Soil and Groundwater Management Plan

121-123 Reynolds Street
Rochester, New York

August 30, 2021

Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY 14414-9519

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1.0 INTRODUCTION

This Soil and Groundwater Management Plan (SGMP) has been prepared on behalf of the City of Rochester (the City) and is the final element of an environmental remediation program undertaken to address petroleum contamination at the site located at 121-123 Reynolds Street in the City of Rochester, Monroe County, New York (the Site; see Location Map, Figure 1).

The site had a history of use as a gas station and an auto repair facility that included a paint spraying operation; such sites are suspect in terms of potential releases of petroleum products or chlorinated compounds. Multiple phases of environmental investigation were performed at the Site. These investigations documented the presence of four abandoned underground storage tanks (USTs) and identified petroleum-related impacts to soil and groundwater. The four USTs were decommissioned by removal in accordance with applicable regulations. In addition, surface and shallow soils included typical urban fill materials, which contained polynuclear aromatic hydrocarbons (PAHs) and heavy metals at concentrations above applicable cleanup standards. Due to the presence of petroleum contamination in soil and groundwater, the New York State Department of Environmental Conservation (NYSDEC) assigned Spill File No. 1103833 to the property in 2011. The City subsequently received a Brownfield Cleanup Grant (Agreement No. BF-96261018) from the United States Environmental Protection Agency (USEPA), and a remedial project was undertaken to address the identified impacts. The remedial program was jointly funded by the USEPA and the City. Though this project has been funded in, wholly or in part by the USEPA, the contents of this document do not necessarily reflect the views and policies of the USEPA.

The primary objectives of the corrective action program were to 1) remove petroleum-contaminated and urban fill-impacted soils to the extent necessary to satisfy NYSDEC's Part 375 soil cleanup objectives (SCOs; specifically for Restricted Residential site use) and Commissioner's Policy CP-51 soil cleanup levels (SCLs); 2) reduce concentrations of petroleum contaminants in groundwater to levels acceptable to NYSDEC; and 3) achieve closure of NYSDEC Spill File No. 1103833 for the Site and facilitate future sale and redevelopment of the property.

The excavation portion of the remedial program was completed in July 2020 in accordance with a NYSDEC-approved Corrective Action Plan (CAP). The excavation work included limited groundwater removal and application of ORC-A® as an amendment to promote bioremediation of residual impacts in groundwater. Four quarters of post-remedial groundwater monitoring has been performed, as detailed in this SGMP.

The remedial program implemented to address petroleum contamination at the Site was successful in removing the majority of the petroleum contamination and contaminant mass (likely more than 95% mass reduction). This is evidenced by: 1) None of the excavation confirmatory soil samples contained VOCs or SVOCs at concentrations at or above applicable NYSDEC SCOs/SCLs, and 2) the last three quarters of post-source removal groundwater sampling exhibited no exceedances of groundwater standards or guidance values. Samples collected from MW-4 and Sump 1 during the first round of quarterly groundwater sampling were reported to contain concentrations of a few volatile organic compounds (VOCs) with minor exceedances of groundwater standards.

All soil excavation confirmatory samples met SCOs and SCLs; however, there was minor residual petroleum presence observed in a limited number of soil excavation confirmatory samples, and some other remaining fill soils contained typical urban fill-related compounds. Note that two feet of clean topsoil was placed across the entire footprint of the excavation after the excavation was backfilled.

This SGMP addresses the low-level presence of residual petroleum compounds in subsurface soil and groundwater and metals in urban fill materials. Section 4 provides a description of the locations where impacts remain.

Given the presence of residual contamination in the subsurface that could potentially be encountered during future excavation or other soil-disturbing activities, this SGMP describes appropriate health and safety considerations, field screening procedures, and materials-handling/disposal procedures to be used. This SGMP includes the following:

- A brief summary of site historical use and environmental investigations performed.
- A description of Site subsurface conditions and the nature and extent of petroleum impacts identified.
- A description of the remedial program performed to address the petroleum impacts.
- Data summary tables which present historic and current contaminant levels in soil and groundwater.
- A site plan which identifies the known locations of residual soil contamination as well as groundwater monitoring well locations.
- A description of the type of monitoring that should be performed in the event future Site work occurs that involves excavation or other work that might disturb or expose soil or groundwater.
- A description of the sampling of impacted media that should be performed if contamination is encountered.
- A description of the procedures that should be followed to assure proper handling and disposal or treatment of contaminated material if it is encountered in the future.
- A list of the parties to be notified and their respective responsibilities if residual contamination is encountered in the future.
- A list of the government officials and agencies and other parties to whom copies of this SGMP will be distributed.
- A description of applicable engineering and institutional controls applicable to the Site.

2.0 SITE LOCATION AND DESCRIPTION

The Site, which is owned by the City (Monroe County Tax ID No. 12.52-3-18.001; address 121-123 Reynolds Street, Rochester, New York 14611) is located in a low-density residential area. The Site is a currently vacant parcel approximately 0.19 acres in size. The Site is generally level and is bounded on the east by a sidewalk and Reynolds Street, on the north by a sidewalk and Tremont Street, on the west by an adjoining vacant parcel (409-411 Tremont Street) and a residential property, and on the south by a residential property. Wooden bollards currently block vehicle access from the streets.

There are currently no utilities servicing the Site.

3.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND PARTIAL REMEDIAL ACTIVITIES

3.1 ENVIRONMENTAL INVESTIGATIONS

Several phases of investigation and partial remediation were previously completed at the site, prior to the final remediation program, as detailed in the following reports:

- Subsurface Evaluation Data Package, Environmental Assessment and Remediation Services, Day Environmental (Day), December 2011;
- Phase I Environmental Site Assessment (ESA), Day, April 2015;
- Phase II ESA, Day, January 2016; and
- Supplemental Phase II ESA, Day, January 2017.

In June 2011, apparent petroleum contamination was observed in soil encountered during excavation of the basement foundation of a new residential house on the 125 Reynolds Street parcel that abuts the Site on the south. Subsequent historical research by the City revealed the former presence of a gas station, and an auto repair facility that included a paint spraying operation on the northern portion of the Site (121 Reynolds Street).

Historical records indicated that up to four petroleum underground storage tanks (USTs) containing gasoline and kerosene had been documented on the Site. In addition, a single-family house had previously been located on the southern portion of the site (123 Reynolds Street). The City and its consultant then removed the four USTs in August 2011. A limited amount of impacted soil was also excavated and disposed offsite at that time; confirmatory sampling indicated residual petroleum impacts remained in soil at levels above regulatory cleanup criteria.

The City then commissioned a Phase I ESA in early 2015, followed by a Phase II ESA in the fall of 2015. The Phase II investigation provided the following findings:

- Twenty locations were drilled and sampled across the site, using either Geoprobe direct-push or rotary drilling methods. Four interface monitoring wells were installed, one in the northern half of the site and three in the southern half. Groundwater gauging in the four monitoring wells indicate groundwater flows toward the south.
- Bedrock was encountered at depths ranging from approximately 8 to 10 feet below ground surface (bgs).
- Photoionization detector (PID) readings from soil screening were detected in 8 of the 20 borings. Peak PID readings ranged up to 1,659 parts per million (ppm).
- Four of nineteen analyzed soil samples contained petroleum volatile organic compounds (VOCs) at levels above applicable Part 375 SCOs and CP-51 SCLs.
- Only one sample obtained from one of several Site perimeter borings (some of which were in the rights-of-way) exceeded applicable SCOs for VOCs.
- Urban fill was encountered in 12 of the 20 test boring locations, to depths ranging up to 6 feet bgs. Two samples of urban fill were analyzed; one sample (located in the southeast portion of the

site) contained lead at a level above the Restricted Residential (RR) SCO but a TCLP analysis did not indicate a hazardous level.

- All four groundwater samples exhibited petroleum VOCs at levels above NYSDEC's Technical and Operational Guidance Series (TOGS) 1.1.1 groundwater standards and/or guidance values.

A supplemental Phase II ESA was then performed in the fall of 2016, consisting of an additional nine soil test borings and field PID screening; nine soil samples were submitted for analysis for VOCs. The results of this investigation were combined with the findings of the initial Phase II ESA to further refine the apparent limits of impacts to soil. Based on the cumulative results, recommendations were provided in the Phase II ESA report that included:

- Additional excavation of impacted soil (beyond that excavated at the time of tank removal) and the upper, fractured portion of bedrock in the source area in the northeast portion of the Site;
- Excavation of deeper, wet to saturated soils in the "plume area" in the southern portion of the Site;
- Excavation of urban fill materials in the northern portion of the site;
- Post-excavation, in-situ bioremediation in the saturated zone in petroleum-impacted areas;
- Implementation of a Soil and Groundwater Management Plan (SGMP) for future development; and
- Installation of a sub-slab depressurization system (SSDS) for any future structures on the Site.

As a result of the findings of these investigations and the City's desire to return the Site to productive residential use, a Brownfield Cleanup Grant was awarded by the USEPA to the City for the remediation of soil and groundwater impacts at the Site. Though this project has been funded, wholly or in part, by the USEPA, the contents of this document do not necessarily reflect the views and policies of the USEPA.

3.2 FINAL REMEDIAL ACTIVITIES COMPLETED

Remedial actions were performed during the period July to August 2020 by TREC Environmental Inc. of Spencerport, New York under the observation of Stantec and the City. The remediation was performed in accordance with a Corrective Action Plan (CAP) approved by the NYSDEC. The primary elements of the program included:

- Excavation and offsite disposal of impacted soils from the Urban Fill Area, UST Source Area, and Plume Area excavations (see Figure 2);
- Backfill with clean excavated soil and imported material;
- Confirmatory soil sampling in excavations;
- Placement of a soil amendment, Oxygen Release Compound-Advanced (ORC-A®; manufactured by Regenesis) in excavations to facilitate *in situ* bioremediation of residual impacts;
- Installation of injection piping in the UST Source and Plume Area Excavations for future applications of ORC-A® powder in these areas, if needed;
- Installation of two bedrock sumps to remove potentially impacted groundwater from the bedrock; and

- Post-remediation groundwater monitoring.

A summary of remedial actions performed is presented below. A more detailed description of the remedial actions is presented in Stantec's report titled *Remedial Construction/Closure Report, Petroleum-Impacted Soil and Groundwater, 121-123 Reynolds Street, Rochester, NY,* dated January 2021*.*

Soil Excavation and Disposal

Approximately 899 tons of petroleum-impacted soil and 957 tons of urban fill material was removed and disposed of offsite at a NYSDEC permitted disposal facility. Figure 2 depicts the limits of each excavation. The limits of these excavations were established based on PID readings and confirmatory soil sampling. In some instances, excavations were limited by the property line or proximity to the adjacent sidewalks; Results of the excavation confirmatory soil sampling indicated that none of the confirmatory samples contained VOCs or SVOCs at concentrations at or above applicable NYSDEC SCOs/SCLs. These results did identify residual concentrations of petroleum and urban fill-related compounds (but below applicable NYSDEC SCOs and SCLs) in a limited number of samples. See Figure 2 for confirmatory sample locations and Table 1 for a summary of contaminant levels in confirmatory soil samples.

***In-situ* Groundwater Treatment and Monitoring**

The soil excavation was generally terminated at the top of bedrock. There was little to no groundwater encountered in the overburden. A relatively minor amount of stormwater accumulated during a rain event. The dolomite bedrock was generally only slightly weathered and very competent, which generally prevented excavation into and removal of rock with an excavator. At one location in the Plume Area, a limited weathered area was encountered, and minor petroleum staining was observed. At the request of the City a hydraulic breaker was employed to further excavate rock at this location. An area approximately 4 by 4 ft in lateral dimension was excavated to a depth of approximately 3 feet below the top of bedrock. Groundwater that accumulated in the sump was removed and temporarily containerized in a poly tank.

It was decided to construct a permanent sump at this location to allow further groundwater removal if deemed appropriate. A second sump of similar dimensions was then excavated in the UST area for the same purpose. The sumps were completed with 12-in diameter plastic pipe that was extended to the ground surface with a concrete surface seal and a steel road box for easy access. The sumps were designated Sump 1 and Sump 2 (see locations, Figure 2)

Given that seasonal groundwater levels fluctuate, and in accordance with the CAP, an amendment was placed in the excavation to enhance natural *in-situ* groundwater bioremediation and further reduction of contaminant levels. This was accomplished by using ORC-A® in dry form; the material was spread evenly in each excavation before backfill materials were placed. Approximately 440 lbs. and 720 lbs. of ORC-A® were placed in the UST Source Area and Plume Areas, respectively.

Eight horizontal lengths of *in-situ* remediation injection piping were installed at the base of both the UST Source Area and the Plume Area excavations, in the event future injections of ORC-A® are deemed necessary. The piping consists of 2-in diameter, 0.02-in slot PVC well screen, which was embedded in a 2-ft-thick layer of crushed stone place on the top of bedrock. Each run of piping was approximately 30 feet in length, oriented east-west. Each vertical riser was finished at the surface with a flush mount road box (see Figure 2).

Groundwater Monitoring

Four quarterly rounds of post-excavation groundwater monitoring were performed: October 2020, and January, April and July 2021. Sumps 1 and 2, installed during the excavation and one preexisting well MW-4 were sampled in each event. The sumps and well were purged with a gas-powered pump using dedicated polyethylene tubing and then sampled with a bailer. The field parameters of conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP), pH, and temperature were measured during each event. These results are summarized on Table 2. These parameters are used to indicate that the well has been adequately purged prior to sampling.

