QUEENS MEDALLION LEASING

21-03 44th AVENUE

QUEENS COUNTY

LONG ISLAND CITY, NEW YORK

SMP PERIODIC REVIEW REPORT

NYSDEC BCP SITE NO. C241144

INDEX NO. C241144-01-14

November 2022

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SITE MANAGEMENT PLAN - PERIODIC REVIEW REPORT
April 2021 through April 2022

1.0 INTRODUCTION

The Site located at 21-03 44th Road, Long Island City, New York ("the Site") is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241144, which is administered by New York State Department of Environmental Conservation (NYSDEC). The Site location is presented on figure 1.

Exclusive Realty Services, LLC (ERS) entered into a Brownfield Cleanup Agreement (BCA) on February 10, 2014 with the NYSDEC to remediate the Site. A Site Plan illustrating the boundaries of the Site (i.e., the controlled property) is provided on figure 2. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easement which are included in the Site Management Plan (SMP).

The Site is currently occupied by a two-story building and asphalt alleyways to the north and east of the building. The Site is zoned as a manufacturing district (MI-4) by the City of New York and is currently utilized for commercial office space and automotive maintenance. The Site occupant is an active taxi leasing business. The majority of the building is situated on a concrete slab on grade; with a small basement beneath the east side of the building.

The Site and surrounding area have been used primarily for industrial and commercial purposes since at least 1900. The most recent industrial facility was for metal plating, which reportedly ceased operations during the early 1980's. The Site has historically been used for metal etching and manufacturing. Historical uses of properties adjacent to and surrounding the Site include but are not limited to; metal manufacturing, paint/lacquer manufacturing, printing processes, vacuum plating, cosmetics manufacturing and textile refinishing.

A NYSDEC Superfund investigation was completed at the Site and surrounding properties by ARCADIS Malcolm Pirnie, Inc. (AMP) during 2011 and 2012. The August 2012 Remedial Investigation Report includes a detailed evaluation of subsurface geology for the Site and surrounding area.

Prior to WSP/Leggette, Brashears and Graham Engineering Services (LBGES) involvement at the Site, there were several environmental investigations and remedial activities conducted at the Site by Vertex Engineering Services, Inc. (VTX) in 2004 and Galdun Frankel Environmental (GFE) in 2005. Phase I Environmental Site Assessments (ESAs) were completed by LBGES in March 2007 and May 2008. The NYSDEC/AMP Superfund investigation was completed in 2012 for the Site and surrounding properties in relation to the areawide PCE groundwater contaminant plume. In November 2014, LBG implemented a Supplemental Remedial Investigation (SRI) in order to determine whether residual contaminant source areas

are present beneath the Site. A complete summary of the investigations/remedial activities performed at the Site is included in the May 2016 Supplemental Remedial Investigation Report by LBGES.

Numerous subsurface soil samples, groundwater samples and soil-vapor samples have been collected for chemical analysis in order to identify the contaminants of concern (COCs) for the Site and to determine the magnitude and extent of potential contamination occurring in various media at the Site.

The results of the environmental investigations indicated that historical activities at the Site and surrounding sites negatively impacted the subsurface through releases of chromium and PCE and other volatile organic compounds (VOCs) as well as by semi-volatile organic compounds (SVOCs) which were attributed to historic fill use at the Site. These contaminants were identified as the primary COCs for the Site. The subsurface contamination also includes compounds detected at lesser concentrations including additional VOCs, metals and SVOCs.

After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as "remaining contamination". As a result, a Site Management Plan (SMP) is a required element of the remedial program, of which Engineering Controls (ECs) and Institutional Controls (ICs) have been incorporated into the site remedy to control exposure to remaining contamination and to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Queens County Clerk, requires compliance with this SMP and all ECs and ICs placed on the Site.

The SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. The SMP has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. The SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- The SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion;
- Failure to comply with the SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Index No. C241144-01-14; Site C241144) for the Site, and thereby subject to applicable penalties.

1.1 Effectiveness of the Site Management Plan

Prior to issuance of the Certificate of Completion by the NYSDEC (October 2017 to December 2018) and through the current reporting period, the ECs and ICs have been maintained at the Site to control exposure to remaining contamination and to ensure protection of public health and the environment.

Based on evaluation of the operational monitoring data for the Site, the implemented ECs and ICs are effectively mitigating exposure to remaining subsurface contamination.

1.2 Compliance

During the current reporting period, the ECs and ICs have been maintained at the Site in compliance with the SMP.

1.3 Site Management Activities

The onsite operation, maintenance and monitoring (OM&M) activities are being performed as per the schedule and frequency outlined in the NYSDEC-approved SMP and consist of the following:

1. ERS will continue to comply with the NYSDEC notification requirements that are outlined in the SMP;
2. Site inspections verifying the condition and status of the Site Cover EC is performed annually;
3. The groundwater monitoring program performed for monitoring dissolved phase chromium concentrations is conducted on an annual basis;
4. The SSD System is operational and monitoring events are conducted on a biannual basis;
5. If ground invasive activities are proposed at the Site, the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed will be implemented in accordance with an Excavation Work Plan (EWP) as outlined in the SMP;
6. ICs and Site Use restrictions continue to be maintained at the Site; and,
7. Periodic Review Reports (PRRs) are to be submitted in digital format annually to the NYSDEC. Additionally, copies of the PRR are to be submitted to the NYSDOH, the Volunteer, and the public document repositories.

SMP activities will continue as per the schedule and frequency unless a modification to the SMP is authorize by the NYSDEC (as requested in Section 7.2, below).

