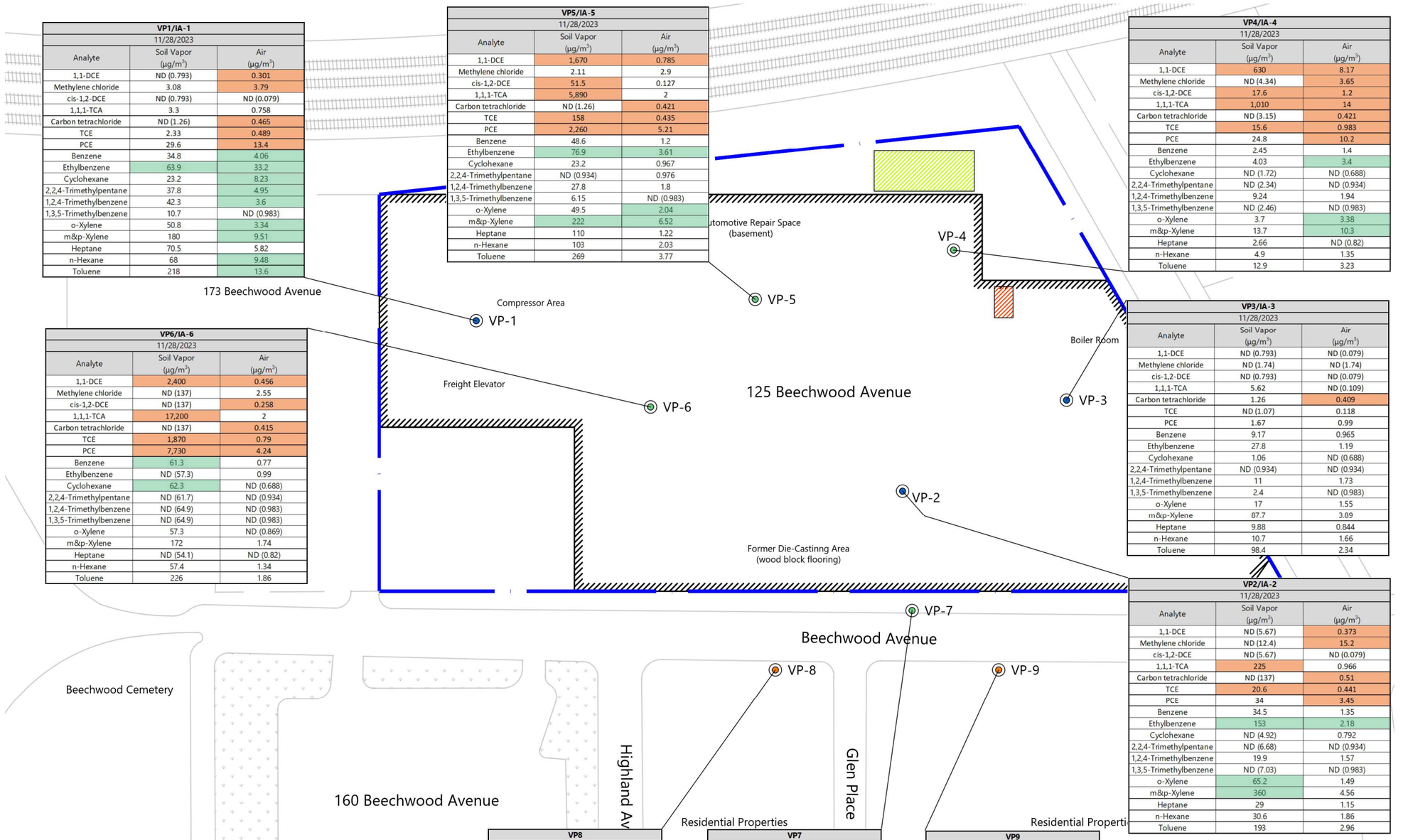
VP3/IA-3		
11/28/2023		
Analyte	Soil Vapor (µg/m³)	Air (µg/m³)
1,1-DCE	ND (0.793)	ND (0.079)
Methylene chloride	ND (1.74)	ND (1.74)
cis-1,2-DCE	ND (0.793)	ND (0.079)
1,1,1-TCA	5.62	ND (0.109)
Carbon tetrachloride	1.26	0.409
TCE	ND (1.07)	0.118
PCE	1.67	0.99
Benzene	9.17	0.965
Ethylbenzene	27.8	1.19
Cyclohexane	1.06	ND (0.688)
2,2,4-Trimethylpentane	ND (0.934)	ND (0.934)
1,2,4-Trimethylbenzene	11	1.73
1,3,5-Trimethylbenzene	2.4	ND (0.983)
o-Xylene	17	1.55
m&p-Xylene	87.7	3.89
Heptane	9.88	0.844
n-Hexane	10.7	1.66
Toluene	98.4	2.34

VP2/IA-2		
11/28/2023		
Analyte	Soil Vapor (µg/m³)	Air (µg/m³)
1,1-DCE	ND (5.67)	0.373
Methylene chloride	ND (12.4)	15.2
cis-1,2-DCE	ND (5.67)	ND (0.079)
1,1,1-TCA	225	0.966
Carbon tetrachloride	ND (137)	0.51
TCE	20.6	0.441
PCE	34	3.45
Benzene	34.5	1.35
Ethylbenzene	153	2.18
Cyclohexane	ND (4.92)	0.792
2,2,4-Trimethylpentane	ND (6.68)	ND (0.934)
1,2,4-Trimethylbenzene	19.9	1.57
1,3,5-Trimethylbenzene	ND (7.03)	ND (0.983)
o-Xylene	65.2	1.49
m&p-Xylene	360	4.56
Heptane	29	1.15
n-Hexane	30.6	1.86
Toluene	193	2.96

VP8	
11/16/2023	
Analyte	Soil Vapor (µg/m³)
1,1-DCE	ND (0.793)
Methylene chloride	3.79
cis-1,2-DCE	ND (0.793)
1,1,1-TCA	2.88
Carbon tetrachloride	ND (1.26)
TCE	ND (1.07)
PCE	5.5
Benzene	4.5
Ethylbenzene	2.6
Cyclohexane	1.03
2,2,4-Trimethylpentane	8.73
1,2,4-Trimethylbenzene	4.55
1,3,5-Trimethylbenzene	1.38
o-Xylene	3
m&p-Xylene	9.77
Heptane	3.9
n-Hexane	9.59
Toluene	13.5

VP7	
11/16/2023	
Analyte	Soil Vapor (µg/m³)
1,1-DCE	78.1
Methylene chloride	ND (1.74)
cis-1,2-DCE	ND (0.793)
1,1,1-TCA	73.1
Carbon tetrachloride	ND (1.26)
TCE	ND (1.07)
PCE	4.79
Benzene	3.67
Ethylbenzene	1.71
Cyclohexane	0.761
2,2,4-Trimethylpentane	5.23
1,2,4-Trimethylbenzene	2.23
1,3,5-Trimethylbenzene	ND (0.983)
o-Xylene	1.92
m&p-Xylene	6.04
Heptane	2.08
n-Hexane	4.3
Toluene	8.97

VP9	
11/16/2023	
Analyte	Soil Vapor (µg/m³)
1,1-DCE	ND (0.793)
Methylene chloride	4.41
cis-1,2-DCE	ND (0.793)
1,1,1-TCA	10.7
Carbon tetrachloride	ND (1.26)
TCE	ND (1.07)
PCE	3.8
Benzene	3.15
Ethylbenzene	1.98
Cyclohexane	1.12
2,2,4-Trimethylpentane	8.5
1,2,4-Trimethylbenzene	2.86
1,3,5-Trimethylbenzene	ND (0.983)
o-Xylene	2.2
m&p-Xylene	7.08
Heptane	19.6
n-Hexane	95.9
Toluene	10.3



Legend and Notes:

- Site Boundary
- Approximate Location of Abandoned 10,000-gallon Fuel Oil UST
- Approximate Location of Former Gasoline USTs
- Soil Gas Sampling Location
- Vapor Probe/Air Sample Location
- Vapor Probe Location
- 1 — Indicates CVOC exceedance of the NY Matrix Value
- 1 — Indicates petroleum VOC exceedance of the NY Matrix Value

- UST = Underground Storage Tank
- VOCs = Volatile Organic Compounds
- PCE = Tetrachloroethene
- TCE = Trichloroethene
- 1,1,1-TCA = 1,1,1-Trichloroethane
- 1,1-DCE = 1,1-Dichloroethene
- cis-1,2-DCE = cis-1,2-Dichloroethene
- Concentrations presented in µg/m³ (micrograms per cubic meter)
- NY IAC = New York Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion
- ND = not detected above indicated laboratory Reporting Limit (RL)
- J = estimated concentration

N

35' 0' 35' 70'

Approximate Scale

Title: **VOCs in Soil Vapor and Indoor Air Samples**

Figure:	Prepared By:	Date:	Project Number:
10	AS	April 2024	21393176-EN

Address:
125 Beechwood Avenue
New Rochelle, New York 10801

PSG
Engineering and Geology, D.P.C.

Legend and Notes:

- Site Boundary
- Concrete Building Slab
- Wood Block Flooring
- Asphalt Pavement

21 2nd Street

AOC-1
Automotive
Repair Space
(basement)

173 Beechwood Avenue

Boiler Room

9 2nd Street

125 Beechwood Avenue

2nd Street

Beechwood Cemetery

AOC-2 - Former Die-Casting Area
(wood block flooring)

Beechwood Avenue

Beechwood Cemetery

160 Beechwood Avenue

Highland Avenue

Residential Properties

Glen Place

Residential Properties

Rockdale Avenue

N

35' 0' 35' 70'

Approximate Scale

Title: **Cover System Figure**

Figure:	Prepared By:	Date:	Project Number:
11	AC	February 2025	21393176-EN

Address:
125 Beechwood Avenue
New Rochelle, New York 10801

PSG
Engineering and Geology, D.P.C.

APPENDIX A: GREEN AND SUSTAINABLE REMEDIATION REQUIREMENTS

PSG

Climate Screening Checklist

Background Information

- Project Manager: Emily Barry
- Site Name: 125 Beechwood, LLC Site
- Site Number: C360232
- Site Location: 125 Beechwood Avenue, New Rochelle, NY
- Site Elevation (average above sea level): Approximately 65 feet above sea level per Google Earth
- ClimAID Region (Responding Climate Change in New York State (ClimAID) - NYSERDA):
  Region 5: East Hudson and Mohawk River Valleys
- Remedial Stage/site classification:
  Active
- Contamination - Media Impacted/ Contaminants of Concern:
  1,1 dichloroethene, 1,1,1-Trichloroethane(TCA), cis-1,2-dichloroethene tetrachloroethene (PCE), trichloroethene (TCE) in groundwater and soil vapor, polycyclic aromatic hydrocarbons (PAHs) in soil
- Proposed/Current Remedy:
  Installation of a sub-slab depressurization system (SSDS), long-term groundwater monitoring, installation of engineering controls, recording an environmental easement, implementation of a Site Management Plan, and use restrictions
- What is the predicted timeframe of the remedy? Will components of the remedy still be in place in 10+ years?

Remediation is expected to start in November 2025 and be completed in April 2026, with groundwater monitoring to continue on an annual basis until NYSDEC AWQS levels are achieved. It is anticipated that engineering and institutional controls will likely remain in place in 10+ years.

- Is the site in proximity to any sensitive receptors? (e.g. wetlands, waterbodies, residential properties, hospitals, schools, drinking water supplies, etc.)
  No

Is the site in a disadvantaged community (DAC) or potential environmental justice area (PEJA) (Use DECinfolocator: DECinfo Locator (ny.gov))?

☒ **Yes** ☐ **No**

If the site is in a DAC or PEJA, will climate impacts be magnified? If yes, list how and why.

☐ **Yes** ☒ **No**

Should thresholds of concern be lowered to account for magnification of impacts? If yes, indicate how lower thresholds will be used in the screening.

☐ **Yes** ☒ **No**

Climate Screening Table*

Potential Climate Hazards	**Relevant to the Site Location** (Y/N/NA)[1]	**Projected Change** (Reference data source/Model)[3]	**Potential to Impact Remedy** (Y/N)	**Is remedy/site already resilient?** (Y/N)[4]
Precipitation	Potentially	N/A	N/A	N/A
Temperature[2] (Extreme Heat or Cold Weather Impacts)	Y			N - remedy will include alarm systems for any power outages
Sea Level Rise	N	N/A	N/A	N/A
Flooding	N	N/A	N/A	N/A
Storm Surge	N	N/A	N/A	N/A
Wildfire	Potentially	N	Y	N - same note as above
Drought	N	N/A	N/A	N/A
Storm Severity	Y	Y	Y	N - same note as above
Landslides	N	N/A	N/A	N/A
Other Hazards:	Seismic	N	Y	N - same note as above

* Links to potential data sources can be found on the following page

[1] If the first column is N --> The rest of the columns will be N/A, the hazard is not applicable to the site.

[2] Extreme Heat: periods of three or more days above 90°F- Extreme Cold: Individual days with minimum temperatures at or below 0 degrees F (NYSERDA ClimAID report)

[3] List the projected change in specific terms or units e.g. inches of rain fall, feet of sea level rise, etc.

[4] If final column is Y, provide reasoning, if the final column is N --> Climate Vulnerability Assessment (CVA) required.

Required Next Steps (If no further action is required, provide justification):

Alarm systems will be included in the remedy to protect again seismic activity, storm severity, and any extreme temperature fluctuations

PSG

ENVIRONMENTAL FOOTPRINT ANALYSIS (EFA)

125 Beechwood, LLC Site
NYSDEC Site No. C360232
125 Beechwood Avenue
New Rochelle, New York 10801
PSG Project Number: 21393176
February 21, 2025

Prepared for:

125 Beechwood LLC
c/o AMERCO Real Estate Company
2727 North Central Avenue
Phoenix, Arizona 85004

Engineers who understand your business

TABLE OF CONTENTS

Appendices

1.0 INTRODUCTION

PSG Engineering & Geology, D.P.C. (PSG) has prepared this Environmental Footprint Analysis (EFA) on behalf of 125 Beechwood LLC a/o AMERCO Real Estate Company, the 125 Beechwood, LLC site (the "Site") located at 125 Beechwood Avenue in New Rochelle, New York.

This EFA has been prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) DER-10 Green Remediation policy, dated August 2010. The EFA supports the Remedial Action Work Plan for the Site.

The primary objective of this EFA is to evaluate the environmental impacts associated with the selected remedies for the Site. This analysis provides critical understanding of the environmental consequences of the chosen remediation approach, facilitating informed decision-making, ensuring alignment with regulatory standards and sustainability goals, and enabling lifecycle tracking of environmental performance.

The subsequent sections provide more site-specific details, regulatory framework, baseline environmental conditions, impact assessment, mitigation strategies, and recommendations derived from the analysis. This structured approach enables a comprehensive understanding of the environmental implications of the remediation activities, supporting the pursuit of sustainable outcomes aligned with the objectives of the NYSDEC Brownfield Cleanup Program (BCP).

2.0 SITE DESCRIPTION

2.1 Location of Site

The Site is approximately 3.17 acres and is located in New Rochelle, New York and identified as Section 2, Block 691, and Lot 005 on the New Rochelle Tax Map.

The Site is bound by the Metro-North Railroad followed by the Motorcycle Center, a motor cycle repair shop, and several residential buildings to the North, by Beechwood Auto Body Inc and H&M Tech are located east of the Site across 2nd Street. Another industrial building, Atlas Welding & Boiler Repair Inc, is located west of the Site. South of the Site is Beechwood Avenue followed by a parking lot, also owned by 125 Beechwood LLC, single family residences, and commercial buildings.

2.2 Previous Uses and Current Occupation

The Site is occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner. Current operations at the Site consist of typical commercial office, self-storage, and parking operations, and associated property maintenance.

A previous Phase I Environmental Site Assessment (Phase I) was prepared for the Site by AKRF, Inc. (AKRF) in 2012. According to this previous report, the Site at 125 Beechwood Avenue was developed with the existing one- to two-story warehouse in 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corp. (aka Gries Dynacast) from 1951 through 1985, who utilized the Site for metal fabrication and die-casting and plating operations.

One 10,000-gallon fuel oil underground storage tank (UST) was closed-in-place beneath the northeastern portion of the building at 125 Beechwood Avenue. Additionally, according to the New Rochelle Building Department, the Site at 125 Beechwood Avenue was formerly equipped with two gasoline USTs and a gas pump. The gasoline USTs were reportedly installed in 1979 and 1980 and removed in 1985 from the northeastern portion of the Site in the loading dock area.

3.0 REGULATORY FRAMEWORK

3.1 Relevant NYSDEC Guidelines and Standards

The NYSDEC sets forth comprehensive guidelines and standards governing BCP. Key regulations include:

- **DER-31 Green Remediation Policy:** DER-31 Green Remediation Policy outlines principles and practices for implementing green and sustainable remediation strategies. It encourages the use of environmentally friendly practices to minimize the environmental footprint of remediation activities.
- **Part 375 Environmental remediation Policy:** Part 375 of the New York State regulations provides the framework for environmental remediation programs, including the BCP. It delineates the requirements for investigation, remediation, and site closure procedures.
- **DER-10 Technical Requirements for Site Investigation and Remediation:** NYSDEC issues technical guidance documents to assist in the implementation of remediation activities. These documents provide detailed instructions on sampling protocols, risk assessment methodologies, and remediation technologies.

3.2 Compliance Requirements for the BCP

Participants in the BCP must adhere to stringent regulatory requirements to achieve successful site cleanup and redevelopment:

- **Site Characterization**: Comprehensive site investigations are required to assess the nature and extent of contamination. Soil, groundwater, and other environmental media must be sampled to determine contaminant presence and concentration.
- **Remedial Action Work Plan (RAWP):** Participants must develop a RAWP outlining the proposed remediation approach, including objectives, cleanup standards, and technologies. Submission to NYSDEC for review and approval is mandatory.
- **Remedial Activities:** Remediation must be conducted according to the approved RAWP and applicable regulation, including proper handling, treatment, and disposal of contaminated media.
- **Monitoring and Reporting:** Implementation of monitoring programs to track remediation effectiveness and ensure compliance is necessary. Regular reporting to NYSDEC is mandatory to document progress and address any issues.

3.3 Green and Sustainable Remediation Practices

In addition to regulatory compliance, NYSDEC advocates for the use of green and sustainable remediation practices:

- **Pollution Prevention**: Reducing or eliminating hazardous substances at the source through pollution prevention measures is encouraged.
- **Energy Efficiency:** Utilizing energy-efficient technologies and renewable energy sources to minimize greenhouse gas emissions and the carbon footprint of remediation activities is

promoted.

- **Resource Conservation:** Reusing and recycling materials, as well as restoring natural resources, minimizes waste generation and promotes sustainable land use practices.

Adhering to these regulatory guidelines and incorporating green and sustainable remediation practices allows participants in the BCP to achieve effective site cleanup while minimizing environmental impacts and promoting long-term environmental stewardship.

3.4 Regulatory Status of the Site

The Site was enrolled in the BCP on March 20, 2023, and was listed on the Brownfield Cleanup Agreement (BCA) under site name 125 Beechwood, LLC, NYSDEC Site No. C360232.

The Site was investigated in accordance with the scope of work presented in the NYSDEC-approved Remedial Investigation Work Plan (RIWP) dated August 17, 2023. The Remedial Investigation (RI) was conducted between November 2023 and January 2024. A Remedial Investigation Report (RIR) was submitted to NYSDEC and the New York State Department of Health (NYSDOH) in April 2024. The NYSDEC and NYSDOH approved the RIR via correspondence dated July 10, 2024.

This EFA will be submitted as part of a draft Remedial Action Work Plan (RAWP) to the NYSDEC in March 2025.

4.0 BASELINE ENVIRONMENTAL CONDITIONS

Subsurface soils at the Site included brown fine to medium sandy silts to depths up to 18 feet bgs, with weathered rock observed between 4 and 22 feet bgs at different areas throughout the Site, followed by competent bedrock between 22 and 28 feet bgs. Groundwater at the Site is present at depths between approximately 5 to 13 feet bgs and generally flows to the southeast. New Rochelle Harbor is located approximately 5,800 feet to the southeast of the Site.

Shallow soils across the Site show historic fill-related impacts, but these exceedances have not significantly affected groundwater quality. The Site soils are currently capped by existing buildings and pavement.

Visual inspections identified petroleum-like staining beneath the wood block flooring in the vicinity of borings SB-14 and SB-15. Soil samples collected from this area identified polycyclic aromatic hydrocarbon (PAH) soil contamination at concentrations in exceedance of NYSDEC Commercial Use Soil Cleanup Objectives (SCOs). Remedial action in the form of engineering and institutional controls will address PAH impacts in SB-14 and SB-15.

Groundwater sampling data identified chlorinated volatile organic compound (CVOC) concentrations in exceedance of the Ambient Water Quality Guidelines (AWQS) in overburden groundwater throughout the central portion of the Site, with the highest concentrations detected downgradient of the former basement automotive repair space (AOC-1) in monitoring well MW-2 and in the area of the former die-casting operations (AOC-2) in monitoring well MW-4. Remedial action is necessary to address CVOC impacts to groundwater in AOC-2 and AOC-2.

Groundwater impacts reportedly decreased in overburden groundwater at the eastern and southern property boundaries, in monitoring wells MW-6 and MW-7. Further, CVOCs were not identified in temporary well point SB-24(TW) installed at an offsite, downgradient location.

Groundwater sampling further identified PAHs, secondary metals, and emerging contaminants in shallow groundwater samples at concentrations marginally above AWQS. These contaminants are common in urban areas and are not likely attributed to onsite releases. Groundwater beneath the Site and surrounding areas is not used for public or private drinking purposes and, as such, potential environmental impacts related to these exceedances are unlikely.

Soil vapor and indoor air sample results identified CVOCs throughout the central portion of the Site, with the highest concentrations detected in the former basement automotive repair space (AOC-1) and in the area of the former die-casting operations (AOC-2). Remedial action is necessary to address CVOC impacts to soil vapor and indoor air in AOC-1 and AOC-2.

5.0 SELECTED REMEDIATION OPTION

The objective of this RAWP is to achieve a Track 4 remedy for commercial use consisting of installation of an SSDS, and engineering and institutional controls to prevent exposure to subsurface contaminated media.

The following remedy is proposed for the Site:

1. **Installation of an SSDS:** Installation of an active sub-slab depressurization system (SSDS). A vapor mitigation system consisting of an active SSDS shall be installed underneath the slab of the existing structure. The SSDS will consist of centrally location suction pits including slotted vertical PVC piping placed in a gas permeable ¾-inch stone. Lateral piping will be connected to vertical piping and discharged above the roofline using an active suction fan. The discharge point of the vented air should be at least 10-feet away from any windows, fresh-air intakes and/or HVAC components. Minimal soil excavation will be completed during SSDS installation.

2. **Groundwater Sampling:** PSG will conduct groundwater sampling events utilizing the existing groundwater monitoring wells at the Site. Groundwater monitoring will include sampling the existing monitoring wells on an annual basis. PSG will conduct the groundwater sampling events in accordance with the procedures presented in the NYSDEC-approved RIWP for the Site.

3. **Engineering Controls:** The asphalt, concrete, and building slabs at the Site will be visually inspected to determine they are complete, with no significant cracks or damage, and can act as an engineering control to prevent exposure to remaining site impacts. Once confirmed, the composite cover system consisting of the existing concrete building slabs and asphalt pavement on exterior open areas of the Site will prevent human exposure to contaminated soils. In addition, an SSDS for the buildings prevent exposure to VOC vapors by mitigating the potential for vapor intrusion from the subsurface into the Site buildings.

4. **Institutional Controls:** Proposed institutional controls include the recording of an environmental easement (EE) to prevent future exposure to any remaining contamination at the Site; implementation of a Site Management Plan (SMP) for long-term management of residual contamination as required by the EE; and use restrictions limiting the use of the Site for commercial/industrial activities, restricting the use of groundwater, and restricting unauthorized excavation or disturbance of the cover system.

6.0 IMPACT ASESSMENT

6.1 Environmental Impacts of Selected Remedy

6.1.1 SSDS Installation

SSDS installations, including piping, extraction point, permanent vacuum monitoring point (VMP), and radial blower/fan installation, and the management and disposal of investigation-derived waste (IDW) have several green and sustainable environmental impacts, and proper mitigation strategies can further enhance their sustainability.

- **Environmental Protection**
    - **Soil Vapor Monitoring:** VMPs wells provide critical data on soil quality and contamination levels, enabling timely detection of pollutants and ensuring effective protection of soil vapor and indoor air resources.
    - **Informed Decision-Making:** Data from VMPs help in making informed decisions about remediation strategies, leading to more effective and efficient cleanup efforts.
- **Reduced Environmental Disturbance**
    - **Minimal Footprint:** The installation of SSDS piping, extraction points and permanent VMPs, and radial blowers/fans typically involves minimal land disturbance compared to large-scale excavation projects, preserving local ecosystems and habitats.
    - **Non-Invasive Techniques:** Modern drilling techniques for SSDS installations are designed to be minimally invasive, reducing the impact on the surrounding environment.
- **Controlled Waste Management**
    - **Safe Handling:** Proper management of IDW, which includes contaminated soil, water, and other materials, prevents the spread of contaminants to unaffected areas, protecting the environment and public health.
    - **Regulated Disposal:** Adhering to regulatory guidelines ensures that IDW is disposed of in a manner that minimizes environmental impact, such as through secure landfills or treatment facilities.
    - **Waste Minimization:** Effective waste management strategies can minimize the volume of waste generated, reducing the burden on disposal facilities and the environment.

6.1.2 Excavation

- **Energy Consumption and Emissions**
    - **Fossil Fuel Use**: Excavation equipment will consist of hand-held equipment and will not result in fossil fuel use.
    - **Greenhouse Gas (GHG) Emissions**: The use of trucks to and from the Site for excavation activities releases carbon dioxide (CO2) and other GHGs, contributing to climate change.
- **Pollutant Release**
    - **Volatilization:** Disturbing contaminated soil can release volatile organic compounds (VOCs) into the air, posing health risks to workers and nearby communities.
    - **Dust Generation:** Excavation can produce dust, which may contain hazardous substances, leading to air quality issues.

6.1.3 Soil Transportation

- **Energy Consumption and Emissions**
    - **Fuel Use:** Loading and transporting contaminated soil typically requires trucks, which consume significant amounts of fuel.
    - **GHG Emissions:** Transportation emits CO2, nitrogen oxides (NOx), and particulate matter (PM), contributing to air pollution and climate change.
- **Road Infrastructure Impact**
    - **Wear and Tear:** Heavy trucks can cause damage to roads, leading to increased maintenance and associated environmental impacts from repair activities.
    - **Traffic Congestion:** Increased traffic from transportation activities can lead to congestion, further exacerbating emissions and energy use.

6.1.4 Soil Disposal

- **Landfill Impact**
    - **Space Consumption:** Disposing of contaminated soil in landfills takes up valuable landfill space, which is a finite resource.
    - **Leachate Generation:** Contaminated soil can produce leachate, which, if not properly managed, can contaminate groundwater and surface water.

- **Long-Term Environmental Impacts**
    - **Future Land Use Restrictions:** Disposal sites may be restricted in future use, impacting land availability for other purposes.
    - **Potential for Remediation:** If disposal sites are not adequately managed, they may require future remediation efforts, leading to additional environmental impacts.

6.1.5 Groundwater Remediation

Groundwater remediation will be achieved through monitored natural attenuation (MNA). This method is designed to address groundwater contamination effectively while minimizing environmental harm. Green and sustainable impacts are summarized below.

- **Reduced Carbon Footprint**
    - **Minimized Excavation and Transportation:** MNA does not require specific equipment or excavation, reducing the need for extensive excavation and transportation of contaminated materials. This leads to lower fossil fuel consumption and greenhouse gas emissions.
    - **Energy Efficiency:** No chemical processes are involved in MNA, further reducing the carbon footprint.
- **Enhanced Environmental Safety**
    - **Targeted Contaminant Degradation:** MNA degrades VOCs in situ, minimizing the risk of releasing harmful substances into the environment during treatment. By not introducing remediation agents into the water, MNA reduces potential air and water pollution.
    - **Reduction of VOCs:** MNA promotes the reductive dechlorination of VOCs, transforming them into less harmful compounds and thereby reducing the release of volatile organic compounds into the atmosphere.
- **Water Resource Protection**
    - **Groundwater Quality Improvement:** MNA promotes the breakdown of VOC contaminants in groundwater, leading to improved water quality and reduced risk to human health and the environment.
    - **Preservation of Aquifers:** By not introducing remediation agents into the water, the natural structure and integrity of aquifers are preserved, ensuring the long-term sustainability of groundwater resources.
- **Ecosystem Preservation**
    - **Minimal Physical Disturbance:** MNA involves minimal physical disruption to the site, preserving local ecosystems and reducing habitat disturbance.

- **Biodegradable Additives:** MNA does not introduce harmful chemicals into the environment, aligning with sustainable remediation practices.

- **Long-Term Sustainability**
  - **Permanent Contaminant Removal:** MNA promotes the permanent degradation of VOCs through natural means rather than merely transferring them to another medium, providing a long-lasting solution to contamination issues.
  - **Long-Term Liabilities:** Effective MNA remediation reduces future environmental liabilities and the need for ongoing management, contributing to long-term sustainability.

6.2 Analysis of Air Emissions, Water Use, Soil Impacts, and Waste Generation

Air Emissions

The proposed remedial actions will utilize a variety of equipment, including an electric concrete coring device, scissor lift , Ford Transit-150, and Ford Transit Connect. The use of gasoline-powered equipment will contribute to air emissions, primarily in the form of carbon dioxide (CO2), nitrogen oxides (NOx), and particulate matter (PM). The excavation processes are expected to generate fugitive dust emissions, which will be mitigated through dust control measures such as water spraying. Additionally, transportation of equipment and materials to and from the Site will contribute to emissions from diesel and gasoline engines.

Water Use

Water use is expected to be minimal in the excavation and SSDS installation activities. Throughout the remedial actions, measures will be taken to prevent unnecessary wastage.

Soil Impacts

The SSDS installation may involve the removal of impacted soils for the installation of Extraction Points. This will result in the generation of contaminated soil that will be temporarily stockpiled on-site in drums before off-site disposal. The soil impacts will be mitigated by backfilling the excavated areas with clean soil in accordance with NYSDEC regulations and restoring the concrete pavement.

Waste Generation

The excavation process will generate contaminated soil that requires proper characterization, containment, and disposal. It is estimated that five (5) 55-gallon drums of concrete and soil waste will be generated. All waste generated will be managed in accordance with state and federal regulations, ensuring safe and environmentally responsible disposal.

In summary, the proposed remedial actions are designed to address CVOC contamination in soil vapor effectively while managing the environmental footprint through controlled air emissions, minimal water use, mitigated soil impacts, and responsible waste generation practices. The project will adhere to regulatory requirements and implement best practices to minimize the overall environmental impact.