The groundwater samples were submitted to Paradigm Environmental Services (October 1, 2020) and Eurofins TestAmerica (January 14, 2021, April 20, 2021 and July 15, 2021) for analysis for CP-51-list VOCs using USEPA Method 8260C. Table 3 provides a summary of the groundwater analytical results for quarters Q1 through Q4. Data from the fourth quarter were also reviewed by an independent validator, and a Data Useability Summary Report (DUSR) was prepared. No issues were identified with the data.

The Q1 results contained the following petroleum-related VOCs at levels above the groundwater standards:

- Benzene in MW-4 and Sump 1 at 1.77 and 1.43 µg/L, respectively, vs. the standard of 1 µg/L.
- Ethylbenzene in Sump 1 at 9.62 µg/L, vs. the standard of 5 µg/L.
- 1,2,4-Trimethylbenzene in Sump 1 at 19.3 µg/L, vs. the standard of 5 µg/L.

Results from the Q2 through Q4 events indicated that none of the groundwater samples exceeded NYSDEC VOC groundwater standards. Minor detections (below NYSDEC groundwater standards) of petroleum-related compounds were observed in some of these samples (see Table 3).

4.0 SUMMARY OF CURRENT SITE CONDITIONS

At the time this SGMP was prepared, the site was vacant and undeveloped, with no structures present. Wooden bollards line the north and east property lines. As described above, the remedial program included completing the excavation backfill with imported topsoil, which was graded essentially level with the adjacent parcels and sidewalks. The entire site was hydroseeded and a grass cover was established. Eight road boxes are present along the eastern edge of the site, one for each remedial injection piping run. Two large-diameter sumps and one monitoring well are also present (see Site feature locations on Figure 2)

4.1 REMAINING CONTAMINATION

Soil: A total of 26 confirmatory soil samples were taken in the excavation areas. Based on these analytical results the following locations are known to contain limited contaminant presence in soil (see Figure 2 and Table 1):

- *Urban Fill Excavation:* No exceedances of SCOs were reported in any of the Urban Fill Area confirmatory samples; however, some residual soil impacts remained along the north sidewall (as reflected by SVOC TIC detections), where the excavation was limited due to the close proximity to the sidewalk.
- *UST Source Area Excavation:* As noted above, the northern extent, as well as the eastern extent, of the excavation were bound by the Tremont Street and Reynolds Streets sidewalk. No exceedances of SCOs were reported in any of the UST Source Area confirmatory samples; however, some residual impacts remained along the north and east sidewalls (as reflected by VOC TIC detections), where the excavation was limited due to the close proximity to the sidewalk.
- *Plume Area Excavation:* The eastern extent of this excavation was limited by the Reynolds Street sidewalk. During the excavation, petroleum staining was observed along the western extent of the excavation. Further excavation was completed in this area until no observed impacts remained (via staining or PID detections). VOC TIC detections indicate some residual impacts remain along the eastern sidewall of the excavation which was limited due to the sidewalk.
- *Surface Soils:* Based on results of surface soil or shallow soil samples taken during the Phase II ESAs, some surface soils may contain urban fill which may contain heavy metals such as lead at levels in excess of applicable SCOs (see Appendix A).

Groundwater:

The results of post-remedial groundwater monitoring in quarters Q2 through Q4 (see Table 3) did not indicate the presence of petroleum-related compounds at concentrations above groundwater quality standards. A few compounds were detected in the low part per billion range but below groundwater quality standards.

Samples collected from MW-4 and Sump 1 during the first round of quarterly groundwater sampling were reported to contain concentrations of a few volatile organic compounds (VOCs) with minor exceedances above groundwater standards.

Subsequent to the remedial excavation, an amendment (ORC-A®)) was placed in the excavation to enhance natural in-situ groundwater bioremediation and further reduce contaminant levels. In addition, eight horizontal lengths of in-situ remediation injection piping were installed at the base of both the UST

Source Area and the Plume Area excavations. At the City's discretion, this injection piping may be used to inject additional ORC-A® into the subsurface at the site to further enhance groundwater bioremediation.

5.0 CONSIDERATIONS FOR SUBSURFACE WORK AND CHANGES IN SITE USE

As discussed above, residual petroleum contamination and urban-fill materials are known to remain at the Site at limited locations. Other limited occurrence of residual impacts not previously identified or encountered may also exist. Future activities involving excavation or soil disturbance in the areas of residual soil contamination must be conducted in accordance with the considerations and requirements of this SGMP.

Note also that use of groundwater for potable purposes within City limits is prohibited by the City Code.

Site development must take into consideration the known residual contamination and the observed concentrations in comparison to allowable concentrations for the proposed site usage (i.e., Restricted-Residential or Restricted-Commercial Use).

The measures described herein are designed to:

- Prevent ingestion/direct contact with contaminants in soil;
- Prevent ingestion of groundwater with contaminant levels that exceed groundwater standards;
- Prevent the discharge of contaminants to surface water; and
- Prevent migration of contaminants that would result in off-site groundwater or surface water contamination.

If contaminated soil is encountered as part of an excavation program or other subsurface work, it cannot be replaced or reused on the Site, or allowed to run off the Site via stormwater flow unless it meets NYSDEC soil cleanup objectives and reuse criteria, and/or NYSDEC permission for reuse is obtained. The materials must be properly characterized, managed and disposed of off-site at a NYSDEC-permitted disposal facility.

The scheduling, duration and cost of activities that involve subsurface disturbance or excavation may be affected by soil or groundwater management and waste characterization issues. Scheduling of work will need to allow for management of potentially contaminated material encountered during the course of the work. Should unanticipated materials or conditions be observed during subsurface work, sampling may be required. Sampling will entail laboratory analysis, which typically takes from a few days to weeks to be completed. Therefore, construction schedules and design plans should allow for adequate flexibility for sampling, segregation, and temporary stockpiling of unanticipated materials on-site. Construction schedules should also provide both contingency time and measures to address variability in subsurface conditions and the presence of groundwater. For example, if contaminated material or hazardous substances are encountered, additional safety measures and use of personal protective equipment (PPE) may be required. Excavation dewatering and work stoppage could also affect construction schedules and costs. Measures designed to address these situations are described in further detail below.

As with all underground excavation work, the parties performing invasive subsurface work are responsible for the safe performance of the work, the integrity and safety of excavations, and for protection of structures that may be affected by excavations (such as underground or aboveground utility lines, sidewalks or road surfaces and building foundations). Prior to commencement of any intrusive work, the presence of utilities and easements on the site should be ascertained via a Dig Safely NY stakeout, review of utility drawings, and interviews with knowledgeable facility staff, etc. to determine if they are likely to be encountered so that appropriate plans can be developed.

6.0 MANAGEMENT OF IMPACTED MATERIAL

6.1 NOTIFICATION

With the exception of emergency activities, written notification to NYSDEC is required at least 10 days prior to the start of activities which are anticipated to potentially encounter residual contamination. Currently this notification will be made to:

Mr. Michael Zamiarski, P.E.

NYSDEC, Bureau of Spill Prevention and Response
6274 E. Avon-Lima Road
Avon, NY 14414
585-226-5483

The notification should include the following information:

- A description of the work to be performed, including the location and areal extent;
- A summary of environmental conditions anticipated in the work areas and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A statement that the work will be performed in compliance with this SGMP;
- A copy of the health and safety plan to be used by Site workers (in electronic format);
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of backfill to be imported to the Site, if applicable.

In the event that ground intrusive activities are required to address an emergency or time-sensitive matter such as the emergency repair of a utility required to allow continued on-site operations, notice shall be given as soon as practicable but no later than 24 hours after the emergency activity.

6.2 FIELD IDENTIFICATION OF IMPACTS

During subsurface activities, petroleum impacted soil or groundwater may be encountered. Petroleum-impacted soil may be stained gray or black, contain a rainbow-type sheen, and emit petroleum-type odor. Petroleum-impacted groundwater may emit a petroleum-type odor and could contain a floating sheen. Free petroleum product has not been detected in the soil or on the groundwater surface. However, free petroleum product, if encountered, would exhibit an oily texture, a strong petroleum-type odor, likely an amber to dark brown/black color, and would be floating on the groundwater surface. Elevated PID readings exceeding background measurements on ambient air above soil or groundwater is also indicative of the presence of VOCs associated with petroleum contamination.

Urban fill materials can often be visually identified by the presence of deleterious materials such as brick, cinders, ash, wood or other debris/trash. These materials may not necessarily emit a distinct odor and can be intermixed with a variety of soil types such as clay, silt sand and gravel.

6.3 SAMPLING

Sampling of excavated soil or subsurface materials or groundwater removed during subsurface work should be considered if unusual odors or visual observations such as stained soils, sheens or the presence of apparent petroleum or other product are identified in soil or groundwater, or if tanks, containers, or unknown piping are encountered.

In these situations, sampling frequency and analyses would depend on the types, conditions and quantities of material encountered and the anticipated reuse, recycling or disposal of the removed materials. The associated chemical analysis of samples obtained must adequately characterize materials in light of current NYSDEC 6 NYCRR Part 375 SCOs or CP-51 SCLs, and/or permitted disposal or wastewater treatment facility requirements, depending on the intended destination of waste materials.

Waste disposal analyses for petroleum-contaminated soil or water, or urban fill materials typically include some or all of the following:

- Total volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs, a sub-class of SVOCs);
- Toxicity Characteristic Leaching Procedure (TCLP) VOCs;
- TCLP Metals; and
- pH, Ignitability, and reactivity.

Depending on the nature of potential contaminants encountered and/or the intended disposal facility, the following additional waste disposal analyses may also be required:

- TCLP SVOCs;
- TCLP Pesticides and Herbicides; and
- Polychlorinated Biphenyls (PCBs)

Based on extensive sampling results obtained during previous investigations and the USEPA-funded remediation, it is anticipated that potential waste streams generated during future activities will qualify as non-hazardous solid or liquid waste.

6.4 MONITORING DURING EXCAVATION

Monitoring of soil and fill materials that are excavated and groundwater pumped during construction should be performed for three reasons:

- to protect the health and safety of project site workers during construction;
- to determine that the material encountered during construction is consistent with the material encountered during previous investigations; and
- to facilitate characterization of the non-hazardous or hazardous nature of material encountered in the event that no previous investigation results are available for a specific area.

6.4.1 Health and Safety Monitoring

Past investigations determined that non-hazardous contaminated soil and groundwater were present on the Site. General groups of compounds subject to future health and safety planning include primarily VOCs, SVOCs (typically PAHs) and metals (primarily lead).

Previous investigations show that while overall the potential for worker chemical exposure exists, it is relatively low. However, Site personnel involved in construction and excavation activities should employ safety measures in accordance with applicable OSHA regulations and should also consider other construction-related hazards such as heavy equipment, weather conditions, confined space entry, and excavation safety. It may be appropriate or even required that workers be trained for Hazardous Waste Operations (HAZWOPER).

Site conditions may warrant preparation and implementation of a Community Air Monitoring Plan (CAMP), in accordance with the NYSDEC DER-10 guidance, to minimize potential exposure to neighboring residents or others in the community from airborne vapors or particulates (dust) that may be generated during excavation activities.

6.4.2 Soil and Groundwater Monitoring

Soil and groundwater monitoring should generally consist of documentation of visible characteristics of the soil, fill and groundwater encountered, including staining, sheens, odors, or other indicators of contamination such as oils, tars or petroleum containers. It is recommended that construction monitoring by a trained individual such as an environmental engineer, scientist, or geologist be performed during excavation and groundwater work regardless of where the invasive work is done. In addition, instruments capable of monitoring for the presence of volatile organic compounds and particulates are readily available and can be rented from several sources. Monitoring should include use of the following instrumentation:

- VOCs: Photoionization detector (PID) such as a MiniRae 3000 or equivalent.
- Particulates: Aerosol monitor such as a TSI DustTrak II or equivalent.

These instruments should be operated by individuals trained and experienced in their use, limitations and capability for data generation. Readings generated from monitoring instruments should be recorded in the field along with visual observations. As long as excavation monitoring shows soil, fill, and groundwater material to be uncontaminated, then the material should be manageable as determined prior to construction. If conditions are different from those anticipated, then sampling and additional characterization may be necessary.

6.5 MANAGEMENT OF IMPACTED MATERIAL

At this time, there is no preferred method for the management of soil/fill excavated during construction activities. In general, it is recommended that non-hazardous soil or fill excavated during excavation, foundation work, utility trenching work and other earth-moving activities (including, if needed, remedial measures), either be reused on-site, if permitted, in accordance with regulations and covered with either clean soil or an impervious surface, or be transported off-Site to a properly-licensed and permitted facility. While unlikely based on past environmental studies and remediation performed, if hazardous wastes are encountered, they cannot be reused on-site and will need to be disposed properly at an approved, off-Site facility. The presence of staining and petroleum odors in soil is also a condition that exceeds the NYSDEC criteria for nuisance characteristics allowing reuse of excavated contaminated soil on-site.

If groundwater is pumped at the Site, approval would be required for wastewater disposal to the sanitary sewer from Monroe County Department of Environmental Services (MCDES). If approval for discharge to the wastewater treatment plant sewer system is not obtained, disposal at an appropriately licensed off-site treatment facility would be required.