2.0 ENGINEERING CONTROLS AND INSTITUTIONAL CONTROLS

The ECs and ICs have been incorporated into the site remedy to control exposure to remaining contamination and to ensure protection of public health and the environment. These ECs and ICs consist of the following measures listed below.

2.1 Engineering Controls

1) <u>Cover (or Cap)</u>

Exposure to remaining contamination in soil/fill at the Site is prevented by a composite cover

system placed over the Site. The cover system is comprised of a concrete slab constructed with a minimum thickness of 4 inches and adequate expansion joints on the interior of the building; or asphalt pavement with a minimum thickness of 3 inches for exterior portions of the Site. The impermeable covers were installed according to the industry standards for construction practices. The locations of each cover type installed at the Site are shown on figure 3. If at any time there is exposed soil onsite, the Site environmental easement will require that the Site cover consist of a minimum of 2 feet of certified clean fill (with soil quality complying with RUSCOs for restricted residential). The backfill brought to the Site for use as a cover will be comprised of soil or other unregulated material as set forth in 6 NYCRR Part 360. Additionally, due to the selected Site use certification being pursued, imported backfill and cover soil must meet RUSCOs established for Restricted Residential Use, as set forth in 6 NYCRR Part 375-6.8(b).

The Excavation Work Plan (EWP) provided in the SMP outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and associated Community Air Monitoring Plan (CAMP) prepared for the Site and provided as Appendices in the SMP.

2) Sub-Slab Depressurization (SSD) System

A SSD System was installed at the Site as an EC to mitigate potential soil-vapor intrusion. The SSD System design, construction, and verification testing is detailed in the RD report, which was submitted by LBGES to NYSDEC in October 2016. The final design plans for the SSD System (prepared based on the results of the 2016 pilot test activities) were developed in general accordance with the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and were submitted to NYSDEC. The system as-built diagrams are included in the SMP.

The SSD System was designed to protect human health, not remediate the soil or groundwater beneath the building. The specific goal is to create a negative pressure field directly under the building (relative to ambient pressure in the building interior), utilizing a network of extraction points and a vacuum extraction blower system. This negative pressure field becomes a preferential pathway for soil vapors which may accumulate beneath the building slab (via off-gassing from the dissolved-phase contamination). Soil vapors caught in the negative pressure field are collected and piped to an ambient air discharge point. This EC will mitigate the potential vapor-intrusion pathway between the identified vapor source (groundwater) and indoor air within the building interior; and subsequently the sensitive receptors (the buildings' occupants).

The number and spacing of collection points were based on the results of the pilot test activities. The final placement of the SSD System extraction wells and vertical risers were reviewed with the property owner to ensure there are no conflicts with business operation activities. For each SSD System soil vapor extraction pit (VEP-1 to VEP-3), a solid 2-inch diameter PVC header pipe extends vertically above grade. Each extraction well header pipe is equipped with a sampling port, a vacuum gauge and a flow control ball valve. Each extraction point is properly secured within the building to protect them from damage. The extraction wells are all connected to a 2-inch diameter PVC manifold pipe. This manifold pipe connects to the vacuum extraction pump.

One vacuum extraction blower is installed at the Site for active operation of the SSD System. The vacuum unit is installed in a dedicated location in the partial basement of the building. The vacuum unit consists of a regenerative blower that is capable of generating sufficient flow rate and vacuum to operate at optimum efficiency (as established based on the pilot test results) while also providing the ability to expand the SSD System extraction network if necessary. A dilution valve is installed on the influent (suction) side of the vacuum blower(s) to adjust the vacuum level applied to the SSD System wellheads.

An air/water separator tank is located on the influent side of the blower to manage any condensate water that may be generated during operation. Both the dilution valve and the air/water separator tank are fitted with air filters to capture solids which could damage the blower.

The effluent vapor stream is forced under positive pressure to a discharge stack located on the roof of the building. The effluent discharge stack is terminated approximately 7 feet above the roof of the building and is located more than ten (10) feet away from any window or air intake into the building.

In addition to the extraction components of the SSD System, eight (8) permanent sub-slab soil vapor/vacuum monitor points (SVP-1 to SVP-8) were installed throughout the first floor and basement of the building. The locations of the soil vapor vacuum extraction pits (VEP-1 to VEP-3) and the sub-slab soil vapor/vacuum monitor points (SVP-1 to SVP-8) are illustrated on figure 4. The number of sub-slab soil vapor/vacuum monitor points and installation locations was determined based on the final SSD System design. These monitor points (in addition to the SSD System extraction wells if/when not active) are utilized to evaluate the vacuum influence resulting from active vacuum extraction from each SSD System pipe leg. The top of each vacuum monitor point is fitted with an air-tight removable plug to facilitate monitoring.

Technical approval from the NYSDEC Division of Air Resources (DAR) to construct and a certificate to operate a process, exhaust, or ventilation system was not required according to 6 CRR-NY III A 201-3 “Permit Exempt and Trivial Activities”. As per 6 CRR NY III A 201 3.3(c)(29)(ii),

the Site is considered a trivial source [6 CRR NY 201 3.3(c)(29)(ii)]. 6 CRR-NY III A 201-3.3(a) states "The owner and/or operator of an emission source or unit that is listed as being trivial in this Part may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records onsite for a period of five years and make them available to representatives of the Department upon request." Additionally, 6 CRR-NY III A 201-3.3(b) states "The owner or operator of any emission source or activity that is listed as being trivial in this section, on the basis of the use of appropriate emission controls, shall operate and maintain those controls in a manner consistent with manufacturer's specifications and good engineering practices."

The manufacturer's equipment specifications for the components of the SSD System are included in the FER. The extraction blower is to remain in continuous operation until permission to discontinue its use is granted in writing by NYSDEC, at which point the active system is to be transitioned to a passive system through barometric influence or potentially via the use of a wind turbine.