6.3 Greenhouse Gas Emissions and Energy Consumption

This section provides an analysis of the greenhouse gas (GHG) emissions and energy consumption associated with the proposed remedial actions at the Site. Detailed assumptions and calculations supporting this analysis are provided in the EPA Spreadsheets for Environmental Footprint Analysis (SEFA), included as **Appendix A**.

Equipment and Energy Consumption:

- **Utility Vehicles (unleaded gasoline):** Used for transportation of personnel and small equipment.
- **Labor Crew:** Two-man crew commuting approximately 87 miles per workday per person.

Operating Hours and Fuel Consumption:

- Operations conducted 8 hours a day, 5 days a week, over approximately 50 workdays.
- Fuel Consumption Estimates:
    - **Utility Vehicles:** Estimated 20 miles per gallon, traveling approximately 87 miles per day per person.
    - **PSG Staff**: Approximately 435 gallons total.

Greenhouse Gas Emissions:

PSG has estimated the total fuel consumption and associated greenhouse gas (GHG) emissions for each piece of equipment based on their operating hours and fuel consumption rates. The total GHG emissions were calculated using the EPA's SEFA. According to these calculations, the total greenhouse gas emissions are approximately 5,233 lbs. of carbon dioxide equivalents (CO2e). For detailed information, please refer to **Appendix A** for the SEFA.

7.0 LIFECYCLE ASSESSMENT

This lifecycle assessment (LCA) evaluates the environmental impacts associated with the chosen remedial strategy, which includes the installation of a VIMS. The LCA follows the stages of extraction, production, implementation, and end-of-life management.

7.1 Extraction and Production

- **Materials and Resources**
    - **Transportation:** Diesel-powered trucks for soil transportation to disposal sites and gasoline-powered trucks for PSG employee travel to and from Site.
    - **Disposal:** Construction and maintenance of secure landfill sites.
    - **Installation of SSDS:** Manufacturing of PVC piping, OBAR Systems, Inc. GBR89 compact radial blowers/fans, monitoring points, and associated monitoring equipment.
- **Environmental Impacts**
    - **Resource Depletion:** Extraction of raw materials for SSDS components.
    - **Energy Consumption:** Significant energy use in the manufacturing of SSDS components.
    - **Emissions:** GHG emissions from the production of materials and the operation of equipment.
    - **Water Use:** Water consumption in the production and manufacturing processes.

7.2 Implementation

- **Activities**
    - **Installation:** SSDS extraction point, monitoring point, piping, and blower installation
    - **Excavation:** Excavating and removing VOC-contaminated soil.
    - **Transportation:** Hauling contaminated soil to disposal sites.
    - **Disposal:** Securely disposing of contaminated soil in lined landfills.
    - **Monitoring Wells:** Periodic sampling and analysis.
- **Environmental Impacts**
    - **GHG Emissions:** Emissions from the operation of diesel-powered trucks.
    - **Soil Disruption:** Physical disturbance of soil structure and potential erosion.
    - **Air Quality:** Dust and VOC emissions during soil excavation and transport and VOC emissions during SSDS operation and sampling.
    - **Waste Generation:** Production of IDW during SSDS installation.

7.3 Use and Maintenance

- **Ongoing Activities**
    - **Monitoring:** Regular sampling and analysis of groundwater via monitoring wells.
    - **Maintenance:** Upkeep of monitoring wells and mitigation systems.
- **Environmental Impacts**
    - **Energy Use:** Energy consumption for periodic sampling and laboratory analysis.
    - **Waste:** Generation of IDW from periodic well sampling and maintenance activities.
    - **Operational Emissions:** Emissions from vehicles and equipment used in monitoring and maintenance.

7.4 End-of-Life-Management

- **Activities**
    - **Site Closure:** Decommissioning of monitoring wells and remediation systems once remediation goals are achieved.
    - **Waste Disposal:** Proper disposal of decommissioned well materials and any remaining IDW.
- **Environmental Impacts**
    - **Resource Recovery:** Potential recycling of SSDS components and well materials (e.g., metals).
    - **Waste Management:** Secure disposal of non-recyclable materials.
    - **Land Restoration:** Restoring the site to its natural state, which may involve re-vegetation and soil stabilization.

8.0 MITIGATION STRATEGIES

The environmental impacts of contaminated soil excavation, transportation, and disposal can be mitigated through sustainable practices. Implementing renewable energy, efficient transportation logistics, and innovative disposal methods are essential strategies for minimizing the environmental footprint of these activities.

8.1 SSDS Installation

- **Site Selection and Planning**
    - **Strategic Placement:** Carefully configure SSDS piping layout and select the VMP and radial blower/fan locations to maximize data quality while minimizing ecological disruption.
    - **Minimize Land Use:** Plan SSDS installation to use the smallest footprint necessary, preserving as much natural land as possible.
- **Pollution Prevention**
    - **Containment Measures:** Implement measures to prevent spills and leaks during SSDS installation, such as secondary containment for equipment and materials.
    - **Proper Sealing and Abandonment:** Ensure that VMPs are properly sealed and abandoned after use to prevent contamination pathways.
- **IDW Characterization and Segregation**
    - **Accurate Identification:** Characterize and segregate IDW based on contamination levels to ensure appropriate handling and disposal. Separate hazardous from non-hazardous waste.
    - **Documentation:** Maintain detailed records of waste types, quantities, and disposal methods to ensure compliance with environmental regulations.
    - **Containment and Storage:** Use secure, labeled containers for temporary storage of IDW to prevent leaks and spills. Employ secondary containment measures where necessary.
- **Sustainable Waste Disposal**
    - **Environmentally Safe Facilities:** Dispose of IDW in secure, environmentally safe landfills or disposal facilities designed to prevent leachate and gas emissions.
    - **Transportation:** Ensure safe transportation of IDW to disposal or treatment facilities using properly licensed and equipped vehicles to prevent accidents and spills.

8.2 Soil Excavation

- **Soil Management Practices**
    - **Minimize Disturbance:** Excavate only the necessary areas to limit soil disturbance and preserve the surrounding environment. Use precision excavation techniques to target contaminated areas more accurately.
- **Dust Suppression**
    - **Water Sprays:** Regularly spraying water over excavation sites can help suppress dust, preventing airborne contaminants from affecting air quality.
    - **Dust Barriers:** Erect barriers or windbreaks around the site to contain dust and prevent it from spreading to surrounding areas if necessary.
- **Operational Efficiency**
    - **Optimize Operations:** Plan excavation activities to maximize efficiency, such as scheduling tasks during favorable weather conditions to reduce delays and additional fuel consumption.
- **Use of Eco-Friendly Materials**
    - **Biodegradable Lubricants:** Use biodegradable and environmentally friendly lubricants and hydraulic fluids when applicable to reduce the risk of soil and water contamination in case of leaks or spills.
- **Community Air Monitoring Program (CAMP)**
    - **Air Quality Monitoring:** Regularly monitor air quality around the excavation sites to detect and address any potential pollutant emissions promptly.

8.3 Soil Transportation

- **Efficient Routing:** Planning the most efficient routes can minimize fuel consumption and emissions.
- **Low-Emissions Vehicles:** Using vehicles with better fuel efficiency or alternative fuels can reduce environmental impact.
- **Load Optimization:** Maximizing the load capacity of each trip can reduce the number of trips required, thereby lowering overall emissions.

8.4 Soil Disposal

- **Waste Management**
    - **Proper Disposal:** Ensure that any waste generated during excavation, such as non-contaminated soil or debris, is disposed of in an environmentally responsible manner, following local regulations and guidelines.

- **Recycling:** Where possible, recycle materials such as concrete or metals encountered during excavation, reducing the demand for new raw materials and conserving landfill space.

8.5 Groundwater Remediation

To maximize the green and sustainable impacts of using MNA for remediation of VOC-impacted groundwater, the following mitigation strategies can be employed:

- **Optimize Treatment Processes**
  - **Site-Specific Assessments:** Thorough site assessments were conducted to tailor the remedial strategy to the Site. This increases the efficiency and effectiveness of the treatment.
- **Monitoring and Maintenance**
  - **Continuous Monitoring:** Implement comprehensive monitoring programs to track the progress of remediation and detect any potential adverse effects early. This includes monitoring groundwater quality to ensure contaminants are effectively degraded.
  - **Adaptive Management:** Be prepared to adjust remediation strategies based on monitoring results to address any emerging issues and optimize treatment performance.

GREEN AND SUSTAINABLE REMEDIATION - APPENDIX A

SUPPORTING DATA AND CALCULATIONS

PSG

Environmental Footprint Summary

Core Element		Metric	Unit of Measure	Footprint						
				Component 1: Installation of Vapor Intrusion Mitigation System (VIMS)	< Component 2 >	< Component 3 >	< Component 4 >	< Component 5 >	< Component 6 >	Total
Materials & Waste	M&W-1	Refined materials used on-site	Tons	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	M&W-2	% of refined materials from recycled or reused material	%							
	M&W-3	Unrefined materials used on-site	Tons	0.000	0.000	0.000	0.000	0.000	0.000	0.0
	M&W-4	% of unrefined materials from recycled or reused material	%							
	M&W-5	On-site hazardous waste disposed of off-site	Tons	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	M&W-6	On-site non-hazardous waste disposed of off-site	Tons	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	M&W-7	Recycled or reused waste	Tons	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	M&W-8	% of total potential waste recycled or reused	%							
Water (used on-site)	W-1	Public water use	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-2	Groundwater use	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-3	Surface water use	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-4	Reclaimed water use	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-5	Storm water use	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-6	User-defined water resource #1	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-7	User-defined water resource #2	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W-8	Wastewater generated	MG	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy	E-1	Total energy used (on-site and off-site)	MMBtu	39.1	0.0	0.0	0.0	0.0	0.0	39.1
	E-2	Energy voluntarily derived from renewable resources								
	E-2A	On-site renewable energy generation or use + on-site biodiesel use + biodiesel and other renewable resource use for transportation	MMBtu	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	E-2B	Voluntary purchase of renewable electricity	MWh	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	E-3	Voluntary purchase of RECs	MWh	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	E-4	On-site grid electricity use	MWh	0.488	0.000	0.000	0.000	0.000	0.000	0.5
Air	A-1	On-site NOx, SOx, and PM emissions	Pounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A-2	On-site HAP emissions	Pounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A-3	Total NOx, SOx, and PM emissions	Pounds	17.5	0.0	0.0	0.0	0.0	0.0	17.5
	A-3A	Total NOx emissions	Pounds	12.3	0.0	0.0	0.0	0.0	0.0	12.3
	A-3B	Total SOx emissions	Pounds	4.2	0.0	0.0	0.0	0.0	0.0	4.2
	A-3C	Total PM emissions	Pounds	1.0	0.0	0.0	0.0	0.0	0.0	1.0
	A-4	Total HAP emissions	Pounds	1.4	0.0	0.0	0.0	0.0	0.0	1.4
	A-5	Total greenhouse gas emissions	Tons CO2e*	2.6	0.0	0.0	0.0	0.0	0.0	2.6
Land & Ecosystems		Qualitative Description								

** Total greenhouse gases emissions (in CO2e) include consideration of CO2, CH4, and N2O (Nitrous oxide) emissions.*
"MMBtu" = millions of Btus
"MG" = millions of gallons
"CO2e" = carbon dioxide equivalents of global warming potential
"MWh" = megawatt hours (i.e., thousands of kilowatt-hours or millions of Watt-hours)
"Tons" = short tons (2,000 pounds)

The above metrics are consistent with EPA's Methodology for Understanding and Reducing a Project's Environmental Footprint (EPA 542-R-12-002), February 2012

Notes:

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Energy & Air Compiled Results

Category	Total Energy	GHG	NOx	SOx	PM	NOx + SOx + PM	HAPs
	MMbtus	lbs CO2e	lbs	lbs	lbs	lbs	lbs
On-site (Scope 1)	**2**	**0**	**0**	**0**	**0**	**0**	**0**
Grid Electricity Generation (Scope 2)	**3.381**	**292**	**0**	**0**	**0**	**0**	**0**
Transportation (Scope 3a)	**27**	**4,252**	**11**	**0**	**1**	**12**	**1**
Other Off-Site (Scope 3b)	**7**	**689**	**1**	**4**	**0**	**5**	**0**
Remedy Totals	**39**	**5,233**	**12**	**4**	**1**	**18**	**1**

Values that are forwarded to the "Summary" tab are indicated in orange.

Voluntary Renewable Energy Use	Unit	Quantity	
On-site renewable energy generation or use	MMBtu	**0**	
On-site biodiesel use	MMBtu	**0**	
Biodiesel and other renewable resource use for transportation	MMBtu	**0**	
On-site renewable energy generation or use + on-site biodiesel use + biodiesel and other renewable resource use for transportation	MMBtu	**0**	*(This value is the sum of the three rows above)*
Voluntary purchase of renewable electricity	MWh	**0**	
Voluntary purchase of RECs	MWh	**0**	

This worksheet is not intended for user input. Values on this worksheet are obtained from the following file: 21393176-EN_calculations v1.xlsx

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - On-Site Footprint (Scope 1)

Contributors to Footprints	Units	Usage	Energy		GHG		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
On-Site														
On-site Renewable Energy														
Renewable electricity generated on-site	MWh	0	3.413	0										
Landfill gas combusted on-site for energy use	ccf CH4	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
On-site biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
On-site biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
User-defined on-site renewable energy use #1	gal	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined on-site renewable energy use #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
On-site Renewable Energy Subtotals				**0**		**0**		**0**		**0**		**0**		**0**
Notes:														
On-site Conventional Energy														
On-site grid electricity	MWh	0.487884	3.413	1.6651481										
On-site diesel use - Other	Gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
On-site diesel use <75 hp	Gal	0	0.139	0	22.21	0	0.1565	0	0.000145	0	0.0145	0	0.00004	0
On-site diesel use 75<hp<750	Gal	0	0.139	0	22.24	0	0.101	0	0.00013	0	0.009	0	0.00004	0
On-site diesel use >750 hp	Gal	0	0.139	0	22.24	0	0.149	0	0.00013	0	0.006	0	0.00004	0
On-site gasoline use - Other	Gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
On-site gasoline use <25 hp	Gal	0	0.124	0	17.48	0	0.037	0	0.00025	0	0.165	0	0.00008	0
On-site gasoline use >25 hp	Gal	0	0.124	0	19.93	0	0.032	0	0.00029	0	0.002	0	0.00009	0
On-site natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
On-site compressed natural gas use - Other	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site compressed natural gas use	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site liquified petroleum gas use - Other	gal	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
On-site liquified petroleum gas use	gal	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
Other forms of on-site conventional energy use #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Other forms of on-site conventional energy use #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
On-site Conventional Energy Subtotals				**2**		**0**		**0**		**0**		**0**		**0**
Notes:														
Other On-site Emissions														
On-site HAP process emissions	lbs	0											1	0
On-site GHG emissions	lbs CO2e	0			1	0								
On-site carbon storage	lbs CO2e	0			1	0								
GHG avoided by flaring on-site landfill methane	Lbs	0			-262	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Other on-site NOx emissions or reductions	lbs	0					1	0						
Other on-site SOx emissions or reductions	lbs	0							1	0				
Other on-site PM emissions or reductions	lbs	0									1	0		
User-defined recycled/reused on-site #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused on-site #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
On-site Totals				**1.67**		**0**		**0**		**0**		**0**		**0**

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Electricity Generation Footprint (Scope 2)

Contributors to Footprints	Units	Usage	Energy		GHG		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Electricity Generation														
Grid electricity	MWh	0.487884	6.929	3.3805482	599	292.24252	0.611	0.2980971	0.206838	0.100913	0.03998	0.0195056	0.0180102	0.0087869
Voluntary purchase of renewable electricity	MWh	0												
Voluntary purchase of RECs	MWh	0												
Notes:														

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Transportation Footprint (Scope 3a)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Conventional Energy														
Transportation diesel use	gal	26.333	0.139	3.660287	22.5	592.4925	0.17	4.47661	0.0054	0.1421982	0.0034	0.0895322	0.0000052	0.0001369
Transportation diesel use - car	gal	0	0.139	0	22.57	0	0.015	0	0.0002	0	0.003	0	0.00252	0
Transportation diesel use - passenger truck	gal	0	0.139	0	22.545	0	0.0585	0	0.0002	0	0.007	0	0.002605	0
Transportation diesel use - User Defined	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Transportation gasoline use	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation gasoline use - car	gal	0	0.124	0	19.77	0	0.027	0	0.00036	0	0.003	0	0.0067	0
Transportation gasoline use - passenger truck	gal	184.9	0.124	22.9276	19.79	3659.171	0.035	6.4715	0.00036	0.066564	0.003	0.5547	0.00661	1.222189
Transportation gasoline use - User Defined	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use - User Defined	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
User-defined conventional energy transportation #1	TBD	10	0	0	0	0	0	0	0	0	0	0	0	0
User-defined conventional energy transportation #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Conventional Energy Subtotals				**27**		**4,252**		**11**		**0**		**1**		**1**
Notes:														
Renewable Energy														
Transportation biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
User-defined renewable energy transportation #1	TBD	0	Biodiesel		0	0	0	0	0	0	0	0	Ref.	
User-defined renewable energy transportation #2	TBD	0	mpg or pmp		0	0	0	0	0	0	0	0	0	0
Renewable Energy Subtotals				**0**		**0**		**0**		**0**		**0**		**0**
Notes:														
Transportation Totals				**27**		**4252**		**11**		**0**		**1**		**1**

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Construction Materials														
Aluminum, Rolled Sheet	lb	0	0.0633	0	9.15	0	0.0148	0	0.0283	0	0.0088	0	0.00102	0
Asphalt, mastic	lb	0	0.0412	0	0.85	0	0.00271	0	0.00798	0	0.000766	0	0.00107	0
Asphalt, paving-grade	lb	0	0.5	0	8.58	0	0.0299	0	0.0969	0	0.0091	0	0.0133	0
Ethanol, Corn, 95%	lb	0	0.0318	0	-0.0199	0	0.00425	0	0.00303	0	0.000469	0	0.0000846	0
Ethanol, Corn, 99.7%	lb	0	0.0324	0	0.0591	0	0.00431	0	0.0031	0	0.000472	0	0.000087	0
Ethanol, Petroleum, 99.7%	lb	0	0.0205	0	1.25	0	0.00199	0	0.00214	0	0.000277	0	0.0000589	0
Gravel/Sand Mix, 65% Gravel	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Gravel/sand/clay	lb	0	0.000028	0	0.00335	0	0.0000165	0	0.000015	0	0.000002	0	2.05E-10	0
HDPE	lb	0	0.0332	0	1.94	0	0.00325	0	0.00409	0	0.000439	0	0.0000641	0
Photovoltaic system (installed)	W	0	0.0336	0	4.47	0	0.015	0	0.032	0	0.00063	0	0.0000029	0
PVC	lb	0	0.0262	0	2.02	0	0.004	0	0.00274	0	0.000372	0	0.000375	0
Portland cement, US average	lb	0	0.0139	0	1.34	0	0.00654	0	0.0104	0	0.00378	0	0.00097	0
Ready-mixed concrete, 20 MPa	ft3	0	0.217	0	19.5	0	0.0975	0	0.154	0	0.057	0	0.0141	0
Round Gravel	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Sand	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Stainless Steel	lb	0	0.0116	0	3.4	0	0.0075	0	0.012	0	0.0044	0	0.000144	0
Steel	lb	0	0.0044	0	1.1	0	0.0014	0	0.0017	0	0.00056	0	0.000067	0
Other refined construction materials	lb	0	0.01885	0	2.115	0	0.0040375	0	0.0051325	0	0.0014428	0	0.0001625	0
Other unrefined construction materials	lb	0	0.000028	0	0.00335	0	0.0000165	0	0.000015	0	0.000002	0	2.05E-10	0

Notes:

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Off-Site Footprint (Scope 3b)

			Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
Category	Units	Usage	Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Treatment Materials & Chemicals														
Cheese Whey	lbs	0	0.0025	0	0.031	0	0.000062	0	0.000033	0	0.000002	0	NP	
Emulsified vegetable oil	lbs	0	0.0077	0	3.44	0	0.0066	0	0.0019	0	0.000033	0	NP	
Granular activated carbon, primary	lbs	0	0.0356	0	4.82	0	0.0793	0	0.128	0	0.000987	0	0.000657	0
Granular activated carbon, regenerated	lbs	0	0.00873	0	1.7	0	0.00733	0	0.0129	0	0.000886	0	0.000671	0
Hydrogen Peroxide, 50% in H2O	lbs	0	0.00979	0	1.19	0	0.00142	0	0.0024	0	0.000308	0	0.0000629	0
Iron (II) Sulfate	lbs	0	0.00147	0	0.167	0	0.000316	0	0.000589	0	0.000103	0	0.000023	0
Lime, Hydrated, Packed	lbs	0	0.00206	0	0.762	0	0.000513	0	0.000358	0	0.00013	0	6.57E-06	0
Molasses	lbs	0	0.0044	0	0.48	0	0.0011	0	0.00024	0	0.0000041	0	NP	
Phosphoric Acid, 70% in H2O	lbs	0	0.0067	0	0.882	0	0.00282	0	0.0294	0	0.00171	0	0.000163	0
Potassium Permanganate	lbs	0	0.00981	0	1.16	0	0.00234	0	0.0032	0	0.000422	0	0.000122	0
Sodium Hydroxide, 50% in H2O	lbs	0	0.00977	0	1.09	0	0.00194	0	0.00352	0	0.000403	0	0.000129	0
Other Treatment Chemicals & Materials	lbs	0	0.015	0	1.67	0	0.003	0	0.0065	0	0.00061	0	0.000016	0
Notes:														
Fuel Processing														
Biodiesel produced	gal	0	0.029	0	-16.8	0	0.018	0	0.033	0	0.00082	0	NP	
Diesel produced	gal	26.333	0.017	0.447661	3.02	79.52566	0.0051	0.1342983	0.0062	0.1632646	0.0017	0.0447661	0.0011	0.0289663
Gasoline produced	gal	184.9	0.033	6.1017	2.8	517.72	0.0046	0.85054	0.005	0.9245	0.0015	0.27735	0.001	0.1849
Liquefied Petroleum Gas Produced	gal	0	0.088	0	1.47	0	0.0016	0	0.0024	0	0.0007	0	0.0003	0
Natural Gas - Compressed Produced	ccf	0	19.983	0	343.92	0	0.4732	0	2.1651	0	0.1846	0	0.2895	0
Natural Gas Produced	ccf	0	0.0052	0	2.2	0	0.0037	0	0.0046	0	0.000072	0	0.0000061	0
Fuel Processing Subtotals				**6.549361**		**597.24566**		**0.9848383**		**1.0877646**		**0.3221161**		**0.2138663**
Notes:														
Public water	gal x 1000	0.125	0.0092	0.00115	5	0.625	0.0097	0.0012125	0.0059	0.0007375	0.016	0.002	0.000015	1.875E-06
User-defined water resource #1	gal x 1000	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined water resource #2	gal x 1000	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Off-Site Footprint (Scope 3b)

			Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
Category	Units	Usage	Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Off-Site Services														
Hazardous waste incineration	lb	0	0.00609	0	2.43	0	0.0016	0	0.00167	0	0.000209	0	0.000087	0
Off-site waste water treatment (POTW)	gal x 1000	0	0.015	0	4.4	0	0.016	0	0.015	0	NP		NP	
Off-site non-hazardous waste landfill	ton	0	0.16	0	25	0	0.14	0	0.075	0	0.4	0	0.0014	0
Off-site hazardous waste landfill	ton	0	0.18	0	27.5	0	0.154	0	0.0825	0	0.44	0	0.00154	0
Off-site Laboratory Analysis - Other	sample	0	0.058071	0	6.8534384	0	0.131402	0	0.3038758	0	0.0455698	0	0.0330165	0
Off-site Laboratory Analysis - Metals	sample	0	0.212	0	27.4693	0	0.6423	0	1.5072	0	0.2264	0	0.1643	0
Off-site Laboratory Analysis - Mercury	sample	0	0.0731715	0	9.325458	0	0.2127439	0	0.4982396	0	0.0747359	0	0.0542332	0
Off-site Laboratory Analysis - Inorganic Anions	sample	0	0.0074025	0	0.6459478	0	0.0067681	0	0.0147929	0	0.0022024	0	0.0015542	0
Off-site Laboratory Analysis - Alkalinity	sample	0	0.0174398	0	1.3381922	0	0.0070106	0	0.0132496	0	0.00194	0	0.0012831	0
Off-site Laboratory Analysis - Perchlorate	sample	0	0.023885	0	1.8717054	0	0.0079807	0	0.0141535	0	0.0020547	0	0.0012875	0
Off-site Laboratory Analysis - Nitrogen/Nitrate	sample	0	0.0336475	0	4.29897	0	0.0954592	0	0.2226646	0	0.0335099	0	0.0242506	0
Off-site Laboratory Analysis - Sulfate	sample	0	0.0141225	0	1.4726728	0	0.0079807	0	0.0136024	0	0.0019797	0	0.0012015	0
Off-site Laboratory Analysis - PCBs	sample	0	0.0512769	0	5.224902	0	0.0833339	0	0.1904774	0	0.0284393	0	0.0212083	0
Off-site Laboratory Analysis - VOCs	sample	0	0.0762045	0	9.016814	0	0.104498	0	0.2270738	0	0.0339508	0	0.0235892	0
Off-site Laboratory Analysis - SVOCs	sample	0	0.0715602	0	7.870422	0	0.1459445	0	0.3373038	0	0.0504853	0	0.0372577	0
Notes:														
Resource Extraction for Electricity														
Coal extraction and processing	MWh	0.0048788	3.1	0.014899	180.0	0.8781912	0.8	0.0037567	0.2	0.0007318	0.0	8.782E-05	NP	
Natural gas extraction and processing	MWh	0.2097901	1.6	0.3423355	270.0	56.643332	0.2	0.0377622	13.0	2.7272716	0.0	0.0014895	NP	
Nuclear fuel extraction and processing	MWh	0.1170922	0.2	0.0182046	25.0	2.927304	0.2	0.0175638	0.5	0.0585461	0.0	0.0001756	NP	
Oil extraction and processing	MWh	0.0048788	2.3	0.0111989	270.0	1.3172868	1.7	0.008294	0.1	0.0003366	0.0	0.0002049	NP	
Other fuel extraction and processing	MWh	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource Extraction Subtotals				**0.386638**		**61.766114**		**0.0673768**		**2.7868861**		**0.0019579**		**0**
Notes:														
Electricity Transmission														
Transmission and distribution losses	MWh	0.487884	1.0342	0.5045696	59.9	29.224252	0.0611	0.0298097	0.0206838	0.0100913	0.003998	0.0019506	0.001801	0.0008787
Notes:														

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Off-Site Footprint (Scope 3b)

			Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.		Conv.		Conv.		Conv.		Conv.		Conv.	
Category	**Units**	**Usage**	**Factor**	**MMBtus**	**Factor**	**lbs CO2e**	**Factor**	**lbs**	**Factor**	**lbs**	**Factor**	**lbs**	**Factor**	**lbs**
User-defined Materials														
User-defined material #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Treatment Mix ABC	lb	0	0.05	0	8.1	0	0.06	0	0.053	0	0.008	0	0.0012	0
User-defined material #5	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #6	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #7	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #8	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #9	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #10	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #11	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #12	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #13	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #14	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #15	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #16	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #17	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #18	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #19	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #20	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
User-defined Waste Destinations														
User-defined recycled/reused off-site #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #3	TBD	0	y(MMBtu/u		(lbs CO2e/u		Ox(lbs/unit		Ox(lbs/unit)		M(lbs/unit)		APs(lbs/unit	
User-defined non-hazardous waste destination #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined non-hazardous waste destination #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined non-hazardous waste destination #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
Off-site Totals				**7.4417186**		**688.86103**		**1.0832373**		**3.8854795**		**0.3280245**		**0.2147469**

Component 1: Installation of Vapor Intrusion Mitigation System (VIMS) - Intermediate Totals

			Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
Category	Units	Usage	Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Total Grid Electricity Footprint														
On-site grid electricity	MWh	0.487884	3.413	1.6651481										
Electricity Generation														
Grid electricity	MWh	0.487884	6.929	3.3805482	599	292.24252	0.611	0.2980971	0.206838	0.100913	0.03998	0.0195056	0.0180102	0.0087869
Resource Extraction for Electricity														
Coal extraction and processing	MWh	0.0048788	3.1	0.014899	180.0	0.8781912	0.8	0.0037567	0.2	0.0007318	0.0	8.782E-05	NP	
Natural gas extraction and processing	MWh	0.2097901	1.6	0.3423355	270.0	56.643332	0.2	0.0377622	13.0	2.7272716	0.0	0.0014895	NP	
Nuclear fuel extraction and processing	MWh	0.1170922	0.2	0.0182046	25.0	2.927304	0.2	0.0175638	0.5	0.0585461	0.0	0.0001756	NP	
Oil extraction and processing	MWh	0.0048788	2.3	0.0111989	270.0	1.3172868	1.7	0.008294	0.1	0.0003366	0.0	0.0002049	NP	
Other fuel extraction and processing	MWh	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Electricity Transmission														
Transmission and distribution losses	MWh	0.487884	1.0342	0.5045696	59.9	29.224252	0.0611	0.0298097	0.0206838	0.0100913	0.003998	0.0019506	0.001801	0.0008787
Total Grid Electricity Footprint				**6**		**383**		**0**		**3**		**0**		**0**
Total Fuel Footprints														
Total Gasoline Footprint														
On-site gasoline use - Other	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
On-site gasoline use <25 hp	gal	0	0.124	0	17.48	0	0.037	0	0.00025	0	0.165	0	0.00008	0
On-site gasoline use >25 hp	gal	0	0.124	0	19.93	0	0.032	0	0.00029	0	0.002	0	0.00009	0
Transportation gasoline use	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation gasoline use - car	gal	0	0.124	0	19.77	0	0.027	0	0.00036	0	0.003	0	0.0067	0
Transportation gasoline use - passenger truck	gal	184.9	0.124	22.9276	19.79	3659.171	0.035	6.4715	0.00036	0.066564	0.003	0.5547	0.00661	1.222189
Transportation gasoline use - User Defined	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Gasoline produced	gal	184.9	0.033	6.1017	2.8	517.72	0.0046	0.85054	0.005	0.9245	0.0015	0.27735	0.001	0.1849
Total Gasoline Footprint		**184.9**		**29.0293**		**4176.891**		**7.32204**		**0.991064**		**0.83205**		**1.407089**
Total Diesel Footprint														
On-site diesel use - Other	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
On-site diesel use <75 hp	gal	0	0.139	0	22.21	0	0.1565	0	0.000145	0	0.0145	0	0.00004	0
On-site diesel use 75<hp<750	gal	0	0.139	0	22.24	0	0.101	0	0.00013	0	0.009	0	0.00004	0
On-site diesel use >750 hp	gal	0	0.139	0	22.24	0	0.149	0	0.00013	0	0.006	0	0.00004	0
Transportation diesel use	gal	26.333	0.139	3.660287	22.5	592.4925	0.17	4.47661	0.0054	0.1421982	0.0034	0.0895322	0.0000052	0.0001369
Transportation diesel use - car	gal	0	0.139	0	22.57	0	0.015	0	0.0002	0	0.003	0	0.00252	0
Transportation diesel use - passenger truck	gal	0	0.139	0	22.545	0	0.0585	0	0.0002	0	0.007	0	0.002605	0
Transportation diesel use - User Defined	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Diesel produced	gal	26.333	0.017	0.447661	3.02	79.52566	0.0051	0.1342983	0.0062	0.1632646	0.0017	0.0447661	0.0011	0.0289663
Total Diesel Footprint		**26.333**		**4.107948**		**672.01816**		**4.6109083**		**0.3054628**		**0.1342983**		**0.0291032**
Total Biodiesel Footprint														
On-site biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
On-site biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Biodiesel produced	gal	0	0.029	0	-16.8	0	0.018	0	0.033	0	0.00082	0	NP	
Total Biodiesel Footprint		**0**		**0**		**0**		**0**		**0**		**0**		**0**
Total Natural Gas Footprint														
On-site natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use - User Defined	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Natural gas produced	ccf	0	0.0052	0	2.2	0	0.0037	0	0.0046	0	0.000072	0	0.0000061	0
Total Natural Gas Footprint		**0**		**0**		**0**		**0**		**0**		**0**		**0**
Total Liquified Petroleum Gas Footprint														
On-site liquified petroleum gas use - Other	ccf	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
On-site liquified petroleum gas use	ccf	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
Liquified petroleum gas produced	ccf	0	0.088	0	1.47	0	0.0016	0	0.0024	0	0.0007	0	0.0003	0
Total Natural Gas Footprint		**0**		**0**		**0**		**0**		**0**		**0**		**0**
Total Compressed Gas Footprint														
On-site compressed gas use - Other	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site compressed gas use	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
Compressed gas produced	ccf	0	19.983	0	343.92	0	0.4732	0	2.1651	0	0.1846	0	0.2895	0
Total Natural Gas Footprint		**0**		**0**		**0**		**0**		**0**		**0**		**0**

Notes:

Note: Please refer to the "Default Conversions" tab for references for the default conversion factors used on this calculation sheet.