6.5.1 On-Site Re-Use of Excavated Materials

Non-impacted (uncontaminated) materials that will be re-used on-Site will need to be segregated on the basis of field screening. If field screening indicates the potential presence of contamination, additional construction sampling and analyses are recommended. If construction sampling is performed, the analysis results will be compared to applicable SCOs and SCLs for the intended use of the Site. If concentrations are below applicable SCOs and SCLs, the soil can be reused on-Site provided that petroleum-related nuisance characteristics are not evident.

If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC for their approval.

Staging and stockpiling management of materials should be conducted as described in the sections below.

6.5.2 Off-Site Disposal of Excavated Materials

Management of solid waste materials that will be disposed off-site will need to include characterization (sampling and laboratory analysis as required by the chosen disposal facility), management and handling, and off-site transportation and disposal at an approved landfill.

Appropriate measures for management of excavated materials must be employed. This should be either pre-characterization and pre-approval for landfill disposal, such that the material can be direct loaded onto permitted trucks for transport, or temporary stockpiling of excavated soils and solids pending disposal characterization and approval. Stockpiling must include measures to prevent soils from contaminating other materials or migrating off-site. Measures that should be incorporated into onsite soil management include:

- Stockpile locations away from storm sewers, downwind property boundaries, and drainage courses.
- Use dust suppression techniques, as necessary.
- Placement of stockpiles of contaminated soils, fill or hazardous materials (e.g., drums, containers, odiferous fill) on minimum 6-mil reinforced polyethylene (poly) with perimeter berms.
- Covering stockpiles of contaminated soils, fill, or hazardous materials (e.g. drums, containers, odiferous fill) with weighted-down poly sheeting at the end of each day of placement to prevent migration by wind-blown dust or stormwater runoff until final placement and final cover is established.

If the contaminant concentrations are elevated above applicable SCOs or SCLs or if nuisance characteristics are noted, the results shall be shared with the NYSDEC and the materials disposed of off-site at an appropriate disposal facility. All impacted material or solid waste excavated and removed from the site will be treated as contaminated and regulated solid waste and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Solid Waste pursuant to 6NYCRR Part 360-1.2. Material that does not meet the lower of the SCOs for residential use or groundwater protection will not be taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility) without a beneficial use determination issued by NYSDEC.

Transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded. If loads contain wet material capable of producing free liquid, truck liners will be used. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials. Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

6.5.3 Off-Site Disposal of Impacted Water

Management of water will include characterization (sampling and laboratory analysis as required by MCDES or off-site treatment or disposal facility), management, and disposal. In order to obtain approval from MCDES for discharge of potentially impacted groundwater to the sewer system or directly to a treatment plant, analyses may be required. If disposal to the MCDES sewer system is not approved, transport to and disposal at another appropriate, permitted disposal facility would be required.

Appropriate measures for management of water will need to include temporary containerization and measures to prevent water from contaminating other materials or migrating off-site. Measures that should be incorporated into such plans include:

- Containerize water prior to pumping or transport off-site.
- Stage containers away from downwind property boundaries and drainage sources.
- Pump water directly into containers.
- Perform necessary sampling prior to disposal.
- Coordinate with the MCDES or alternate facility to receive a temporary discharge permit for disposal.

7.0 INSTITUTIONAL CONTROLS

The City of Rochester has established a procedure for Institutional Control (ICs) which involves “flagging” the tax account numbers of properties that require special environmental reviews due to the known presence of residual soil and/or groundwater contamination. Upon approval of this SGMP by NYSDEC, the City will “flag” the Site parcel (by address and Tax ID number) in the City’s Building Information System (BIS). This flag will indicate the Site is subject to a special environmental review by the City’s Division of Environmental Quality (DEQ) prior to issuance of any permits related to Site development. DEQ staff will review permit applications for consistency with requirements of this SGMP, limited-use areas and land-use restrictions. A notification may be forwarded by DEQ to the NYSDEC at the time the permit is reviewed, if warranted, depending on the scope of the proposed work and other Site-specific factors.

8.0 ENGINEERING CONTROLS

The potential need for Engineering Controls (ECs) as part of the future Site redevelopment should be evaluated in the context of remaining contamination, as detailed in this SGMP, or as characterized by actions or sampling during Site disturbance. In the event that engineering controls are deemed necessary, NYSDEC and/or NYSDOH (see contacts in Section 9 below) should be consulted for review and approval of proposed controls.

Per the USEPA Action Memo and the CAP, a vapor barrier and sub-slab depressurization system must be incorporated into building design to mitigate the potential for vapor intrusion into future occupied buildings. Additional ECs for a site such as the 121-123 Reynolds Street parcel may include, but are not limited to:

- A clean soil cover over areas of surface or shallow impacted soil not intended to be covered by pavement, concrete or structures.

Appendix B contains excerpts from guidance by the New York State Department of Health (NYSDOH) and the United States Environmental Protection Agency (USEPA) that provide generalized design elements of sub-slab vapor mitigation systems typically used to mitigate vapor intrusion.

9.0 CONTACT INFORMATION

The following is a list of entities who can be contacted regarding environmentally-related issues at the Site:

- **City of Rochester**
  Division of Environmental Quality
  30 Church Street, Room 300-B
  Rochester, New York 14614
  585-428-6649
  Joseph Biondolillo, Associate Environmental Specialist

- **NYSDEC Region 8**
  6274 Avon-Lima Road
  Avon, New York 14414
  585-226-5428
  Mike Zamiarski, P.E.

- **NYSDEC Spills Hotline**
  1-800-457-7362

- **Monroe County Department of Public Health**
  111 Westfall Road
  Room 952
  Rochester, New York 14620
  585-753-2991

- **New York State Department of Health**
  Corning Tower
  Empire State Plaza
  Albany, New York 12237

- **Stantec Consulting Services Inc.**
  61 Commercial Street, Suite 100
  Rochester, NY 14614
  585-475-1440
  Mike Storonsky

FIGURES

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Legend:

- Site Location

0 1,000 2,000 4,000 Feet

1:24,000 (at original document size of 8.5x11)

Stantec

Project Location
121-123 Reynolds Street
Rochester, New York

Site Location Map REVA
Prepared by AJK on 2017-10-12
Technical Review by KI on 2017-10-13
Independent Review by MPS on 2017-10-13

Client/Project
City of Rochester
Environmental Remediation
Soil and Groundwater Management Plan

Figure No.
1

Title
Site Location Map

Notes
1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
3. Topo imagery provided by ESRI Online Services and USGS 7.5 Minute Quad of Rochester West, NY, dated 1995.
4. Key Map Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community
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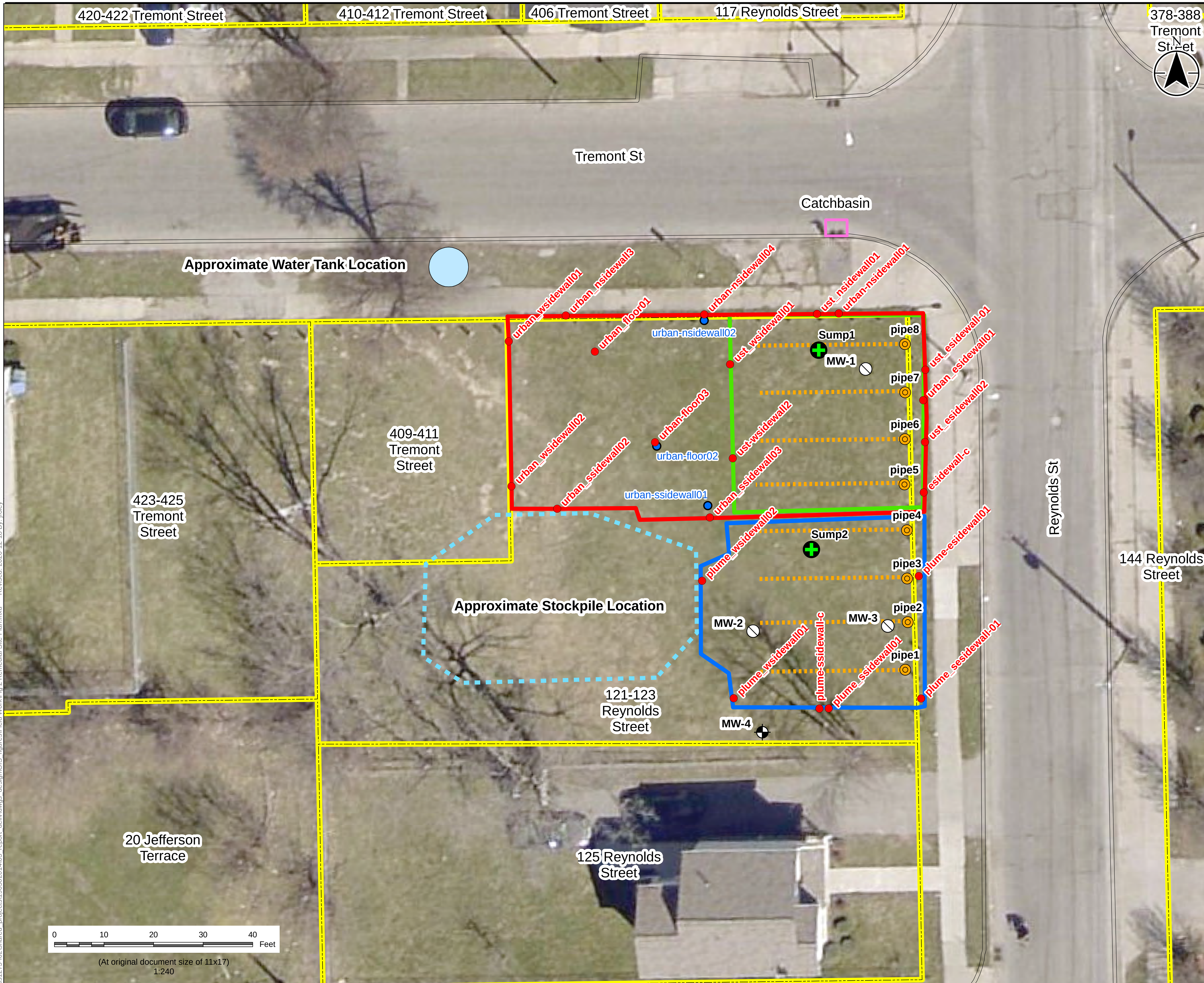


Stantec

Legend

- Existing Monitoring Well
- Decommissioned Monitoring Well
- Edge of Pavement
- Intermediate Soil Samples
- Confirmatory Soil Samples
- Injection Piping Run and Riser - Well
- Injection Piping Run and Riser - Piping
- Sumps
- Urban Fill Area Excavation Limits
- UST Area Excavation Limits
- Plume Area Excavation Limits
- Water Tank Location

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
4. All feature and sample locations are approximate only, as established using a Trimble GPS with sub-meter accuracy and adjusted using field measurements as appropriate. Stockpile location not surveyed.
5. Injection pipe headers and sumps are flush-mounted.
6. The parcel at 409-411 Tremont Street is owned by the City of Rochester and was used for access to the 121-123 Reynolds Street parcel, as well as material storage and temporary stockpiling.
7. Intermediate soil samples were superseded by final confirmatory samples after further excavation.
8. See accompanying report for detailed description of program and all sampling results.

Project Location
121-123 Reynolds Street
Rochester . NY

Prepared by APL on 2020-08-10
TR by JF on 2020-08-10
IR Review by BM on 2020-08-10

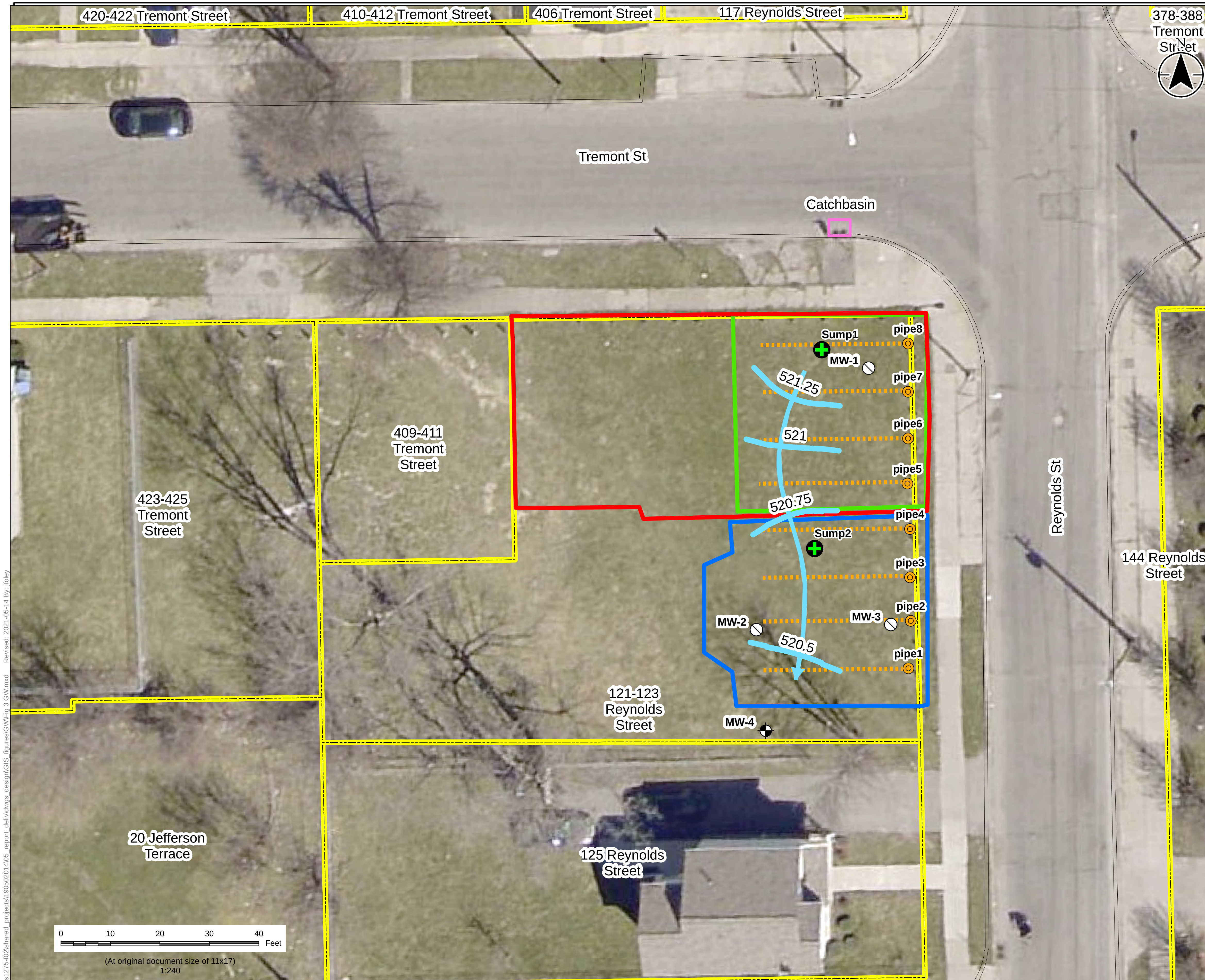
Client/Project
City of Rochester
Environmental Remediation
Soil and Groundwater Management Plan