Procedures for operating and maintaining the SSD System are provided in the Operation and Maintenance Plan included in the SMP. Procedures for monitoring the system are included in the Monitoring Plan included in the SMP. The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect onsite ECs.

2.2 Institutional Controls

The series of ICs is required by the Decision Document to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Site to Restricted Residential uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The IC boundaries are identical to the Site property boundaries; shown on figure 2. These ICs are:

- Property Use Restriction

  The property may be used for: Restricted Residential Use; however, the current and anticipated Site use is Commercial. Following the implementation of the proposed remedy, the Site may be used for the currently zoned property use (commercial/industrial). Additionally, provided the long-term ECs and ICs listed in the SMP are maintained at the Site and if permitted in accordance with New York City zoning/re-zoning requirements, implementation of the proposed remedy will allow for the Site to be used for Restricted Residential mixed use. The Site may not be used for a higher level of use (e.g., residential or unrestricted use) without an amendment or extinguishment of the NYSDEC-approved SMP;

- All ECs must be operated and maintained as specified in the NYSDEC-approved SMP;
- All ECs must be inspected at a frequency and in a manner defined in the NYSDEC-approved SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in the NYSDEC-approved SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the NYSDEC-approved SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the NYSDEC-approved SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the NYSDEC-approved SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the NYSDEC-approved SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on figure 2 and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the Site are prohibited;
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that:
    1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and,
    2) nothing has occurred that impairs the ability of the controls to protect public health and environment (or that would constitute a violation or failure to comply with the NYSDEC-approved SMP).

To date the ECs and ICs that are maintained at the Site are operating effectively as designed and have proven effective at making the Site protective of human health and the environment.

The PRR will continue on an annual frequency until the NYSDEC authorizes discontinuation of the groundwater monitoring program, at which point the frequency of the PRR to be extended to once every three years.

3.0 MONITORING AND SAMPLING PLAN

The Monitoring and Sampling Plan (included in the SMP) describes the measures for evaluating the overall performance and effectiveness of the remedy. The Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the Site are included in the Quality Assurance Project Plan (included in the SMP).

3.1 Baseline Site Conditions

The initial Site remedy consisted of a sub-slab depressurization (SSD) System. All the treatment system monitoring, and sampling ports and operating controls are located in the basement of the building. Three horizontal sub-slab soil vapor/vacuum extraction pits (VEP-1 to VEP-3) are installed beneath the concrete slab on grade within the interior of the building. The SSD System effluent discharge stack is located on the roof of the building adjacent to the alley. In addition to the SSD System components, there are eight sub-slab soil vapor/vacuum monitoring points (SVP-1 to SVP-8) located within the interior building footprint. Operation of the active remediation system commenced October 2, 2017. The Site conditions at the time of system commencement were utilized as baseline conditions for future assessment of system effectiveness. The most recent SSD System monitoring and sampling round was conducted on April 14, 2022.

3.2 Pre-Certificate of Completion 2018 Site Conditions

Prior to NYSDEC issuance of the Certificate of Completion certifying the effectiveness of the remedy at the Site, operational data validating that the SSD System operation is capable of mitigating the potential soil vapor intrusion from beneath the Site was necessary. Monthly Progress Reports were completed from January 2018 to August 2018, to document the effectiveness of the remedy.

Additionally, groundwater quality beneath the Site is monitored via network of overburden groundwater monitor wells located throughout the Site. The locations of the groundwater monitoring wells are shown on figure 2. The 2018 Groundwater Monitoring Report characterizes chromium concentrations at the Site prior to NYSDEC issuance of the Certificate of Completion. The most recent annual groundwater sampling round (including the onsite and offsite groundwater monitor wells) was conducted on February 24, 2022.

3.2 SMP Site–Wide Inspection

Site-wide inspections are required to be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed, and will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- General site conditions at the time of the inspection;
- Whether ECs continue to function as designed and continue to be protective of human health and the environment;
- Confirm that site records are up to date.
- Compliance with requirements of this SMP and the Environmental Easement;

During the current period, the comprehensive site-wide inspections were conducted during each biannual SSD System monitoring round. The OM&M Site Inspection Field Sheets for the Cover System and General Conditions for the current reporting period are included in Appendix A.

3.3 SSD System Monitoring and Sampling

Monitoring of the SSD system is currently being performed on a biannual basis. Modification to the frequency or sampling requirements requires approval from the NYSDEC. A visual inspection of the complete system was (and will continue to be) conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system.

The OM&M Site Inspection Field Sheets for the SSD System for the reporting period are included in Appendix A.

SSD System effluent sampling is currently being performed on a biannual basis, concurrent with the SSD System monitoring activities. After the system operational monitoring data is recorded, an air sample is collected from the effluent sample location of the SSD System manifold and submitted to a certified laboratory for analysis for VOCs by United States Environmental Protection Agency (USEPA) Method TO-15.

3.4 Post-Remediation Groundwater Monitoring and Sampling

Regularly scheduled groundwater sampling started in November 2017 and annual sampling continues to date. Field activities conducted during the annual groundwater sampling events include: well inspections; fluid level elevation measurements of all onsite and offsite groundwater monitor wells; and, low-flow

groundwater sampling. The purpose of monitoring is to document the chromium concentrations (hexavalent and total chromium) in groundwater at the Site and to assess any long-term trends in water quality.

Prior to 2020, groundwater samples were collected from four existing groundwater monitor wells (MW-1, MW-2, MW-5 and MW-6) on an annual basis for analysis of total chromium and hexavalent chromium by USEPA Method 6010. These existing monitoring wells were previously installed to monitor upgradient and downgradient groundwater conditions at the Site. From 2020 through the current reporting period, groundwater samples were collected from three monitor wells (MW-1, MW-2 and MW-6).