Space below available for notes and calculations:

APPENDIX B: REMEDIAL COST ESTIMATE

PSG

PSG Engineering and Geology, D.P.C.

Remedial Cost Estimate
125 Beechwood, LLC
New Rochelle, New York
PSG Project No. 21-393176
February 2025

Background Information PSG Engineering & Geology, DPC. Remedial Action Work Plan February 2025	The Site is located in New Rochelle, New York and identified as Section 2, Block 691, and Lot 005 on the New Rochelle Tax Map. The Site is occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner. Current operations at the Site consist of typical commercial office, self-storage, and parking operations, and associated property maintenance. The Site was developed with the existing warehouse in 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corp. (aka Gries Dynacast) from 1951 through 1985, who utilized the Site for metal fabrication and die-casting and plating operations. Polycyclic Aromatic Hydrocarbon (PAH) soil contamination at concentrations in exceedance of the Commercial Use Soil Cleanup Objectives (CUSCOs) is present beneath the wood block flooring in the Former Die-Casting Area (AOC-2), where petroleum-like staining was observed. Low-level concentrations of metals and pesticides in exceedance of the Unrestricted Use SCOs (UUSCOs) were present in soil samples from other areas of the Site, but these concentrations were below the CUSCOs. The exceedances detected in soil do not appear to have had a significant impact on groundwater quality at the Site. Additionally, Site soils are covered by the existing building and pavement, which prevent an exposure pathway to the impacted soil. Chlorinated Volatile Organic Compounds (CVOCs) in exceedance of the AWQS are present in overburden groundwater throughout the central portion of the Site, with the highest concentrations detected downgradient of the former basement automotive repair space (AOC-1) in monitoring well MW-2 and in the area of the former die-casting operations (AOC-2) in monitoring well MW-4. CVOC groundwater impacts decrease in overburden groundwater at the eastern and southern property boundaries, in monitoring wells MW-6 and MW-7, respectively, and CVOCs were not detected in temporary well point SB-24(TW) installed at an offsite, downgradient location, to the south of Beechwood Avenue. No VOCs were detected above the AWQS in the groundwater sample collected from the double-cased bedrock monitoring well, MW-7D. Based on this information it appears that the CVOC groundwater impacts are delineated horizontally and vertically, and are not migrating offsite. Groundwater sampling data also identified PAHs, secondary metals, and emerging contaminants at concentrations marginally above NYSDEC AWQS. These contaminants are common in urban areas and are not likely attributed to onsite releases. Groundwater beneath the Site and surrounding areas is not used for public or private drinking purposes and, as such, potential environmental impacts related to these exceedances are unlikely. Soil vapor and indoor air results indicate that CVOCs were identified throughout the central portion of the Site with the highest concentrations detected in the former basement automotive repair space (AOC-1) and in the area of the former die-casting operations (AOC-2). When compared to the NYSDOH Matrices, the CVOCs detected in soil vapor and indoor air require mitigation. Petroleum-related VOCs were also detected in soil vapor and indoor air samples; however, when compared to the NYSDOH Matrices, the concentrations detected would not necessarily require mitigation, but monitoring or resampling would be recommended. In soil vapor samples collected from the south side of Beechwood Avenue, no CVOCs were detected at levels that would require monitoring or mitigation. Therefore, soil vapor impacts associated with the CVOC groundwater contamination do not appear to be migrating offsite. The draft Remedial Action Work Plan prepared by PSG, dated February 2025, includes the following Track 4 Commercial Use cleanup remedy of the Site: • Installation of an active sub-slab depressurization system (SSDS) to address VOCs detected in soil vapor and indoor air which require mitigation; • Monitored natural attenuation of groundwater at the Site. Groundwater monitoring would continue on an annual basis until NYSDEC AWQS levels are achieved; • Use of the existing concrete building slabs and asphalt pavement on exterior open areas of the Site as a composite cover system to address remaining soil contamination; • Implementation of a Site Management Plan (SMP) for long term maintenance of the remedial systems; • Implementation of a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) during all ground intrusive activities; and • Recording of an Environmental Easement to ensure proper use of the Site.
Remedial Cost Estimate (RCE) Assumptions	1.The RCE is based on the remedy provided in PSG's March 2025 Draft RAWP. 2.PSG assumes that any soil excavated during the SSDS installation will be transported and disposed of at an off-site facility as non-hazardous waste. 3.PSG assumes that no active soil remedation will be required. 4.PSG assumes that no active groundwater remediation will be required. 5.PSG assumes that a "Track 4" cleanup objective will be implemented, and residual soil and groundwater impacts will be address via engineering and institutional controls to prevent exposure to impacted subsurface media. 6.The RCE is designed to provide probable maximum and probable low costs to mitigate the Site. 7.The RCE does not include costs associated with long-term post-remediation monitoring, sampling, and inspections, or operations and maintenance (O&M) of engineering controls following Certificate of Completion issuance. 8.The range provided is based on the information available at the time of this RCE preparation.

Item Number	Task Name	Findings	Scope-of-Work	Estimates and Probabilities					
				Estimated Task Duration [1]	Probable Maximum Estimate [2]	Probability [3]	Probable Rasonable Estimate [4]	Probability [3]	Probable Low Estimate [4]
1	Remedial Action Program Coordination	Project management and coordination activities are necessary to prepare a Remedial Cost Estimate, address any public comments, finalize the RAWP, and to complete pre-mobilization tasks necessary for implementation of the remedial actions.	Prepare RCE; solicit contractor bids for the various components of the proposed remedial actions; submit a Contained-In Determination to NYSDEC to determine how CVOC contaminated soil and investigation derived waste (IDW) must be managed (i.e. hazardous/non-hazardous waste); obtain disposal facility pre-approval; Obtain NYSDEC approval for clean fill to be utilized as backfill; prepare and submit progress reports to NYSDEC; address any public or regulatory comments; and submit final RAWP.	8 to 12 weeks	$ 12,000	90%	$ 10,800	75%	$ 9,000
2	Vapor Intrustion Mitigation System (VIMS) Installation	Soil vapor and indoor air results indicate that CVOCs were identified throughout the Site at concentrations that when compared to the NYSDOH Matrices, require mitigation.	The VIMS will include the instllation of a SSDS throughout the onsite building in order to mitigate vapor intrusion into the building's indoor air. The proposed VIMS includes the installation of three (3) blowers mounted on the lower roof of the Site building, tied into 37 extraction points located throughout the Site building. Additionally, three (3) sumps within the building's basement areas will be sealed and utilized as additional extraction points. Each blower installed as a part of the VIMS will be equipped with an alarm system that will alert the onsite staff if the system is not operating.	4 to 6 months	$ 150,000	85%	$ 127,500	75%	$ 112,500
3	VIMS Verification Sampling and Operation Monitoring & Maintenance (OM&M)	Following VIMS startup, discharge vent and indoor air sampling will be conducted on a periodic basis to confirm system operation and evaluate the effectiveness of the remediation.	Immediately after system startup, air samples will be collected from each of the three (3) SSDS blower locations to evaluate concentrations of contaminants being discharged to the ambient air. 30 days following system startup, a total of eight (8) indoor air samples, three (3) discharge air samples, and 2 ambient air samples will be collected to evaluate system effectiveness in mitigating vapor intrusion concerns. Quarterly OM&M events will be conducted 3 months, 6 months, and 9 months following system start-up, to confirm system operation and collect discharge air samples from each of the three (3) SSDS blower locations. An annual OM&M event will be performed one year following system start-up to confirm system operation and collect a total of eight (8) indoor air samples, three (3) discharge air samples, and two (2) ambient air samples to evaluate system effectiveness in mitigating vapor intrusion concerns.	1 year	$ 58,000	85%	$ 49,300	75%	$ 43,500
4	Engineering Controls (ECs) and Institutional Controls (ICs)	ECs/ICs will be required to prevent exposure to impacted subsurface media that will be remaining in place.	A composite cover system consisting of the existing concrete building slabs and asphalt pavement on exterior open areas of the Site will prevent human exposure to contaminated soils. In addition, the VIMS will prevent exposure to VOC vapors by mitigating the potential for vapor intrusion from the subsurface into the Site buildings. Proposed institutional controls include: recording of an Environmental Easement (EE) to prevent future exposure to any remaining contamination at the Site; publication of a Site Management Plan (SMP) for long-term management of residual contamination as required by the EE; and deed restrictions limiting the use of the Site for commercial/industrial activities, restricting the use of groundwater, and restricting unauthorized excavation or disturbance of the cover system.	4 to 8 weeks	$ 8,250	85%	$ 7,013	75%	$ 6,188
5	Site Management Plan (SMP) and Final Engineering Report (FER)	Following the completion of remedial activities, a FER and SMP are required prior to the issuance of a Certificate of Completion.	Prepared and submit a FER and SMP following the completion of the remedial actions.	2 to 3 months	$ 25,000	70%	$ 17,500	60%	$ 15,000
			Associated Tasks	Sub-total	$ 253,250		$ 212,113		$ 186,188
6	Project Management & Stakeholder Engagement	Project management will be required to oversee, and manage, the scope, schedule, and budget.	Project management to include regular communication with client, internal oversight of field staff and reporting and invoicing. Cost is estimated to be 10% of total project costs.	Project Duration	$ 25,325	n/a	$ 21,211	n/a	$ 18,619
7	Contingency	Complex projects such as these often result in unknown or unexpected issues that require action.	Address unforeseen issues as they arise throughout the course of the project. Cost is estimated to be 20% of total project costs.	Project Duration	$ 55,715	na	$ 46,665	na	$ 40,961
			TOTALS		$ 334,290		$ 279,989		$ 245,768

Notes:
1. Estimated Task Duration is the estimated time required for performing the specific task; tasks are not necessarily performed consecutively. Tasks should not be added to estimate overall environmental scope duration. Overall project duration is primarily driven by stakeholder requirements, regulatory review duration, meetings, coordination, as well as other factors.
2. Probable Maximum Estimate is the upper estimate based on PSG's experience at similar sites and is generally considered similar to a 90% confidence level estimate.
3. Probability is based on the % likelihood (of the Probable Maximum) that a Task will be performed and/or the % likelihood (of the Probable Maximum) the estimated cost will be incurred. Probabilities between the Probable Upper and the Probable Low may vary; that is, the distribution may not be linear or normal.
4. Probable Low Estimate is a conservative low estimate based on PSG's experience at similar sites. Each estimate is based on multiple variables that may require further clarification / quantification.

5. PSG has provided this RCE for anticipated environmental services specific to the environmental actions identified above as currently known to exist at the subject property. This RCE is not a quotation; a quotation for a specific scope-of-work should be obtained from PSG under separate cover prior to the commencement of the work. This RCE has been generated with a sense of magnitude and includes Site-specific data and PSG's experience at similar Sites. Our Site-specific understanding of the issues is based on reports, documents, and communication in PSG's possession at the time of preparation of this RCE. This RCE is dependent on multiple factors and subsurface conditions that may have not been fully defined at the time of preparation. This RCE may be based on information provided by others; the information is assumed to be correct and factual. PSG assumes no liability for errors or omissions contained within the provided information.

6. The RCE is based on our opinion of the anticipated required actions as presented above. This RCE does not account for litigation support or expert witness, unless otherwise indicated, or costs for additional investigation and/or subsequent remedial action that may be required due to the discovery of new information or changes to regulatory requirements.
7. This RCE is generated for the sole purpose of providing an order-of-magnitude environmental estimate to be used for business decision purposes only. This RCE has no other use and may not be transferred to, or relied upon, by any other entity without the written consent of PSG.

APPENDIX C: CONSTRUCTION HEALTH & SAFETY PLAN (CHASP)

PSG

PSG
Engineering and Geology, D.P.C.

CONSTRUCTION HEALTH AND SAFETY PLAN

125 Beechwood, LLC
125 Beechwood Avenue
New Rochelle, Westchester County, New York 10801

January 2025

PSG Project Number: 21396176

Prepared for:

Amerco Real Estate Company
2727 North Central Avenue
Phoenix, Arizona 85004

TABLE OF CONTENTS

1.0 INTRODUCTION

This Site-specific Health and Safety Plan ("HASP") has been prepared to address activities to be performed during the implementation of work ("Scope of Work") at 125 Beechwood Avenue in the City of New Rochelle, Westchester County, New York (the "Site"). Relevant portions of Occupational Safety and Health Administration ("OSHA") 29 CFR 1910.120 and 1926.62 were used as guidance while preparing this HASP.

The designated Site Health and Safety Officer ("SHSO") will be responsible for implementing the HASP. Compliance with this HASP is required of all workers who may potentially encounter fill at the Site (hereinafter referred to as "Site Workers"), including any Contractor's employees, subcontractors to the Contractor, subcontractors to the Owner's representative, and onsite workers for PSG Engineering and Geology, D.P.C. (PSG). In the event that a Site Worker does not follow these procedures, he or she will be required to leave the Site immediately. The content of this HASP may change or undergo revisions based upon changes in the technical scope of work, the results of monitoring, and/or additional information made available to health and safety personnel. Any proposed changes must be reviewed and approved by the Corporate Safety Supervisor, and the SHSO implementing the changes to the HASP. As of the date of this HASP, PSG will be conducting all work at the Site.

Upon entering the Site, all visitors will be required to sign in and read and comply with the provisions of this HASP. In the event that a visitor does not follow these procedures, he or she will be required to leave the Site immediately.

1.1 Scope of Work

The Scope of Work will be to install a Vapor Intrusion Mitigation System (VIMS) to mitigate vapor intrusion.

1.2 Emergency and Project Management Contact Information

Provided below is a list of telephone numbers for use in the event of an emergency onsite.

Emergency Medical Service 911

Police: New Rochelle Police Department.....911

Hospital: Montefiore New Rochelle Hospital..... (914) 632-5000

National Response Center .....(800) 424-8802

Poison Control Center .....(800) 222-1222

Chemtrec .....(800) 262-8200

Fire: New Rochelle Fire Department.....911

Center for Disease Control .....(800) 311-3435

USEPA (Region II) .....(877) 251-4575

NYSDEC Emergency Spill Response .....(800) 457-7362

The following table includes the contact information for Site management and health and safety personnel:

Title	Contact	Cellular Phone
Project Manager	Anthony Cauterucci	551-455-3406
Site Health and Safety Officer	Peter Cerny	267-769-5880

1.3 Address of Hospital

Montefiore New Rochelle Hospital

16 Guion Place,

New Rochelle, NY 10801

(914) 632-5000

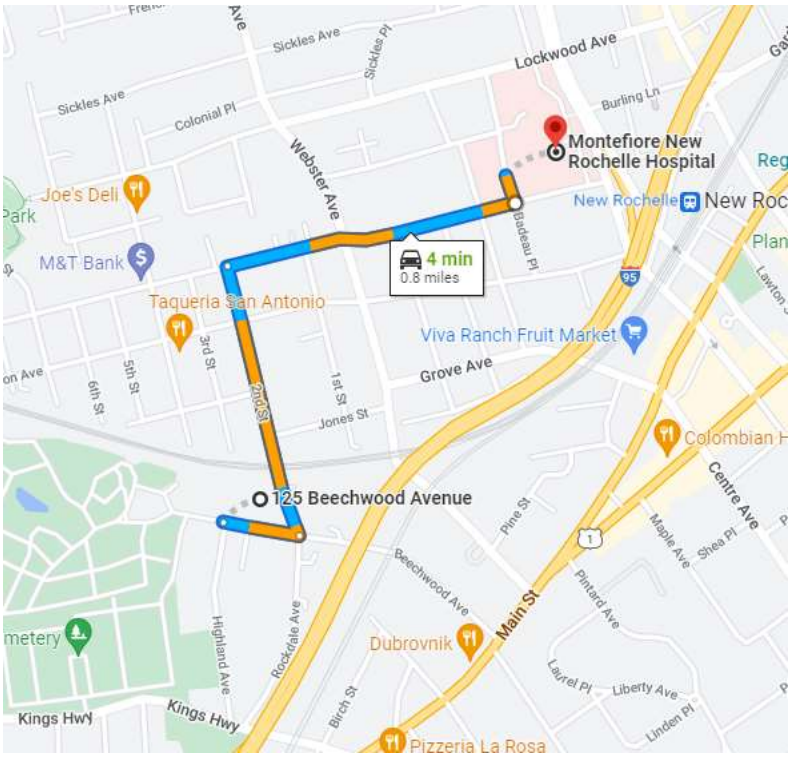
Directions from the Site to the Hospital

Head east on Beechwood Ave toward Highland Ave

Turn left onto 2nd St

Turn right onto Washington Ave

Turn left onto Glover Johnson Pl and follow signs for the Emergency Room



1.4 Emergency Equipment

The following is a list of emergency equipment to be kept onsite at all times:

- First Aid Kit
- ABC Fire Extinguisher
- Absorbent Pads
- Oil DryEye Wash

1.5 Spills

Spills associated with Site activities may be attributed to project-specific heavy equipment and include gasoline, diesel and hydraulic oil. In the event of a leak or a release, Site personnel will inform their supervisor immediately, locate the source of spillage and stop the flow if it can be done safely. A spill containment kit including absorbent pads, booms and/or granulated speedy dry absorbent material will be available to Site personnel to facilitate the immediate recovery of the spilled material. Daily inspections of Site equipment components including hydraulic lines, fuel tanks, etc. will be performed by their respective operators as a preventative measure for equipment leaks and to ensure that equipment is functioning properly.

In the event of a spill, Site personnel will immediately notify the NYSDEC 24 Hour Spill/Emergency Line (800) 457-7362) and a spill number will be generated.

2.0 HEALTH AND SAFETY STAFF

This section briefly describes the health and safety responsibilities for the excavation work to be implemented at the Site. The following staff is responsible for ensuring compliance with the HASP.

2.1 General/Site Superintendent (GSS)

- Has the overall responsibility for the health and safety of all Site workers.
- Ensures that adequate resources are provided to the field health and safety staff to carry out their responsibilities as outlined below.

2.2 Site Health and Safety Officer (SHSO)

- Directs and coordinates health and safety monitoring activities.
- Ensures that field teams utilize proper personal protective equipment ("PPE").
- Conducts initial onsite specific training prior to Site Workers commencing work.
- Conducts and documents daily and periodic safety briefings.
- Ensures that field team members comply with this HASP.
- Immediately notifies the GSS and Project Manager of all accident/incidents.
- At the end of each day, communicates the tasks completed to the designated representatives, the next day's planned activities, any third-party issues, changes of work plans, and/or changes in level of PPE.
- Determines upgrading or downgrading of PPE based on Site conditions and/or real time monitoring results. Ensures that monitoring instruments are calibrated daily or as the manufacturer's instructions determine.
- Reports to the Project Manager to provide summaries of field operations and progress.
- Submits and maintains all documentation required in this HASP and any other pertinent health and safety documentation.

2.3 Site Workers

- Reports any unsafe or potentially hazardous conditions to the SHSO.
- Maintains knowledge of the information, instructions, and emergency response actions contained in the HASP.
- Complies with rules, regulations, and procedures as set forth in this HASP, including any revisions that are instituted.
- Prevents admittance to work Site by unauthorized personnel.

3.0 SITE DESCRIPTION AND BACKGROUND

The Site consists of one 3.17-acre property identified as Section 2, Block 691, Lot 005 and is developed with a large two-story commercial building occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner. Current operations at the Site consist of typical commercial office, self-storage, and parking operations, and associated property maintenance. The Site is bounded by railroad tracks to the north; Beechwood Avenue followed by residential buildings and commercial automotive repair services to the south; Second Street followed by commercial offices and automotive repair services to the east; and one commercial building occupied by Atlas Welding & Boiler Repair Inc. to the west. The Site is currently zoned "LI" for light industrial and commercial use.

3.1 Summary of Environmental Conditions

According to available historical sources reviewed the Site was developed with the existing one- to two-story warehouse in 1951, with a northern wing added in 1955. Tenants at the Site included Gries Reproducer Corp. (aka Gries Dynacast) from 1951 through 1985, who utilized the Site for metal fabrication, die-casting, and plating operations. The following relevant Recognized Environmental Conditions (RECs) were identified during a 2012 Phase I Environmental Site Assessment:

- The Site was historically utilized for metal fabrication, die-casting, and plating operations from 1951 through 1985. The former metal plating and die-casting process took place in the southern portion of the building at 125 Beechwood Avenue. An approximately 8,000-square foot area of wood block flooring with intermittent petroleum-like staining was observed in the southern and southeastern portion of the distribution warehouse. Wood-block flooring was reportedly used to absorb vibrations caused by the equipment.
- One 10,000-gallon fuel oil underground storage tank (UST) was closed-in-place beneath the northeastern portion of the building at 125 Beechwood Avenue. The fuel oil UST was located beneath an access door in the floor. Concrete was visible in the tank and fill line. An underground tank closure site assessment report dated August 1995 documented that visual observation of the UST during abandonment revealed no evidence of a release, and laboratory results associated with soil samples collected from three soil borings drilled along Second Street, and approximately 50 feet to the east of the UST, at a presumed downgradient location, indicated that residual detections were not indicative of an adverse impact to soil quality. Petroleum staining was observed in the boiler room in the northeast portion of the basement at 125 Beechwood Avenue near former UST supply lines associated the closed-in-place fuel oil UST.
- According to the New Rochelle Building Department, the Site at 125 Beechwood Avenue was formerly equipped with two gasoline USTs and a gas pump. The USTs were reportedly installed in 1979 and 1980 and removed in 1985 from the northeastern portion of the Site in the loading dock area.
- Petroleum staining and one out-of-use aboveground storage tank (AST) were identified in the gas meter room in the northeast portion of the building at 125 Beechwood Avenue. A recirculation vat (Vat -2) formerly used by the metal plating and die casting tenant, an AST (capacity and contents

unknown) and sump were located in the gas meter room. The sump reportedly discharged to the municipal sewer system. The AST in the gas meter room contained pressure gauges and product transfer pipes. The pipes were cut off and abandoned. The use of the tank was unable to be determined.

- Petroleum staining was identified on concrete adjacent to an air compressor blow-down vent at 125 Beechwood Avenue. Cracking was noted in the concrete.
- The building at 125 Beechwood Avenue operated a hydraulic freight elevator. The pit was observed to be filled with groundwater during a 2009 inspection. A second inspection was reported in 2012 with evidence of flooding, line failure, or hydraulic oil releases.
- Two Consolidated Edison (Con Ed) owned pad-mounted transformers were located adjacent to the southwestern exterior of the Site building at 125 Beechwood Avenue. The Con Ed transformers reportedly contained polychlorinated biphenyls (PCBs) between 23.34 and 30.82 parts per million (ppm).
- The Site at 125 Beechwood Avenue was identified on the New York (NY) Spill, Petroleum Bulk Storage (PBS), and Resource Conversation and Recovery Act (RCRA) Small Quantity Generator databases.

Investigations completed at the Site between 2012 and 2024 have identified chlorinated volatile organic compound (CVOC) and polycyclic aromatic hydrocarbon (PAH) impacts in groundwater and CVOC impacts in soil vapor and indoor air at the Site.

4.0 POTENTIAL HAZARDS RELATED TO FILL/SOIL

This section provides a brief summary of the potential Compounds of Concern and related hazards.

4.1 General

The following information is presented in order to identify the types of materials that may be encountered at the Site.

4.2 Compounds of Concern

Compounds of concern have been identified and are listed as following:

- Volatile Organic Compounds
- Semi-Volatile Organic Compounds / Metals / emerging contaminants

4.3 Hazard Assessment

The potential to encounter hazards related to soil and groundwater is dependent upon the type of work activity performed and the duration and location of the work activity. Soil and groundwater will be encountered during the sample collection process in small quantities; therefore, potential environmental hazards at the Site include ingestion and/or skin contact of soil and groundwater.

Prior to the beginning of each new phase of work, an activity hazard analysis will be prepared by the SHSO with the assistance of the Project Manager. The analysis will address the hazards for each activity performed in the phase and will present the procedures and safeguards necessary to eliminate the hazards or reduce the risk.

There is no real potential for Site Workers to be exposed to chemical hazards during the Scope of Work.

4.4 Exposure Pathways and Assessment

Exposure to these compounds during ongoing activities may occur through inhalation of dust particles and by way of dermal absorption and accidental ingestion by either direct or indirect cross-contamination activities. For groundwater, the most common exposure may occur via accidental ingestion or dermal absorption.

Inhalation of dust particles can occur during adverse weather conditions (high or changing wind directions). Due to the sampling quantities involved in this Scope of Work and as all work will be conducted indoors, there is little chance for generation or migration of dust. Should dust become an issue, dust control measures such as applying water to work areas will be implemented if visible dust is generated, in accordance with this HASP.

4.5 Additional Precautions

Dermal absorption or skin contact with Site soils is possible during intrusive activities at the Site. The use of PPE and proper vehicle and Site Worker cleaning procedures should significantly reduce the risk of skin contact. The potential for accidental ingestion of Site soils/groundwater is expected to be remote when good hygiene practices are used.

4.6 Hazard Assessment and Mitigation

Task	Hazards	Risk of Exposure	Action Taken
Mobilization/Demobilization	Inhalation/Skin Contact	Low	Proper PPE will be worn. No eating or drinking will be permitted in active work areas.
SSDS Installation Activities	Inhalation/Skin Contact	Low/High	Proper PPE will be worn. No eating or drinking will be permitted in active work areas.

5.0 TRAINING

This section details the training requirement for Site Workers.

5.1 Site-Specific Training

Prior to the commencement of field activities, the SHSO will provide Site-specific training to all Site Workers. Site Workers will receive training that will specifically address the activities, procedures, monitoring, and equipment for Site operations. It will include Site layout, hazards, fire prevention and response, first aid equipment locations and emergency services at the Site and will highlight all provisions contained within this HASP. This training will also allow field workers to clarify anything they do not understand and to reinforce their responsibilities regarding safety and operations for their particular activity. This training may be conducted in conjunction with other Site training or meetings.

5.2 Onsite Safety Meetings

Safety meetings will take place to discuss potential safety concerns for the upcoming activities. At a minimum, the appropriate field supervisors or foremen for all workers will conduct at least one formal daily safety meeting in the morning; however, additional meetings or briefings may be necessary as a result of changing conditions or modifying tasks. Copies of the daily safety meeting sign in sheet and a description of items discussed will be kept at the Site.

The meetings will also provide a forum to facilitate conformance with safety requirements and to identify performance deficiencies related to safety during daily activities or as a result of safety audits by the Contractor or other involved parties. These meetings may be conducted in conjunction with other Site training or meetings.

Visitors onsite must be made aware of the hazards onsite in a Site-specific safety briefing and sign a statement indicating that they will comply with the applicable requirements of this HASP.

5.3 First Aid and CPR

The SHSO will identify those individuals having first aid and CPR training to assist with emergency medical treatment during field activities, if necessary. The training will be consistent with the requirements of the American Red Cross. Certification and appropriate training documentation will be kept with the Site Workers' records by the SHSO.

6.0 SITE CONTROL AND PPE

This section provides a detailed description of the Site control measures and personal PPE procedures to be implemented at the Site. It is important to note that this HASP has been drafted to apply to work in Level D or modified Level D only. If the monitoring results require Level C protection or higher, all Site work will immediately cease until activities can be completed with workers trained in accordance with 29 CFR 1910.120.

6.1 Site Control

The Site, from land surface down to the native soil, will be considered the work area with respect to this HASP.

6.2 Personal Protective Equipment

The level of protection worn by Site Workers will be enforced by the SHSO. The level of protection may be upgraded at the discretion of the SHSO. All decisions on the level of protection will be based upon a conservative interpretation by the SHSO of the information provided by air monitoring results and/or other appropriate information. Any changes in the level of protection shall be recorded in the health and safety field logbook. If the level of respiratory protection needs to be upgraded, the Contractor will immediately contact the Project Manager and Owner's Representative.