190502014

Figure No.
2

Title

Remedial Site Plan



Stantec

Legend

- Existing Monitoring Well
- Decommissioned Monitoring Well
- Edge of Pavement
- Injection Piping Run and Riser - Well
- Injection Piping Run and Riser - Piping
- Sumps
- Urban Fill Area Excavation Limits
- UST Area Excavation Limits
- Plume Area Excavation Limits
- 1/4 Foot Groundwater Contour
- Direction of Groundwater Flow

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
4. All feature and sample locations are approximate only, as established using a Trimble GPS with sub-meter accuracy and adjusted using field measurements as appropriate. Stockpile location not surveyed.
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6. The parcel at 409-411 Tremont Street is owned by the City of Rochester and was used for access to the 121-123 Reynolds Street parcel, as well as material storage and temporary stockpiling.
7. Intermediate soil samples were superseded by final confirmatory samples after further excavation.
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Project Location
121-123 Reynolds Street
Rochester . NY

Prepared by APL on 2020-08-10
TR by JF on 2020-08-10
IR Review by BM on 2020-08-10

Client/Project
City of Rochester
Environmental Remediation
Soil and Groundwater Management Plan

190502014

Figure No.
3

Title

Groundwater Elevation Contour Map - January 14, 2021

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TABLES

Table 1
Summary of Excavation Confirmatory Soil Sample Analyses
121-123 Reynolds St., Rochester, NY
City of Rochester

Sample Location				North Sidewall Confirmatory		14' South of plume boundary	PLUME-WSIDEWALL-02	SE Corner Confirmatory			South Sidewall Confirmatory		URBAN-ESIDEWALL-01	URBAN-FLOOR-01	URBAN-FLOOR-03	URBAN-NSIDEWALL-01	URBAN-NSIDEWALL-03
Sample Date				13-Jul-20	13-Jul-20	9-Jul-20	28-Jul-20	17-Jul-20	17-Jul-20	17-Jul-20	15-Jul-20	14-Jul-20	21-Jul-20	21-Jul-20	28-Jul-20	21-Jul-20	21-Jul-20
Sample ID				UST-NSIDEWALL-C	UST-NSIDEWALL-01	PLUME-ESIDEWALL-01	PLUME-WSIDEWALL-02	PLUME-SESIDEWALL-01	PLUME-WSIDEWALL-01 DUP	PLUME-WSIDEWALL-01	PLUME-SSIDEWALL-C	PLUME-SSIDEWALL-01	URBAN-ESIDEWALL-01	URBAN-FLOOR-01	URBAN-FLOOR03	URBAN-NSIDEWALL-01	URBAN-NSIDEWALL-03
Sample Depth				5 ft	8 ft	7.5 ft	8 ft	8 ft	9 ft	9 ft	5 ft	8 ft	3.5 ft	4 ft	4 ft	3.5 ft	3.5 ft
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				ERF	ERF	ERF	TALBU	ERF	ERF	ERF	ERF	ERF	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order				480-172301-1	480-172301-1	460-213025-1	480-173074-2	480-172578-1	480-172578-1	480-172578-1	480-172462-1	480-172398-1	480-172688-1	480-172688-1	480-173074-2	480-172688-1	480-172688-1
Laboratory Sample ID				480-172301-2	480-172301-1	460-213025-2	480-173074-3	480-172578-3	480-172578-2	480-172578-1	480-172462-1	480-172398-3	480-172688-1	480-172688-5	480-173074-8	480-172688-2	480-172688-4
Sample Type	Units	NYSDEC-Part 375	NYSDEC CP-51	Initial	Initial	Initial	Initial	Initial	Field Duplicate Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial
Metals																	
Lead	mg/kg	400^{AB} 450^{C}	n/v	-	-	-	-	-	-	-	-	-	135	147	12.0	13.3	13.7
Semi-Volatile Organic Compounds																	
Acenaphthene	µg/kg	100,000$_{b}^{AB}$ 98,000^{C}	20,000^{E}	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Acenaphthylene	µg/kg	100,000$_{b}^{AB}$ 107,000^{C}	100,000^{E}	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Acetophenone	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Anthracene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	100,000^{E}	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Atrazine	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Benzaldehyde	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Benzo(a)anthracene	µg/kg	1,000$_{g}^{ABC}$	1,000^{E}	-	-	-	-	-	-	-	-	-	200 U	240	190 U	57 J	210 U
Benzo(a)pyrene	µg/kg	1,000$_{g}^{AB}$ 22,000^{C}	1,000^{E}	-	-	-	-	-	-	-	-	-	200 U	290	190 U	65 J	67 J
Benzo(b)fluoranthene	µg/kg	1,000$_{g}^{AB}$ 1,700^{C}	1,000^{E}	-	-	-	-	-	-	-	-	-	200 U	340	190 U	98 J	82 J
Benzo(g,h,i)perylene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	100,000^{E}	-	-	-	-	-	-	-	-	-	200 U	230	190 U	68 J	59 J
Benzo(k)fluoranthene	µg/kg	3,900^{A} 1,000^{B} 1,700^{C}	800^{E}	-	-	-	-	-	-	-	-	-	200 U	170 J	190 U	45 J	37 J
Biphenyl	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Bis(2-Chloroethoxy)methane	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Bis(2-Chloroethyl)ether	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Bromophenyl Phenyl Ether, 4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Butyl Benzyl Phthalate	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	350	190 U	200 U	210 U
Caprolactam	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Carbazole	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	30 J	190 U	200 U	210 U
Chloro-3-methyl phenol, 4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Chloroaniline, 4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Chloronaphthalene, 2-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Chrysene	µg/kg	3,900^{A} 1,000$_{g}^{BC}$	1,000^{E}	-	-	-	-	-	-	-	-	-	200 U	270	190 U	70 J	77 J
Cresol, o- (Methylphenol, 2-)	µg/kg	100,000$_{b}^{AB}$ 330$_{f}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Cresol, p- (Methylphenol, 4-)	µg/kg	100,000$_{b}^{A}$ 34,000^{B} 330$_{f}^{C}$	n/v	-	-	-	-	-	-	-	-	-	***380 U***	***370 U***	***360 U***	***380 U***	***410 U***
Dibenzo(a,h)anthracene	µg/kg	330$_{f}^{AB}$ 1,000,000$_{d}^{C}$	330^{E}	-	-	-	-	-	-	-	-	-	200 U	81 J	190 U	200 U	210 U
Dibenzofuran	µg/kg	59,000^{A} 14,000^{B} 210,000^{C}	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Dibutyl Phthalate (DBP)	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Dichlorobenzidine, 3,3'-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
Dichlorophenol, 2,4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Diethyl Phthalate	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Dimethyl Phthalate	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Dimethylphenol, 2,4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Dinitro-o-cresol, 4,6-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
Dinitrophenol, 2,4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	1,900 U	1,800 U	1,800 U	1,900 U	2,100 U
Dinitrotoluene, 2,4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Dinitrotoluene, 2,6-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Di-n-Octyl phthalate	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Fluoranthene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	100,000^{E}	-	-	-	-	-	-	-	-	-	200 U	410	190 U	110 J	140 J
Fluorene	µg/kg	100,000$_{b}^{AB}$ 386,000^{C}	30,000^{E}	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Hexachlorobenzene	µg/kg	1,200^{A} 330$_{f}^{B}$ 3,200^{C}	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Hexachlorocyclopentadiene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Hexachloroethane	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Indeno(1,2,3-cd)pyrene	µg/kg	500$_{g}^{AB}$ 8,200^{C}	500^{E}	-	-	-	-	-	-	-	-	-	200 U	190	190 U	61 J	58 J
Isophorone	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Methylnaphthalene, 2-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Naphthalene	µg/kg	100,000$_{b}^{AB}$ 12,000^{C}	12,000^{DE}	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Nitroaniline, 2-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
Nitroaniline, 3-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
Nitroaniline, 4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
Nitrobenzene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Nitrophenol, 2-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Nitrophenol, 4-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U	370 U	360 U	380 U	410 U
N-Nitrosodi-n-Propylamine	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
n-Nitrosodiphenylamine	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Pentachlorophenol	µg/kg	6,700^{A} 2,400^{B} 800$_{f}^{C}$	n/v	-	-	-	-	-	-	-	-	-	380 U *	370 U *	360 U	380 U *	410 U *
Phenanthrene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	100,000^{E}	-	-	-	-	-	-	-	-	-	200 U	160 J	190 U	60 J	52 J
Phenol	µg/kg	100,000$_{b}^{AB}$ 330$_{f}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Pyrene	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	100,000^{E}	-	-	-	-	-	-	-	-	-	200 U	360	190 U	100 J	100 J
Trichlorophenol, 2,4,5-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
Trichlorophenol, 2,4,6-	µg/kg	100,000$_{b}^{AB}$ 1,000,000$_{d}^{C}$	n/v	-	-	-	-	-	-	-	-	-	200 U	190 U	190 U	200 U	210 U
SVOC - Tentatively Identified Compounds																	
Total SVOC TICs	µg/kg	n/v	n/v	-	-	-	-	-	-	-	-	-	ND	700 TJ	10,330 TJ	2,490 TJ	6,770 TJN

See notes on last page

Table 1
Summary of Excavation Confirmatory Soil Sample Analyses
121-123 Reynolds St., Rochester, NY
City of Rochester