Prior to sampling, the depth to groundwater is measured at all onsite and offsite monitor well locations using an electric interface probe. Groundwater level measurements of all onsite monitor wells on February 24, 2022 are shown on table 1.

Groundwater samples were then collected using the low-flow sampling method (USEPA Low Flow Groundwater Sampling Procedures 1996). During sampling, onsite field parameters were monitored continuously using a Horiba U52 (or equivalent) multiparameter water-quality monitoring system. Measurements for pH, conductivity, turbidity, dissolved oxygen (DO), temperature and oxygen reduction potential (ORP) were obtained as the groundwater was purged through a flow-cell at a rate of 100 to 500 ml/minute (milliliter per minute) using a peristaltic pump. In addition, the turbidity of the water was measured with a stabilization target of three consecutive measurements with less than 10% variation. Three turbidity measurements with values less than 5 NTU (nephelometric turbidity unit) are considered stabilized.

The groundwater samples were stored on ice in a cooler to maintain a constant temperature until delivery to the laboratory. Quality Assurance/Quality Control (QA/QC) samples, including a trip blank, accompanied the groundwater sample shipments. The groundwater samples were submitted to York Analytical Laboratories (York), a NYSDOH certified laboratory, after which the samples were processed by USEPA Method 6010B and subsequently analyzed for chromium by USEPA Method 200.8 and for hexavalent chromium (CrVI) by USEPA Method 218.6.

All groundwater sampling activities were recorded on field sheets and associated low-flow sampling logs. Other observations (e.g., groundwater monitoring well integrity, etc.) were also noted on the field sheets when applicable. The field sheets and associated low-flow sampling logs serve as inspection forms for the groundwater monitoring network. The low-flow sampling logs for the current reporting period are included in Appendix B.

4.0 RESULTS OF SSD SYSTEM MONITORING AND GROUNDWATER MONITORING

Analytical results for soil vapor effluent samples and groundwater samples collected at the Site were evaluated to assess the effectiveness of the remedial program. All sampling and analytical activities were completed in accordance with the requirements of the site-specific Quality Assurance Project Plan (included in the SMP).

4.1 Vapor Phase VOC Concentrations (Sub-Slab)

Based on previous Site characterization work, the primary vapor phase contaminants of concern historically present beneath the Site are tetrachloroethene (PCE), trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA). An initial effluent air/vapor sample was collected from the SSD System on October 2, 2017 (baseline sample), and effluent samples were subsequently collected monthly for the first three months following commencement of system operation.

Starting in 2018 the SSD System sampling frequency was modified and all subsequent sampling (to date) was performed on a biannual frequency. The SSD System effluent air sample collected in January 2018 (3 months after system startup) constituted the first of two biannual sampling events in 2018.

For all SSD System sampling events, the SSD System air/soil vapor samples were collected from the SSD System effluent pipe and were analyzed for VOCs by USEPA Method TO-15. The effluent air stream was screened with a photoionization detector (PID) for total volatiles, as well as the soil vapor stream extracted from the individual SSD System vacuum extraction pits (VEP-1 through VEP-3) during each of the monitoring rounds.

Tables 2 through 11 summarize all SSD System effluent air samples analytical results from October 2017 through the current reporting period. Table 12 is a summary of total VOC discharge mass in the SSD System effluent air. The results of laboratory results for all effluent samples collected during this period indicate that the highest effluent contaminant concentrations were detected on October 2, 2017 during the SSD system start up (baseline sample) and on August 2, 2018 after the SSD System was restarted (following replacement of the failed vacuum blower). The laboratory reports for the SSD System air samples collected during the current reporting period are included in Appendix C.

4.2 Groundwater Contaminant Concentrations

The 2018 Groundwater Monitoring Report includes a summary of the historical groundwater quality at the Site as characterized by the laboratory analytical results for samples collected during historical groundwater monitoring activities performed from 2009 to 2012.

In accordance with the Groundwater Monitoring Program, groundwater samples were collected from the on site monitor wells on February 24, 2022.

The sampling activities were performed following the procedures as outlined in the SMP included the collection of groundwater samples via low-flow sampling and analysis of the groundwater samples for chromium and hexavalent chromium (total and dissolved). The laboratory analytical results indicate that unfiltered total chromium and total hexavalent chromium was detected at concentrations above the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) Ambient Quality Standards

(AWQS) of 50 ug/l (micrograms per liter) in the groundwater sample collected from MW-1. A groundwater quality summary is presented on Table 13 which provides a data set for evaluation of dissolved chromium and hexavalent chromium concentrations in groundwater from 2018 to 2022. The laboratory report for the groundwater samples collected during the current reporting period are included in Appendix D.

4.2.1 Total Chromium and Hexavalent Chromium

Total chromium (unfiltered) was detected in the February 24, 2022 groundwater sample collected from MW-1 in exceedance of NYSDEC TOGS AWQS (August 15, 2018 and December 18, 2019) at concentrations of 2,350 ug/l and 1,730 ug/l, respectively. Total hexavalent chromium (unfiltered) was detected in exceedance of NYSDEC TOGS AWQS in the groundwater samples collected from MW-1 (August 15, 2018 and December 18, 2019) at concentrations of 1,700 ug/l and 1,960 ug/l, respectively.

Total hexavalent chromium (unfiltered) was detected in exceedance of NYSDEC TOGS AWQS in the groundwater samples collected from MW-6 on December 18, 2019 at a concentration of 64 ug/l. Chromium and hexavalent chromium (unfiltered and filtered; total and dissolved) were not detected in the groundwater samples collected from MW-2 (August 28, 2018) or MW-5 (August 15, 2018 and December 18, 2019).