The level of PPE for work on the Site is Level D PPE, which includes the following:

- Work uniform (long pants, sleeved shirt)
- Hard hat (all Geoprobe operations)
- Steel-toed, steel-shanked work boots
- Safety glasses
- Boot covers (as needed)
- Hearing protection (as needed)
- Reflective safety vest

If required by the SHSO, modified Level D PPE may also be used at the Site during specific activities, consisting of the following:

- Regular Tyvek coveralls (Poly-coated Tyvek as required)
- Outer gloves: leather, cotton, neoprene or nitrile (as required)
- Inner gloves: latex or nitrile (doubled) as required
- Chemical resistant boots over work boots (as required)
- Steel-toed, steel-shanked work boots
- Hard hat
- Safety glasses

- Hearing protection, as needed
- Reflective safety vest
- Half-face respirator
    - Metals – NIOSH/MSHA approved respirator (P100 Cartridges)
    - Silver – NIOSH approved dust respirator

6.3 Site Control for Unexpected Conditions

Although unexpected for this Scope of Work, in the event that unexpected conditions or hazardous waste is encountered, thereby requiring workers trained in accordance with 29 CFR 1910.120, the following four-zone approach will be employed in order to prevent the spread of the contamination from the area containing the unexpected condition and to protect Site Workers. The four-zones include the Exclusion Zone, the Contamination Reduction Zone, the Remediated Zone, and the Support Zone. A stepped remedial approach will be managed, and the zones modified as the work progresses. Each of the areas will be defined through the use of control barricades and/or construction/hazard fencing. A clearly marked delineation between the zones will be maintained. Signage will be posted to further identify and delineate these areas.

The following subsections describe the four zones that will be utilized in the event that unexpected conditions or contamination is discovered at the Site.

6.3.1 Exclusion Zone

The area where the unexpected condition is discovered would be considered the Exclusion Zone (EZ). All excavation and handling of contaminated materials generated as a result of the discovery of an unexpected condition would take place within the EZ. This zone will be clearly delineated by hay bales, jersey barriers, and/or similar methods. Safety tape may be used as secondary delineation within the EZ. The zone delineation markings may be opened in areas for varying lengths of time to accommodate equipment operation or specific construction activities. The SHSO may establish more than one EZ where different levels of protection may be employed or where different hazards exist. Site Workers will not be allowed in the EZ without:

- A buddy (co-worker)
- Appropriate PPE
- Medical authorization
- Training certification

6.3.2 Contamination Reduction Zone

A Contamination Reduction Zone (CRZ) will be established between the EZ and the property limits. The CRZ contains the Contamination Reduction Corridor (CRC) and provides an area for decontamination of Site Workers and equipment. The CRZ will be used for general Site entry and egress, in addition to access for heavy equipment and emergency support services. Site Workers will not be allowed in the CRZ without:

- A buddy (co-worker)

- Appropriate PPE
- Medical authorization
- Training certification

6.3.3 Remediated Zone

A Remediated Zone (RZ) will be established in portions of the Site where the remediation has been completed and only general construction work will be performed. Setup of the RZ will consist of implementing several measures designed to reduce the risk of workers' exposure and prevent non-trained workers from entering the non-remediated zone. Non-trained workers will work only in areas where the potential for exposure has been minimized by removal of all hazardous materials. The remediated zone will then be separated from the non-remediated zone by installing and maintaining temporary plywood or other construction fences along the boundary between the two zones. If potentially impacted material is uncovered in the RZ, all non-trained workers will be removed and the SHSO will assess the potential risks. If, at any other time, the risk of exposure increases while non-trained workers are present in the RZ, the non-trained workers will be removed. At all times, when non-trained workers are present in the RZ, air monitoring for the presence of VOCs will be conducted in the RZ, as well as at the fence line of the non-remediated zone.

6.3.4 Support Zone

The Support Zone (SZ) will be an uncontaminated area that will be the field support area for the Site operations. The SZ will contain the temporary project trailers and provides for field team communications and staging for emergency response. Appropriate sanitary facilities and safety equipment will be located in this zone. Potentially contaminated Site Workers or materials are not allowed in this zone. The only exception will be appropriately packaged/decontaminated and labeled samples. Meteorological conditions will be observed and noted from this zone, as well as those factors pertinent to heat and cold stress.

7.0 VEHICLE/SITE WORKER CLEANING AREAS AND DISPOSAL PROCEDURES

This section details the specific vehicle/Site Worker cleaning and waste disposal procedures to be implemented at the Site during the Scope of Work activities.

7.1 Contamination Prevention

Contamination prevention should minimize worker exposure and help to avoid spreading Site derived soil onto the public roadways. Procedures for prevention include:

Site Workers

- Do not walk through areas of soil.
- Do not directly handle or touch soil.
- No eating or drinking in the soil areas.
- Particular care should be taken to protect any skin injuries.
- Stay upwind of dust – not expected as all work is indoors.
- Do not use cigarettes, cosmetics, gum, etc., in areas of soil.

Heavy Equipment

- Care should be taken to limit the amount of soil that comes in contact with heavy equipment (tires, excavator, Geoprobe tracks).
- If tools used in soil are to be placed on equipment for transport to an area where all soil has been removed or to be cleaned, plastic should be used to keep the equipment clean.

7.2 Site Worker Cleaning Procedures

It is not expected that any Site Worker will need to employ a cleaning procedure when exiting the active work areas due to the limited amount of potential for soil exposure. There will be no designated Site Worker Cleaning Area for this Scope of Work.

7.3 Vehicle Cleaning Area/Stabilized Construction Entrances

It is not expected for any vehicle to require a cleaning area due to the limited amount of potential for soil exposure. No vehicle cleaning area or construction entrance will be constructed. Regardless, no soil will be spread or tracked onto the public roadway. No equipment will be allowed to leave the Site prior to the SHSO or Site Superintendent's inspection and verification that the equipment is clean.

7.4 Disposal Procedures

A system of segregating all waste will be developed by the SHSO. All discarded materials, waste materials, or other objects shall be handled in such a way as to preclude the potential for spreading Fill, creating a sanitary hazard, or causing litter to be left onsite. If any potentially contaminated materials (e.g., clothing, gloves, etc.) are generated, they will be bagged or drummed, as necessary, labeled, and segregated for disposal. All non-contaminated materials shall be collected and bagged for appropriate disposal as domestic waste.

8.0 HANDLING OF POTENTIAL HAZARDOUS MATERIALS

Any materials removed from the site shall be handled only by OSHA 40-Hour HAZWOPER trained personnel in appropriate PPE as discussed in Section 6.2 above.

Soil removed as part of sampling during the course of the remedial investigation activities will either be returned to the boring or containerized in labeled DOT-approved shipping containers by the end of the work day. Waste containers will be staged in a secure area until transportation by a permitted hauler to an authorized disposal facility can be arranged.

All groundwater removed during intrusive activities will be containerized in labeled DOT-approved shipping containers and staged in a secure area until transportation by a permitted hauler to an authorized disposal facility can be arranged.

All procedures outlined in Section 7 & 8 of this HASP will be implemented to prevent personnel and equipment contamination and migration offsite.

9.0 EMERGENCY PLAN

The emergency plan outlined in this section will be understood by all Site Workers prior to the start of work so that, should an emergency occur, all parties will know how to respond. During an emergency, the SHSO will perform air monitoring as needed and will assist responding emergency personnel with health and safety information related to the Site. Site Workers will endeavor to keep non-essential personnel away from the incident until the appropriate emergency personnel arrive. At that time, the emergency personnel will take control of the Site. Site Workers may be asked to lend assistance to emergency personnel such as during evacuations, help with the injured, etc.

9.1 Emergency Response Numbers

The following sections provide emergency response and project management phone numbers. Emergencies encountered on this Site will be responded to via offsite emergency services personnel and Site Workers.

Emergency Medical Service 911

Police: New Rochelle Police Department.....911

Hospital: Montefiore New Rochelle Hospital..... (914) 632-5000

National Response Center .....(800) 424-8802

Poison Control Center .....(800) 222-1222

Chemtrec .....(800) 262-8200

Fire: New Rochelle Fire Department.....911

Center for Disease Control .....(800) 311-3435

USEPA (Region II) .....(877) 251-4575

NYSDEC Emergency Spill Response .....(800) 457-7362

9.2 Emergency Evacuation

Evacuation procedures will be discussed prior to the start of work and periodically during safety meetings. In the event of an emergency situation such as fire or an explosion the area will be evacuated. All Site Workers will assemble outside of the active work areas and away from the area of danger and the fire department and other emergency response personnel will be notified by telephone of the emergency.

9.3 Injury to Site Workers

Emergency first aid shall be applied onsite as appropriate. In the event that additional medical attention is necessary, the injured worker should be brought to the emergency room at the hospital. If the Site worker is unable to be brought to the hospital, 911 should be called and an ambulance sent to the Site.

9.4 Site Worker Exposure

Skin Contact: Use copious amounts of soap and water. Wash/rinse affected area thoroughly, then clean or remove PPE and provide appropriate medical attention, if necessary. Eyes should be rinsed for 15 minutes upon chemical contamination.

Inhalation: Move to fresh air and/or, if necessary, clean or remove PPE and transport to emergency medical facility.

Ingestion: Clean or remove PPE and transport to emergency medical facility, if necessary.

Puncture Wound/Laceration: Clean or remove PPE and transport to emergency medical facility, if necessary.

10.0 FIELD TEAM REVIEW

Each Site Worker shall sign this section after Site-specific training is completed and before being permitted to work at the Site.

Date	Name	Signature	Company

Date	Name	Signature	Company

APPENDIX D: QUALITY ASSURANCE PROJECT PLAN (QAPP)

PSG

Appendix A
Quality Assurance Project Plan

Site Identification:
125 Beechwood, LLC
125 Beechwood Avenue
New Rochelle, Westchester County, New York 10801

Introduction

This Quality Assurance Project Plan (QAPP) was prepared by PSG Engineering and Geology, D.P.C. (PSG) for 125 Beechwood, LLC, who will be conducting a Remedial Action (RA) at the property located at 125 Beechwood Avenue in the City of New Rochelle, Westchester County, New York 10801 (the "Site").

The purpose of this QAPP is to ensure that scientific data are acquired according to established methods and procedures designed to obtain results that are objective, true, repeatable, and of known accuracy. Specifically, this QAPP provides guidance and specifications to ensure that RA activities are planned and executed in a manner consistent with the Quality Assurance Objectives (QAO's) stated below:

- Field determinations and analytical results are valid through adherence to New York State Department of Environmental Conservation (NYSDEC) field procedures, NYSDEC-approved analytical protocols, and calibration and preventive maintenance of equipment;
- Samples are identified and controlled through sample tracking systems and chain of custody procedures;
- Records are retained as documentary evidence of field activities and observations;
- Samples are collected, and analytical data are validated in accordance with the NYSDEC requirements; and
- Evaluations of the data are accurate, appropriate, and consistent throughout the project

The contents of this QAPP are based on the NYSDEC requirements as stated in the EPA Requirements for Quality Assurance Project Plans (QA/R-5) (May 2006). This QAPP includes the following components:

- Problem Definition/Background;
- Project/Task Description;
- Project/Task Organization;
- Data Quality Objectives and Criteria for Measurement Data;
- Historical and Secondary Information/Data;
- Investigative Process Design;
- Field Instrumentation/Equipment Calibration and Frequency;
- Inspection/Acceptance of Supplies and Consumables;
- Sample Handling and Custody Requirements;
- Field Storage and Transport Procedures;
- Sample Containers, Preservation, and Holding Times;
- Analytical Methods Summary Table;

- Project Compounds and Analytical Summary;
- Analytical Quality Control;
- Laboratory Deliverables;
- Data and Records Management;
- Data Verification and Usability; and
- Corrective Action Processes.

As specific conditions and additional information warrant, this QAPP will be amended or revised to include site-specific quality assurance/quality control procedures.

1. Project Definition / Background

The Site consists of one 3.17-acre property identified as Section 2, Block 691, Lot 005 and is developed with a large two-story commercial building occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner.

Investigations completed at the Site between 2012 and 20024 have identified chlorinated volatile organic compound (CVOC) and polycyclic aromatic hydrocarbon (PAH) impacts in groundwater and CVOC impacts in soil vapor and indoor air at the Site.

The objective of this RA is to achieve a Track 4 remedy for commercial use consisting of the installation of an SSDS, groundwater monitoring, and engineering and institutional controls to prevent exposure to subsurface contaminated media. The developed remedial program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program.

The data shall be used to determine if further remediation is required. These decisions shall be made following receipt of all analytical data associated with the remedial action. Data users for the project include the person responsible for conducting the remediation, the environmental consultant, and ultimately the NYSDEC.

These findings will be summarized in a Final Engineering Report (FER) that will be submitted to the NYSDEC for review and approval. Remedial Action Objectives (RAOs) will also be developed for the Site based on the contaminant characterization results, current land use, and potential exposure pathways. Based on an understanding of potential Site issues and the presence of chlorinated VOCs, the RAOs for the Site include establishment of engineering controls, monitored natural attenuation of groundwater, and the installation of a sub-slab depressurization system.

2. Project Summary

The work that is planned to be conducted includes RAs to address soil, groundwater, soil vapor, and indoor air. Personnel required to conduct the RA activities include a Qualified Environmental Professional.

All of the data shall be collected through groundwater, soil vapor, indoor air sampling and laboratory analysis. No data shall be collected from other sources.

The sample results shall be compared to the applicable NYSDEC Ambient Water Quality Standards (AWQS) for groundwater, and the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Matrices A, B, and C for indoor air and soil vapor, and a conclusion shall be made, based on the comparison, as to whether contamination exists that requires further remedial action.

The anticipated project schedule from initiation to final report is included as Table 7 of the RAWP. The applicable regulatory quality standards are: RCUSCOs and PGWSCOs for soil, NYSDEC AWQSs for groundwater, and the NYSDOH Soil Vapor/Indoor Air Matrices A, B, and C for indoor air and soil vapor.

3. Project / Task Organization

Project Team

The Site Health and Safety Officer and Quality Assurance Coordinator for this project is Mr. Pete Cerny of PSG. He is responsible for implementing the Quality Assurance Project Plan and the Remedial Action in accordance with NYSDEC regulations and serves as the central point of communication with all other individuals and organizations associated with this project. Mr. Cerny can be reached at (267) 769-5880.

The Quality Assurance Officer and Project Manager for this project is Anthony Cauterucci. While Mr. Cauterucci will not be directly involved in the collection and analysis of samples from the Site, he has worked in conjunction with Mr. Cerny in the development of the sampling and analytical portion of this QAPP. He is responsible for reviewing sampling procedures and certifying that the data was collected and analyzed using the appropriate procedures. Mr. Cauterucci is familiar with analytical methods, data interpretation and validation, the development of sampling plans, quality control procedures and auditing requirements and techniques. During the course of the sampling and analytical portion of the project Mr. Cauterucci may conduct periodic field and sampling audits, interface with the analytical laboratory to resolve problems, and interface with the data validator and/or the preparer of the Data Usability Summary Report (DUSR) to resolve problems.

Laboratory Analysis: Pace / Alpha Analytical Laboratory (NY Certification #11148): 35 Whitney Rd # 5, Mahwah, NJ 07430 (Contact: Brittney Bodtke) (610) 532-5742. Special training is required to operate laboratory equipment and conduct laboratory analyses.

Special Training Needs/Certification

Training needs and certifications of field oversight include requirements to have completed the OSHA 40- Hour training with annual 8-hour refresher training in accordance with 29 CFR 1910.120 (Hazardous waste operations and emergency response).

4. Data Quality Objectives and Criteria for Measurement Data

Data quality objectives ("DQOs") are qualitative and quantitative statements that are developed in the first six (6) steps of the DQO process. DQOs define the purpose of the data collection effort, clarify what the data should represent to satisfy this purpose, and specify the performance requirements for the quality of information to be obtained from the data.

The development of the data quality criteria can be developed through the formal DQO process described in the EPA document titled "Guidance for the Data Quality Objectives Process'', EPA/600/R-96/055. For most projects, however, a less iterative process is normally used to develop the project specific DQOs.

Data of Known Quality Protocols ("DKQP") describe specific laboratory quality assurance and quality control procedures which, if followed, will provide data of known and documented quality (i.e. scientific reproducible and reliable data). When data of known quality ("DKQ") is obtained, an evaluation of the data with respect to its intended purpose can be made. To this end, a NY-certified laboratory must be used to analyze samples whenever possible.

Typical DQOs are often expressed in terms of data quality indicators ("DQIs") including precision, accuracy, representativeness, comparability, completeness and sensitivity (also known as the "PARCCS" parameters). These measures of performance are discussed in detail below.

Precision

Precision is the measure of agreement among repeated measurements of the same property under identical or substantially similar testing conditions. The investigator will determine the precision of the data by:

- Using the same analytical methods to perform repeated analyses on the same sample (laboratory or matrix duplicates);
- Collection of a field duplicate and submittal of both to evaluate the precision from sample collection, for sample handling, preservation and storage and analytical measurements

Precision for laboratory and field measurements can be expressed as the relative percent difference ("RPD") between two duplicate determinations or percent relative standard deviation ("%RSD") between multiple determinations.

Acceptance criteria for field precision shall be assessed through the splitting of a sample in the field and submitting both to the laboratory. Field duplicates will be collected at a frequency of one (1) per twenty (20) investigative samples per matrix per analytical parameter. Precision will be measured through the calculation of RPD. The resulting information will be used to assess sample homogeneity, spatial variability at the site, sample collection reproducibility, and analytical

variability.

Accuracy

Accuracy is the degree of agreement of a measured value and an accepted reference or true value. The difference between the measured value and the reference or true value includes components of both systematic error (bias) and random error (precision). It should be noted that precise data may not be accurate data. Accuracy can be expressed as a percent recovery or percent deviation of the measurement with respect to its known or true value.

The accuracy will be determined through establishing acceptance criteria for spike recoveries (e.g., surrogate recoveries, laboratory control sample recoveries, matrix spike recoveries, reference material recoveries etc.) or allowable deviations for calibration (e.g., % RPD for calibration verification). Acceptance criteria for matrix spike measurements are expressed as a percent recovery and are usually specified in the analytical method (or laboratory SOP, as applicable). Various blank samples (laboratory or field) may also be used to assess contamination of samples that may bias results high. Accuracy in the field shall be assessed through the adherence to sample collection, handling, preservation, and holding time requirements.

Representativeness

Representativeness is a qualitative measurement that describes the extent to which analytical data represent the site conditions. In almost every project, the investigator will not be able to measure the whole system, process, or situation of interest. Instead, the investigator will choose sample locations, quantities, and analyses in order to capture a sufficiently broad and/or weighted view of the situation.

Representativeness in the laboratory is ensured by using the proper analytical procedures, appropriate methods, and meeting sample holding times. Following the detailed requirements outlined in the EPA methods and the laboratory SOPs will maximize the representativeness of the laboratory data.

Comparability

Comparability is a qualitative term that expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Comparability is defined as the extent to which data from one data set can be compared directly to similar or related data sets and/or decision-making standards.

Historical data should be evaluated to determine whether they may be combined with data being collected in present time. Comparability should discuss comparisons of sample collection and handling methods, sample preparation, and analytical procedures, holding times, stability issues and QA protocol.

Comparability in the laboratory is dependent on the use of recognized methods and approved laboratory SOPs. Comparability in the field is dependent upon adherence to the sampling

methodology and that the proper preservation techniques are used.

Completeness

Completeness is a measure of the amount of usable data collected compared to the amount of data expected to be obtained. Three measures of completeness are defined as:

- Sampling completeness, defined as the number of valid samples collected relative to the number of samples planned for collection;
- Analytical completeness, defined as the number of valid sample measurements relative to the number of valid samples collected; and
- Overall completeness, defined as the number of valid sample measurements relative to the number of samples planned for collection.

Sensitivity

Sensitivity refers to the ability of an analytical procedure to quantify an analyte at a given concentration. The sensitivity requirements should be established such that the laboratory method Reporting Limits ("RLs") are at or below the relevant and applicable regulatory limits for each Contaminant of Concern ("COC") for the project. For the purpose of this project:

- The RL for a specific substance when determining the extent and degree of polluted soil from a release. For the purpose of this document, the RL is defined as:
  - Organics, the lowest initial calibration standard as adjusted for the dilution factor, sample weight/volume, and moisture content;
  - Inorganics, the concentration of that analyte in the lowest level check standard (which could be the lowest calibration standard in a multi-point calibration curve).

Methods for analysis have been chosen to meet the sensitivity requirements for a project (e.g., compound- specific and matrix-specific). If however, the laboratory RLs exceed the project sensitivity requirements (i.e., the RL is above the relevant and applicable regulatory standard), the analytical methods may need to be adjusted (e.g., analysis conducted using a more sensitive method or sample preparation and analysis features adjusted to gain sensitivity) and/or the project objectives may need to be adjusted (i.e., certain COCs may not be able to be screened out during this phase of the evaluation).

Due to the low regulatory limits, it will be ensured that laboratory reporting limits for PFAS in groundwater and soil are to be 2 nanograms per liter (ng/L) (ppt) and 1 microgram per kilogram (ug/kg) (ppb), respectively.

The method detection limit for 1,4-dioxane in groundwater and soil will not exceed 0.35 micrograms per liter (ug/L) and 0.1 milligram per kilogram (mg/kg) in soil.

5. Historical and Secondary Information / Data

The potential sources of data for any project include both historical data (i.e., data not collected by the current investigator) and secondary data (i.e., data that were collected for a different purpose than that for which they are now being used). Historical data should be evaluated for

applicability to current project objectives. Secondary data should be assessed to determine if the quality of the data is sufficient for the current project objectives and meets comparability criteria (it is not sufficient that the secondary data were produced by a reliable source or a known environmental monitoring project with an approved QAPP).

Historical data and secondary data are not known to exist in association with the media being investigated at the current Site.

6. Investigation Process Design

A description and justification of the investigation design should include, for each area of interest:

- The COCs or other parameters of interest
- The number of anticipated investigation points and how and why they will be selected including a site map depicting proposed sample locations
- Method of obtaining/determining locational information (such as the use of GPS instrumentation)
- Factors which could affect the variability of the data such as physical obstructions, seasonal variations, tidal influences, soil profile changes, weather-related variation, and process variation within the source
- Design basis (i.e., probability based or judgment based)
- Results comparison (i.e., versus previous data, regulatory standards, reference population, etc.) Matrices to be monitored including any special sampling requirements
- Monitoring frequency (if applicable)
- Heterogeneity or homogeneity of the matrix
- Appropriateness of composite samples
- Required quality control samples

The investigative process design is based generally on the following:

- NYSDEC DER-10 / Technical Guidance for Site Investigation and Remediation
- Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) with updates

7. Field Quality Control

Field quality control activities, along with their frequency, acceptance criteria, and corrective actions to be taken are provided for each DQI in the following tables.

Analyte(s)	DQI	Data Quality Element	Frequency of Collection	Acceptance Criteria	Corrective Action(s)
-VOCs+TICs per Method 8260C -SVOCs+TICs by Method 8270D -TAL Metals by EPA 200.7 / 200.8/ 245.2 / 6010C / 6020A / 7470A / 7471B -TCL PCBs and Pesticides by Method 8082A/8081B -1,4-Dioxane by EPA Method 8270D-SIM -PFAS by EPA Method 1633	Sensitivity	Samples reported to RL	For each target analyte	Analyte specific	Qualify sample data
-VOCs+TICs per Method 8260C -SVOCs+TICs by Method 8270D -TAL Metals by EPA 200.7 / 200.8/ 245.2 / 6010C / 6020A / 7470A / 7471B -TCL PCBs and Pesticides by Method 8082A/8081B -1,4-Dioxane by EPA Method 8270D-SIM - PFAS by EPA Method 1633	Accuracy	Laboratory Control Samples (LCS)	One (1) per preparatory batch of 20 samples	Analyte specific	Reanalyze all samples in the batch

-VOCs+TICs per Method 8260C -SVOCs+TICs by Method 8270D -TAL Metals by EPA 200.7 / 200.8/ 245.2 / 6010C / 6020A / 7470A / 7471B -TCL PCBs and Pesticides by Method 8082A/8081B -1,4-Dioxane by EPA Method 8270D-SIM - PFAS by EPA Method 1633	Precision	Laboratory Duplicates	One (1) per preparatory batch of 20 samples	RPD≤ 25%	Qualify sample data
-VOCs+TICs per Method 8260C -SVOCs+TICs by Method 8270D -TAL Metals by EPA 200.7 / 200.8/ 245.2 / 6010C / 6020A / 7470A / 7471B -TCL PCBs and Pesticides by Method 8082A/8081B -1,4-Dioxane by EPA Method 8270D-SIM - PFAS by EPA Method 1633	Accuracy	Method Blanks	One (1) per preparatory batch of 20 samples	No target analytes concentrations ≥ RL	Investigate the source of contamination and document and reanalyze all samples processed
-VOCs per Method TO-15	Accuracy and precision	Leak Check	Every soil vapor sample	<10% helium in sample probe	Purge tubing and reseal annular space at surface

* Target Compound List (TCL) VOCs, including Tentatively Identified Compounds (TICs); Semi-volatile organic compounds; Target Analyte List (TAL) Metals; Polychlorinated Biphenyls (PCBs); Per- and Polyfluoroalkyl substances (PFAS).

Equipment to be decontaminated during the project may include tools, monitoring equipment, and sample collection equipment.

Contaminated tools and sampling equipment will be dropped into a plastic pail, tub or other container. The tools will be brushed off, rinsed, and transferred into a second pail to be carried to further decontamination stations where they will be washed with a non-PFAS containing detergent and water solution, rinsed with clean potable water, and finally rinsed with deionized water.

Any direct or obvious contamination on monitoring equipment will be brushed or wiped with a disposable paper wipe. The units will then be wiped off with damp disposable wipes and dried. The units will be checked, standardized, and recharged, as necessary, for the next day's operation. They will then be prepared with new protective coverings.

Sample containers will be wiped clean at the sample site, taken to the decontamination area to be further cleaned, as necessary, and transferred to a clean carrier. The samples will be checked off against the COC record. The samples will then be stored on ice in a secure area prior to shipment. Sample handling areas will be cleaned/wiped down daily using disposable wipes. Disposable wipes will not be used on any equipment that comes in contact with samples. For final cleanup, all equipment will be disassembled and decontaminated. Any equipment which cannot be satisfactorily decontaminated will be disposed (e.g., glassware, covers for surfaces).

Analysis of an equipment/field blank sample shall be conducted for the COCs being investigated that day with that equipment.

Due to the ubiquitous nature and low detection levels for PFAS compounds, several additional specific considerations and protocols must be taken during project setup, sampling, and decontamination procedures when sampling for PFAS compounds as follows:

- PFAS sampling will occur at the beginning of the work day prior to any other sampling planned, to avoid possible contamination sources.
- Clothing for the day must have been previously washed a minimum of 6 times (i.e. no new clothing) without fabric softener.
- No waterproof, water-repellent, fire-repellant or stain-resistant clothing or footwear will be worn.
- On the day of sampling the project manager will shower only with PFAS-free soap and shampoo, brush teeth with fluoride-free toothpaste only (no mouthwash or dental floss), and will not use lotions, moisturizers, deodorant cosmetics, makeup sunscreen or insect repellents.
- Prior to sampling the project manager will not handle any packaged food or drinks, aluminum foil, adhesive labels, etc. at or around sampling site.
- Sampling bottles will be pre-labeled before arrival at the sampling site and marked with a ball-point pen only (no markers).
- No waterproof logbooks or plastic clipboards will be used, only untreated paper and aluminum clipboards.
- Prior to collection of samples, field personnel must wash their hands and wear a new set of powderless, disposable, nitrile gloves and will take extra caution not to touch any surface prior to sample collection.
- High density polyethylene (HDPE) and polypropylene will be used during sampling and all sampling equipment components and sample containers will not come in contact

with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

- Samples will be collected directly into the provided preserved, HDPE bottle, which will be sealed and bagged immediately and will be stored and transported in a clean, dedicated cooler between bags of PFAS-free, fresh, bagged ice (no chemical ice packs will be used).
- Field sampling equipment, including oil/water interface meters, water level indicators, and other nondedicated equipment used at each sample location, will be cleaned between use.
- The safety data sheets (SDSs) of detergents or soaps used in decontamination procedures will be reviewed to ensure fluoro-surfactants are not listed as ingredients.
- Laboratory-certified PFAS-free water will be used for the final rinse during decontamination of sampling equipment.
- Larger equipment (for example, drill rigs and large downhole drilling and sampling equipment) will be decontaminated with potable water using a high-pressure washer or steam.
- To the extent practical, equipment coming in direct contact with samples will be rinsed with PFAS-free water. Water used for the decontamination of sampling equipment will be laboratory certified "PFAS-free" water.

8. Sampling Methods and Techniques

Groundwater Sampling

Groundwater samples will be collected periodically from the existing monitoring wells onsite. Prior to sampling, an electronic interface meter will be used to measure water levels and the water column will be purged used low-flow procedures. The purge water will be monitoring for field parameters including pH, oxidation-reduction potential (ORP), specific conductivity, dissolved oxygen, temperature, and depth to water for approximately 30 to 60 minutes or until stabilized.

Groundwater samples slated for laboratory analysis will be placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory. The samples will be analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, total and dissolved TAL metals by EPA Method 6000/7000 series, PFAS compounds by EPA Method 1633, and/or 1,4-dioxane by EPA Method 8270. Sampling for emerging contaminants will be conducted in accordance with the November 2022 NYSDEC-issued sampling protocol ("Sampling, Analysis, and Assessment of PFAS"), with the exception that a low-density polyethylene (LDPE) bladder will be used as no industry-approved high-density polyethylene (HDPE) alternative currently exists. Appropriate QA/QC samples will be collected for the groundwater sampling event including one trip blank, one field duplicate sample, one matrix spike sample, and one matrix spike duplicate sample per day of sampling. Well sampling details will be noted on groundwater sampling logs, which will be included in submittals to the NYSDEC.

Soil Vapor Sampling

Soil vapor sampling will be conducted on a periodic basis to monitor the operation of the SSDS. Soil vapor sampling will be conducted in accordance with Section 2.7.1 of the New York State SVI Guidance and DER-10 Section 3.6.

Soil vapor samples will be analyzed by using USEPA Method TO-15. Flow rate of both purging and sampling will not exceed 0.2 liter per minute (L/min) for soil vapor and sub-slab soil vapor sampling. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody protocols.

A tracer gas will be used in accordance with NYSDOH protocols to serve as a QA/QC device to verify the integrity of the soil vapor probe seal. Helium will be used as the tracer gas and a shroud will serve to keep it in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer prior to sampling. If the tracer sample results show a significant presence (>10% of the tracer as outlined in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York, with revisions October 2006) of the tracer, the probe seals will be adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring will be performed a second time to confirm the integrity of the probe seals.

Indoor/Ambient Air Sampling

Indoor air sampling will be conducted on a periodic basis to monitor the operation of the. The air samples will be collected concurrently with the interior sub-slab soil vapor samples. The air samples will be collected over a period of approximately eight-hours per NYSDOH Vapor Intrusion (VI) Guidance Manual requirements for non-residential buildings. The air samples will be collected using laboratory-supplied six (6) liter evacuated Summa canisters with calibrated flow controllers.

A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody protocols.

The air samples will be analyzed for VOCs using EPA method TO-15.