Sample Location				North Sidewall Confirmatory		14' South of plume boundary	PLUME-WSIDEWALL-02	SE Corner Confirmatory			South Sidewall Confirmatory		URBAN-ESIDEWALL-01	URBAN-FLOOR-01	URBAN-FLOOR-03	URBAN-NSIDEWALL-01	URBAN-NSIDEWALL-03
Sample Date				13-Jul-20	13-Jul-20	9-Jul-20	28-Jul-20	17-Jul-20	17-Jul-20	17-Jul-20	15-Jul-20	14-Jul-20	21-Jul-20	21-Jul-20	28-Jul-20	21-Jul-20	21-Jul-20
Sample ID				UST-NSIDEWALL-C	UST-NSIDEWALL-01	PLUME-ESIDEWALL-01	PLUME-WSIDEWALL-02	PLUME-SESIDEWALL-01	PLUME-WSIDEWALL-01 DUP	PLUME-WSIDEWALL-01	PLUME-SSIDEWALL-C	PLUME-SSIDEWALL-01	URBAN-ESIDEWALL-01	URBAN-FLOOR-01	URBAN-FLOOR03	URBAN-NSIDEWALL-01	URBAN-NSIDEWALL-03
Sample Depth				5 ft	8 ft	7.5 ft	8 ft	8 ft	9 ft	9 ft	5 ft	8 ft	3.5 ft	4 ft	4 ft	3.5 ft	3.5 ft
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				ERF	ERF	ERF	TALBU	ERF	ERF	ERF	ERF	ERF	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order				480-172301-1	480-172301-1	460-213025-1	480-173074-2	480-172578-1	480-172578-1	480-172578-1	480-172462-1	480-172398-1	480-172688-1	480-172688-1	480-173074-2	480-172688-1	480-172688-1
Laboratory Sample ID				480-172301-2	480-172301-1	460-213025-2	480-173074-3	480-172578-3	480-172578-2	480-172578-1	480-172462-1	480-172398-3	480-172688-1	480-172688-5	480-173074-8	480-172688-2	480-172688-4
Sample Type	Units	NYSDEC-Part 375	NYSDEC CP-51	Initial	Initial	Initial	Initial	Initial	Field Duplicate Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial
Volatile Organic Compounds																	
Acetone	µg/kg	$100,000_{b}^{AB}$ 50^{C}	n/v	28 U vs	***130 U vs***	6.2 U	28 U vs	***140 U vs***	30 U vs	29 UJ	27 U vsF1	28 U vs	-	-	-	-	-
Benzene	µg/kg	$4,800^{A}$ $2,900^{B}$ 60^{C}	60^{DE}	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Bromodichloromethane	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Bromoform (Tribromomethane)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Butylbenzene, n-	µg/kg	$100,000_{b}^{AB}$ $12,000^{C}$	$12,000^{DE}$	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Butylbenzene, sec- (2-Phenylbutane)	µg/kg	$100,000_{b}^{AB}$ $11,000^{C}$	$11,000^{DE}$	5.6 U vs	26 U vs	0.89 J	5.5 U vs	31 vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Butylbenzene, tert-	µg/kg	$100,000_{b}^{AB}$ $5,900^{C}$	$5,900^{DE}$	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Carbon Disulfide	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	0.44 J	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$2,400^{A}$ $1,400^{B}$ 760^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Chlorobenzene (Monochlorobenzene)	µg/kg	$100,000_{b}^{AB}$ $1,100^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	$49,000^{A}$ $10,000^{B}$ 370^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Chloromethane	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Cyclohexane	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vsF1	5.7 U vs	-	-	-	-	-
Dibromochloromethane	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/kg	$100,000_{b}^{AB}$ $1,100^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	$49,000^{A}$ $17,000^{B}$ $2,400^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	$13,000^{A}$ $9,800^{B}$ $1,800^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloroethane, 1,1-	µg/kg	$26,000^{A}$ $19,000^{B}$ 270^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloroethane, 1,2-	µg/kg	$3,100^{A}$ $2,300^{B}$ 20_{g}^{C}	n/v	5.6 U vs	***26 U vs***	1.0 U	5.5 U vs	***29 U vs***	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloroethene, 1,1-	µg/kg	$100,000_{b}^{AB}$ 330^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloroethene, cis-1,2-	µg/kg	$100,000_{b}^{A}$ $59,000^{B}$ 250^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloroethene, trans-1,2-	µg/kg	$100,000_{b}^{AB}$ 190^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloropropane, 1,2-	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Dichloropropene, trans-1,3-	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Ethylbenzene	µg/kg	$41,000^{A}$ $30,000^{B}$ $1,000^{C}$	$1,000^{DE}$	5.6 U vs	6.2 Jvs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 UJ	5.7 U vs	-	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	28 U vs	22 Jvs	5.1 U	28 U vs	140 U vs	30 U vs	29 U F1vs	27 U vs	28 U vs	-	-	-	-	-
Isopropylbenzene	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	$2,300^{DE}$	5.6 U vs	13 Jvs	0.22 J	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Isopropyltoluene, p- (Cymene)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	$10,000^{DE}$	5.6 U vs	26 vs	1.7	5.5 U vs	33 vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Methyl Acetate	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	28 U vs	130 U vs	5.1 U	28 U vs	140 U vs	30 U vs	29 U F1vs	27 U vs	28 U vs	-	-	-	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/kg	$100,000_{b}^{AB}$ 120^{C}	n/v	28 U vs	***130 U vs***	5.1 U	28 U vs	***140 U vs***	30 U vs	29 UJ	27 UJ	28 U vs	-	-	-	-	-
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	28 U vs	130 U vs	5.1 U	28 U vs	140 U vs	30 U vs	29 U F1vs	27 U vsF1	28 U vs	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	µg/kg	$100,000_{b}^{A}$ $62,000^{B}$ 930^{C}	930^{D}	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Methylcyclohexane	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	11 Jvs	1.0 U	5.5 U vs	15 Jvs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/kg	$100,000_{b}^{A}$ $51,000^{B}$ 50^{C}	n/v	5.6 U vs	26 U vs	0.59 J	8.9 vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Naphthalene	µg/kg	$100,000_{b}^{AB}$ $12,000^{C}$	$12,000^{DE}$	5.6 U vs	160 vs	1.5 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Propylbenzene, n-	µg/kg	$100,000_{b}^{AB}$ $3,900^{C}$	$3,900^{DE}$	5.6 U vs	52 vs	0.22 J	5.5 U vs	9.5 Jvs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Styrene	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	7.2 Jvs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U F1vs	5.3 UJ	5.7 U vs	-	-	-	-	-
Tetrachloroethene (PCE)	µg/kg	$19,000^{A}$ $5,500^{B}$ $1,300^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Toluene	µg/kg	$100,000_{b}^{AB}$ 700^{C}	700^{DE}	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/kg	$100,000_{b}^{AB}$ 680^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trichloroethane, 1,1,2-	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 UJ	5.7 U vs	-	-	-	-	-
Trichloroethene (TCE)	µg/kg	$21,000^{A}$ $10,000^{B}$ 470^{C}	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100,000_{b}^{AB}$ $1,000,000_{d}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trimethylbenzene, 1,2,4-	µg/kg	$52,000^{A}$ $47,000^{B}$ $3,600^{C}$	$3,600^{DE}$	5.6 U vs	510 vs	0.74 J	5.5 U vs	31 vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/kg	$52,000^{A}$ $47,000^{B}$ $8,400^{C}$	$8,400^{DE}$	5.6 U vs	140 vs	0.30 J	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Vinyl Chloride	µg/kg	900^{A} 210^{B} 20^{C}	n/v	5.6 U vs	***26 U vs***	1.0 U	5.5 U vs	***29 U vs***	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Xylene, m & p-	µg/kg	$100,000_{b,p}^{AB}$ $1,600_{p}^{C}$	n/v	11 U vs	29 Jvs	1.0 U	11 U vs	57 U vs	12 U vs	11 U vs	11 U vs	11 U vs	-	-	-	-	-
Xylene, o-	µg/kg	$100,000_{b,p}^{AB}$ $1,600_{p}^{C}$	n/v	5.6 U vs	26 U vs	1.0 U	5.5 U vs	29 U vs	6.0 U vs	5.7 U vs	5.3 U vs	5.7 U vs	-	-	-	-	-
Xylenes, Total	µg/kg	$100,000_{b}^{AB}$ $1,600^{C}$	260^{DE}	11 U vs	29 Jvs	2.1 U	11 U vs	57 U vs	12 U vs	11 U vs	11 U vs	11 U vs	-	-	-	-	-
VOC - Tentatively Identified Compounds																	
Total VOC TICs	µg/kg	n/v	n/v	ND	3,270 TJN	223 TJN	-	4,070 TJN	ND	ND	ND	ND	-	-	-	-	-

See notes on last page

Table 1
Summary of Excavation Confirmatory Soil Sample Analyses
121-123 Reynolds St., Rochester, NY
City of Rochester

Sample Location				URBAN-NSIDEWALL-04	URBAN-SSIDEWALL-02	URBAN-SSIDEWALL-03	URBAN-WSIDEWALL-01	URBAN-WSIDEWALL-02	UST Source Area	12.5' South of Sidewalk, 7.5' down	27' South of Sidewalk	West Sidewall Confirmatory		
Sample Date				28-Jul-20	28-Jul-20	5-Aug-20	28-Jul-20	28-Jul-20	23-Jul-20	8-Jul-20	9-Jul-20	14-Jul-20	14-Jul-20	15-Jul-20
Sample ID				URBAN-NSIDEWALL-04	URBAN-SSIDEWALL-02	URBAN-SSIDEWALL-03	URBAN-WSIDEWALL-01	URBAN-WSIDEWALL-02	ESIDEWALL - C	UST-ESIDEWALL-01	UST-ESIDEWALL-02	UST-WSIDEWALL-01	UST-WSIDEWALL-DUP	UST-WSIDEWALL-02
Sample Depth				4 ft	3.8 ft	3.8 ft	3.5 ft	3.8 ft	5 ft	7.5 ft	7 ft	9 ft	9 ft	10 ft
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	ERF	ERF	ERF	ERF	ERF
Laboratory Work Order				480-173074-1	480-173074-2	480-173445-1	480-173074-1	480-173074-1	480-172912-1	480-172151-1	460-213025-1	480-172398-1	480-172398-1	480-172462-1
Laboratory Sample ID				480-173074-4	480-173074-7	480-173445-1	480-173074-1	480-173074-2	480-172912-1	480-172151-1	460-213025-1	480-172398-1	480-172398-2	480-172462-2
Sample Type	Units	NYSDEC-Part 375	NYSDEC CP-51	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Field Duplicate Initial	Initial
Metals														
Lead	mg/kg	400^{AB} 450^{C}	n/v	10.7	13.4	8.4	24.1	5.4	-	-	-	-	-	-
Semi-Volatile Organic Compounds														
Acenaphthene	µg/kg	$100,000_b^{AB}$ $98,000^{C}$	$20,000^{E}$	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Acenaphthylene	µg/kg	$100,000_b^{AB}$ $107,000^{C}$	$100,000^{E}$	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Acetophenone	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Anthracene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	$100,000^{E}$	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Atrazine	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U F2	200 U	-	-	-	-	-	-
Benzaldehyde	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	$1,000_a^{ABC}$	$1,000^{E}$	190 U	250	190 U	190 U	200 U	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	$1,000_a^{AB}$ $22,000^{C}$	$1,000^{E}$	190 U	250	45 J	190 U	200 U	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	$1,000_a^{AB}$ $1,700^{C}$	$1,000^{E}$	190 U	360	62 J	190 U	200 U	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	$100,000^{E}$	190 U	200	28 J	190 U	200 U	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	$3,900^{A}$ $1,000^{B}$ $1,700^{C}$	800^{E}	190 U	150 J	27 J	190 U	200 U	-	-	-	-	-	-
Biphenyl	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Bis(2-Chloroethoxy)methane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Bis(2-Chloroethyl)ether	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Bromophenyl Phenyl Ether, 4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Butyl Benzyl Phthalate	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Caprolactam	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Carbazole	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	61 J	190 U	190 U	200 U	-	-	-	-	-	-
Chloro-3-methyl phenol, 4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Chloroaniline, 4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 UJ	200 U	-	-	-	-	-	-
Chloronaphthalene, 2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 U	380 U	-	-	-	-	-	-
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Chrysene	µg/kg	$3,900^{A}$ $1,000_a^{BC}$	$1,000^{E}$	190 U	300	59 J	190 U	200 U	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/kg	$100,000_b^{AB}$ 330_f^{C}	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Cresol, p- (Methylphenol, 4-)	µg/kg	$100,000_b^{A}$ $34,000^{B}$ 330_f^{C}	n/v	***370 U***	***370 U***	***360 U***	***360 U***	***380 U***	-	-	-	-	-	-
Dibenzo(a,h)anthracene	µg/kg	330_f^{AB} $1,000,000_d^{C}$	330^{E}	190 U	47 J	190 U	190 U	200 U	-	-	-	-	-	-
Dibenzofuran	µg/kg	$59,000^{A}$ $14,000^{B}$ $210,000^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Dibutyl Phthalate (DBP)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Dichlorobenzidine, 3,3'-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 U F2	380 U	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Diethyl Phthalate	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Dimethyl Phthalate	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 U F2	380 U	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	1,900 U	1,900 U	1,800 U	1,800 U F2	1,900 U	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Di-n-Octyl phthalate	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Fluoranthene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	$100,000^{E}$	190 U	590	100 J	190 U	200 U	-	-	-	-	-	-
Fluorene	µg/kg	$100,000_b^{AB}$ $386,000^{C}$	$30,000^{E}$	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Hexachlorobenzene	µg/kg	$1,200^{A}$ 330_f^{B} $3,200^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Hexachlorocyclopentadiene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U F1	200 U	-	-	-	-	-	-
Hexachloroethane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	500_a^{AB} $8,200^{C}$	500^{E}	190 U	180 J	32 J	190 U	200 U	-	-	-	-	-	-
Isophorone	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Methylnaphthalene, 2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Naphthalene	µg/kg	$100,000_b^{AB}$ $12,000^{C}$	$12,000^{DE}$	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Nitroaniline, 2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 U	380 U	-	-	-	-	-	-
Nitroaniline, 3-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 UJ	380 U	-	-	-	-	-	-
Nitroaniline, 4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 U F2	380 U	-	-	-	-	-	-
Nitrobenzene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Nitrophenol, 2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Nitrophenol, 4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	370 U	370 U	360 U	360 U	380 U	-	-	-	-	-	-
N-Nitrosodi-n-Propylamine	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Pentachlorophenol	µg/kg	$6,700^{A}$ $2,400^{B}$ 800_f^{C}	n/v	370 U	370 U	360 U	360 U	380 U	-	-	-	-	-	-
Phenanthrene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	$100,000^{E}$	190 U	220	190 U	190 U	200 U	-	-	-	-	-	-
Phenol	µg/kg	$100,000_b^{AB}$ 330_f^{C}	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Pyrene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	$100,000^{E}$	190 U	410	61 J	190 U	200 U	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^{C}$	n/v	190 U	190 U	190 U	190 U	200 U	-	-	-	-	-	-
SVOC - Tentatively Identified Compounds														
Total SVOC TICs	µg/kg	n/v	n/v	ND	520 TJN	ND	ND	ND	-	-	-	-	-	-

See notes on last page

Table 1
Summary of Excavation Confirmatory Soil Sample Analyses
121-123 Reynolds St., Rochester, NY
City of Rochester