An assessment of historic groundwater quality data recorded for MW-1 indicates a decrease in total chromium concentrations (from August 2018 to December 2019), however; concentrations over the same period reflect an increase in total hexavalent chromium concentrations.

4.2.2 Dissolved Chromium and Hexavalent Chromium

Dissolved chromium and hexavalent chromium (filtered) were only detected in exceedance of NYSDEC TOGS AWQS in the groundwater sample collected from monitor well MW-1 (February 24, 2022). Laboratory results from the February 24, 2022 sampling event indicate dissolved chromium (field filtered) and dissolved hexavalent chromium were detected at concentrations of 999 ug/l and 958 ug/l (a reduction from the August 3, 2020 monitoring event [1,800 ug/l and 1,500 ug/l, respectively]). These concentrations are also comparable to the February 24, 2022 event groundwater samples from MW-1 for laboratory filtered dissolved chromium and dissolved hexavalent chromium (1,140 ug/l and 961 ug/l, respectively).

All concentrations of both dissolved chromium and dissolved hexavalent chromium detected in the groundwater samples collected from MW-2 and MW-6 were at concentrations either below the NYSDEC TOGS AWQS (less than 50 ug/l) or below the minimum detection limit of the laboratory. Additionally, comparison between lab filtered samples and field filtered samples show that there is no significant difference between the concentrations based on the location in which the groundwater samples are filtered.

5.0 PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS OF REMEDY

The ECs and ICs that are maintained at the Site have proven effective at ensuring that the Site is protective of human health and the environment. The effectiveness of the ECs and ICs has been verified by the monitoring activities at the Site as described below.

5.1 Pre-Certificate of Completion Operation, Maintenance & Monitoring (OM&M)

Site OM&M activities were implemented at the Site in accordance with the SMP prior to the NYSDEC approval of the FER and SMP (and subsequent issuance of the Certificate of Completion). These OM&M activities were summarized in the Monthly Progress Reports for the Site, which were submitted to the NYSDEC to document the status of the Site remedial activities. Based on the Site monitoring activities, the ECs and ICs were being implemented in accordance with the framework of the FER, and monitoring was being implemented in accordance with the framework of the SMP.

5.2 Engineering Controls Operation, Maintenance & Monitoring

During regularly scheduled OM&M activities for the onsite ECs conducted by WSP, field sheets are completed to record observations of field conditions. The OM&M Site Inspection Field Sheets Appendix A.

No unscheduled Site visits were required at the Site beyond the regularly scheduled biannual SSD System monitoring and sampling and Site Management Site Inspections during the current reporting period.

5.2.1 Cover (or Cap) Inspection

The cover system is comprised of a concrete slab constructed with a minimum thickness of 4 inches and adequate expansion joints on the interior of the building; or asphalt pavement with a minimum thickness of 3 inches for exterior portions of the Site. The impermeable covers were installed according to the industry standards for construction practices. The locations of each cover type installed at the Site are shown on figure 3.

Since the installation of this cover, no ground invasive activities have been conducted at the Site which would have had the potential to compromise its integrity and/or effectiveness. Competency of this EC is verified annually during the Site Management Site Inspection.

As observed during the Site Management Site Inspection of the current reporting period, the concrete slab and the asphalt pavement were in good condition with no significant cracking and no observed noises and/or vacuum, which would indicate a breach in the composite cover. Based on these field observations, this EC is functioning properly.

5.2.2 SSD System Inspections

An SSD System was installed beneath the first-floor concrete slab on grade. This system was activated

in October 2017. The locations of the SSD System vacuum extraction pits VEP-1 to VEP-3 as well as the sub-slab soil vapor/vacuum monitoring points (SVP-1 to SVP-8) are shown on figure 4.

Currently OM&M activities are performed on the SSD System at a frequency of twice per year, during which time an effluent air sample is collected for laboratory analysis. Monitoring field sheets are used to record system performance during operation. During each bi-annual sampling event, the vacuum rate, flow rate, temperature, PID concentration, and effluent pressure are recorded for each vacuum extraction pits VEP-1 to VEP-3, and the flow rate and PID concentration is recorded for the effluent air stream. Additionally, during each SSD System monitoring round, sub-slab vacuum measurements are recorded at each of the sub-slab soil vapor/vacuum monitoring points (SVP-1 to SVP-8). The vacuums recorded at each sub-slab soil vapor/vacuum monitoring points confirm that the active operation of the SSD System is maintaining negative pressure beneath the concrete slab on grade (encompassing the entire footprint of the building), ant thereby mitigating the potential for soil vapor intrusion within the interior of the building on the Site.

After the system operational monitoring data were recorded, an air sample is collected from the effluent sample location of the SSD System manifold and submitted to a certified laboratory for analysis for VOCs by USEPA Method TO-15. Following the completion of the field sampling activities for each respective monitoring round, the laboratory analytical results for the SSD System effluent vapor were evaluated and presented in tables 3 through 10 which are included at the end of the report.

During the Site Management Site Inspection of the current reporting period, the circuit breaker for the SSD System blower was manually tripped to verify that the alarm condition notification lights on the interior of the school were functioning. After confirming that the notification lights were functioning properly, the SSD System blower was restarted. The SSD System continues to operate on the Site as outlined in the SMP and effluent vapor samples will continue to be collected during the regularly scheduled bi-annual Site visits.

5.2.3 Annual Groundwater Monitoring Program

Following the completion of the field sampling activities for each respective monitoring round, the laboratory analytical results for the groundwater were evaluated. Prior to NYSDEC approval of the FER and SMP (and subsequent issuance of the Certificate of Completion), an annual groundwater monitoring round was performed in August 2018.