9. Field Instrumentation / Equipment Calibration and Frequency

Field instrumentation/equipment that will require calibration includes a PID, a peristaltic pump, a U-50 Multiparameter Water Quality Meter and flow through cell, a helium detector, and flow regulators for Summa canisters. Calibration of PID will be conducted using isobutylene gas at the beginning at each day of field work. The U-50 Multiparameter Water Quality Meter calibration record will be provided by Pine Environmental Services, Inc. upon request. Pace/Alpha Laboratory will provide all calibration records on the flow regulators and the helium detector calibration record

will be provided by Pine Environmental Services, Inc. upon request

10. Inspection / Acceptance of Supplies and Consumables

Critical supplies or consumables are planned for use in soil, groundwater, soil vapor, and indoor air sampling events. All consumables must be unused and dedicated specifically to this project. The soil and groundwater samples will be collected into laboratory-supplied bottleware. The soil vapor and indoor air samples will be collected into laboratory-supplied Summa canisters. Summa canisters shall be batch certified as clean from the laboratory.

11. Sample Handling and Custody Requirements

Sample containers will be wiped clean at the sample site, taken to the decontamination area to be further cleaned, as necessary, and transferred to a clean carrier. The samples will be checked off against the chain of custody (COC) record. The samples will then be stored on ice in a secure area prior to shipment. At the time samples are obtained, the following must be recorded by the sampler in the field logbook and/or on sample data sheets: Sample location

- Sample type
- Date and time of sampling
- Project and sample designations
- Sample identification
- Analyses requested

Sample handling areas will be cleaned/wiped down daily using disposable wipes. Disposable wipes will not be used on any equipment that comes in contact with samples. For final cleanup, all equipment will be disassembled and decontaminated. Any equipment which cannot be satisfactorily decontaminated will be disposed (e.g., glassware, covers for surfaces). Samples shall be maintained on-site for no more than two (2) consecutive days and shall be delivered to the laboratory within one (1) day of shipment from the field.

The following COC protocol will be followed by the sampling crews:

- Documenting procedures and reagents added to the sample during sample preservation
- Recording sampling locations, sample bottle identification, and specific sample collection procedures on the appropriate forms
- Using sample labels that contain all information necessary for effective sample tracking
- Completing standard field data records to establish analytical sample custody in the field before sample shipment.

Prepared labels are normally developed for each sample to be collected. Each label is numbered to correspond with the appropriate sample(s) to be collected.

The COC record is used to document sample-handling information (i.e., sample location, sample identification, and number of containers corresponding to each sample number). The following

information is recorded on the COC record:

- Project reference
- The site location code, sample identification number, date of collection, time of collection, sample bottle number, preservation, and sample type, number of containers, sample matrix
- The names of the sampler(s) and the person shipping the samples
- Serial number of custody seals and shipping cases (if applicable)
- The date and time that the samples were delivered for shipping
- Analyses required
- The names of those responsible for receiving the samples at the laboratory.

COC Forms may be obtained from the subcontractor laboratory or from PSG. A copy of the COC is sent with the analytical samples to the laboratory; another is kept by the sample crew leader and maintained in the project file. When this shipment is received by the laboratory, the COC is signed by the laboratory and returned with the test results as part of the data package submittal.

12. Field Storage and Transport Procedures

Samples shall remain in direct sight and in the custody of field personnel at all times until transfer to the laboratory.

13. Sample Containers, Preservation, and Holding Times

Sample containers, preservation, and holding times are specified on Table 1.

14. Analytical Methods Summary Table

Analytical methods are summarized on Table 1.

15. Project Compounds and Analytical Summary

CVOCs and PAHs are the COCs for the soil and groundwater at the Site and CVOCs are the COCs for soil vapor and indoor air at the Site. The project action limits are the NYSDEC RCUSCOs and NYSDEC PGWSCOs for soil, NYSDEC AWQSs for groundwater, and NYSDOH Soil Vapor/Indoor Air Matrices A, B, and C for indoor air and soil vapor. The analytical methods chosen can meet the DQOs of the project.

Analytical sensitivity requirements include the use of instruments or methods to detect the contaminants of concern at or below the action limits. The RLs are expected to be below the applicable regulatory standards. NYSDEC and EPA methods were selected to achieve the action limits. Laboratories may need to adjust RLs based on dilutions, sample sizes, extract/digestate volumes, percent solids and cleanup procedures. Sensitivity will be maximized by following the NYSDEC and EPA methods or laboratory SOPs utilizing experienced, trained laboratory personnel and by conducting laboratory audits.

16. Analytical Quality Control

Quality assurance and quality control ("QA/QC") requirements for analysis are specified in the most recent version of the document titled "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods'', prepared by EPA. The laboratory may also have QA/QC procedures in addition to those specified by the test method.

17. Laboratory Deliverables

The laboratory deliverable format to be used for this project shall be the Analytical Services Protocols (ASP) Category B full laboratory data deliverable. The laboratory shall also generate spreadsheets of the analytical results.

18. Data and Records Management

The recording media for the project will be both paper and electronic. The project will implement proper document control procedures for both. For instance, hand-recorded data records will be taken with indelible ink, and changes to such data records will be made by drawing a single line through the error with an initial by the responsible person. The Project Manager will have ultimate responsibility for all changes to records and documents. Similar controls will be put in place for electronic records.

The Quality Assurance Coordinator shall retain all updated versions of the QAPP and be responsible for distribution of the current version of the QAPP. The Quality Assurance Coordinator/Project Manager will approve periodic updates. The Project Manager shall retain copies of all management reports, memoranda, and all correspondence between the parties identified in Section 3.

Project data shall be stored in the Project Manager's office.

19. Data Verification and Usability

The data package will be evaluated for accuracy and precision of the analytical results. A DUSR will be prepared to describe the compliance of the analyses with the analytical method protocols detailed in the NYSDEC ASP.

The DUSR will provide a determination of whether the data meets the project-specific criteria for data quality and data use. The validation effort will be completed in accordance with NYSDEC Division of Environmental Remediation DUSR guidelines.

The procedure for review (verification and usability procedures) including data assessment versus stated data quality objectives of the investigation is specified in the NYSDEC's DER-10.

The data validator for this project will be Mr. Donald C. Anne of Alpha Geoscience in Clifton Park, New York.

20. Corrective Action Processes

Corrective action in the field may be needed when the work plan is modified (i.e., number or locations of samples) or when sampling procedures and/or field analytical procedures require modification due to unexpected conditions. The corrective action may be implemented at the time the determination is made in the field or may be implemented later, depending on the circumstances. Any corrective actions taken shall be documented in the field logbook and in the technical report.

Corrective actions in the laboratory may be needed when Non-Conformances occur. The laboratory shall implement and document corrective actions in accordance with the laboratory SOP.

TABLE 1
Analytical Methods/Quality Assurance Summary Table
125 Beechwood Avenue, New Rochelle, Westchester County, New York 10801

Matrix Type		Analytical Parameters	Analytical Methods	Sample Preservation	Sample Container & Volume	Permissible Holding Time
Groundwater		TCL VOCs+TICs	8260C	HCL	(3) 40 ml VOA amber gl.	14 days
		TCL SVOCs+TICs	8270D	0-6 °C	(2) 1000 ml amber glass	7 Days[2]
		TAL Metals (filtered and total metals)	200.7/200.8/ 245.2/6010C/ 6020A/7470A	0-6 °C HNO_3	(1) 500 ml HDPE	180 Days (28 days for Hg)
		Total PCBs	8082A	0-6 °C	(2) 1000 ml amber glass	7 Days
		TCL Pesticides	8081B	0-6 °C	(2) 500 ml HDPE	7 Days[2]
		1,4-Dioxane	8270D-SIM	0-6 °C	(2) 1000 ml amber glass	7 Days[2]
		PFAS[1]	1633	Trizma/0-6 °C	(2) 250 ml HDPE	14 Days[3]
Soil Vapor		VOCs	EPA TO-15	Ambient temperature	Summa Canister; 2.7-liter	30 days
Indoor/ Ambient Air		VOCs	EPA TO-15	Ambient temperature	Summa Canister; 6-liter	30 days

1. Full list of PFAS will be analyzed. List of PFAS compounds to be analyzed is attached to this QAPP.
2. Permissible holding time for SVOCs+TICs, TCL Pesticides, and 1,4-Dioxane in groundwater is 7 days to extract and 40 days to analyze.
3. Permissible holding time for PFAS in groundwater is 14 days to extract and 28 days to analyze.

ATTACHMENT 1: PFAS ANALYTE LIST

Attachment 1 – PFAS Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonic acids	Perfluorobutanesulfonic acid	PFBS	375-73-5
	Perfluoropentanesulfonic acid	PFPeS	2706-91-4
	Perfluorohexanesulfonic acid	PFHxS	355-46-4
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanesulfonic acid	PFOS	1763-23-1
	Perfluorononanesulfonic acid	PFNS	68259-12-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
	Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Perfluoroalkyl carboxylic acids	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	PFHpA	375-85-9
	Perfluorooctanoic acid	PFOA	335-67-1
	Perfluorononanoic acid	PFNA	375-95-1
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUnA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTeDA	376-06-7
Per- and Polyfluoroether carboxylic acids	Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6
	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
	Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1
	Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5
	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6
Fluorotelomer sulfonic acids	4:2 Fluorotelomer sulfonic acid	4:2-FTS	757124-72-4
	6:2 Fluorotelomer sulfonic acid	6:2-FTS	27619-97-2
	8:2 Fluorotelomer sulfonic acid	8:2-FTS	39108-34-4
Fluorotelomer carboxylic acids	3:3 Fluorotelomer carboxylic acid	3:3 FTCA	356-02-5
	5:3 Fluorotelomer carboxylic acid	5:3 FTCA	914637-49-3
	7:3 Fluorotelomer carboxylic acid	7:3 FTCA	812-70-4
Perfluorooctane sulfonamides	Perfluorooctane sulfonamide	PFOSA	754-91-6
	N-methylperfluorooctane sulfonamide	NMeFOSA	31506-32-8
	N-ethylperfluorooctane sulfonamide	NEtFOSA	4151-50-2
Perfluorooctane sulfonamidoacetic acids	N-methylperfluorooctane sulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethylperfluorooctane sulfonamidoacetic acid	N-EtFOSAA	2991-50-6
Perfluorooctane sulfonamide ethanols	N-methylperfluorooctane sulfonamidoethanol	MeFOSE	24448-09-7
	N-ethylperfluorooctane sulfonamidoethanol	EtFOSE	1691-99-2

Group	Chemical Name	Abbreviation	CAS Number
Ether sulfonic acids	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (F-53B Major)	9Cl-PF3ONS	756426-58-1
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (F-53B Minor)	11Cl-PF3OUdS	763051-92-9
	Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	113507-82-7

APPENDIX E: COMMUNITY AIR MONITORING PLAN (CAMP)

PSG

Community Air Monitoring Plan (CAMP)

125 Beechwood, LLC
BCP Site No. C360232
125 Beechwood Avenue
New Rochelle, NY 10901

The following Community Air Monitoring Plan (CAMP) will be implemented during the Remedial Actions to be performed at the 125 Beechwood, LLC site (Site). Air monitoring will be conducted in accordance with the New York State Department of Health (NYSDOH) *Generic Community Air Monitoring Plan (CAMP).* All air monitoring will be conducted on a real-time basis, using both hand-held field instruments and perimeter air monitoring stations, for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area.

Continuous monitoring will be performed for all ground intrusive activities including the break-up and removal of concrete foundations and the excavation of contaminated soil. Periodic monitoring for VOCs and particulates will be required during nonintrusive activities (if required) such as the collection of soil samples from stockpiles or the placement of clean backfill or cover materials.

This CAMP is not intended for use in establishing action levels for worker respiratory protection that shall be described in the site-specific HASP prepared by the Contractor for the proposed excavations. Rather, its intent is to provide a measure of protection for the downwind community (i.e. off-site receptors including residences and businesses) from potential airborne contaminant releases as a direct result of the proposed remedial work activities. Reliance on this CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, this CAMP will help prevent the remedial construction activities from spreading contamination off-site through the air.

Particulate Monitoring, Response Levels, and Actions

Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations (one placed upwind and one placed downwind). The particulate monitoring will be performed using real-time 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 (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings will be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review if requested.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor 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 vapors identified, corrective actions taken to abate emissions, 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings will be recorded and be available for State (DEC and NYSDOH) personnel to review if requested. Instantaneous readings, if any, used for decision purposes will also be recorded.

APPENDIX F: CITIZENS PARTICIPATION PLAN

PSG

NEW YORK STATE | Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan
for
125 Beechwood, LLC

January 2023

Site Number: C360232
125 Beechwood Avenue
New Rochelle
Westchester County, New York

Contents

* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant: **125 Beechwood, LLC ("Applicant")**
Site Name: **125 Beechwood, LLC ("Site")**
Site Address: **125 Beechwood Avenue**
Site County: **Westchester County**
Site Number: **C360232**

1. What is New York's Brownfield Cleanup Program?

New York's Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants who conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at: http://www.dec.ny.gov/chemical/8450.html .

2. Citizen Participation Activities

Why NYSDEC Involves the Public and Why It Is Important

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 investigation and cleanup 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

- 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.

This Citizen Participation (CP) Plan provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the site's investigation and cleanup program also are identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some documents may be placed on the NYSDEC web site. If this occurs, NYSDEC will inform the public in fact sheets distributed about the site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.
The site contact list includes, at a minimum:

- chief executive officer and planning board chairperson of each county, city, town and village in which the site is located;
- residents, owners, and occupants of the site and properties adjacent to the site;
- the public water supplier which services the area in which the site is located;
- any person who has requested to be placed on the site contact list;
- the administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility;
- location(s) of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

Note: The first site fact sheet (usually related to the draft Remedial Investigation Work Plan) is distributed both by paper mailing through the postal service and through DEC Delivers, its email listserv service. The fact sheet includes instructions for signing up with the appropriate county listserv to receive future notifications about the site. See http://www.dec.ny.gov/chemical/61092.html .

Subsequent fact sheets about the site will be distributed exclusively through the listserv, except for households without internet access that have indicated the need to continue to receive site information in paper form. Please advise the NYSDEC site project manager identified in Appendix A if that is the case. Paper mailings may continue during the investigation and cleanup process for some sites, based on public interest and need.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.

- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

The public is encouraged to contact project staff at any time during the site's investigation and cleanup process with questions, comments, or requests for information.

This CP Plan may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

NYSDEC must determine if the site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the site, as described in Section 5.

If the site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the site, and that its members' health, economic well-being or

enjoyment of the environment may be affected by a release or threatened release of contamination at the site.

As of the date the declaration (page 2) was signed by the NYSDEC project manager, the significant threat determination for the site had not yet been made.

To verify the significant threat status of the site, the interested public may contact the NYSDEC project manager identified in Appendix A.

For more information about TAGs, go online at http://www.dec.ny.gov/regulations/2590.html

Note: The table identifying the citizen participation activities related to the site's investigation and cleanup program follows on the next page:

Citizen Participation Activities	Timing of CP Activity(ies)
Application Process:	
• Prepare site contact list • Establish document repository(ies)	At time of preparation of application to participate in the BCP.
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period • Publish above ENB content in local newspaper • Mail above ENB content to site contact list • Conduct 30-day public comment period	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement (BCA):	
• Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation **Note:** Applicant must submit CP Plan to NYSDEC for review and approval within 20 days of the effective date of the BCA.
Before NYSDEC Approves Remedial Investigation (RI) Work Plan:	
• Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan • Conduct 30-day public comment period	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
• Distribute fact sheet to site contact list that describes RI results	Before NYSDEC approves RI Report
Before NYSDEC Approves Remedial Work Plan (RWP):	
• Distribute fact sheet to site contact list about draft RWP and announcing 45-day public comment period • Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager) • Conduct 45-day public comment period	Before NYSDEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.
Before Applicant Starts Cleanup Action:	
• Distribute fact sheet to site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
• Distribute fact sheet to site contact list that announces that cleanup action has been completed and that NYSDEC is reviewing the Final Engineering Report • Distribute fact sheet to site contact list announcing NYSDEC approval of Final Engineering Report and issuance of Certificate of Completion (COC)	At the time the cleanup action has been completed. **Note:** The two fact sheets are combined when possible if there is not a delay in issuing the COC.

3. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern that relate to the site. Additional major issues of public concern may be identified during the course of the site's investigation and cleanup process.

No major issues of public concern such as potential impacts on nearby public water supply or private water wells, restrictions on community activities, or health concerns are associated with the investigation or cleanup process of the Site at this time.

The Brownfield Site consists of one 3.17-acre property and is developed with a large two-story commercial building occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner. Based on a review of historical sources, The Site was historically utilized for metal fabrication, die-casting, and plating operations from 1951 through 1985. Investigations completed at the Site have identified chlorinated volatile organic compounds (CVOC) and polycyclic aromatic hydrocarbons (PAHs) impacts in groundwater and CVOC impacts in soil vapor and indoor air at the Site at concentrations greater than their corresponding, applicable screening levels. The scope of work outlined in the Remedial Investigation Work Plan will further delineate the extent of the impacts resulting from the historical onsite releases. Remedial activities that will be proposed in order to remediate the contamination identified during the Remedial Investigation and to protect the community may include soil removal, groundwater treatment, and the installation of a Sub-Slab Depressurization System (SSDS) to remove chlorinated vapors from beneath the building slab of the facility to improve indoor air quality. Proposed remedial actions will depend on the findings of the completed remedial investigation.

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities.

The Site is located in an area with a sizable Hispanic-American population nearby. Therefore, all future fact sheets will also be available in Spanish.

For additional information, visit: https://statisticalatlas.com/zip/10040/Race-and-Ethnicity

Other potential impacts may be related to noise, odor, or truck-related traffic.

4. Site Information

Appendix C contains a map identifying the location of the site.

Site Description

The 125 Beechwood, LLC Site consists of one 3.17-acre property identified as Section 2, Block 691, Lot 005 and is developed with a large two-story commercial building occupied by U-Haul Moving & Storage and an asphalt-paved parking lot along the southwestern corner. The Site is located on the north side of Beechwood Avenue in a mixed commercial and residential area of New Rochelle, Westchester County, New York. The Site is bounded by railroad tracks to the north; Beechwood Avenue followed by residential buildings and commercial automotive repair services to the south; Second Street followed by commercial offices and automotive repair services to the east; and one commercial building occupied by Atlas Welding & Boiler Repair Inc. to the west.

History of Site Use, Investigation, and Cleanup

The Site was developed with the existing one- to two-story warehouse building between 1951 and 1955. Historic operations at the Site included metal fabrication, die-casting, and plating from 1951 through 1985 which have led to site contamination. The Site was occupied by commercial office and warehouse tenants from circa 1985 to 2014 and commercial office and self-storage facility operations since the current owner purchased the Site in 2014.

PSG Engineering and Geology, D.P.C. (PSG) completed subsurface environmental investigations at the Site for due diligence purposes in July and August 2014. The results indicated elevated concentrations of chlorinated solvents were present in groundwater, soil vapor, and indoor air at the Site, above the applicable criteria. It is suspected that the chlorinated solvents were utilized for cleaning purposes by the historic metal fabrication, die-casting, and plating operation. Elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) have also been detected in groundwater at the Site. These PAHs are likely related to historic fill material which is common in urban areas. A supplemental subsurface investigation conducted by PSG in 2021 in anticipation of entering the BCP again identified chlorinated solvents groundwater, soil vapor, and indoor air at the Site, above the applicable criteria, but at concentrations significantly lower than those identified during the 2014 investigation.

The current owner, 125 Beechwood, LLC, purchased the Site in October 2014. Being that the contamination present onsite was detected prior to the current ownership, it can be presumed that the current owner did not contribute to the contamination or the releases

that have occurred on the property; therefore, 125 Beechwood, LLC, is applying into the BCP program as a Volunteer.

Plans for further investigation and remediation of the contamination are being developed as described below.

5. Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination onsite, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the site and to contamination that has migrated from the site.

The Applicant in its Application proposes that the site will be used for restricted commercial purposes.

To achieve this goal, the Applicant will conduct investigation activities at the Site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the site.

Investigation

The Applicant has completed a partial site investigation before it entered into the BCP. For the partial investigation, NYSDEC will determine if the data are useable.

The Applicant will conduct an additional investigation of the site officially called a "remedial investigation" (RI). This investigation will be performed with NYSDEC oversight. The Applicant must develop a remedial investigation workplan, which is subject to public comment.

The site investigation has several goals:

1) define the nature and extent of contamination in soil, surface water, groundwater and any other parts of the environment that may be affected;

2) identify the source(s) of the contamination;
3) assess the impact of the contamination on public health and the environment; and
4) provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

The Applicant submits a draft "Remedial Investigation Work Plan" to NYSDEC for review and approval. NYSDEC makes the draft plan available to the public review during a 30-day public comment period.

When the investigation is complete, the Applicant will prepare and submit a report that summarizes the results. This report also will recommend whether cleanup action is needed to address site-related contamination. The investigation report is subject to review and approval by NYSDEC.

NYSDEC will use the information in the investigation report to determine if the site poses a significant threat to public health or the environment. If the site is a "significant threat," it must be cleaned up using a remedy selected by NYSDEC from an analysis of alternatives prepared by the Applicant and approved by NYSDEC. If the site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Interim Remedial Measures

An Interim Remedial Measure (IRM) is an action that can be undertaken at a site when a source of contamination or exposure pathway can be effectively addressed before the site investigation and analysis of alternatives are completed. If an IRM is likely to represent all or a significant part of the final remedy, NYSDEC will require a 30-day public comment period.

Remedy Selection

When the investigation of the site has been determined to be complete, the project likely would proceed in one of two directions:

1. The Applicant may recommend in its investigation report that no action is necessary at the site. In this case, NYSDEC would make the investigation report available for public comment for 45 days. NYSDEC then would complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. NYSDEC would then issue a "Certificate of Completion" (described below) to the Applicant.

or

2. The Applicant may recommend in its investigation report that action needs to be taken to address site contamination. After NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a “Remedial Work Plan”. The Remedial Work Plan describes the Applicant’s proposed remedy for addressing contamination related to the site.

When the Applicant submits a draft Remedial Work Plan for approval, NYSDEC would announce the availability of the draft plan for public review during a 45-day public comment period.

Cleanup Action

NYSDEC will consider public comments, and revise the draft cleanup plan if necessary, before approving the proposed remedy. The New York State Department of Health (NYSDOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy. The selected remedy is formalized in the site Decision Document.

The Applicant may then design and perform the cleanup action to address the site contamination. NYSDEC and NYSDOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a final engineering report that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the site.

Certificate of Completion

When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the site, it will approve the final engineering report. NYSDEC then will issue a Certificate of Completion (COC) to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the site after it receives a COC.

Site Management

The purpose of site management is to ensure the safe reuse of the property if contamination will remain in place. Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan.

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.

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

Site management also may include the operation and maintenance of a component of the remedy, such as a system that pumps and treats groundwater. Site management continues until NYSDEC determines that it is no longer needed.

Appendix A -
Project Contacts and Locations of Reports and Information

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Emily Barry
Assistant Geologist
NYSDEC 3
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, New York 12561
(845) 633-5457
Email: emily.barry@dec.ny.gov

Stephanie Mossey
Citizen Participation Specialist
NYSDEC – Region 3
21 South Putt Corners Road
New Paltz, New York 12561
Tel: (845) 256-3154
Email: stephanie.mossey@dec.ny.gov

New York State Department of Health (NYSDOH):

Mark Sergott
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza – Corning Tower Room 1787
Albany, NY 12237
Email: BEEI@health.ny.gov
Tel: (518) 402-7860

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

New Rochelle Public Library
1 Library Plaza
New Rochelle, NY 10801

Attn: Thomas Geoffino
Phone: (914-632-7879
Hours: M/T/Th 9-8; W 10-6; F/Sat 9-5

Appendix B - Site Contact List

Chief Executive Officer of Westchester County
County Executive George Latimer
148 Martin Avenue, White Plains, New York 10601
(914) 995-2900

Planning Board Chairperson of Westchester County
Westchester County Department of Planning
148 Martin Avenue, Room 432, White Plains, New York 10601
(914) 995-4400

Chief Executive Officer of New Rochelle
Mayor Noam Bramson
515 North Avenue, New Rochelle, New York 10801
(914) 654-2150

Planning Board Chairperson of New Rochelle
Kevin Kain, Director of Planning & Sustainability
515 North Avenue, New Rochelle, New York 10801
(914) 654-2191

Residents, owners, and occupants of the property and properties adjacent to the property

North: Consolidated Rail Corp. (https://conrail.com/)

South: Joseph Urbinati (81 Rockdale Avenue); 122 Beechwood Properties Inc. (122 Beechwood Avenue); Javier and Maria Lopez (132 Beechwood Avenue); Florence M. Rose (138 Beechwood Avenue); Jeffrey M. DeMarco (142 Beechwood Avenue); Virginia Kosiba (146 Beechwood Avenue); Claudio and Corradina Carpano (152 Beechwood Avenue); Aurelio Secchiano and Ruiz Narcisa Secchiano (156 Beechwood Avenue); 125 Beechwood LLC (160 Beechwood Avenue)

East: Formanno Properties, LLC (111 Beechwood Avenue) occupied by Beechwood Auto Body (http://beechwoodautobody.com/); Cinder LLC (9 Second Street); Roberto Sanchez (21 Second Street)

West: 173 Beechwood Ave Rlty Corp. (173 Beechwood Avenue), occupied by Atlas Welding & Boiler Repair Inc. (http://www.atlasboiler.com/)

Local news media from which the community typically obtains information

New Rochelle Daily Voice
NewRochelle@dailyvoice.com

The public water supplier which services the area in which the property is located

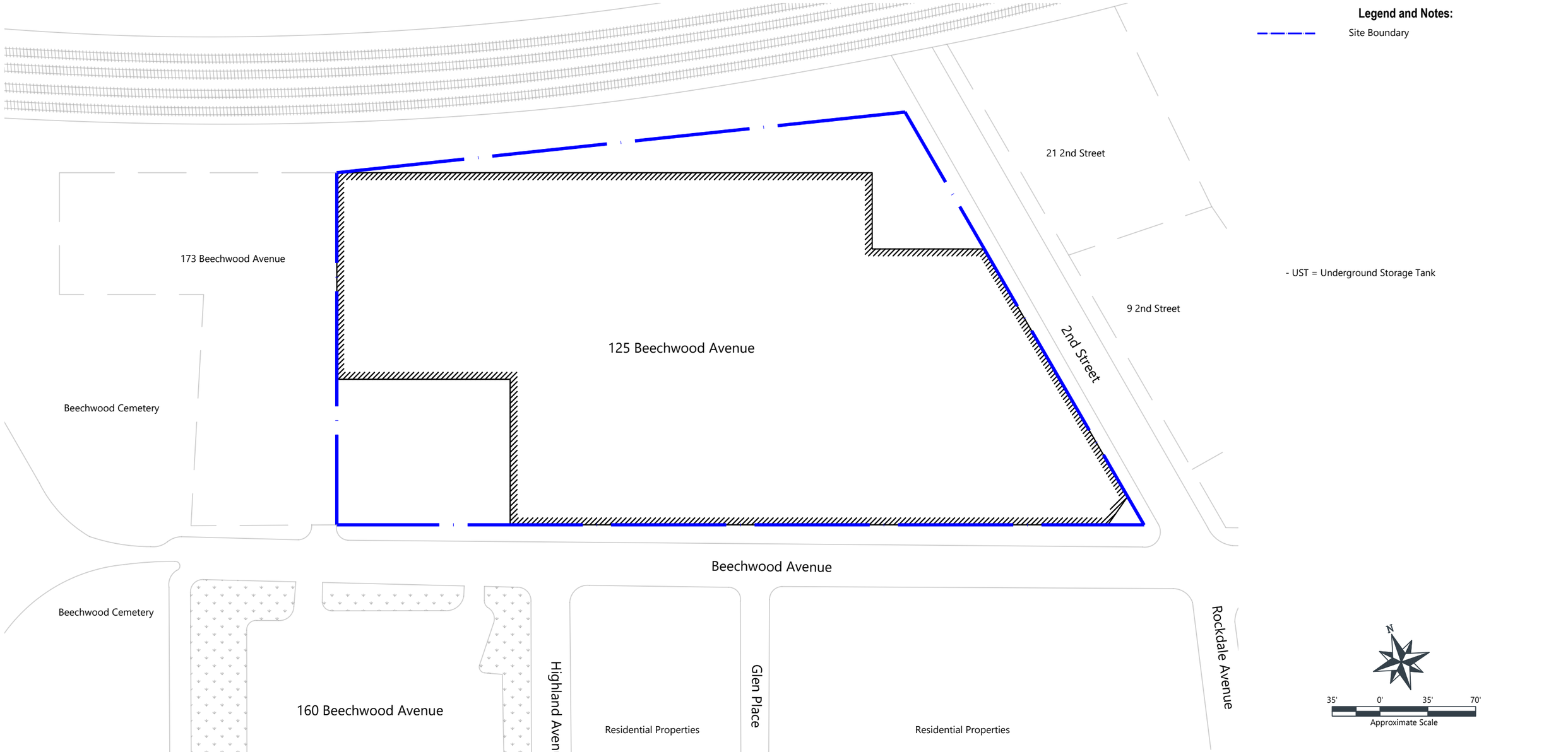
Suez Water-Westchester, Inc.
2525 Palmer Avenue, New Rochelle, New York 10801

The administrator of any school or day care facility located on or near the property

No schools or daycare facilities are located within 1,000 feet of the Site.

The location of a document repository for the project (e.g., local library).