Sample Location				URBAN-NSIDEWALL-04	URBAN-SSIDEWALL-02	URBAN-SSIDEWALL-03	URBAN-WSIDEWALL-01	URBAN-WSIDEWALL-02	UST Source Area	12.5' South of Sidewalk, 7.5' down	27' South of Sidewalk	West Sidewall Confirmatory		
Sample Date				28-Jul-20	28-Jul-20	5-Aug-20	28-Jul-20	28-Jul-20	23-Jul-20	8-Jul-20	9-Jul-20	14-Jul-20	14-Jul-20	15-Jul-20
Sample ID				URBAN-NSIDEWALL-04	URBAN-SSIDEWALL-02	URBAN-SSIDEWALL-03	URBAN-WSIDEWALL-01	URBAN-WSIDEWALL-02	ESIDEWALL - C	UST-ESIDEWALL-01	UST-ESIDEWALL-02	UST-WSIDEWALL-01	UST-WSIDEWALL-DUP	UST-WSIDEWALL-02
Sample Depth				4 ft	3.8 ft	3.8 ft	3.5 ft	3.8 ft	5 ft	7.5 ft	7 ft	9 ft	9 ft	10 ft
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	ERF	ERF	ERF	ERF	ERF
Laboratory Work Order				480-173074-1	480-173074-2	480-173445-1	480-173074-1	480-173074-1	480-172912-1	480-172151-1	460-213025-1	480-172398-1	480-172398-1	480-172462-1
Laboratory Sample ID				480-173074-4	480-173074-7	480-173445-1	480-173074-1	480-173074-2	480-172912-1	480-172151-1	460-213025-1	480-172398-1	480-172398-2	480-172462-2
Sample Type	Units	NYSDEC-Part 375	NYSDEC CP-51	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Initial	Field Duplicate Initial	Initial
Volatile Organic Compounds														
Acetone	µg/kg	$100,000_b^{AB}$ 50^C	n/v	-	-	-	-	-	30 U vs	13 Jvs	12	30 UJ	28 U vs	28 U vs
Benzene	µg/kg	$4,800^A$ $2,900^B$ 60^C	60^{DE}	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Bromodichloromethane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Bromoform (Tribromomethane)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Bromomethane (Methyl bromide)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Butylbenzene, n-	µg/kg	$100,000_b^{AB}$ $12,000^C$	$12,000^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	2.2	5.9 U vs	5.7 U vs	5.5 U vs
Butylbenzene, sec- (2-Phenylbutane)	µg/kg	$100,000_b^{AB}$ $11,000^C$	$11,000^{DE}$	-	-	-	-	-	5.9 U vs	1.3 Jvs	6.3	5.9 U vs	5.7 U vs	5.5 U vs
Butylbenzene, tert-	µg/kg	$100,000_b^{AB}$ $5,900^C$	$5,900^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	1.3	5.9 U vs	5.7 U vs	5.5 U vs
Carbon Disulfide	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	0.42 J	5.9 U vs	5.7 U vs	5.5 U vs
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$2,400^A$ $1,400^B$ 760^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Chlorobenzene (Monochlorobenzene)	µg/kg	$100,000_b^{AB}$ $1,100^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Chloroethane (Ethyl Chloride)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Chloroform (Trichloromethane)	µg/kg	$49,000^A$ $10,000^B$ 370^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Chloromethane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	U F2 F1 vs 5.5	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Cyclohexane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.2	5.9 U vs	5.7 U vs	5.5 U vs
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9	5.7 U vs	5.5 U vs
Dibromochloromethane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vsF1	5.7 U vs	5.5 U vs
Dichlorobenzene, 1,2-	µg/kg	$100,000_b^{AB}$ $1,100^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichlorobenzene, 1,3-	µg/kg	$49,000^A$ $17,000^B$ $2,400^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichlorobenzene, 1,4-	µg/kg	$13,000^A$ $9,800^B$ $1,800^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichlorodifluoromethane (Freon 12)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloroethane, 1,1-	µg/kg	$26,000^A$ $19,000^B$ 270^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloroethane, 1,2-	µg/kg	$3,100^A$ $2,300^B$ 20_g^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vsF1	5.7 U vs	5.5 U vs
Dichloroethene, 1,1-	µg/kg	$100,000_b^{AB}$ 330^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloroethene, cis-1,2-	µg/kg	$100,000_b^A$ $59,000^B$ 250^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloroethene, trans-1,2-	µg/kg	$100,000_b^{AB}$ 190^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloropropane, 1,2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloropropene, cis-1,3-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Dichloropropene, trans-1,3-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Ethylbenzene	µg/kg	$41,000^A$ $30,000^B$ $1,000^C$	$1,000^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	0.86 J	5.9 U vs	5.7 U vs	5.5 U vs
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 UJ	1.1 U	5.9 UJ	5.7 U vs	5.5 U vs
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	30 U vs	28 U *vs	5.4 U	30 UJ	28 U vs	28 U vs
Isopropylbenzene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	$2,300^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	6.0	5.9 U vs	5.7 U vs	5.5 U vs
Isopropyltoluene, p- (Cymene)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	$10,000^{DE}$	-	-	-	-	-	5.9 U vs	1.6 Jvs	3.2	5.9 U vs	5.7 U vs	5.5 U vs
Methyl Acetate	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	30 U vs	28 U vs	5.4 U	30 U vsF1	28 U vs	28 U vs
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/kg	$100,000_b^{AB}$ 120^C	n/v	-	-	-	-	-	30 U vs	28 U vs	5.4 U	30 UJ	28 U vs	28 U vs
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	30 U vs	28 U vs	5.4 U	30 UJ	28 U vs	28 U vs
Methyl tert-butyl ether (MTBE)	µg/kg	$100,000_b^A$ $62,000^B$ 930^C	930^D	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Methylcyclohexane	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	11	5.9 U vs	5.7 U vs	5.5 U vs
Methylene Chloride (Dichloromethane)	µg/kg	$100,000_b^A$ $51,000^B$ 50^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	0.53 J	5.9 U vs	5.7 U vs	5.5 U vs
Naphthalene	µg/kg	$100,000_b^{AB}$ $12,000^C$	$12,000^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	3.7	5.9 U vs	5.7 U vs	5.5 U vs
Propylbenzene, n-	µg/kg	$100,000_b^{AB}$ $3,900^C$	$3,900^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	11	5.9 U vs	5.7 U vs	5.5 U vs
Styrene	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Tetrachloroethane, 1,1,2,2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 UJ	1.1 U	5.9 UJ	5.7 U vs	5.5 U vs
Tetrachloroethene (PCE)	µg/kg	$19,000^A$ $5,500^B$ $1,300^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Toluene	µg/kg	$100,000_b^{AB}$ 700^C	700^{DE}	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trichlorobenzene, 1,2,4-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trichloroethane, 1,1,1-	µg/kg	$100,000_b^{AB}$ 680^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trichloroethane, 1,1,2-	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U F1vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trichloroethene (TCE)	µg/kg	$21,000^A$ $10,000^B$ 470^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trichlorofluoromethane (Freon 11)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100,000_b^{AB}$ $1,000,000_d^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Trimethylbenzene, 1,2,4-	µg/kg	$52,000^A$ $47,000^B$ $3,600^C$	$3,600^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	59	1.1 Jvs	5.7 U vs	5.5 U vs
Trimethylbenzene, 1,3,5-	µg/kg	$52,000^A$ $47,000^B$ $8,400^C$	$8,400^{DE}$	-	-	-	-	-	5.9 U vs	5.5 U vs	19	0.43 Jvs	5.7 U vs	5.5 U vs
Vinyl Chloride	µg/kg	900^A 210^B 20^C	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	1.1 U	5.9 U vs	5.7 U vs	5.5 U vs
Xylene, m & p-	µg/kg	$100,000_{b,p}^{AB}$ $1,600_p^C$	n/v	-	-	-	-	-	12 U vs	11 U vs	6.8	12 U vs	11 U vs	11 U vs
Xylene, o-	µg/kg	$100,000_{b,p}^{AB}$ $1,600_p^C$	n/v	-	-	-	-	-	5.9 U vs	5.5 U vs	0.26 J	5.9 U vs	5.7 U vs	5.5 U vs
Xylenes, Total	µg/kg	$100,000_b^{AB}$ $1,600^C$	260^{DE}	-	-	-	-	-	12 U vs	11 U vs	7.0	12 U vs	11 U vs	11 U vs
VOC - Tentatively Identified Compounds														
Total VOC TICs	µg/kg	n/v	n/v	-	-	-	-	-	100.6 TJ	139 TJN	1,324 TJN	ND	ND	ND

See notes on last page

Table 1
Summary of Excavation Confirmatory Soil Sample Analyses
121-123 Reynolds St., Rochester, NY
City of Rochester

Notes:

NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use Soil Cleanup Objectives - Protection of Human Health - Residential
C	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
NYSDEC CP-51	New York State Department of Environmental Conservation, DEC Policy CP-51, October 21, 2010
D	Table 2 Soil Cleanup Levels for Gasoline Contaminated Soils
E	Table 3 Soil Cleanup Levels for Fuel Oil Contaminated Soil
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_{b}^{AB}$	The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
$_{b,p}^{AB}$	The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3. The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
$_{f}^{ABC}$	For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
$_{g}^{ABC}$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
$_{p}^{C}$	The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
*	Indicates analysis is not within the quality control limits.
J	The reported result is an estimated value.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits.
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.
ERF	Eurofins TestAmerica

Table 2
Summary of Groundwater Field Parameters
121-123 Reynolds Street Remediation
City of Rochester

	Sample Location	Sump 1 - North				Sump 2 - South				MW-4			
	Purge Date	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21
	Purge Method	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Bailer	Bailer	Bailer	Bailer
	Sample Date	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21
	Sampling Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
Field Parameters	**Units**												
Conductivity	mS/cm	2.01	3.85	3.38	3.27	2.94	3.75	3.395	3.33	1.87	2.84	2.608	3.14
Dissolved Oxygen	mg/L	7.31	3.61	6.70	4.88	6.69	6.04	4.84	2.22	3.44	4.84	4.41	1.98
Oxidation Reduction Potential	mV	-62.5	204.4	100.5	32.9	58.8	175.0	57.2	92.2	-49.0	-38.5	-24.5	-57.3
pH	S.U.	6.90	7.07	7.08	7.37	6.74	7.04	7.09	7.18	6.93	7.02	6.74	7.24
Temperature	deg C	17.5	10.7	11.1	15.5	17.5	10.5	11.3	15.9	15.6	10.8	9.9	15.9
Volume Purged	gal	65	78	90	75	46	65	75	65	2	2.6	4.5	2.5

Table 3
Summary of Groundwater Analyses
121-123 Reynolds St., Rochester, NY
City of Rochester

Sample Location			MW4				SUMP1					SUMP2				TRIP BLANK			
Sample Date			1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21	1-Oct-20	14-Jan-21	20-Apr-21	15-Jul-21
Sample ID			MW4-01	MW-4-Q2	MW-4-Q3	MW-4-Q4	SUMP1-01	SUMP1-NORTH-Q2	SUMP1-NORTH-Q3	SUMP1-NORTH-Q4	GW-DUP	SUMP2-01	SUMP2-SOUTH-Q2	SUMP2-SOUTH-Q3	SUMP2-SOUTH-Q4	Trip Blank T1009	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	ERF	ERF	TALBU	PARAROCH	ERF	ERF	TALBU	TALBU	PARAROCH	ERF	ERF	TALBU	PARAROCH	ERF	ERF	TALBU
Laboratory Work Order			204662	480-180265-1	480-183642-1	480-187354-1	204662	480-180265-1	480-183642-1	480-187354-1	480-187354-1	204662	480-180265-1	480-183642-1	480-187354-1	204662	480-180265-1	480-183642-1	480-187354-1
Laboratory Sample ID			204662-03	480-180265-3	480-183642-3	480-187354-3	204662-01	480-180265-1	480-183642-1	480-187354-1	480-187354-4	204662-02	480-180265-2	480-183642-2	480-187354-2	204662-04	480-180265-4	480-183642-4	480-187354-5
Sample Type	Units	TOGS									Field Duplicate					Trip Blank	Trip Blank	Trip Blank	Trip Blank
Volatile Organic Compounds																			
Benzene	µg/L	1^{B}	**1.77^{B}**	1.0 U	0.50 J	1.0 U	**1.43^{B}**	1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.0 U	1.0 U	1.0 U F1	1.00 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Butylbenzene, sec- (2-Phenylbutane)	µg/L	5_{**}^{B}	2.00 U	2.1	0.90 J	1.1	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U F1	2.00 U	1.0 U	1.0 U	1.0 U
Butylbenzene, tert-	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U F1	2.00 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	**9.62^{B}**	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	µg/L	5_{**}^{B}	1.24 J	0.46 J	1.0 U	1.0 U	2.31	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Isopropyltoluene, p- (Cymene)	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U F1	2.00 U	1.0 U	1.0 U	1.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10^{A}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10^{B}	5.00 U	1.0 U	1.0 U	1.0 U	5.00 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	1.0 U	1.0 U	1.0 U	5.00 U	1.0 U	1.0 U	1.0 U
Propylbenzene, n-	µg/L	5_{**}^{B}	1.54 J	0.51 J	1.0 U	1.0 U	3.32	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Trimethylbenzene, 1,2,4-	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	**19.3^{B}**	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Trimethylbenzene, 1,3,5-	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5_{**}^{B}	2.00 U	1.0 U	2.0 U	2.0 U	2.00 U	1.0 U	2.0 U	2.0 U	2.0 U	2.00 U	1.0 U	2.0 U	2.0 U F1	2.00 U	1.0 U	2.0 U	2.0 U
Xylene, o-	µg/L	5_{**}^{B}	2.00 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U	1.0 U	2.00 U	1.0 U	1.0 U	1.0 U F1	2.00 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	µg/L	5_{**}^{B}	-	2.0 U	2.0 U	2.0 U	-	2.0 U	2.0 U	2.0 U	2.0 U	-	2.0 U	2.0 U	2.0 U F1	-	2.0 U	2.0 U	2.0 U

Notes:

TOGS	NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
A	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
B	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
**	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
p	Applies to the sum of cis- and trans-1,3-dichloropropene.
F1	MS and/or MSD recovery exceeds control limits.
J	The reported result is an estimated value.