The monitor wells utilized for annual groundwater sampling rounds during the current reporting period included monitor wells MW-1, MW-2, and MW-6. A summary of the laboratory analytical results for chromium concentrations detected in groundwater from 2011 through 2022 is presented on table 13.

Pending authorization by NYSDEC to discontinue the groundwater monitoring program component of the SMP, the onsite groundwater monitor wells will continue to be included in annual sampling round in order to track the contaminant concentrations.

5.3 Institutional Controls

In addition to the ECs at the Site, a series of ICs (required under the SMP) are in effect to: 1) implement, maintain and monitor EC systems; 2) prevent future exposure to residual contamination by controlling disturbances of the subsurface contamination; and 3) restrict the use of the Site.

Following NYSDEC approval of the FER and SMP, and subsequent issuance of the Certificate of Completion, the Site has been maintained in compliance with all ICs designated for the Site (Controlled Property) as required under the NYSDEC-approved SMP. Additionally, under the SMP, the reporting requirements are outlined as a component of the ICs as listed below:

- Grantor agrees to submit to NYSDEC in Periodic Review Reports issued at a frequency as prescribed in the SMP, a written statement that certifies that:
  1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and
  2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitutes a violation or failure to comply with the SMP.

  NYSDEC retains the right to access the Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This statement must be certified by an expert that the NYSDEC finds acceptable.

The only deviation to the requirements outlined under the SMP are in association with the reporting requirements prescribed in the NYSDEC-approved SMP. Due to accessibility issues and personnel scheduling restrictions associated with the COVID-19 pandemic, the 2020 Site certification was delayed until August 2020.

During the current reporting period, no ground invasive work was completed at the Site which could disturb the residual contamination. Additionally, all of the above-listed Site restrictions were adhered to during the Site Monitoring period.

6.0 MONITORING PLAN & EC/IC COMPLIANCE

Following the implementation of the onsite ECs/ICs, the Site has been maintained under a regularly scheduled OM&M program as outlined in the approved SMP and NYSDEC-approved modifications. Additionally, the Monitoring and Sampling Plan (as outlined in the SMP) was implemented at the Site to evaluate the performance and effectiveness of the implemented ECs in reducing or mitigating contamination at the Site. The current OM&M program and the Monitoring and Sampling Plan consists of the following:

- Biannual SSD System monitoring and effluent sampling;
- The Site Cover remains in place and has not been disturbed;

- Annual groundwater monitoring for assessment of chromium and hexavalent chromium concentrations;
- On-call response and/or repairs to treatment system equipment/controls;
- Evaluating Site information periodically to confirm that the ECs/ICs continue to be effective as designed;
- Preparing the necessary reports for the NYSDEC presenting the data generated during various monitoring activities;
- Assessing compliance with NYSDEC groundwater quality standards or stabilization of dissolved-phase chromium and hexavalent chromium concentrations; and,
- Annual periodic review report Site inspection (annual pending NYSDEC authorization to transition to every 3 years) to certify ECs and ICs remain in place and are functioning properly and as designed.

The following activities are representative of those performed during OM&M visits:

- visual inspection of the complete system (e.g., vacuum extraction blower, piping, warning device, building interior, etc.);
- monitoring of the permanent sub-slab soil vapor/vacuum monitoring points (SVP-1 to SVP-8) and recording of the sub-slab vacuums beneath the concrete slab on grade to the system is inducing a negative pressure field below the entire footprint of the building;
- monitoring of the operating parameters of the individual SSD System soil vapor/vacuum extraction pits (VEP-1 to VEP-3);
- monitoring of the vacuum extraction blower operating parameters;
- identification and repair of any leaks identified throughout the system;
- inspection of the discharge stack to verify there is no damage, there are no obstructions and to confirm that no air intakes have been located nearby; and,
- verbally discuss the operational status of the SSD system with the facility manager.

The site cover and the SSD system required little maintenance to perform as designed. SSD system maintenance activities involved ensuring proper operation of the vacuum blower and confirmation that no significant volume of water has accumulated in the knock-out tank. The treatment system was inspected and sampled according to the schedule outlined in the SMP. All failures, faults or unusual observations were investigated fully within 24 hours after occurrence (or as soon as was feasible) or at the time of routinely scheduled maintenance visit. Any equipment found to be out of adjustment or in disrepair will be repaired or serviced. Manufacturer's information for the major equipment components are provided in the SMP.

Photographs documenting the conditions at the Site during the April 14, 2022 Site-wide inspection are included in Appendix E. No deficiencies in the ECs or ICs were observed or recorded during either the February 24, 2022 sampling event or the April 14, 2022 inspection. A copy of the 2022 Institutional and Engineering Control Certification Form with the Engineer's signed and stamped certification is attached in Appendix F.

7.0 PRR CONCLUSIONS AND RECOMMENDATIONS

All substantive requirements of the SMP have been met for the current reporting period. All onsite ECs/ICs are in place and being implemented properly. The ECs (the SSD System and the Soil Cover) are functioning as designed and ensuring the Site is protective of human health and the environment. There are no recommendations for this reporting period.

The current site status under the SMP is summarized as follows:

1. There has been no change in Site ownership;
2. There has been no change in use of the Site (still currently commercial use for a taxi medallion company and taxi repair garage);
3. No ground-invasive activities have been performed at the Site during the period in which the Site Management Plan has been in effect;
4. There has been no onsite use of groundwater at the Site;
5. There have been no vegetable gardens or farming performed on the Site;
6. The concentrations of dissolved phase chromium and hexavalent chromium in groundwater have stabilized following completion of the Site remedy and commencement of the SMP.