New Rochelle Public Library
Tom Geoffino, Director
1 Library Plaza, New Rochelle, New York 10801
(914) 632-7878



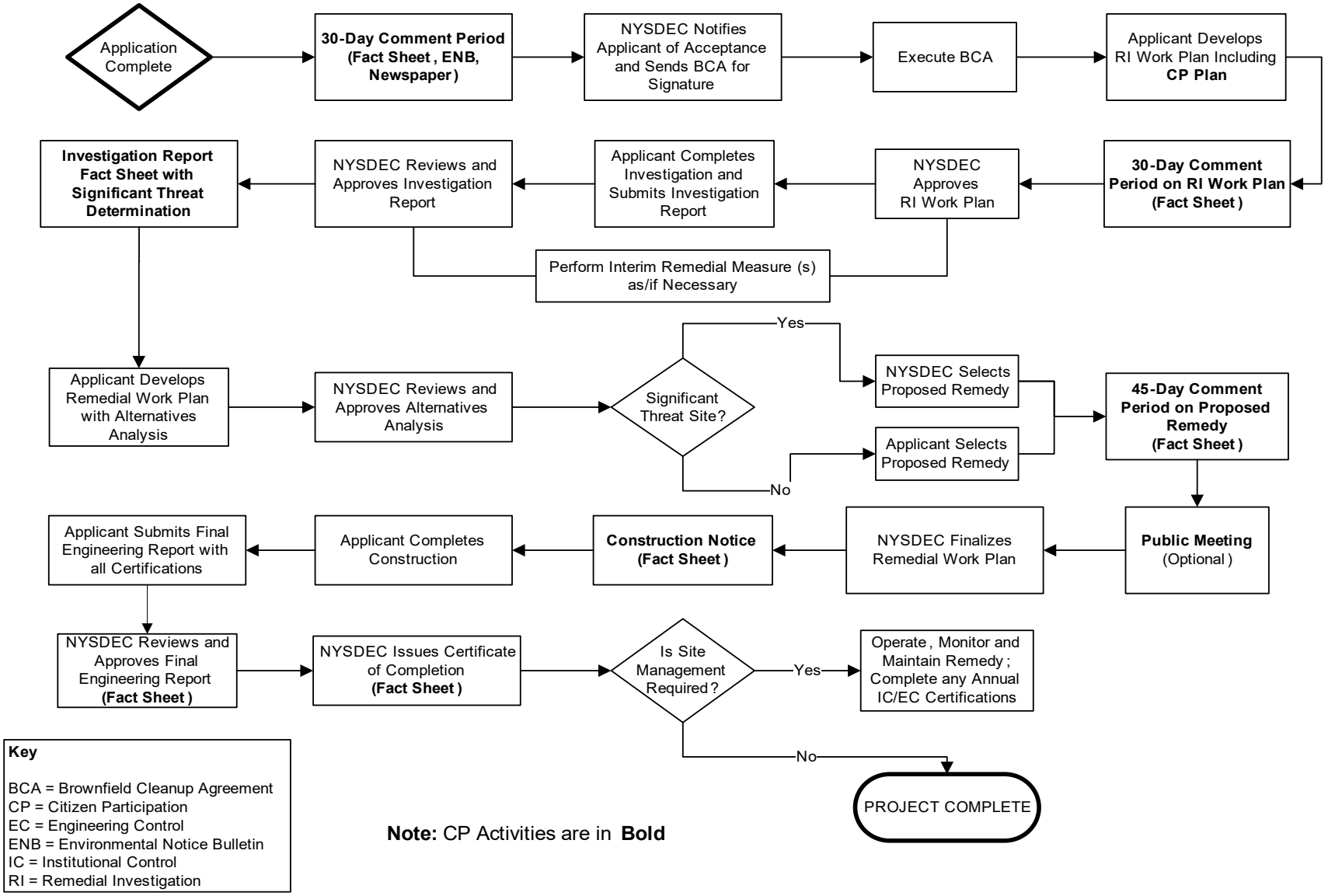
Title: **Appendix C - Site Location Map**

Figure:	Prepared By:	Date:	Project Number:
1	AC	January 2023	21393176-EN

Address:
125 Beechwood Avenue
Noew Rochelle, New York 10801

PARTNER
Engineering and Science, Inc.

Appendix D– Brownfield Cleanup Program Process



Key

BCA = Brownfield Cleanup Agreement
CP = Citizen Participation
EC = Engineering Control
ENB = Environmental Notice Bulletin
IC = Institutional Control
RI = Remedial Investigation

Note: CP Activities are in **Bold**

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Division of Environmental Remediation

Remedial Programs
Scoping Sheet for Major Issues of Public Concern

Site Name: 125 Beechwood, LLC
Site Number: C360232
Site Address and County: 125 Beechwood Avenue, New Rochelle, Westchester County
Remedial Party(ies): 125 Beechwood, LLC

Note: For Parts 1. – 3. the individuals, groups, organizations, businesses and units of government identified should be added to the site contact list as appropriate.

Part 1. List major issues of public concern and information the community wants. Identify individuals, groups, organizations, businesses and/or units of government related to the issue(s) and information needs. **Use this information as an aid to prepare or update the Major Issues of Public Concern section of the site Citizen Participation Plan.**

The Site is located in an Environmental Justice Area. Therefore, all future fact sheets need to be translated into Spanish.

How were these issues and/or information needs identified?
Needs were identified using census data.

Part 2. List important information needed **from** the community, if applicable. Identify individuals, groups, organizations, businesses and/or units of government related to the information needed.
N/A

How were these information needs identified?
N/A

Part 3. List major issues and information that need to be communicated **to** the community. Identify individuals, groups, organizations, businesses and/or units of government related to the issue(s) and/or information.
N/A

How were these issues and/or information needs identified?
N/A

Part 4. Identify the following characteristics of the affected/interested community. This knowledge will help to identify and understand issues and information important to the community, and ways to effectively develop and implement the site citizen participation plan (mark all that apply):

a. Land use/zoning at and around site:
☒ **Residential** ☐ **Agricultural** ☐ **Recreational** ☒ **Commercial** ☒ **Industrial**

b. Residential type around site:
☒ **Urban** ☐ **Suburban** ☐ **Rural**

c. Population density around site:
☒ **High** ☐ **Medium** ☐ **Low**

d. Water supply of nearby residences:
☒ **Public** ☐ **Private Wells** ☐ **Mixed**

e. Is part or all of the water supply of the affected/interested community currently impacted by the site?
☐ **Yes** ☒ **No**

Provide details if appropriate:
Water is supplied by United Water New Rochelle – East.

f. Other environmental issues significantly impacted/impacting the affected community?
☐ **Yes** ☒ **No**

Provide details if appropriate:
N/A

g. Is the site and/or the affected/interested community wholly or partly in an Environmental Justice Area?
☒ **Yes** ☐ **No**

h. Special considerations:
☒ **Language** ☐ **Age** ☐ **Transportation** ☐ **Other**

Explain any marked categories in **h:**
The Site is located in an area with a sizable Hispanic-American population nearby. Therefore, all future fact sheets will also be available in Spanish.

Part 5. The site contact list must include, at a minimum, the individuals, groups, and organizations identified in Part 2. of the Citizen Participation Plan under 'Site Contact List'. Are *other* individuals, groups, organizations, and units of government affected by, or interested in, the site, or its remedial program? (Mark and identify all that apply, then adjust the site contact list as appropriate.)

☐ **Non-Adjacent Residents/Property Owners:** Click here to enter text.

☐ **Local Officials:** Click here to enter text.

☐ **Media:** Click here to enter text.

☐ **Business/Commercial Interests:** Click here to enter text.

☐ **Labor Group(s)/Employees:** Click here to enter text.

☐ **Indian Nation:** Click here to enter text.

☐ **Citizens/Community Group(s):** Click here to enter text.

☐ **Environmental Justice Group(s):** Click here to enter text.

☐ **Environmental Group(s):** Click here to enter text.

☐ **Civic Group(s):** Click here to enter text.

☐ **Recreational Group(s):** Click here to enter text.

☐ **Other(s):** Click here to enter text.

Prepared/Updated By: Anthony Cauterucci, PSG **Date:** January 18, 2023

Reviewed/Approved By: Click here to enter text. **Date:** Click here to enter text.

APPENDIX G: RESUMES OF KEY PERSONNEL

PSG

PARTNER

Kristine M. MacWilliams, PE
Managing Director, Subsurface Investigation

Education
B.S., Civil Engineering, University of North Carolina at Charlotte

Registrations
Registered Professional Engineer, North Carolina
Registered Professional Engineer, South Carolina
Registered Professional Engineer, New York
Registered Professional Engineer, Maryland

Training
OSHA 10-Hour Construction Safety
Hazardous Waste Site Supervisor
OSHA 40-Hour HAZWOPER
OSHA 8Hour HAZWOPER Refreshers, Current

Highlights
26 years of experience in Environmental Engineering and Consulting
26 years of Soil and Groundwater Contamination Investigations and Remediation
15 years of Risk Assessments
15 years of Vapor Intrusion Assessments and Risk Evaluations

Experience Summary
Ms. MacWilliams is the Managing Director for Subsurface Investigations overseeing investigations across the country. Ms. MacWilliams is a registered Professional Engineer in North and South Carolina, Maryland, and New York with 26 years of experience in managing and conducting site assessment and remediation projects.

Ms. MacWilliams' areas of expertise include assessment and remediation of chlorinated solvents, petroleum hydrocarbons and numerous other contaminants in soil, groundwater, and soil gas. In addition, Ms. MacWilliams has extensive experience in conducting Phase I Environmental Site Assessments associated with property transactions for a variety of clients in accordance with EPA's All Appropriate Inquiry (AAI).

Ms. MacWilliams has managed assessment and cleanup projects for private and municipal clients ranging in size from single sites to multi-site portfolios ranging in value from several thousand dollars to several million dollars throughout the country. Projects include: negotiations with regulatory personnel; permitting; formulation of conceptual site models; data gathering through various assessment techniques; data analysis and modeling; evaluation of remedial options; and site-specific remedial recommendations. Many of the sites have been a result of property redevelopment and have resulted in cleanup through Brownfields Programs or other voluntary clean-up programs. Ms. MacWilliams has experience in managing small short-term projects as well as implementation of large, long term projects including oversight of several contractors and various technical staff. Ms. MacWilliams has a thorough understanding of both federal and state environmental regulations and routinely interacts with the regulating agencies.

Environmental Assessment and Remediation

Ms. MacWilliams has experience in the management of and implementation of site assessment and remedial strategies to meet client needs and has been successful in negotiation with regulatory agencies in implementing the best remedial options for sites to work within the planned site use/existing site operations.

Ms. MacWilliams has experience conducting Phase II Assessment projects throughout the US ranging in size from sites with 2 – 3 borings to comprehensive site assessments.

Regulatory Interaction and Compliance

Ms. MacWilliams is knowledgeable of environmental federal, state and local compliance and regulatory permitting requirements, and is proficient in interacting with the regulatory agencies.

Project Experience

Solvents Contamination

Virginia Department of Environmental Quality (VADEQ) Voluntary Remedial Program (VRP), Chlorinated Solvents. Project Manager for VADEQ VRP for the assessment and remediation of former dry cleaning facility in Winchester Virginia. Responsibilities included preparing site conceptual models, assessing soil, groundwater, soil gas and indoor air followed by installation of a vapor mitigation system for a No Further Action determination.

North Carolina Dry-Cleaning Solvent Cleanup Act (DSCA) Program, Chlorinated Solvents. Program Manager for state-lead, multi-million dollar, 70 site portfolio for the assessment and remediation of existing and former dry cleaning facilities throughout North Carolina. Responsibilities included preparing site conceptual models, assessing soil, groundwater, soil gas and indoor air followed by Tier I/II Risk Assessment to determine remedial objectives or risk management options.

South Park Mall, Charlotte, North Carolina, Site Redevelopment Chlorinated Solvents. Lead consultant for high profile mall and associated property redevelopment. Expedited assessment and remediation of impacts attributable to former dry cleaning operations. Completed large-scale source removal effort to mitigate land use restrictions. Utilized onsite low temperature thermal desorption and offsite bioremediation to address the transportation and disposal of significant amounts of impacted soils. Completed fate and transport modeling to assess potential risk of groundwater discharge into a man-made public pond.

Bearing Manufacturer, Cheraw, South Carolina, Chlorinated Solvent Remediation. South Carolina Department of Health and Environmental Control (SC DHEC) enforced assessment and remediation of VOC-affected groundwater at manufacturing facility. Developed interim corrective action system based on fate and transport analysis and groundwater modeling. Implemented active corrective action efforts on-site consisting of a groundwater pump and treatment system to prevent continued offsite contaminant migration. Off-site assessment activities indicated mixing of down gradient VOC-affected groundwater with groundwater impacted by petroleum hydrocarbons attributed to neighboring property. Identified reductive dechlorination of VOCs occurring due to presence of electron donor source material (petroleum hydrocarbon/anthropogenic carbon substrate). Active offsite remediation not recommended as to not disrupt optimum biodegradation conditions.

Bearing Manufacturer, Spartanburg, South Carolina, Chlorinated Solvent Remediation. Project manager for SC DHEC enforced soil/groundwater assessment and remediation at a manufacturing facility. Primary concern was the discharge of dissolved phase VOCs into down gradient surface water body. Developed remediation strategy consisting of a mobile dual phase extraction system to remove source and reduce down gradient contaminant mass. Phytoremediation strategy using riparian corridor of poplar trees developed as contingency plan in the event that VOC concentrations in the surface water body do not decrease.

Camelot Dry Cleaners, Winston-Salem, North Carolina, Chlorinated Solvents, Vapor Mitigation. Assessed and remediated vapor impacts attributable to a former dry cleaning facility located in Winston-Salem, North Carolina. Dry cleaning operations were conducted between 1971-1992 at the site and PCE was used as a dry cleaning solvent. The site now operates as a grocery store. The results of the assessment activities at the site indicated that the impacts most likely occurred in the rear of the grocery store, which is assumed to be the possible location of the dry cleaning machine. Initial assessment of the sub-slab vapor (SSV) and soil gas (SG) samples yielded extremely high VOC concentrations exceeding the state regulatory standards for an industrial site. A sub-slab vapor assessment using micro insert points as well as conducted a radius of influence (ROI)/Pilot test under the building sub-slab. The ROI test results helped to evaluate/determine the required spacing of the extraction points to provide thorough coverage for the design of the sub-slab depressurization system to limit soil gasses/sub-slab vapors from entering the building. Designed and implemented sub-slab depressurization system so as to not interfere with current site operations.

Former Dry Cleaners, Spenser, North Carolina, Chlorinated Solvents. Responsible for assessment and remediation of impacts attributable to a former dry cleaning facility. Dry cleaning operations were conducted at the site from 1964 to 1995 and currently resides in a strip mall. Assessment activities indicated extremely elevated, yet localized area of soil impacts and a fairly significant groundwater contaminant plume beneath a residential neighborhood. A Soil Vapor Extraction (SVE) was recommended as a remedial option that would address the soil impacts, mitigate vapor impacts, and avoid extensive sub grade excavation that could lead to possible building undermining. Conducted a SVE pilot test determine the suitability and effectiveness of SVE for remediating soil impacts at the site. Completed design and construction of the SVE system based on the results of the pilot test.

Former Dry Cleaner, Morehead City, North Carolina, Chlorinated Solvents. Project manager for assessment and remedial activities pertaining to soil and groundwater impacts attributed to former dry cleaning activities at the Morehead Plaza. In-situ source area and partial plume remedial activities implemented to decrease environmental liability as part of a potential property transaction.

Former Dry Cleaner, Asheville, North Carolina, Chlorinated Solvents. Performed assessment and remediation on impacts identified at an abandoned dry cleaning facility located in Asheville, North Carolina. Dry cleaning operations were conducted at the site from 1980 to 2007 and the site has been permanently out of service and vacant since. The results of assessment activities completed indicated the origin of impacts most likely occurred at the rear of the former dry-cleaning facility adjacent to the former dry cleaning machine as well as directly behind the building where dumping of spent solvents may have occurred. Soil impacts outside the back of the building are located in close proximity to a former church which has been redeveloped into a state-of-the-art recording studio employing the use of low frequency sensitive recording equipment. Indoor air VOC-impacts, likely attributable to vapor intrusion occurring from beneath and outside the back wall of the facility, have been detected at concentrations at least 100X the applicable indoor air risk based screening levels. Implemented interim remedial measures to accommodate the owner's redevelopment and

leasing schedule for the property. To mitigate vapor intrusion from beneath and outside the back wall of the existing building a partial excavation of impacted soils was performed where accessible. Due to construction restraints inside the building, the excavation was only advanced deep enough to accommodate a sub slab vapor depressurization system. In other areas of the building where the floor is elevated above a crawl space, a modified crawl space depressurization is planned for installation.

Various Contaminants

Commercial Property, Charlotte, North Carolina, Methane. Project manager for assessment and mitigation of explosive conditions created by accumulation of methane gas beneath commercial real-estate development. Origin of methane gas determined to be decay of improperly buried organic material present in construction fill. Oversaw design and construction of both passive and active vapor recovery systems beneath existing structures. Worked with Mecklenburg County Building Standards Department on obtaining construction and operation permits for tenants to occupy structures.

GE Apparatus Service Facility, Charlotte, North Carolina, PCBs and Chlorinated Solvents. Project manager for the remediation of PCB and chlorinated solvent impacted sediment, soil and groundwater within the North Carolina Registered Environmental Consultant Program. Dual-Phase Extraction selected to address immiscible phase residual source delineated on-site. Long term negotiations with CSX to obtain off-site access agreements to remediate impacted soils beneath active rail lines. Evaluating options to remediate impacts attributable to transport of impacted sediments from the site through the storm water sewer system and offsite tributary stream.

Florida Wire & Cable, Jacksonville, Florida, Lead Impacted Groundwater. Project manager for FDEP enforced assessment and remediation of lead-impacted groundwater. Implemented interim remedial action by lining surface water ditch with impermeable material to mitigate groundwater discharge to surface water in support of long-term groundwater monitored natural attenuation.

Landfill Consulting

Textile Manufacturer, Closed Landfill Site. Site Remedial Investigation/Focused Feasibility Study and Baseline Risk Assessment, South Carolina. Responsible for managing, developing, and performing the site characterization of a 14-acre closed landfill site in South Carolina. Activities included: development of a Remedial Work Plan for performing the Remedial Investigation/Focused Feasibility Study (RI/FFS) and Baseline Risk Assessment (BRA); sampling of groundwater, river sediments, soil, and river surface water with the United States Environmental Protection Agency (USEPA) Region IV; development, preparation, and implementation of an Early Final Action Work Plan to remove and dispose of surface debris; preparation of a RI Report; evaluation of potential remediation options for the Site; negotiations and meetings with USEPA, SC DHEC staff, USEPA Risk Assessors, and the client

Textile Manufacturer, Closed Landfill Site. Non-Time-Critical Removal Action. Responsible for design and construction of a Removal Action which consisted of excavation of on-site soils and construction of an Engineered Cap consisting of a 40-rnil low-linear density polyethylene liner with approximately 30 inches of protective cover fill which resulted in a No Further Action Record of Decision from EPA.

Additional Consulting

Environmental Services, City of Charlotte, Various. Served as Program Manager for the City of Charlotte Unspecified Services Contract. Managed and conducted Phase I/Phase II Environmental Assessments for

the City of Charlotte, Engineering and Property Management for numerous projects associated with roadway widening, storm water projects and projects impacted by environmental concerns within the City's real estate group.

USPS, Multiple Sites, North and South Carolina, Various. Project Manager on several environmental assessment projects in North and South Carolina. Completed several Phase I and Phase II Environmental Site Assessment projects in accordance with ASTM and USPS guidelines. Completed all aspects of underground storage tank removal, coordinated limited site investigation to obtain closure and assisted with installation of new above ground storage tank.

Door Manufacturer, Multiple Sites Throughout U.S., Phase I/II Limited Compliance. Managed Phase I/Phase II and limited compliance assessments for door manufacturing company for several sites as part of a potential acquisition. Included coordination with several state regulatory agencies, recommendations for additional assessment prior to the acquisition and estimated remedial costs where necessary.

Contact

kmacwilliams@partneresi.com

PARTNER

David Lent, P.G., LEP
Senior Project Manager

Education

B.A. Geology, State University at Buffalo

Registrations

Professional Geologist (P.G.), NY #00514-1
Licensed Environmental Professional (LEP), CT #644

Training

6 Graduate Credits, Hydrogeology, Wright State University, Dayton, OH.
3 Graduate Credits, Environmental Law, Wright State University, Dayton, OH.
40 Hr. OSHA HAZWOPER Training
8. Hr. OSHA HAZWOPER Refresher, March 2019
8 Hr. OSHA HAZWOPER Level B Safety Training
10 Hr. OSHA Training for the Construction Industry

Highlights

Mr. Lent is a New York State licensed Professional Geologist and a Connecticut Licensed Environmental Professional with more than 35 years of experience servicing client needs; identifying, characterizing and addressing complex environmental risk and valuation issues, nationwide. Mr. Lent facilitates and implements accurate and efficient environmental due diligence investigations, subsurface characterization and cost-effective site mitigation solutions. Mr. Lent has expertise in technical proposal development and managing complex subsurface investigations and remediation projects and has sound knowledge and understanding of environmental regulations, effectively fulfilling objectives of private and municipal clients, commercial real estate interests, financial institutions, and legal counsel.

Experience Summary

Mr. Lent is a Senior Project Manager with Partner's Environmental Solutions Group. In this role, Mr. Lent is responsible for managing, coordinating and implementing solutions-oriented site investigation and mitigation a wide array of activities including: Subsurface Investigations, hydrogeologic and geologic studies for environmentally impacted properties, geophysical studies, underground storage tank (UST) closures, vapor intrusion investigations, emerging contaminants (PFAS) investigations, third-party review, remedial action oversight, Brownfield Cleanup Program (BCP) investigations / remediation, Remedial Investigation/Feasibility Studies (RI/FS) projects and solid/petroleum/hazardous waste remediation. Mr. Lent has experience with Federal and State regulatory programs.

Project Experience

Connecticut Property Transfer Act Site Characterization / Remediation, Stamford Connecticut - Mr. Lent is currently managing the characterization and cleanup of a former auto repair / auto body facility located in Stamford, Connecticut. Based on historical use of the Site for automotive body repair, the Site meets the definition of an Establishment as defined by §22a-134 of the Connecticut General Statutes. Prior assessments of the Site identified that soils were impacted by polycyclic aromatic hydrocarbons (PAHs) and heavy metals, including arsenic and lead Site activities and a site-wide layer of historic fill. Partner completed and submitted to the Connecticut Department of Energy and Environment (CT DEEP) a Form III and

Environmental Condition Assessment (ECAF) Form, fully characterized all areas of concern (AOCs) on the Site, and successfully remediated soil hot spots, with the objective of achieving compliance with residential standards via 95% Upper Confidence Level statistical averaging. Post-remediation activities, including site groundwater monitoring and reporting are currently ongoing.

Groundwater Remediation, Westbrook, Connecticut - Mr. Lent is currently managing the remediation Leaking Underground Storage Tank (LUST) case at a marina located in Westbrook, Connecticut. Previous attempts by other consultants to remediate a gasoline-contaminated groundwater plume proved to be unsuccessful due to the tidal influence, which resulted in a greater than 10 ft smear zone, the heterogeneity of subsurface soils, and restrictions to horizontal groundwater flow related to the Site's existing seawalls and bulkheads. Partner utilized the large tidal swings to excavate soils at low tide, successfully removing more than 400 tons of source soils below the water table to a depth of 12 feet. Post-remediation groundwater monitoring and reporting is currently ongoing.

Emerging Contaminants (PFAS) Site Characterization, Upstate New York - Mr. Lent managed a New York State Superfund Site Characterization Investigation at a municipal airport to characterize on-site and off-site environmental impacts related to emerging contaminants, including polyfluoroalkyl substances (PFAS) associated with historical use of Aqueous Film-Forming Foam (AFFF) for firefighting and training activities, as well as PFAS and 1,4-dioxane impacts related to two previously closed landfills on the site. The scope of the investigation included the advancement of soil borings and monitoring wells site-wide, with associated soil and groundwater sampling; groundwater sampling of previously installed monitoring wells; surface water and sediment sampling from on-site ponds and storm drainage features; on-site potable well sampling and off-site residential well sampling; coordination with the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), County officials and legal counsel, and reporting.

Dry Cleaner Remediation, Four Strip Shopping Centers, Dallas, Texas - Mr. Lent managed the concurrent investigation and remediation of four commercial strip shopping centers located in Plano, Richardson, Arlington and Highland Park, Texas. Each of these projects began with a Phase II ESA to investigate active on-site dry cleaners. In each case, the Phase II ESA identified significant impacts to subsurface soils and groundwater by the dry-cleaning solvent tetrachloroethene (PCE) and related degradation products of PCE. All four properties were entered individually into the Texas Commission on Environmental Quality (TCEQ) Voluntary Cleanup Program (VCP). Remedial investigation/feasibility studies were then conducted concurrently under TCEQ-approved work plans to delineate the full extent of subsurface contamination and facilitate selection of an appropriate remedial action plan. Based on the RI/FS findings, in-situ chemical oxidation (ISCO) was selected and approved by TCEQ for three of the four properties, and monitored natural attenuation was selected as the remedy for the fourth property. ISCO treatment consisted of a series of injections under approved Injection Control Permits of an aggressive Fenton's reagent mixture. Delivery of the reagents was hindered due to the presence of low-permeability clayey soils. Soil permeability was enhanced via hydraulic fracturing. TCEQ case closure was issued for each site.

42-Property Rush Phase II ESA Portfolio, Nationwide - Mr. Lent successfully managed expedited Phase II ESAs on a portfolio of 42 individual commercial retail properties located nationwide. The Phase II ESAs were initiated and completed between Thanksgiving and Christmas to support a year-end closing schedule. Each of the properties was situated on former gas station and/or dry-cleaning facility sites. The scope of the assessments included ground penetrating radar surveys; advancement of soil borings and temporary monitoring wells site-wide; soil and groundwater sampling, and reporting.

PARTNER

Anthony Cauterucci, CHMM
Project Manager

Education
Bachelor's Degree in Environmental Science, Montclair State University, NJ

Registrations
Certified Hazardous Materials Manager (CHMM) License #30371

Training
40-Hour OSHA HAZWOPER Certification/8-Hour OSHA Refresher Training
10-Hour OSHA Construction Safety Certification

Highlights
Over 13 years in the environmental consulting industry including managing and executing environmental investigation and remediation projects throughout the Northeast under various regulatory programs.

Experienced in managing brownfield investigations and cleanups in New Jersey and New York.

10+ years of experience in environmental field sampling, fieldwork supervision, and project management of Phase IIs, Site and Remedial Investigations, and Remediations at a variety of sites with environmental conditions including dry cleaners, gasoline filling stations, automotive repairs shops, industrial facilities, multi-family residential buildings, agricultural properties, child care centers, and healthcare facilities.

Extensive involvement in underground storage tank (UST) removals and closures for both regulated and unregulated USTs in states throughout the Northeast including coordination, field assessment, sampling, and regulatory reporting.

Experienced with the investigation of vapor intrusion conditions, as well as pilot study assessments, design, installation, and operation and maintenance of Vapor Intrusion Mitigation Systems (VIMS).

Proficient in Phase I Environmental Site Assessments (ESAs), Preliminary Assessments (PAs), peer reviews, and remedial cost estimates.

Experience Summary
Mr. Cauterucci is a Project Manager for Partner Engineering and Science, Inc. (Partner) on Partner's Environmental Solutions Team. Mr. Cauterucci has over 13 years of experience as an environmental consultant, including managing and executing Phase II, Remedial Investigation, Remediation, and Brownfield Redevelopment projects under a variety of regulatory programs including the New Jersey Department of Environmental Protection (NJDEP), New York State Department of Environmental Conservation (NYSDEC), New York City Office of Environmental Remediation (NYC OER), Connecticut Department of Energy and Environmental Protection (CTDEEP), Pennsylvania Department of Environmental Protection (PADEP), Virginia Department of Environmental Quality (VADEQ), and Maryland Department of the Environment (MDE).

Project experience includes performance of remedial investigations and remediations of Brownfield Cleanup sites, oversight of tank removals, soil excavation and disposal, in-situ chemical oxidations, hydrogeological assessments involving petroleum hydrocarbons and chlorinated solvents, the preparation of PAs and Phase I ESAs and Phase II subsurface investigation reports, and the design, implementation, and operation of Sub-Slab Depressurization Systems (SSDS) for the purpose of vapor intrusion mitigation.

Project Experience

Former Leader and Dye Factory, Paterson, NJ

As the Project Manager for the environmental remediation of this former industrial site, Mr. Cauterucci worked with the Licensed Site Remediation Professional (LSRP) and prospective property owner to enter into a Pre-Purchaser Administrative Consent Order (PP ACO) with the NJDEP and set up a Remedial Funding Source (RFS) prior to property transfer. Following the property transfer and preparation of a Remedial Action Work Plan (RAWP), site work included the sampling and waste characterization of concrete and soil for transportation and offsite disposal as well as on-site reuse, the removal of four USTs ranging in size from 500 gallons to 20,000 gallons, the removal and disposal of over 7,000 tons of petroleum-impacted soil and 50,000 gallons of oil product and water, and the design and implementation of a VIMS, and application of institutional and engineering controls for the redevelopment of the property for future use as a charter school. Environmental remediation of the site exceeded $1 million dollars.

Historic Filling Station and Auto Repair, Inwood, Manhattan, NYC

Project manager in charge of assisting the property owner in entering into the NYSDEC Brownfield Cleanup Program (BCP), preparation of a Remedial Investigation Work Plan (RIWP) and Remedial Action Work Plan (RAWP), Site Investigation (SI), Remedial Investigation (RI), and Remedial Action (RA) of a historic filling station and auto repair within the Inwood Rezoning District in northern Manhattan. Work was completed under the oversight of a NY-Licensed Professional Engineer (PE). Site work included the removal of nine (9) USTs and over 2,000 tons of impacted soil, in-situ chemical oxidation of petroleum-impacted soil and groundwater, and the design and implementation of a VIMS for redevelopment of the property for future use as a mixed-use commercial and residential building.

Lawrence Shopping Center, Lawrence, NJ

Mr. Cauterucci was the project manager in charge of Site Investigation (SI), Remedial Investigation (RI), Remedial Action Work Plan (RAWP), Receptor Evaluations (RE), and Remedial Action (RA), of a shopping center with contaminated soil and groundwater due to a former auto repair operation and current dry-cleaning operation. Work conducted under the oversight of a LSRP per NJDEP regulations and guidance. Site work included the removal of over 600 tons of impacted soil, the installation and monitoring of more than 20 groundwater monitoring wells for horizontal and vertical contaminant delineation, a Membrane Interface Probe (MIP) assessment of chlorinated Volatile Organic Compounds (VOCs), and a Vapor Intrusion (VI) investigation. Remedial Action of chlorinated VOC groundwater contamination through Monitored Natural Attenuation (MNA) with a Classification Exception Area (CEA) along with Remedial Action Outcomes (RAOs) issued for Areas of Concern (AOCs) related to the former auto repair operation.

Historic Bulk Oil Storage Terminal, Swedesboro, NJ

Project manager in charge of Phase II, PA, SI, RI, RAWP, RE, and RA, and post-remedial groundwater monitoring at a former Standard Oil bulk petroleum terminal. Work conducted through the NJDEP under the oversight of a LSRP. Assisted the property owner in forensic analysis and age dating of petroleum hydrocarbon contamination in order to evaluate responsible party liability. Site work included the removal

of over 500 tons of impacted soil and 500 linear feet of sub-surface piping, post-excavation soil sampling, and installation and monitoring of onsite and offsite monitoring wells. Following remediation and post-remedial groundwater sampling, a site-wide RAO was issued for the property.

Gwynedd Valley Technology Center, Lansdale, PA

Onsite field manager for a vapor intrusion and indoor air investigation and mitigation of a 650,000+ square foot commercial/industrial building that was formerly an electronics manufacturing facility in Lansdale, Pennsylvania. Vapor intrusion investigation indicated that elevated VOCs existed beneath the building slab and indoor air levels of chlorinated VOCs exceeded PADEP screening levels. Responsible for providing oversight of a pilot study in the building to determine the potential area of influence for each vapor extraction point, installation of a SSDS consisting of 59 vapor extraction points throughout the interior of the building and sealing of joints and cracks within the building slab to prevent any preferential pathways from allowing the sub-slab air into the building. Conducted monthly operation and maintenance (O&M) check-ups on the SSDS to ensure proper operation. Vapor mitigation contract exceeded $1 million dollars.