APPENDIX A

Historical Soil and Groundwater Analytical Results from Day Environmental Phase II ESA (January 11, 2016)

Sample ID	Collection Date	Depth (ft)	Composite or Grab	PID Reading (PPM)	Matrix	Analytical Test Parameters
001-TB-1(5-8)	9/24/2015	5-8	Grab	0.0	Soil	STARS/CP-51 VOC
002-TB-2(5-8.2)	9/24/2015	5-8.2	Grab	1.4	Soil	STARS/CP-51 VOC, STARS/CP-51 SVOC
003-TB-3(5-8.5)	9/24/2015	5-8.5	Grab	0.0	Soil	STARS/CP-51 VOC
004-TB-4(5-9)	9/24/2015	5-9	Grab	0	Soil	STARS/CP-51 VOC
005-TB-5(4-8)	9/24/2015	4-8	Grab	1435	Soil	STARS/CP-51 VOC, STARS/CP-51 SVOC, RCRA Metal
006-TB-6(8-8.8)	9/24/2015	8-8.8	Grab	0.0	Soil	STARS/CP-51 VOC
007-TB-7(0-4)	9/24/2015	0-4	Grab	0.0	Soil	RCRA Metal, TCLP Metal
008-TB-7(8-9.7)	9/24/2015	8-9.7	Grab	249	Soil	STARS/CP-51 VOC, STARS/CP-51 SVOC
009-TB-8(0-4)	9/24/2015	0-4	Grab	0.0	Soil	STARS/CP-51 SVOC, RCRA Metal, TCLP Metal
010-TB-8(8-9.7)	9/24/2015	8-9.7	Grab	0.0	Soil	STARS/CP-51 VOC
011-TB-9(8-9.7)	9/24/2015	8-9.7	Grab	0.0	Soil	STARS/CP-51 VOC
012-TB-10(8-9.5)	9/24/2015	8-9.5	Grab	0.0	Soil	STARS/CP-51 VOC
013-TB-11(0-4)	9/24/2015	0-4	Grab	0.0	Soil	STARS/CP-51 SVOC, RCRA Metal
014-TB-11(8-9.2)	9/24/2015	8-9.2	Grab	0.0	Soil	STARS/CP-51 VOC
015-TB-12(8-8.8)	9/24/2015	8-8.8	Grab	696	Soil	STARS/CP-51 VOC
016-TB-13(4-8)	9/24/2015	4-8	Grab	201	Soil	STARS/CP-51 SVOC, RCRA Metal
017-TB-13(8-9.2)	9/24/2015	8-9.2	Grab	241	Soil	STARS/CP-51 VOC
018-TB-14(8-9.4)	9/24/2015	8-9.4	Grab	0.0	Soil	STARS/CP-51 VOC
019-TB-15(0-4)	9/24/2015	0-4	Grab	0.0	Soil	RCRA Metal
020-TB-15(4-8)	9/24/2015	4-8	Grab	2.9	Soil	STARS/CP-51 VOC
021-TB-16(8-9.8)	9/24/2015	8-9.8	Grab	0.0	Soil	STARS/CP-51 VOC
022-MW-2(8-9.4)	10/7/2015	8-9.4	Grab	152	Soil	STARS/CP-51 VOC
023-MW-3 (8-8.8)	10/7/2015	8-8.8	Grab	1659	Soil	STARS/CP-51 VOC
024-MW-4(9)	10/6/2015	9	Grab	0.0	Soil	STARS/CP-51 VOC
025-IDW1(Soil)	10/7/2015	NA	Composite	NA	Soil	TCLP Metal, Flash
026-MW-1	10/23/2015	NA	Grab	NA	Groundwater	TCL + STARS/CP-51 VOC
027-MW-2	10/23/2015	NA	Grab	NA	Groundwater	TCL + STARS/CP-51 VOC
028-MW-3	10/23/2015	NA	Grab	NA	Groundwater	TCL + STARS/CP-51 VOC
029-MW-4	10/23/2015	NA	Grab	NA	Groundwater	TCL + STARS/CP-51 VOC
030-IDW2(water)	10/23/2015	NA	Grab	NA	Water	Purgeable Organic VOC/SVOC

VOC = Volatile Organic Compounds via USEPA Method 8260
SVOC = Semi-Volatile Organic Compounds via USEPA Method 8270
RCRA Metal = Resource Conservation and Recovery Act total metals via USEPA Methods 6010 and 7471
TCLP Metal = Toxicity Characteristic Leaching Procedure metals via USEPA Methods 1311, 6010 and 7470
Flash = Flashpoint via USEPA Method 1030
USEPA = United States Environmental Protection Agency
NYSDEC - New York State Department of Environmental Conservation
STARS= NYSDEC Spill Technology and Remediation Series list
CP-51 = NYSDEC Commissioner's Policy 51 list
TCL = USEPA Target Compound List
NA = Not Applicable
Purgeable Organic VOC/SVOC = Purgeable Organic VOCs via USEPA Method 624/SVOCs via USEPA Method 625

Well ID	Elevation of PVC Well Casing (FT)	Static Water Level (SWL) Measurement (FT)	Groundwater Elevation (FT)
MW-1	529.20	7.89	521.31
MW-2	529.20	9.52	519.68
MW-3	528.70	9.04	519.66
MW-4	529.10	9.38	519.72

Detected Compound	A Protection of Groundwater SCO [1]	B Residential SCO [1]	C Restricted Residential SCO[1]	D SCL[2]	001 TB-1 5-8 09/24/2015	002 TB-2 5-8.2 09/24/2015	003 TB-3 5-8.5 09/24/2015	004 TB-4 5-9 09/24/2015	005 TB-5 4-8 09/24/2015	006 TB-6 8-8.8 09/24/2015	008 TB-7 8-9.7 09/24/2015
Benzene	0.06	2.9	4.8	0.06	U	U	U	U	U	U	U
Toluene	0.7	100	100	0.7	U	U	U	U	U	U	U
Ethylbenzene	1	30	41	1	U	U	U	U	**3.8** D **AD**	U	0.0242
Xylene (mixed)	1.6	100	100	0.26	U	U	U	U	**16.1382** D **AD**	U	0.0035 J
Isopropylbenzene	2.3	100	NA	2.3	U	U	U	U	1.6 D	U	0.0238
n-Propylbenzene	3.9	100	100	3.9	U	0.0019 J	U	U	**6.1** D **AD**	U	0.0552
1,3,5- Trimethylbenzene	8.4	47	52	8.4	U	U	U	U	**13.5** D **AD**	U	0.0157
tert-Butylbenzene	5.9	100	100	5.9	U	U	U	U	0.0108	U	0.003 J
1,2,4-Trimethylbenzene	3.6	47	52	3.6	U	U	U	U	**49.2** D **ABD**	U	0.023
sec-Butylbenzene	11	100	100	11	U	U	U	U	0.11	U	0.0216
p-Isopropyltoluene	10	NA	NA	10	U	U	U	U	1.7 D	U	0.049
n-Butylbenzene	12	100	100	12	U	U	U	U	6.2 D	U	U
TOTAL VOCs	NA	NA	NA	NA	0.0	0.0019	0.0	0.0	98.359	0.0	0.219
Naphthalene	12	100	100	12	U	U	U	U	3.5 D	U	U

U = Not detected

VOC = Volatile Organic Compound

J = Estimated Value

NA = Not available

(1) = Soil Cleanup Objectives (SCO) referenced in 6 NYCRR Part 375 dated 12/14/06

(2) = Soil Cleanup Level (SCL) as referenced in NYSDEC CP-51 / Soil Cleanup Guidance Table 1 dated 10/21/10

A = Exceeds Protection of Groundwater SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds SCL

Detected Compound	A Protection of Groundwater SCO (1)	B Residential SCO (1)	C Restricted Residential SCO(1)	D SCL(2)	010 TB-8 8-9.7 09/24/2015	011 TB-9 8-9.7 09/24/2015	012 TB-10 8-9.5 09/24/2015	014 TB-11 8-9.2 09/24/2015	015 TB-12 8-8.8 09/24/2015	017 TB-13 8-9.2 09/24/2015
Benzene	0.06	2.9	4.8	0.06	U	U	U	U	U	U
Toluene	0.7	100	100	0.7	U	U	U	U	U	0.13 J
Ethylbenzene	1	30	41	1	U	U	U	U	U	U
Xylene (mixed)	1.6	100	100	0.26	U	U	U	U	0.89 J D	7.7 AD
Isopropylbenzene	2.3	100	NA	2.3	U	U	U	U	U	U
n-Propylbenzene	3.9	100	100	3.9	U	U	U	U	U	U
1,3,5- Trimethylbenzene	8.4	47	52	8.4	U	U	U	U	9.7 AD	8.2
tert-Butylbenzene	5.9	100	100	5.9	U	U	U	U	U	U
1,2,4-Trimethylbenzene	3.6	47	52	3.6	U	U	U	U	10.4 AD	25.1 D AD
sec-Butylbenzene	11	100	100	11	U	U	U	U	U	U
p-Isopropyltoluene	10	NA	NA	10	U	U	U	U	4	3.9
n-Butylbenzene	12	100	100	12	U	U	U	U	U	U
TOTAL VOCs	NA	NA	NA	NA	0.0	0.0	0.0	0.0	24.99	45.03
Naphthalene	12	100	100	12	U	U	U	U	U	21.6 D AD

U = Not detected

VOC = Volatile Organic Compound

J = Estimated Value

NA = Not available

(1) = Soil Cleanup Objectives (SCO) referenced in 6 NYCRR Part 375 dated 12/14/06

(2) = Soil Cleanup Level (SCL) as referenced in NYSDEC CP-51 / Soil Cleanup Guidance Table 1 dated 10/21/10

A = Exceeds Protection of Groundwater SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds SCL

Detected Compound	A Protection of Groundwater SCO (1)	B Residential SCO (1)	C Restricted Residential SCO(1)	D SCL(2)	018 TB-14 8-9.4 09/24/2015	020 TB-15 4-8 09/24/2015	021 TB-16 8-9.8 09/24/2015	022 MW-2 8-9.4 10/7/2015	023 MW-3 8-8.8 10/7/2015	024 MW-4 9 10/6/2015
Benzene	0.06	2.9	4.8	0.06	U	U	U	0.049	U	U
Toluene	0.7	100	100	0.7	U	U	U	0.0807	U	U
Ethylbenzene	1	30	41	1	U	U	U	**2** D **AD**	U	U
Xylene (mixed)	1.6	100	100	0.26	U	U	U	**10.1** D **AD**	0.21	U
Isopropylbenzene	2.3	100	NA	2.3	U	U	U	1.1 D	0.0567	U
n-Propylbenzene	3.9	100	100	3.9	U	U	U	2.9 D	0.083	U
1,3,5- Trimethylbenzene	8.4	47	52	8.4	U	U	U	5.2 D	1.9 D	U
tert-Butylbenzene	5.9	100	100	5.9	U	U	U	U	0.0268	U
1,2,4-Trimethylbenzene	3.6	47	52	3.6	U	U	U	**17.8** D **AD**	2.2 D	U
sec-Butylbenzene	11	100	100	11	U	U	U	4.1 D	0.11	U
p-Isopropyltoluene	10	NA	NA	10	U	U	U	2.9 D	1.5 D	U
n-Butylbenzene	12	100	100	12	U	U	U	9.1 D	U	U
TOTAL VOCs	NA	NA	NA	NA	0.0	0.0	0.0	55.3297	6.0865	0.0
Naphthalene	12	100	100	12	0.0098	U	U	**85.4** D **AD**	0.0214	U

U = Not detected

VOC = Volatile Organic Compound

J = Estimated Value

NA = Not available

(1) = Soil Cleanup Objectives (SCO) referenced in 6 NYCRR Part 375 dated 12/14/06

(2) = Soil Cleanup Level (SCL) as referenced in NYSDEC CP-51 / Soil Cleanup Guidance Table 1 dated 10/21/10

A = Exceeds Protection of Groundwater SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds SCL

Detected Compound	A Protection of Groundwater SCO (1)	B Residential SCO (1)	C Restricted Residential SCO(1)	D SCL (2)	002 TB-2 5-8.2 09/24/2015		005 TB-5 4-8 09/24/2015		008 TB-7 8-9.7 09/24/2015		009 TB-8 0-4 09/24/2015		013 TB-11 0-4 09/24/2015		016 TB-13 4-8 09/24/2015	
Acenaphthene	98	100	100	20	U		U		U		0.19 J		U		U	
Phenanthrene	1,000	100	100	100	U		U		U		3.1		0.31 J		32.2 D	
Anthracene	1,000	100	100	100	U		U		U		0.89		0.0817 J		U	
Fluoranthene	1,000	100	100	100	U		U		U		5.2		0.65		0.76	
Pyrene	1,000	100	100	100	U		U		U		4.5		0.51		1.6	
Benzo(a)anthracene	1	1	1	1	U		U		U		**3.6**	**ABCD**	0.32 J		0.17 J	
Chrysene	1	1	3.9	1	U		U		U		**2.7**	**ABD**	0.29 J		0.13 J	
Benzo(b)fluoranthene	1.7	1	1	1	U		U		U		**4**	**ABCD**	0.38		U	
Benzo(k)fluoranthene	1.7	1	3.9	0.8	U		U		U		**2.1**	**ABD**	0.19 J		U	
Benzo(a)pyrene	22	1	1	1	U		U		U		**3.2**	**BCD**	0.27 J		U	
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	0.5	U		U		U		**2**	**BCD**	0.2 J		U	
Dibenzo(a,h) anthracene	1000	0.33	0.33	0.33	U		U		U		**0.5** J	**BCD**	U		U	
Benzo(g,h,i)perylene	1,000	100	100	100	U		U		U		1.9		0.16 J		U	
TOTAL SVOCS	NA	NA	NA	NA	0.0		0.0		0.0		33.88		3.3617		34.86	

U = Not detected SVOC = Semi-Volatile Organic Compound

J = Estimated Value NA = Not available

(1) = Soil Cleanup Objectives (SCO) referenced in 6 NYCRR Part 375 dated 12/14/06.