WSP USA

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Reviewed By:
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Steven Eget, P.E.
New York District Business Line Leader

November 2, 2022
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TABLES

TABLE 1

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Water Level Measurements
February 24, 2022

Well ID	Total Depth (ft btoc) [1]	Screen		TOC [3] Elevation (ft msl) [4] *	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Corrected Ground Water Elevation (ft msl)
		Diameter (inch)	Setting (ft bg)[2]					
MW-1	18.66	2.00	Vertex Install *	21.88	-----	12.72	0.00	9.16
MW-2	18.55	2.00	Vertex Install *	22.77	-----	13.74	0.00	9.03
MW-3	15.20	2.00	Vertex Install *	23.40	-----	14.10	0.00	9.30
MW-4 ***	18.65	2.00	Vertex Install *	24.08	-----	14.12	0.00	9.96
MW-5	18.15	2.00	Vertex Install *	24.53	-----	14.13	0.00	10.40
MW-6	19.70	2.00	Vertex Install *	24.04	-----	14.05	0.00	9.99
MW-7	12.65	2.00	Vertex Install *	24.44	-----	NM	NM	NM
MW-8	12.82	2.00	9 to 19	21.76	-----	12.65	0.00	9.11

1) - Feet below top of casing
2) - Feet below grade
3) - Top of Casing
4) - Feet above mean seal level
5) - Not Measured

Notes:
* MW-1 to MW-7 were installed by Vertex Environmental
** TOC elevations were extrapolated from an arbitrary elevation of 30.00 feet above mean sea level
*** Removed Oil Sorbent Sock from inside MW-4.

TABLE 2

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected October 2, 2017
Volatile Organic Compound Discharge Mass - System Start-up Baseline

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**22**	**5.5**		0.000009
1,1,2,2-Tetrachloroethane	ND	6.9	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	7.7	U	-----
1,1,2-Trichloroethane	ND	5.5	U	-----
1,1-Dichloroethane	ND	4.0	U	-----
1,1-Dichloroethene	ND	4.0	U	-----
1,2,4-Trichlorobenzene	ND	7.4	U	-----
1,2,4-Trimethylbenzene	ND	4.9	U	-----
1,2-Dibromoethane	ND	7.7	U	-----
1,2-Dichlorobenzene	ND	6.0	U	-----
1,2-Dichloroethane	ND	4.0	U	-----
1,2-Dichloropropane	ND	4.6	U	-----
1,2-Dichlorotetrafluoroethane	ND	7.0	U	-----
1,3,5-Trimethylbenzene	ND	4.9	U	-----
1,3-Butadiene	ND	6.6	U	-----
1,3-Dichlorobenzene	ND	6.0	U	-----
1,3-Dichloropropane	ND	4.6	U	-----
1,4-Dichlorobenzene	ND	6.0	U	-----
1,4-Dioxane	ND	7.2	U	-----
2-Butanone	**24**	**2.9**		0.000010
2-Hexanone	ND	8.2	U	-----
3-Chloropropene	ND	16	U	-----
4-Methyl-2-Pentanone	ND	4.1	U	-----
Acetone	**51**	**4.8**		0.000021
Acrylonitrile	ND	2.2	U	-----
Benzene	**4.5**	**3.2**		0.000002
Benzyl chloride	ND	5.2	U	-----
Bromodichloromethane	ND	6.7	U	-----
Bromoform	ND	10	U	-----
Bromomethane	ND	3.9	U	-----
Carbon Disulfide	ND	3.1	U	-----
Carbon Tetrachloride	ND	1.6	U	-----
Chlorobenzene	ND	4.6	U	-----
Chloroethane	ND	2.6	U	-----
Chloroform	ND	4.9	U	-----
Chloromethane	**3.1**	**2.1**		0.000001
cis-1,2-Dichloroethene	ND	4.0	U	-----
cis-1,3-Dichloropropene	ND	4.5	U	-----
Cyclohexane	46	3.4		0.000019
Dibromochloromethane	ND	8.5	U	-----
Dichlorodifluoromethane	ND	4.9	U	-----
Ethyl Acetate	**10**	**7.2**		0.000004
Ethylbenzene	ND	4.3	U	-----
Hexachlorobutadiene	ND	11	U	-----
Isopropanol	ND	4.9	U	-----
Methyl Methacrylate	ND	4.1	U	-----
Methyl t-Butyl Ether	ND	3.6	U	-----
Methylene Chloride	**8.7**	**6.9**		0.000004
n-Heptane	**34**	**4.1**		0.000014
n-Hexane	**31**	**3.5**		0.000013
o-Xylene	ND	4.3	U	-----
p- & m- Xylene	**9.1**	**8.7**		0.000004
p-Ethyltoluene	ND	4.9	U	-----
Propylene	4.0	1.7		0.000002
Styrene	ND	4.3	U	-----
Tetrachloroethene	**1,800**	**1.7**		0.000735
Tetrahydrofuran	53	5.9		0.000022
Toluene	**28**	**3.8**		0.000011
trans-1,2-Dichloroethene	ND	4.0	U	-----
trans-1,3-Dichloropropene	ND	4.5	U	-----
Trichloroethene	**170**	**1.3**		0.000069
Trichlorofluoromethane	ND	5.6	U	-----
Vinyl acetate	ND	3.5	U	-----
Vynyl bromide	ND	4.4	U	-----
Vinyl Chloride	ND	2.6	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15
Sample analytical results reflect a Dilution Factor of 10

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000939**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,250
Flow - CFM	**109**
Flow - m^3/minute	**3.089**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000939**
Total VOCs (lb/day)	**0.022538**
Total VOCs (lb/week)	**0.157769**
Total VOCs (lb/month)	**4.733081**