Sunoco Gas Station, Fairfield, CT

Project manager in charge of a SI of an operating gas station and auto repair with multiple fuel USTs, underground hydraulic lifts, a heating oil UST, closed-in-place waste oil UST, and historic surface spills. Conducted soil and groundwater evaluation of numerous AOCs, installation and monitoring of multiple groundwater monitoring wells, report writing, and preparation of a remedial cost estimate for a potential buyer.

Industrial Warehouse, Pennsauken, NJ

Project manager in charge of a PA and SI at an industrial warehouse in Pennsauken, NJ. Work was conducted as a requirement of a property transaction under Industrial Site Recovery Act (ISRA) regulations through the NJDEP and under the oversight of a LSRP. Site investigation included the collection of shallow soil samples along an onsite rail line and offsite regional rail line. The AOC related to the rail line and the site received an RAO based on elevated regional rail line contamination and continued use of rail for product shipment and delivery.

Contact

acauterucci@partneresi.com

PARTNER

Peter Cerny
Staff Scientist

Education

Bachelor of Arts, Environmental Studies, Ramapo College of New Jersey

Training

40-Hour HAZWOPER
10hr OSHA for Construction

Highlights

Phase II Subsurface Investigations
Remediation Investigations
Remediation Reviews

Experience Summary

Mr. Cerny is a Staff Scientist at Partner Engineering and Science, Inc. (Partner). His responsibilities include conducting field tasks, such as, groundwater sampling and subsurface investigation oversight, as well as reporting, data entry and completion of regulatory documents.

Mr. Cerny performs Phase II Subsurface Investigations, Remediation Investigations and Reviews for a variety of client types on various types of commercial properties based on the standard outline in ASTM E2018-15. The building types observed include: office buildings, hotels, multi-family developments, industrial properties and recreational facilities.

Contact

pcerny@partneresi.com

APPENDIX H: REQUEST TO IMPORT/REUSE FILL OR SOIL

PSG

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e) and 6NYCRR Part 360.13. Use of this form is not a substitute for reading the applicable regulations and Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Choose an item

Have Ecological Resources been identified? Choose an item

Is this soil originating from the site? Choose an item

How many cubic yards of soil will be imported/reused? Choose an item

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? Choose an item

Does it contain less than 10%, by weight, material that passes a size 100 sieve? Choose an item

Is this virgin material from a permitted mine or quarry? Choose an item

Is this material recycled concrete or brick from a DEC registered processing facility? Choose an item

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

_____ _____

Signature Date

_____

Print Name

_____

Firm

Revised April 2023

APPENDIX I: SSDS DESIGN PACKAGE

PSG

PLANS AND SPECIFICATIONS FOR VAPOR INTRUSION MITIGATION SYSTEM (VIMS)

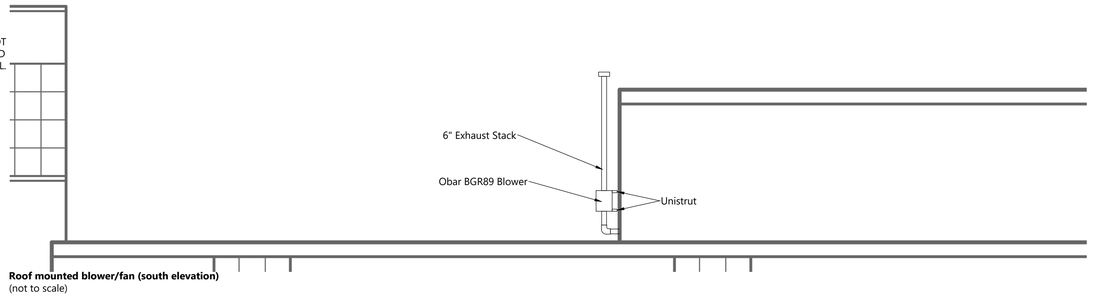
125 BEECHWOOD LLC
125 BEECHWOOD AVENUE
NEW ROCHELLE, WESTCHESTER COUNTY, NY

INDEX OF SHEETS

INDEX OF VIMS MATERIAL AND EQUIPMENT SPECIFICATION SHEETS

NOTE: THE FOLLOWING TABLE OF MAJOR EQUIPMENT AND MATERIALS SPECIFICATION SHEETS IS NOT AN ALL EMCOMPASSING LIST OF PRODUCTS TO BE USED. ALL PRODUCTS LISTED ARE RECOMMENDED AND EQUIVALENT ALTERNATIVES MAY BE PRESENTED FOR VIMS DESIGNER AND BUILDING APPROVAL. PRODUCT SHEETS ARE PROVIDED WITH THIS DESIGN PLAN SET.

SPEC. SHEET	PRODUCT DESCRIPTION
SS-1	OBAR GBR-89 FAN
SS-2	PVC PIPE AND FITTINGS
SS-3	BIRD SCREEN / RAIN GUARD
SS-4	SUMP COVERS
SS-5	VAPOR MONITORING POINT



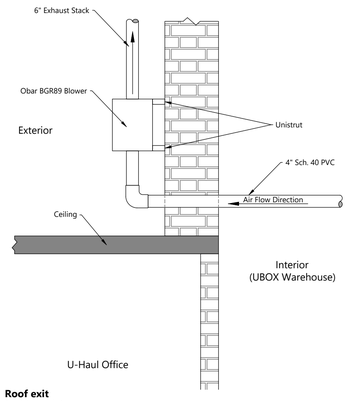
Roof mounted blower/fan (south elevation)
(not to scale)

NOTES - GENERAL

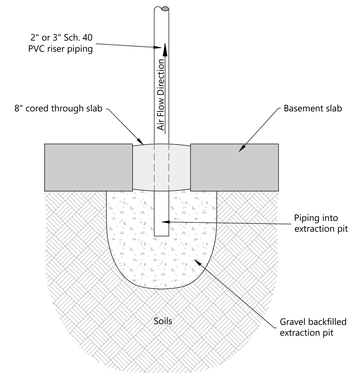
1. VIMS DETAILS PRESENTED IN THESE PLANS AND SPECIFICATIONS SHALL BE UTILIZED IN THE INSTALLATION OF THE VIMS AT THE SITE BUILDING AS DESIGNATED ON THE INDEX OF SHEET INDICATED ABOVE. THE BASIS OF DESIGN IS TO INSTALL UP TO FORTY EXTRACTION POINTS INSTALLED THROUGH THE CONCRETE FLOOR, BASEMENT WALL, AND EXISTING BASEMENT SUMPS. PIPING FROM THESE POINTS WILL BE MANIFOLDED TOGETHER AND RUN UP TO THREE ROOF MOUNTED BLOWERS. THE SYSTEM IS INTENDED TO DRAW SUB-SLAB VAPORS OUT FROM UNDER THE BUILDING AND DISCHARGE THEM TO ABOVE THE ROOF LINE OF THE BUILDING AWAY FROM POTENTIAL RECEPTORS.
2. ASSOCIATED EQUIPMENT, MATERIALS AND ACCESSORIES AS DESCRIBED IN THESE PLANS OR RECOMMENDED BY THE MANUFACTURER ARE FOR REFERENCE ONLY AND ARE PROVIDED TO DESCRIBE THE SYSTEM AND MATERIALS AND MAY BE SUBSTITUTED FOR EQUIVALENT PRODUCTS IF APPROVED BY THE OWNER AND VIMS DESIGNER.

VIMS INSTALLATION – OWNER & VIC RESPONSIBILITIES

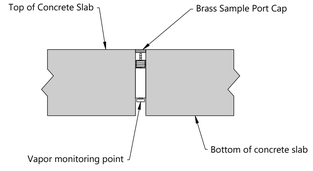
1. THE VIMS CONSTRUCTION SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE GENERAL ORDER OF INSTALLATION. ASSOCIATED ASSUMPTIONS FOR EACH SECTION ARE LISTED ACCORDINGLY. PSG SHALL CONFIRM AND INSTALL THE VIMS BASED ON THE FOLLOWING ASSUMPTIONS AND RESPONSIBILITIES.
   a. **SUB-SLAB CONDITION ASSUMPTIONS** – IT IS ASSUMED THAT THE SUBSLAB CONDITIONS ARE OF A POROUS ENOUGH CONSISTENCY TO SUPPORT SUFFICIENT AIR MOVEMENT AND EFFECTIVE SUB-SLAB DEPRESSURIZATION BY A TYPCIAL RADON FAN. THE MINIMUM SUB-SLAB DEPRESSURIZATION PRESSURES ARE EXPECTED TO BE -0.004 INCHES OF WATER COLUMN OR LESS AS MEASURED BY A MAGNEHELIC DIFFERENTIAL PRESSURE GAGE OR DIGITAL MICROMANOMETER CAPABLE OF MEASURING DIFFERENTIAL PRESSURE WITH AN ACCURACY OF 0.01 INCHES OF WATER (1 PASCAL). ADDITIONALLY, IT IS ASSUMED THAT THE SEASONAL HIGH GROUNDWATER TABLE WILL REMAIN AT LEAST TWO FEET BELOW THE BOTTOM OF THE BASEMENT FLOOR SLAB AT ALL TIMES.
   b. **PSG** - SUPPLY AND INSTALL VERTICAL AND LATERAL SCHEDULE 40 PVC VAPOR CONVEYANCE PIPING AND ASSOCIATED FITTINGS TO THE APPLICABLE COMMON RISER LOCATION FOR CONNECTION TO THE ROOF-TOP EXTRACTION FAN LOCATIONs. ALL PIPING SHALL BE INSTALLED & SUPPORTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS. ALL PIPING TRANSITIONS, CONNECTIONS, AND PENETRATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODES.
   c. **PSG/SUB** – SUPPLY, CONSTRUCT, INSTALL VIMS IN-LINE VAPOR EXTRACTION BLOWER, NECESSARY ELECTRICAL RECEPTACLE AND MONITORING DEVICES.
      i. MECHANICAL: OBAR GBR 89 VAPOR EXTRACTION BLOWERS OR EQUIVALENT SHALL BE INSTALLED AND BE EQUIPPED WITH A DISCHARGE VENT STACK TERMINATING A MINIMUM OF 24-INCHES ABOVE THE NEAREST ROOF TOP STRUCTURE OR PARAPET. THE DISCHARGE STACK SHALL BE EQUIPPED WITH A BIRD SCREEN AND RAIN CAP. THE EXTRACTION FAN AND DISCHARGE STACK SHALL BE NO LESS THAN 10 FEET FROM BUILDING EDGE.
      ii. ELECTRICAL: AT THE BLOWER LOCATION, A 20-AMP GFCI DISSCONNECT SHALL BE MOUNTED AND HARDWIRED TO THE BLOWER. SEE ASSOCIATED GBR-89 BLOWER SPECIFICATION SHEET FOR DETAILS. THE POWER FEED SHOULD BE A DEDICATED CIRCUIT OR ON A CIRCUIT THAT IS NOT SWITCHED OR ABLE TO BE INADVERTENTLY DE-ENERGIZED FOR ANY OTHER LOCATION THAN THE MAIN BUILDING POWER PANEL.
      iii. VACUUM MONITORING POINTS: PSG SHALL INSTALL FIVE THROUGH-SLAB VACUUM MONITORING POINTS (VMP) AS INDICATED ON V-100 AND AS SHOWN ON V-101.



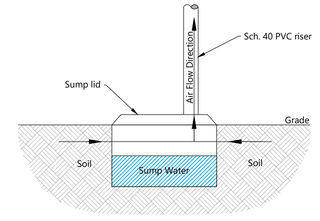
Roof exit
(not to scale)



Extraction point
(not to scale)



Vapor monitoring point
(not to scale)



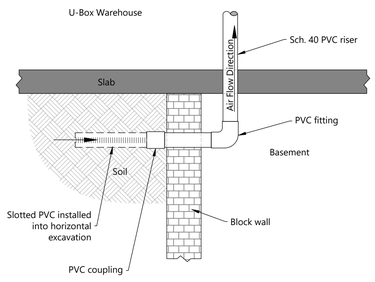
Sump Extraction Point
(not to scale)

QUALITY ASSURANCE

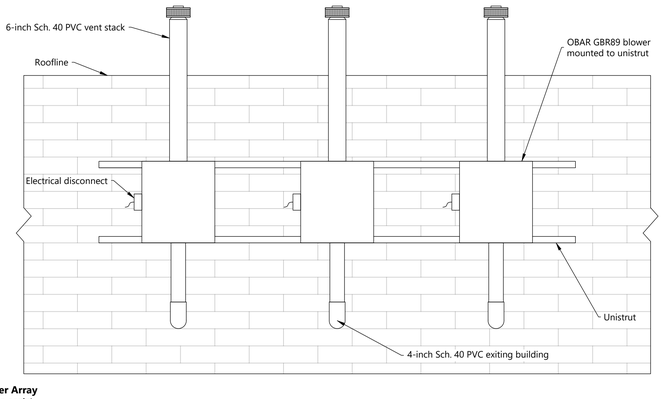
1. PSG AND SUBCONTRACTORS SHALL BE TRAINED/APPROVED TO PERFORM THE WORK SPECIFICED HEREIN.
2. A PRE-INSTALLATION CONFERENCE SHALL BE HELD TO COORDINATE PROPER EQUIPMENT AND INSTALLATION CONDITIONS AND PROCEDURES INCLUDING PSG, SITE SUPERINTENDENT, AND APPLICABLE UTILITY CONTRACTORS.
3. INSPECTIONS SHALL TYPICALLY BE PERFORMED PRIOR TO, DURING, AND SUBSEQUENT TO THE INSTALLATION OF THE VIMS. IT IS THE RESPONSIBILITY OF PSG TO NOTIFY THE OWNER WITHIN 72 HOURS OF BEGINNING ANY PORTION OF THIS WORK.

SUBMITTALS

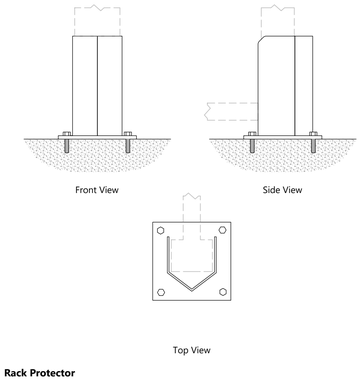
1. PSG SHALL SUBMIT PRODUCT SPEICIFCATION SHEETS, PRODUCT INSTALLATION SHEETS, AND APPLICABLE INSTALLATION CERTIFICATIONS FOR ALL EQUIPMENT AND MATERIALS AT LEAST TWO WEEKS PRIOR TO INSTALLATION OF THAT EQUIPMENT OR MATERIAL.
2. PSG SHALL SUBMIT ANY UPDATES OR REVISIONS TO THE MANUFACTURER'S MATERIAL SPECIFICAITON DATA AND RECOMMENDED INSTALLATION PROCEDURES TO THE VIMS DESIGNER FOR REVIEW AND APPROVAL AT LEAST ONE WEEK PRIOR TO THE START OF WORK.



Horizontal Extraction Point
(not to scale)



Blower Array
(not to scale)



Rack Protector
(not to scale)

PSG
Engineering and Geology, D.P.C.

PSG ENGINEERING AND GEOLOGY, D.P.C.
222 BLOOMINGDALE ROAD, SUITE 303
WHITE PLAINS, NEW YORK 10605

Engineer

125 BEECHWOOD LLC
C/O AMERCO REAL ESTATE COMPANY
2727 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004

Client and/or Owner

BUSINESS
NAME
ADDRESS
LOS ANGELES, CA 9xxxx
T: ----
E: ----

Contractor

DHCD SET - ARCHITECTURAL PREPARED BY:
PGN ARCHITECTS, PLLC
210 7TH STREET SE - SUITE 201
WASHINGTON, DC 20003

STATE OF NEW YORK
KRISTINE MCCARTHY-MACWILLIAMS
LICENSED PROFESSIONAL ENGINEER
096177

Kristine McCarthy-MacWilliams
04/24/2025

No.	Date	Description
1	----	PLAN CHECK RESPONSE #1
-	----	PLAN CHECK SUBMITTAL

125 Beechwood LLC

125 Beechwood Avenue
New Rochelle, New York

Project

Title Page

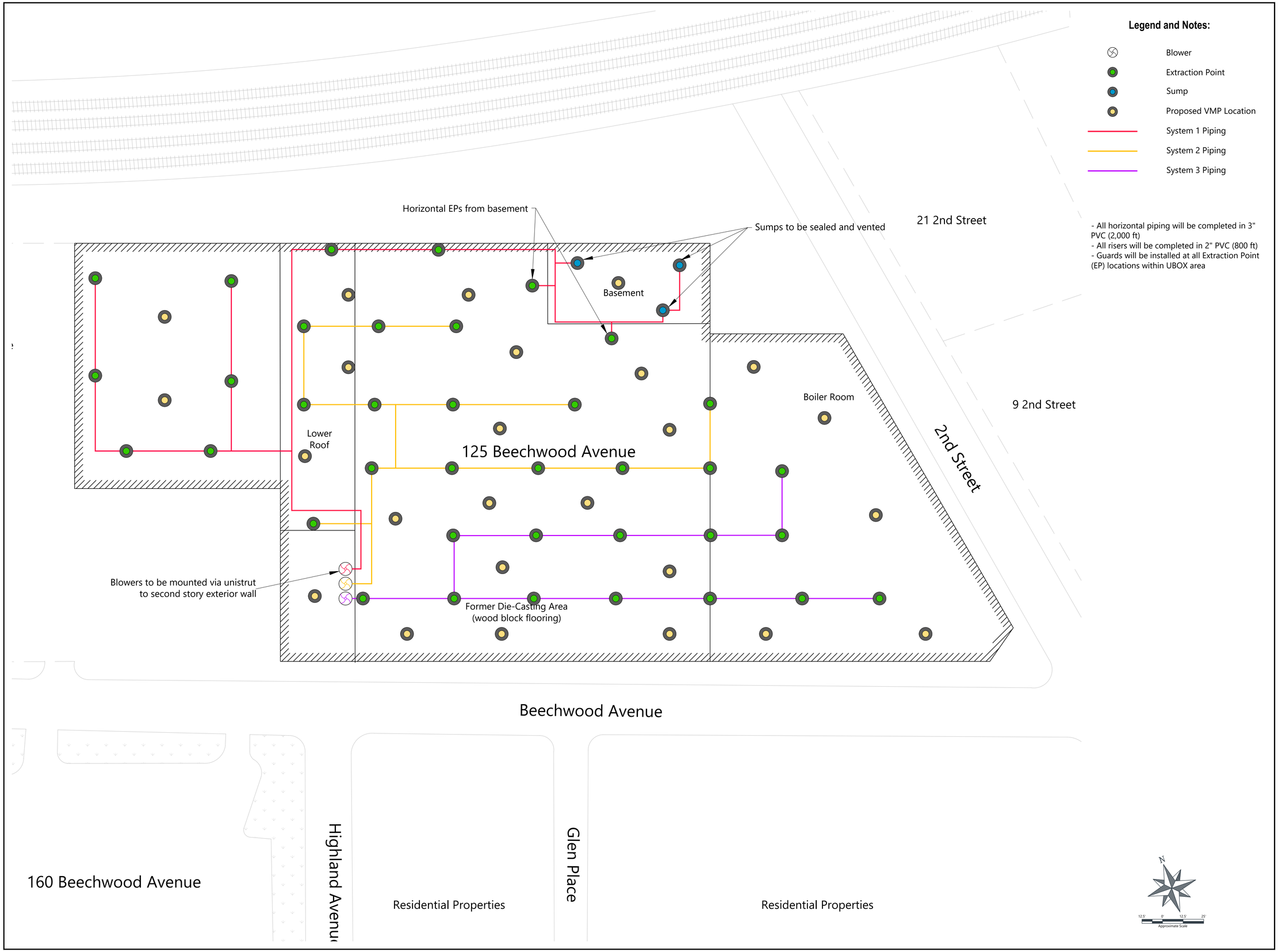
Drawing Title

Project	Design	Date
21393176-EN	L. LANGEVIN	2.2025
Drawn	Approved	Scale
A. SURDEK		As Shown

Seal

V-100

Drawing No.



Legend and Notes:

- Blower
- Extraction Point
- Sump
- Proposed VMP Location
- System 1 Piping
- System 2 Piping
- System 3 Piping

- All horizontal piping will be completed in 3" PVC (2,000 ft)
- All risers will be completed in 2" PVC (800 ft)
- Guards will be installed at all Extraction Point (EP) locations within UBOX area

N

12.5' 0' 12.5' 25'
Approximate Scale

PSG
Engineering and Geology, D.P.C.

PSG ENGINEERING AND GEOLOGY, D.P.C.
222 BLOOMINGDALE ROAD, SUITE 303
WHITE PLAINS, NEW YORK 10605
Engineer

125 BEECHWOOD LLC
C/O AMERCO REAL ESTATE COMPANY
2727 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004
Client and/or Owner

BUSINESS
NAME
ADDRESS
LOS ANGELES, CA 9xxxx
T: ----
E: ----
Contractor

DHCD SET - ARCHITECTURAL PREPARED BY:
PGN ARCHITECTS, PLLC
210 7TH STREET SE - SUITE 201
WASHINGTON, DC 20003

STATE OF NEW YORK
KRISTINE MCCARTHY-MACWILLIAMS
096177
LICENSED PROFESSIONAL ENGINEER

04.24/2025

No.	Date	Description
1	----	PLAN CHECK RESPONSE #1
-	----	PLAN CHECK SUBMITTAL

125 Beechwood LLC

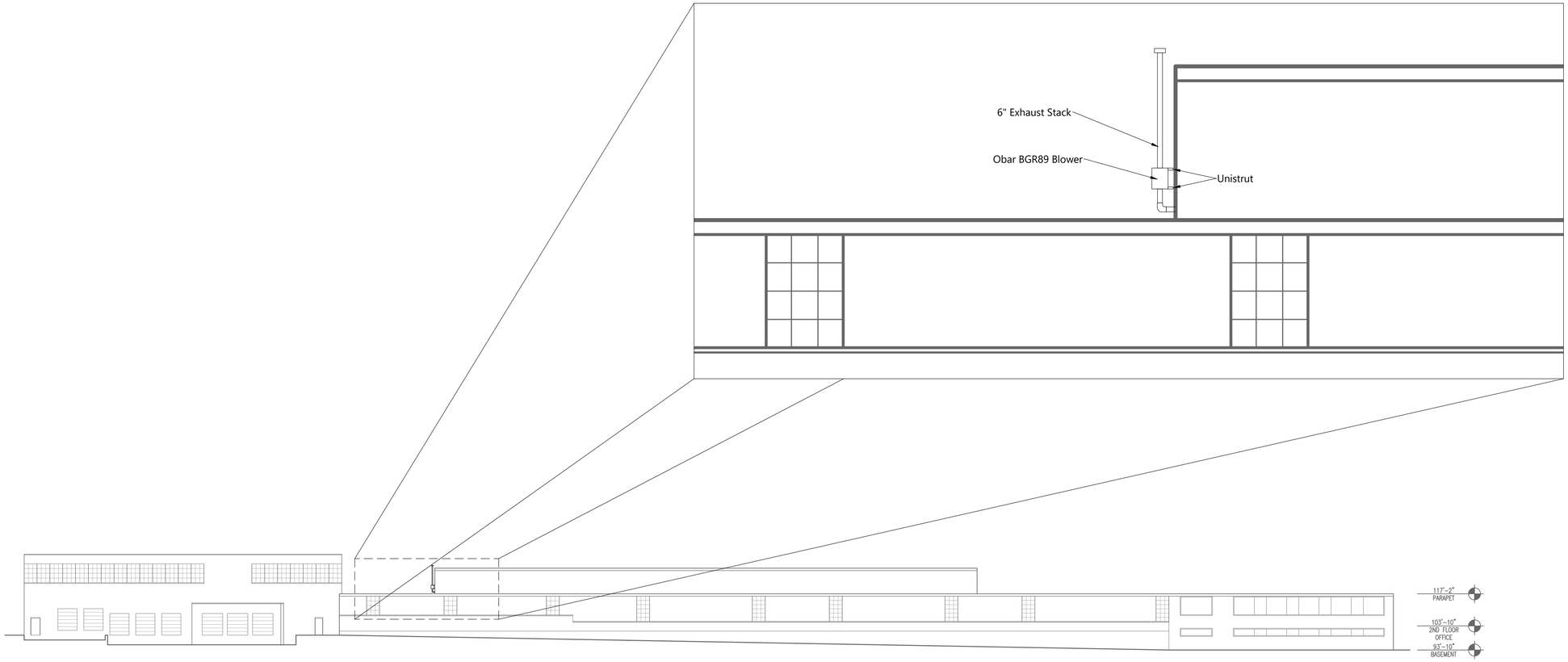
125 Beechwood Avenue
New Rochelle, New York
Project

Vapor Intrusion Mitigation System Plan
Drawing Title

Project	Design	Date
21393176-EN	L. LANGEVIN	2.2025
Drawn	Approved	Scale
A. SURDEK		As Shown

Seal

V-101
Drawing No.



1 EXTERIOR ELEVATION - SOUTH

Scale: $\frac{1}{2}$" = 1'-0"

PSG
Engineering and Geology, D.P.C.

PSG ENGINEERING AND GEOLOGY, D.P.C.
929 ASBURY AVENUE
ASBURY PARK, NJ 07712

Engineer

125 BEECHWOOD LLC
C/O AMERCO REAL ESTATE COMPANY
2727 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004

Client and/or Owner

BUSINESS
NAME
ADDRESS
LOS ANGELES, CA 9xxxx
T: ----
E: ----

Contractor

DHCD SET - ARCHITECTURAL PREPARED BY:
PGN ARCHITECTS, PLLC
210 7TH STREET SE - SUITE 201
WASHINGTON, DC 20003

STATE OF NEW YORK
KRISTINE MCCARTHY-MACWILLIAMS
096177
LICENSED PROFESSIONAL ENGINEER

Kristine M. MacWilliams

04/24/2025

No.	Date	Description
1	----	PLAN CHECK RESPONSE #1
-	----	PLAN CHECK SUBMITTAL

125 Beechwood LLC

125 Beechwood Avenue
New Rochelle, New York

Project

Vapor Intrusion Mitigation System South Exterior Plan

Drawing Title

Project	Design	Date
21393176-EN	L. LANGEVIN	2.2025
Drawn	Approved	Scale
A. SURDEK		As Shown

Seal

V-102

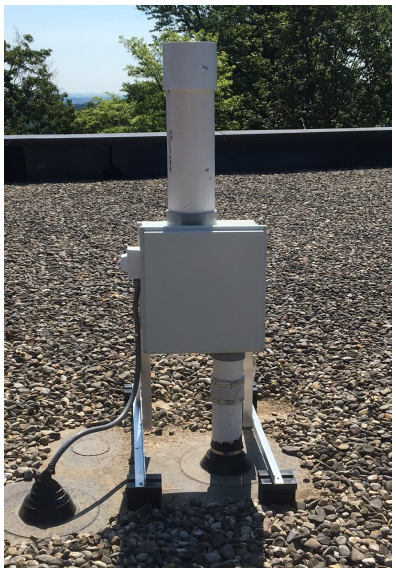
Drawing No.

SS-1

THE OBAR GBR89

COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR89 WITH ROOF MOUNT

PERFORMANCE

- GBR89 HA 14” WC at 100CFM max flow 500 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 18”x 16”x 10” weighing only 26 lbs.
- 4” schedule 40 inlet and 6” schedule 40 exhaust.