(2) = Soil Cleanup Level (SCL) as referenced in NYSDEC CP-51 / Soil Cleanup Guidance Table 1 dated 10/21/10

A = Exceeds Protection of Groundwater SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds SCL

Detected Analyte	A Protection of Groundwater SCO (1)	B Residential SCO (1)	C Restricted Residential SCO(1)	005 TB-5 4-8 09/24/2015		007 TB-7 0-4 09/24/2015		009 TB-8 0-4 09/24/2015		013 TB-11 0-4 09/24/2015		016 TB-13 4-8 09/24/2015		019 TB-15 0-4 09/24/2015	
Arsenic	16	16	16	2.29		3.68		4.02		1.57		2.2		1.76	
Barium	820	350	400	42.8 N		86.9 N		140 N		24.5 N		45.1 N		32.9 N	
Cadmium	7.5	2.5	4.3	0.079 J		0.335		1.19		U		0.104 J		U	
Chromium	NA	36	180	5.71		9.5		6.79		4.83		7.28		6.5	
Lead	450	400	400	9.51		**441**	**BC**	**486**	**ABC**	5.5		90.8		12.6	
Mercury	0.73	0.81	0.81	0.133		0.659		0.714		0.166		0.013 J		0.042	
Selenium	4	36	180	U N		U N		U N		U N		U N		U N	
Silver	8.3	36	180	0.621		0.989		0.796		0.536		0.769		0.68	

U = Not detected

N = Spiked sample recovery not within control limits

J = Estimated Value

NA = Not available

(1) = Soil Cleanup Objectives (SCO) Referenced in 6 NYCRR Part 375 dated 12/14/06.

A = Exceeds Protection of Groundwater SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

Detected Analyte	Regulatory Level[1]	007 TB-7 0-4 09/24/2015		009 TB-8 0-4 09/24/2015	
Arsenic	5	U		U	
Barium	100	1.61		1.26	
Cadmium	1	0.0052 J		0.0205 J	
Chromium	5	0.027 J		0.0217 J	
Lead	5	0.269		0.239	
Mercury	0.2	U		U	
Selenium	1	0.125		0.142	
Silver	5	U		U	

U = Not detected

J = Estimated Value

(1) = Regulatory Level (MCL) for characteristic hazardous waste based on toxicity referenced in NYSDEC 6NYCRR Part 371.3(e).

Detected Compound	Groundwater Standard or Guidance Value (1)	026 MW-1 10/23/15		027 MW-2 10/23/15		028 MW-3 10/23/15		029 MW-4 10/23/15	
Benzene	1	3.5	X	7.7	X	2.9	X	2.5	X
Toluene	5	11.5	X	2.2		2.1		0.6 J	
Xylene (mixed)	5	2,317.4 D	X	46.0	X	63.0	X	9.8	X
Isopropylbenzene	5	81.3	X	9.2	X	9.8	X	6.8	X
n-Propylbenzene	5	150	X	15.3	X	14.5	X	11.2	X
1,3,5- Trimethylbenzene	5	300 D	X	15.0	X	28.1	X	2.9	
tert-Butylbenzene	5	1.4		0.54 J		0.82 J		0.56 J	
1,2,4-Trimethylbenzene	5	1,100 D	X	83.2	X	130	X	28.3	X
sec-Butylbenzene	5	9.4	X	6.5	X	5.9	X	6.9	X
p-Isopropyltoluene	5	17	X	4.5		6.0	X	2.7	
Ethylbenzene	5	500 D	X	9.1	X	5.9	X	2.2	
Cyclohexane	NA	260 D		10.5		32.3		5.1	
Methylcyclohexane	NA	270 D		6.2		56.4		3.7	
n-Butylbenzene	5	12.2	X	3.4		3.1		2.9	
TOTAL VOCs (2)	NA	5,033.7		219.3		360.8		86.2	
Naphthalene	10	350 D	X	74.8	X	37.30	X	23.9	X

U = Not Detected above detection limit utilized by the analytical laboratory

NA = Not available

J = Estimated Value

VOC = Volatile Organic Compound

X = Exceeds applicable groundwater standard or guidance value

Values are in microgram per liter (ug/L) or parts per billion (ppb)

(1) Groundwater standard or guidance values are as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended by NYSDEC's supplemental table dated April 2000.

(2) Total VOCs does not include naphthalene.

APPENDIX B

Soil Vapor Intrusion Mitigation Guidance

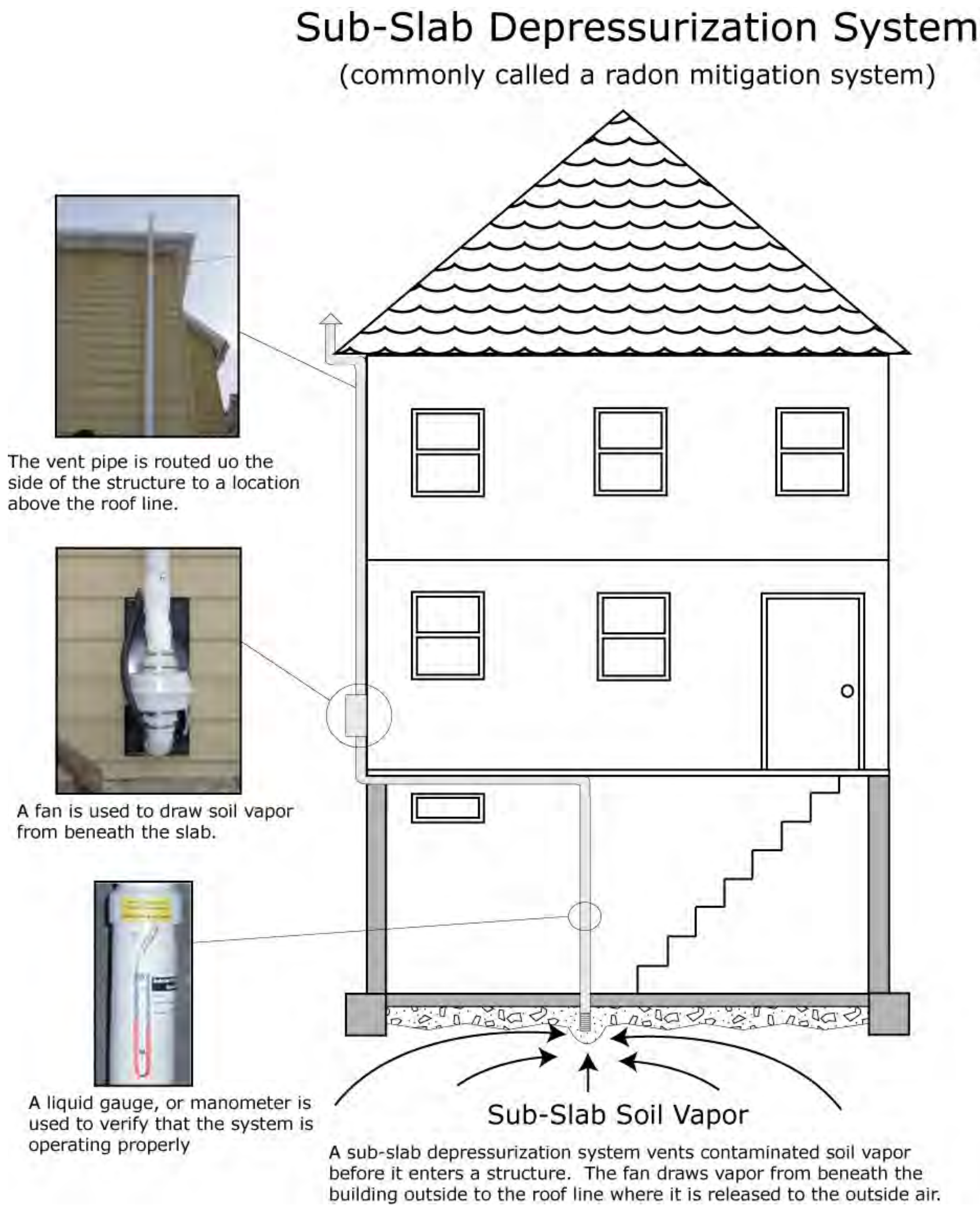
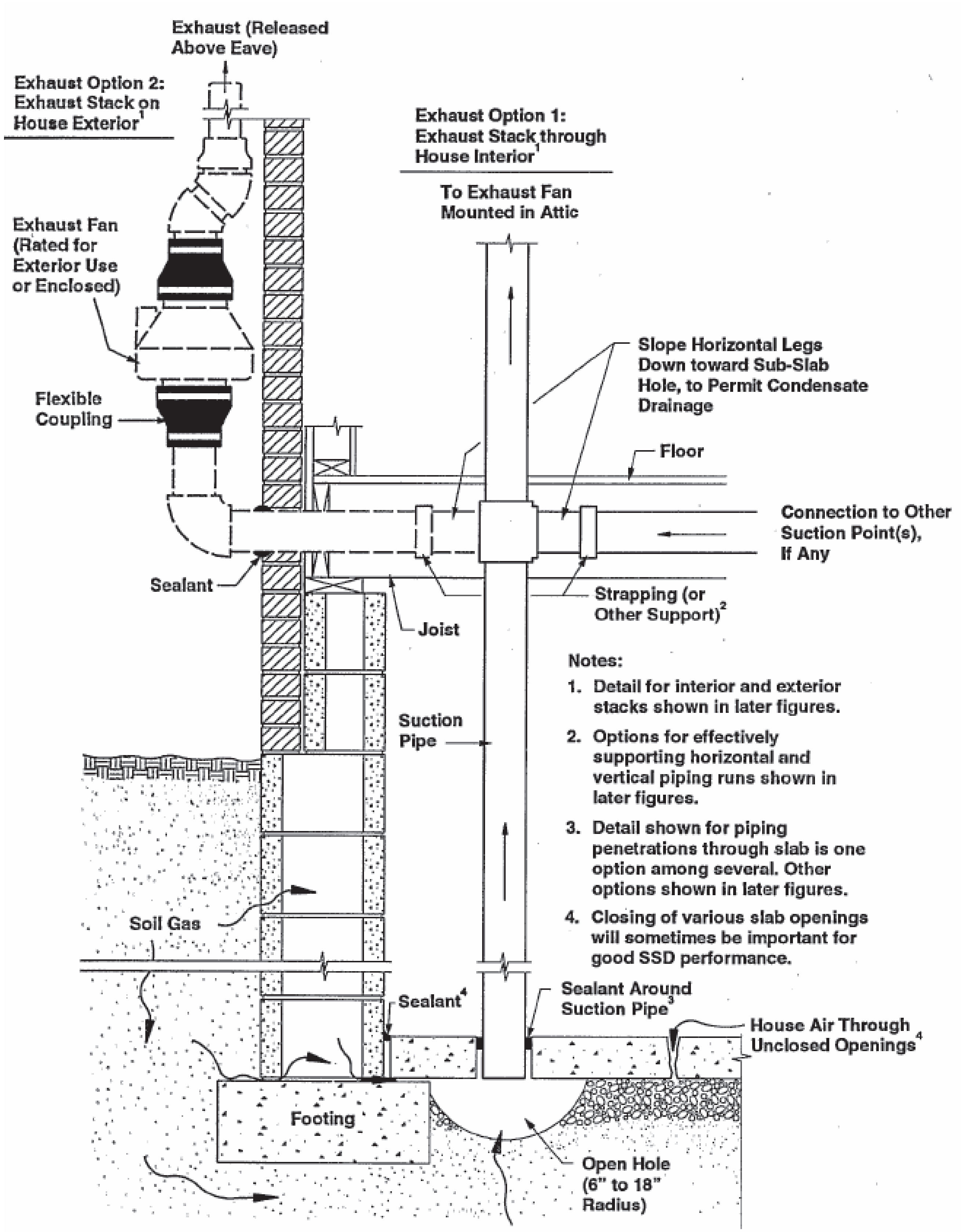


Figure 5.2
Example of an illustration showing how a SSD system works.



Sub-slab depressurization (SSD) using pipes inserted down through the slab from indoors.

Excerpt from *Technical Guidance (Third Edition) for Active Soil Depressurization Systems*, USEPA, 1993.