Enclosure Specifications

Rating:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

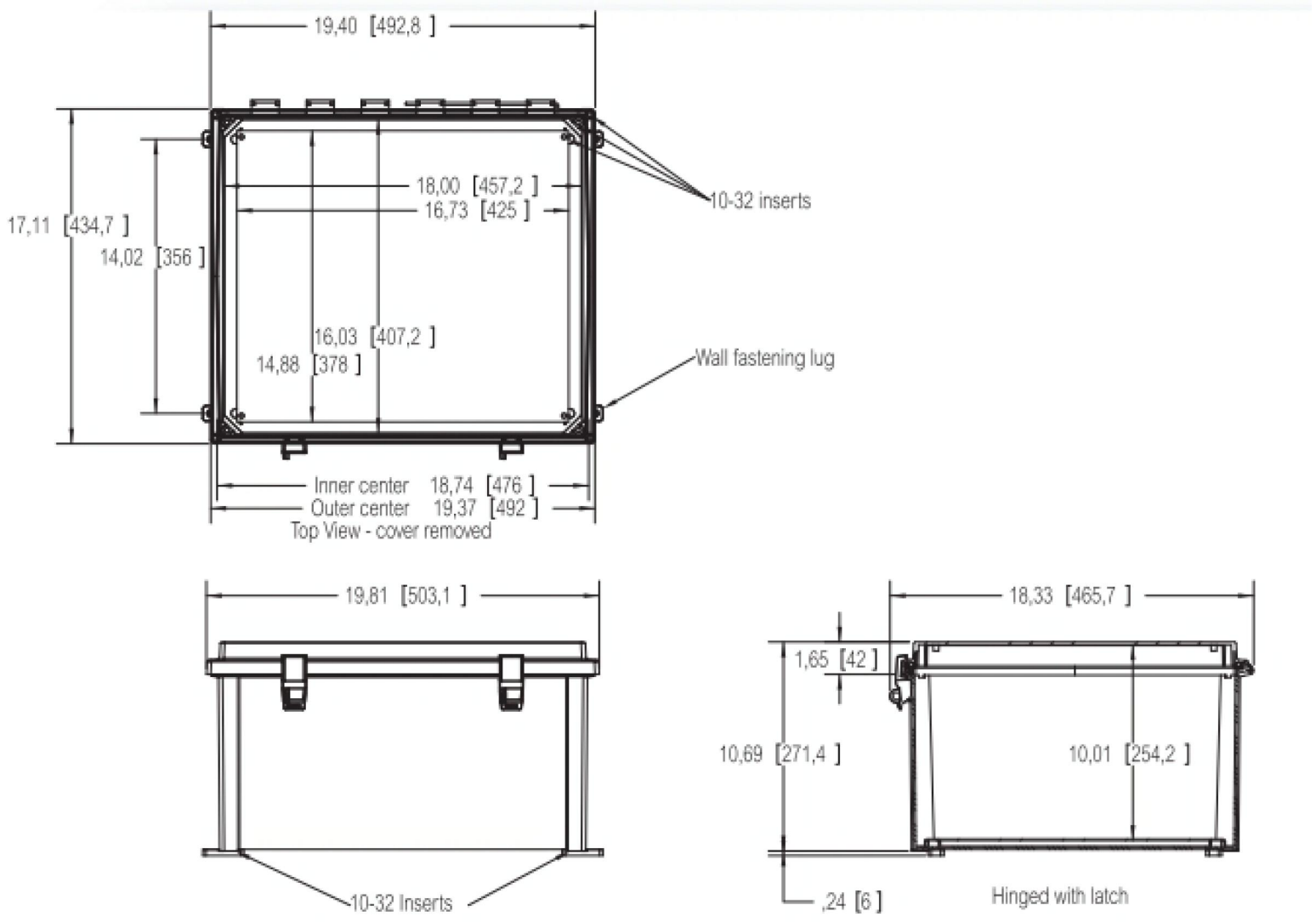
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

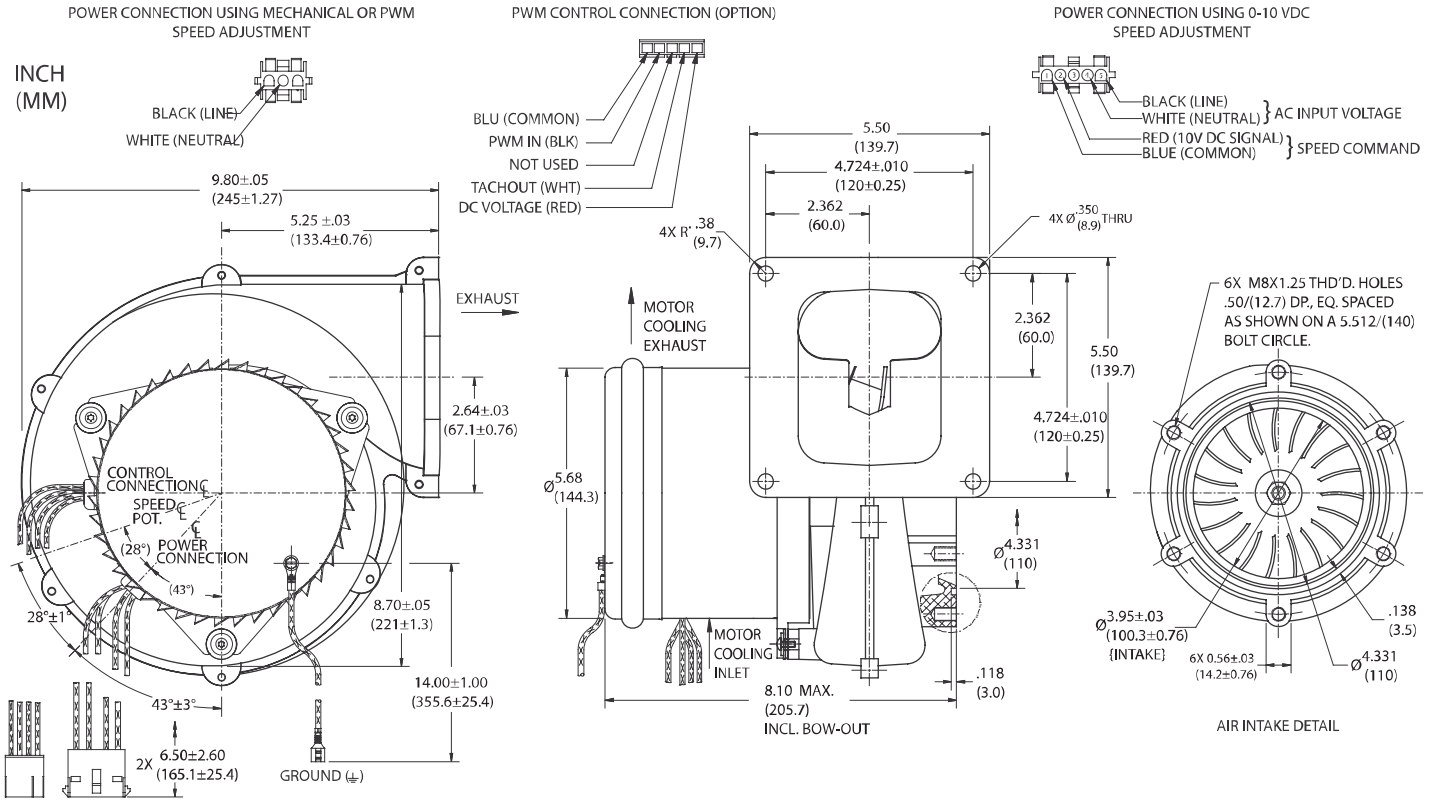
Certificates: Underwriters Laboratories



High Voltage Brushless DC Blowers

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

240 Volt AC Input, Single Phase, High Output



		Part/ Model Number		
Specification	Units	150240	150241	150242
Speed Control	-	Mechanical	0-10 VDC	PWM

Notes:

- **Input Voltage Range:** 216 - 264 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 10 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1800 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation). Speed control input signal of 15 - 45 VDC @ 500 Hz - 10 kHz, and tachometer output (2 Pulses / Revolution).
  Optional tachometer output (3 Pulses / Revolution).
  0 to 10 VDC with a speed control input current of 5 mA to 20 mA at 10 VDC Input with multi-turn potentiometer set to minimum resistance (fully clockwise).
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
  4-20mA speed control available.
- **Approximate Weight:** 9.3 Lbs. / 4.2 Kg.
- **Option Card available for Customization**
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and CSA C22.2#133 under File LR43448
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION (3 CAVITY): Blower connector, AMP Universal MATE-N-LOK, part no. 1-480701-0.
  POWER CONNECTION (5 CAVITY): Blower connector, AMP Universal MATE-N-LOK, part no. 350810-1.
  SPEED CONNECTION (5 CAVITY): Blower connector, Molex Mini-Fit Jr., part no. 39-01-4057.
  Mating harnesses available upon request.

AMETEK TECHNICAL & INDUSTRIAL PRODUCTS
627 Lake Street, Kent OH 44240
USA: +1 215-256-6601 - Europe: +44 (0) 845 366 9664 - Asia: +86 21 5763 1258
www.ametektip.com

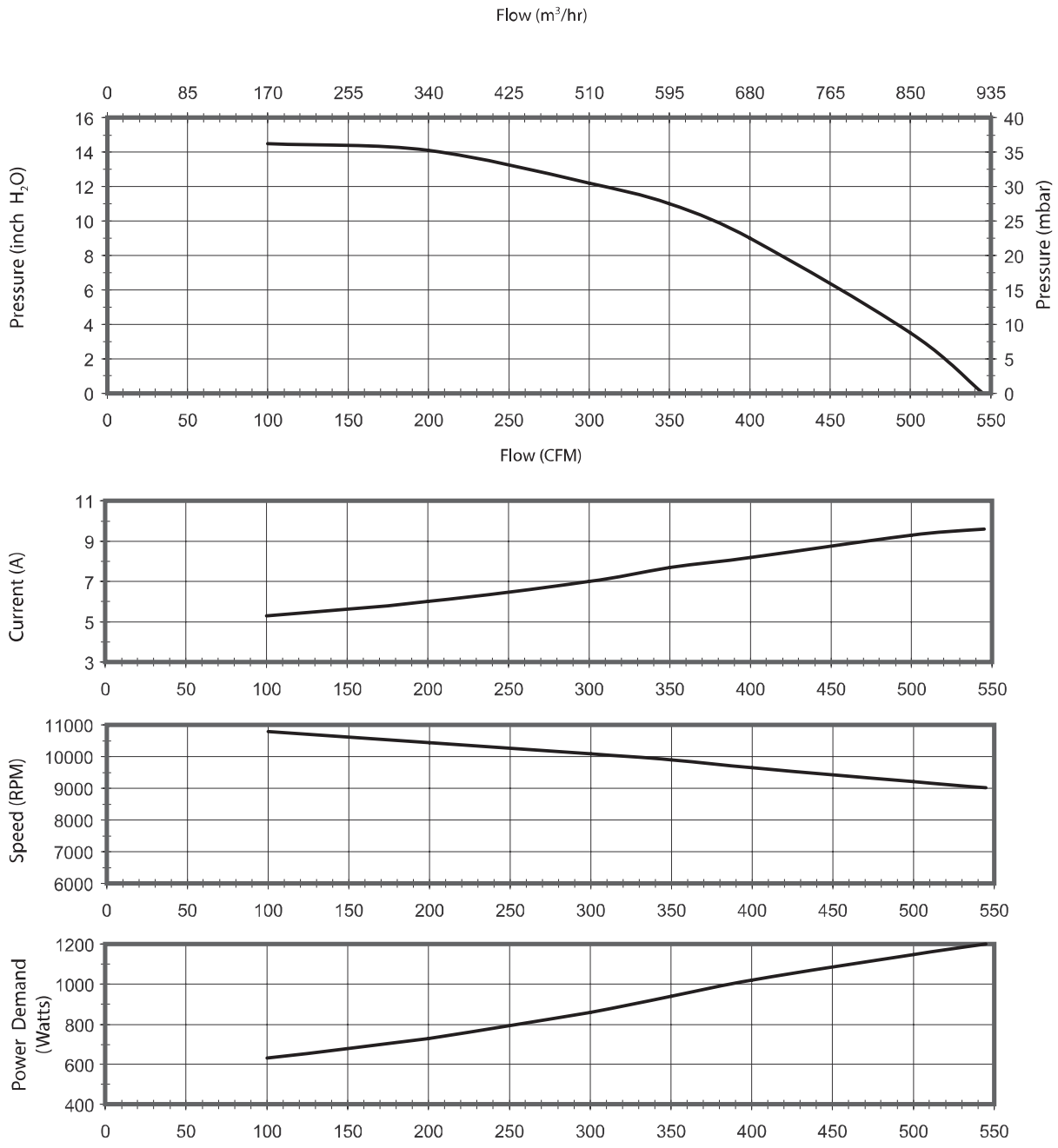
AMETEK
PRECISION MOTION CONTROL

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

Nautilair

240 Volt AC Input, Single Phase, High Output

Typical Performance



Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft³ (29.92" Hg, Sea Level, 68° F)
Vacuum performance available upon request.

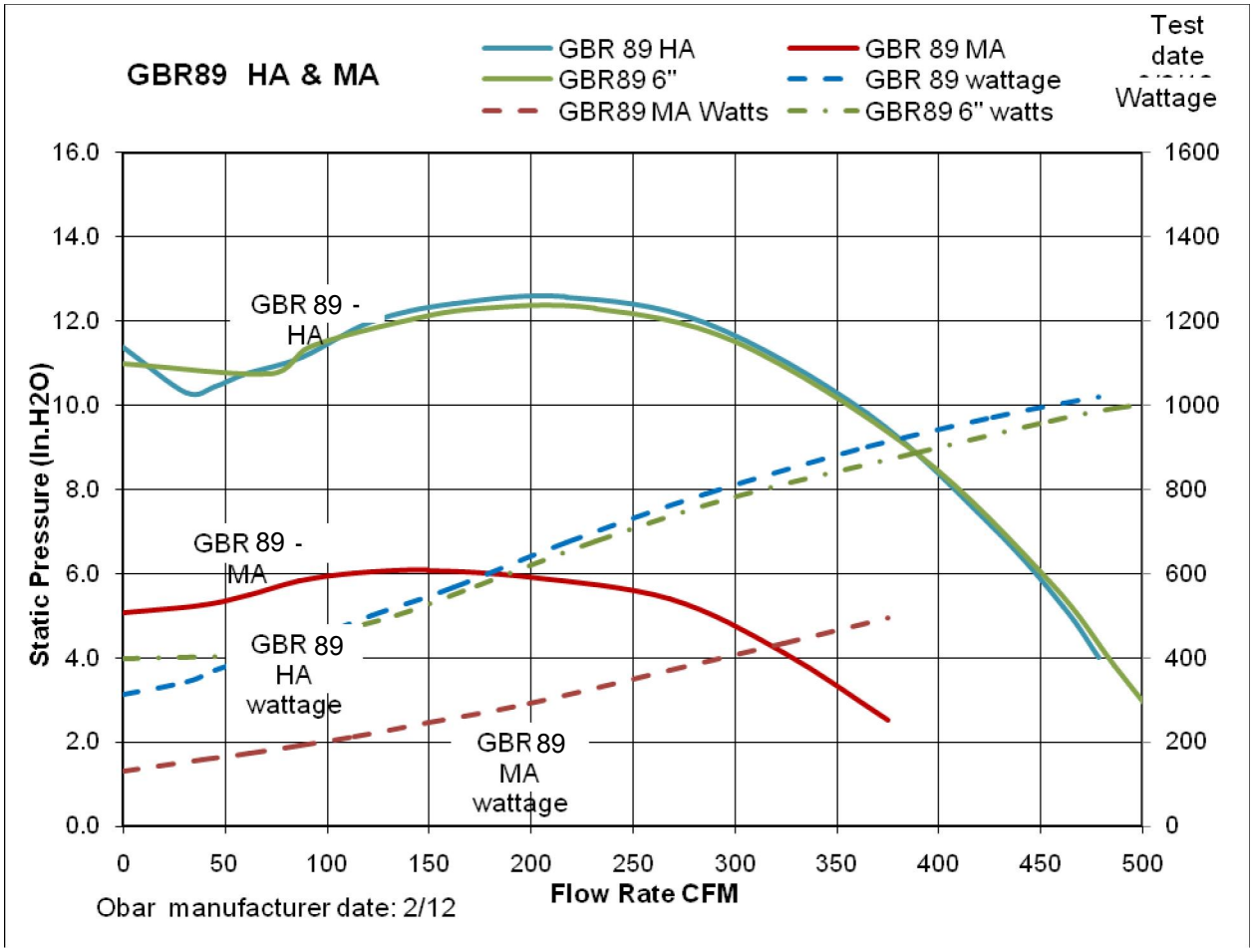
AMETEK TECHNICAL & INDUSTRIAL PRODUCTS
627 Lake Street, Kent OH 44240
USA: +1 215-256-6601 - Europe: +44 (0) 845 366 9664 - Asia: +86 21 5763 1258
www.ametektip.com

AMETEK
PRECISION MOTION CONTROL

GBR89 HA tested at full voltage with 8 feet of 4" inlet (Blue Lines) and 6" Inlet (Green lines)

Maximum airflow with no exhaust piping and 8' of 6" piping is 529 CFM

GBR89 MA tested with speed control set to half the wattage consumption (Red Line)



CHARLOTTE PIPE AND FOUNDRY COMPANY

Plastic Pipe and Fittings Drainage Systems Suggested Short Form Specifications

ABS Plus Pipe and ABS DWV Fitting System:

Inside and outside layers of pipe shall be manufactured from ABS compound with a minimum cell class of 42222 per ASTM D 3965. Center layer of pipe shall be manufactured from PVC compound with a cell class of 11432 per ASTM D 4396. Pipe shall be iron pipe size (IPS) Schedule 40 conforming to ASTM F 1488.

Fittings shall be manufactured from ABS compound with a cell class of 32222 per ASTM D 3965. Fittings shall conform to ASTM D 2661. Both pipe and fittings shall conform to NSF International Standard 14.

All pipe and fittings to be produced by a single manufacturer and to be installed in accordance with manufacturer's recommendations and applicable code requirements. **WARNING!** Never test with or transport/store compressed air or gas in ABS pipe or fittings. Buried pipe shall be installed in accordance with ASTM D 2321 and ASTM F 1668. Solvent cement shall conform to ASTM D 2235. The system is to be manufactured by Charlotte Pipe and Foundry Co. and is intended for non-pressure drainage applications where the temperature will not exceed 140°F.

PVC Schedule 40 Cellular Core (Foam Core) Pipe and DWV Fitting System:

Pipe and fittings shall be manufactured from PVC compound with a cell class of 11432 per ASTM D 4396 for pipe and 12454 per ASTM D 1784 for fittings and conform with National Sanitation Foundation (NSF) standard 14. Pipe shall be iron pipe size (IPS) conforming to ASTM F 891. Injection molded fittings shall conform to ASTM D 2665. Fabricated fittings shall conform to ASTM F 1866.

All pipe and fittings to be produced by a single manufacturer and to be installed in accordance with manufacturer's recommendations and local code requirements. **WARNING!** Never test with or transport/store compressed air or gas in PVC pipe or fittings. Solvent cements shall conform to ASTM D 2564. Primer shall conform to ASTM F 656. The system to be manufactured by Charlotte Pipe and Foundry Co. and is intended for non-pressure drainage applications where the temperature will not exceed 140°F.

PVC Schedule 40 Solid Wall Pipe and DWV Fitting System:

Pipe and fittings shall be manufactured from PVC compound with a cell class of 12454 per ASTM D 1784 and conform with National Sanitation Foundation (NSF) standard 14. Pipe shall be iron pipe size (IPS) conforming to ASTM D 1785 and ASTM D 2665. Injection molded fittings shall conform to ASTM D 2665. Fabricated fittings shall conform to ASTM F 1866.

All pipe and fittings to be produced by a single manufacturer and to be installed in accordance with manufacturer's recommendations and local code requirements. **WARNING!** Never test with or transport/store compressed air or gas in PVC pipe or fittings. Solvent cements shall conform to ASTM D 2564. Primer shall conform to ASTM F 656. The system to be manufactured by Charlotte Pipe and Foundry Co. and is intended for non-pressure drainage applications where the temperature will not exceed 140°F.

PO Box 35430 Charlotte, NC 28235 USA 704/372-5030 800/438-6091 FAX 800/553-1605
www.charlottepipe.com

Not Yet Rated | Write the First Review (//www.radonsupplies.com/mm5/merchant.mvc?Screen=GD_WREVIEW&Product_Code=FFECALL)

Free Flow Exhaust Caps™

Product#		1-4	Qty
FF320	Use on 3-Inch Schedule 20 PVC	$42.00 **5-9** $39.90 **10+** $38.90	0
Product#		**1-4**	
FF420	Use on 4-Inch Schedule 20 PVC	$43.00 **5-9** $41.75 **10+** $40.50	0

JACKEL™
Trusted Since 1972

The Original Radon / Sump Dome™

Model: SMR16101-CV

SS-4

Made in the USA

The Original Radon / Sump Dome™ was invented to serve two pressing needs; the need for a universal gas-tight cover to serve the emerging radon mitigation market and the need for a cover to retrofit failing sump and sewage basin covers.

The Original Radon / Sump Dome™ is designed to cover an existing basin, providing a new heavy duty cover to seal the basin against odors and radon gas and to provide adequate safety. There is no reason to dig up your basement or garage floor to remove the existing sump or sewage basin. Simply remove old cover and install The Original Radon / Sump Dome™ over the opening, to create a new, completely sealed system.

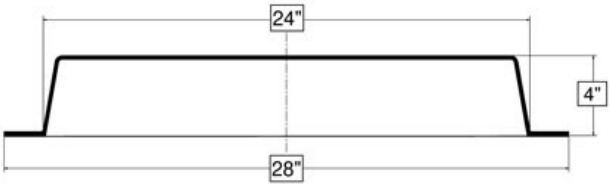
Specifications

- **Cover Material:** Polyethylene Structural Foam
- **Fittings:** Acrylonitrile Butadiene Styrene (ABS) and Flexible Polyvinyl Chloride (PVC)
- **Washers and Bolts:** 301 Stainless Steel
- **Fasteners:** 301 Stainless Steel

Features and Benefits

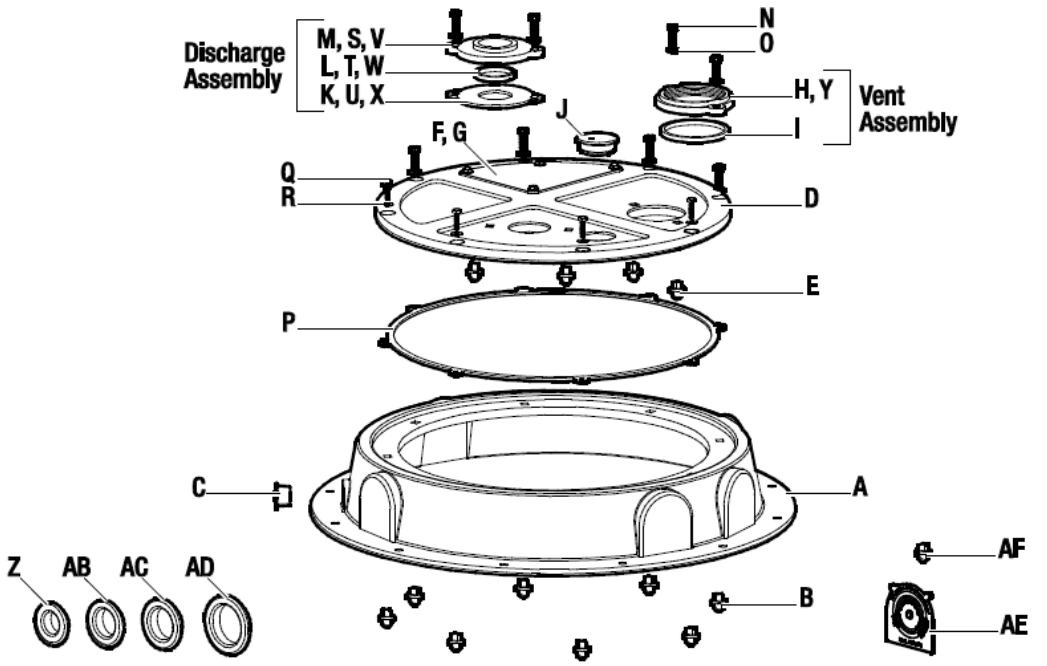
- Passive radon mitigation
- Retro fit/repair old, failing sump or sewage basin covers
- Universal, fits over all installed basins
- Improve safety; children and pets
- Property transfers and rentals
- Eliminates odors, gas-tight seal
- Easy to install
- Top discharge and vent
- Easily supports 1,000 lbs.
- Heavy duty injection molded structural foam construction
- Comes with the Jackel SF16101-CVDT structural foam solid cover, 8-bolt
- Clear view removable inspection plate
- 1-1/2” pump discharge flange, slip connection, ABS
- 3” vent flange, threaded connection, ABS
- Weight: 15 lbs.

Dimensions



The Original Radon / Sump Dome™

Parts List



Part	Description	Quantity
A	Cover riser	1
B	1/4-20 Nylon enclosed nut (Preassembled to cover (A))	8
C	Drain plug	1
D	SF16314 2x3 Lid	1
E	1/4-20 Nylon enclosed nut (Preassembled to lid (D))	8
F	INSP314-C Clean inspection plate (Preassembled to lid (D))	1
G	SEAL314 Inspection plate seal (Preassembled to lid (D))	1
H	3 in. Plastic vent threaded flange (Preassembled to lid (D))	1
I	3 in. Discharge and vent O-ring (Preassembled to lid (D))	1
J	2 in. One-hole cord grommet (Preassembled to lid (D))	1
K	1.5 in. Reducer plate (Preassembled to lid (D))	1
L	1.5 in. Discharge O-ring (Preassembled to lid (D))	1
M	1.5 in. Plastic discharge flange (Preassembled to lid (D))	1
N	1/4-20 x 1 HHC-SS (Preassembled to lid (D))	8
O	1/4 in. Flat washer SS (Preassembled to lid (D))	8
P	SEAL 18-8 Cover seal	1
Q	1/4-20 x 1 HHC-SS	8
R	1/4 in. Flat washer	8
S	1.25 in. Plastic discharge flange	1
T	1.25 in. Discharge O-ring	1
U	1.25 in. Reducer plate	1
V	2 in. Discharge flange	1
W	2 in. Discharge O-ring	1
X	Reducer plate blank	1
Y	2 in. Plastic threaded vent flange	1
Z	E100H Rubber hub for 1 in. pipe	1
AB	E125H Rubber hub for 1-1/4 in. pipe	1
AC	E150H Rubber hub for 1-1/2 in. pipe	1
AD	E200H Rubber for 2 in. pipe	1
AE	Drill locator	1
AF	Extra 1/4-20 Nylon enclosed nuts	4

Jackel, Inc • 15314 Harrison Road • Mishawaka, IN 46544 • (574) 256-5635 • (574) 256-6966 fax • www.jackelinc.com

SS-5

Standard Operating Procedure

Installation of the
Vapor Pin® Insert

Scope & Purpose

Scope

This standard operating procedure describes the installation of the Vapor Pin® Insert (Figure 1).

Purpose

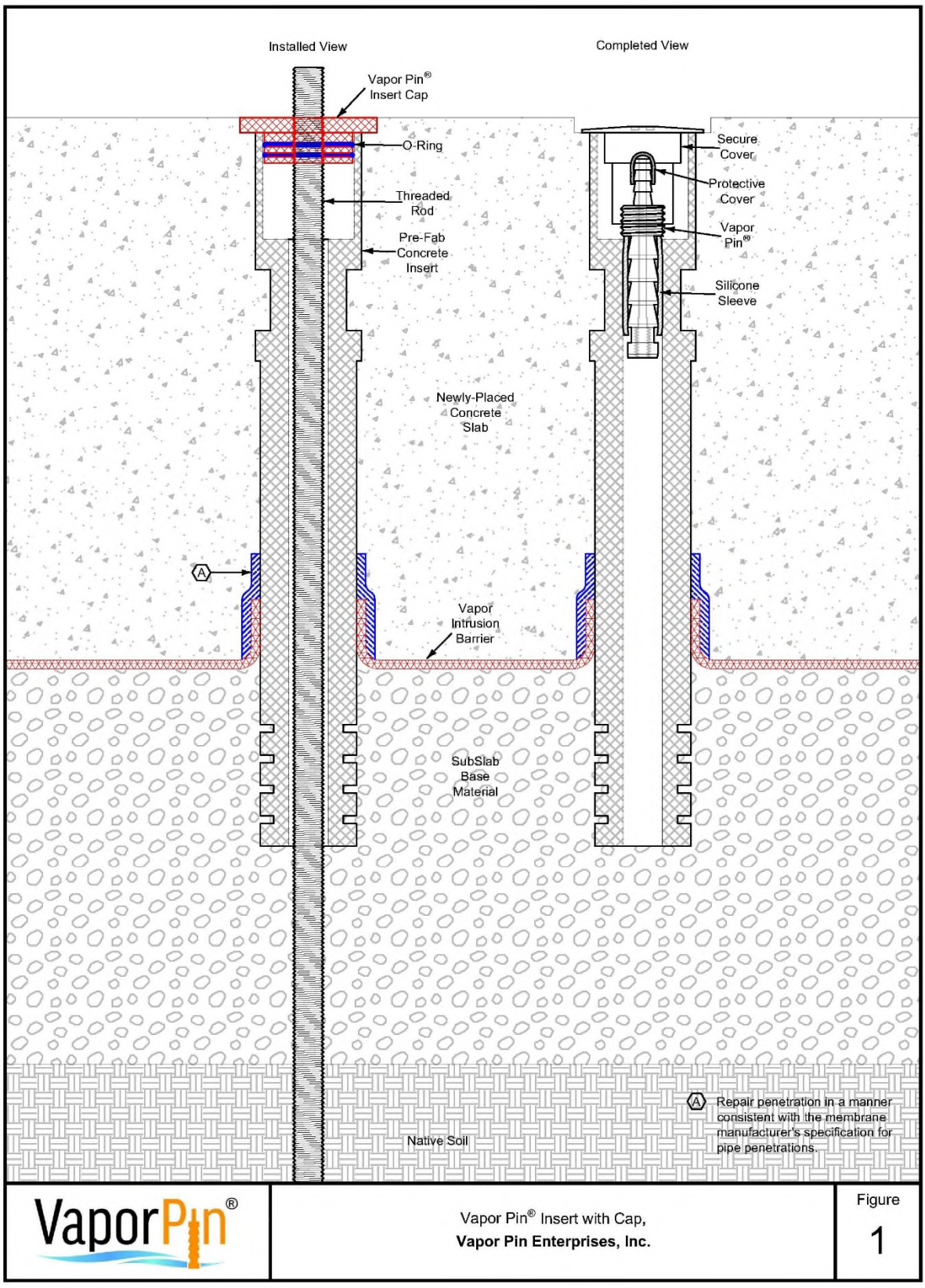
The purpose of this procedure is to assure good quality control in field operations and uniformity between field personnel in the use of the Vapor Pin® Insert. The Vapor Pin® Insert is used to facilitate the collection of soil gas samples and pressure measurements beneath engineered vapor intrusion barriers (e.g., Geo-Seal®), or vapor mitigation coatings (e.g., Retro-Coat™).

Equipment Needed

- Vapor Pin® Insert
- Vapor Pin® Insert Cap
- Hacksaw (option)
- Power drill and small diameter bits (optional)
- Threaded rod (½" – 13 Thread Size)
- Dead blow hammer

Installation Procedure

1. Check for buried obstacles (pipes, electrical lines, etc.) prior to proceeding.
2. Prior to installation in an existing slab, a large diameter hole must be cored through the slab to either expose the barrier. Contact the vendor of the barrier or coating about the desired diameter of the hole, the procedures used to expose the seal, and the methods and materials used to marry the seal or coating to the Vapor Pin® Insert prior to proceeding.
3. Locate the desired position (horizontally and vertically) of the top of the Vapor Pin® Insert
4. Pierce the barrier with a threaded rod of sufficient length to extend slightly above the elevation of the finished floor and into the subgrade a sufficient depth to provide support for the Vapor Pin® Insert. Make sure the rod is perpendicular to the proposed floor surface. Avoid bending the rod, as it may inhibit its removal after the concrete has cured. Also avoid damaging the threads on the threaded rod.
5. Dry fit the Vapor Pin® Insert and trim or extend the length. Extend the length by sliding the Insert into a length of 1½ inch diameter schedule 40 PVC pipe. If a longer length is needed, make sure to be below the liner. The Vapor Pin® Insert and pipe can be joined using PVC cement or similar material. Allow sufficient time for the adhesive to cure prior to sampling. Vent holes may be added at the bottom of the extension, beneath the liner, to promote air flow.
6. Assemble the Vapor Pin® Insert and Cap by pressing the Vapor Pin® Insert Cap into the top of the Vapor Pin® Insert. Position the assembly on the threaded rod so that the top of the Vapor Pin® Insert Cap lies flush with the elevation of the finished floor. It is important that the position of the Vapor Pin® Insert be perpendicular to the slab so that the Vapor Pin® Sampling Device Secure Cover meets uniformly with the floor.
7. Marry the barrier to the Insert per the barrier manufacture's specification prior to pouring the concrete slab.
8. After the concrete has set, remove the threaded rod and the Vapor Pin® Insert Cap and install any of your preferred Vapor Pin® Sampling Devices in the Vapor Pin® Insert.


Installed View
Completed View
Vapor Pin®
Insert Cap
O-Ring
Threaded
Rod
Pre-Fab
Concrete
Insert
Secure
Cover
Protective
Cover
Vapor
Pin®
Silicone
Sleeve
Newly-Placed
Concrete
Slab
A
Vapor
Intrusion
Barrier
SubSlab
Base
Material
Native Soil
A Repair penetration in a manner consistent with the membrane manufacturer's specification for pipe penetrations.
VaporPin®
Vapor Pin® Insert with Cap,
Vapor Pin Enterprises, Inc.
Figure
1