TABLE 3

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected November 6, 2017
Volatile Organic Compound Discharge Mass - 1 Month After System Start-up

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	ND	0.55	U	-----
1,1,2,2-Tetrachloroethane	ND	0.69	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.77	U	-----
1,1,2-Trichloroethane	ND	0.55	U	-----
1,1-Dichloroethane	ND	0.40	U	-----
1,1-Dichloroethene	ND	0.40	U	-----
1,2,4-Trichlorobenzene	ND	0.74	U	-----
1,2,4-Trimethylbenzene	ND	0.49	U	-----
1,2-Dibromoethane	ND	0.77	U	-----
1,2-Dichlorobenzene	ND	0.60	U	-----
1,2-Dichloroethane	ND	0.40	U	-----
1,2-Dichloropropane	ND	0.46	U	-----
1,2-Dichlorotetrafluoroethane	ND	0.70	U	-----
1,3,5-Trimethylbenzene	ND	0.49	U	-----
1,3-Butadiene	ND	0.66	U	-----
1,3-Dichlorobenzene	ND	0.60	U	-----
1,3-Dichloropropane	ND	0.46	U	-----
1,4-Dichlorobenzene	ND	0.60	U	-----
1,4-Dioxane	ND	0.72	U	-----
2-Butanone	ND	0.29	U	-----
2-Hexanone	ND	0.82	U	-----
3-Chloropropene	ND	1.6	U	-----
4-Methyl-2-Pentanone	**0.45**	**0.41**		0.0000002
Acetone	**0.95**	**0.48**		0.0000004
Acrylonitrile	ND	0.22	U	-----
Benzene	ND	0.32	U	-----
Benzyl chloride	ND	0.52	U	-----
Bromodichloromethane	ND	0.67	U	-----
Bromoform	ND	1.0	U	-----
Bromomethane	ND	0.39	U	-----
Carbon Disulfide	**0.81**	**0.31**		0.0000003
Carbon Tetrachloride	ND	0.16	U	-----
Chlorobenzene	ND	0.46	U	-----
Chloroethane	ND	0.26	U	-----
Chloroform	ND	0.49	U	-----
Chloromethane	ND	0.21	U	-----
cis-1,2-Dichloroethene	ND	0.40	U	-----
cis-1,3-Dichloropropene	ND	0.45	U	-----
Cyclohexane	ND	0.34	U	-----
Dibromochloromethane	ND	0.85	U	-----
Dichlorodifluoromethane	**0.54**	**0.49**		0.0000002
Ethyl Acetate	ND	0.72	U	-----
Ethylbenzene	ND	0.43	U	-----
Hexachlorobutadiene	ND	1.1	U	-----
Isopropanol	ND	0.49	U	-----
Methyl Methacrylate	**0.41**	**0.41**		0.0000002
Methyl t-Butyl Ether	ND	0.36	U	-----
Methylene Chloride	ND	0.69	U	-----
n-Heptane	ND	0.41	U	-----
n-Hexane	**0.81**	**0.35**		0.0000003
o-Xylene	ND	0.43	U	-----
p- & m- Xylene	ND	0.87	U	-----
p-Ethyltoluene	ND	0.49	U	-----
Propylene	ND	0.17	U	-----
Styrene	ND	0.43	U	-----
Tetrachloroethene	**10**	**0.17**		0.0000041
Tetrahydrofuran	ND	0.59	U	-----
Toluene	**1.2**	**0.38**		0.0000005
trans-1,2-Dichloroethene	ND	0.40	U	-----
trans-1,3-Dichloropropene	ND	0.45	U	-----
Trichloroethene	**0.81**	**0.13**		0.0000003
Trichlorofluoromethane	ND	0.56	U	-----
Vinyl acetate	ND	0.35	U	-----
Vynyl bromide	ND	0.44	U	-----
Vinyl Chloride	ND	0.26	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour
Note - Sample analyzed by EPA Method TO-15

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000007**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,250
Flow - CFM	**109**
Flow - m^3/minute	**3.089**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000007**
Total VOCs (lb/day)	**0.000157**
Total VOCs (lb/week)	**0.001097**
Total VOCs (lb/month)	**0.032908**

TABLE 4

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected December 4, 2017
Volatile Organic Compound Discharge Mass - 2 Months After System Start-up

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**8.2**	**5.5**		0.000003
1,1,2,2-Tetrachloroethane	ND	6.9	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	7.7	U	-----
1,1,2-Trichloroethane	ND	5.5	U	-----
1,1-Dichloroethane	ND	4.0	U	-----
1,1-Dichloroethene	ND	0.99	U	-----
1,2,4-Trichlorobenzene	ND	7.4	U	-----
1,2,4-Trimethylbenzene	ND	4.9	U	-----
1,2-Dibromoethane	ND	7.7	U	-----
1,2-Dichlorobenzene	ND	6.0	U	-----
1,2-Dichloroethane	ND	4.0	U	-----
1,2-Dichloropropane	ND	4.6	U	-----
1,2-Dichlorotetrafluoroethane	ND	7.0	U	-----
1,3,5-Trimethylbenzene	ND	4.9	U	-----
1,3-Butadiene	ND	6.6	U	-----
1,3-Dichlorobenzene	ND	6.0	U	-----
1,3-Dichloropropane	ND	4.6	U	-----
1,4-Dichlorobenzene	ND	6.0	U	-----
1,4-Dioxane	ND	7.2	U	-----
2-Butanone	**11**	**2.9**		0.0000036
2-Hexanone	ND	8.2	U	-----
3-Chloropropene	ND	16	U	-----
4-Methyl-2-Pentanone	**7.0**	**4.1**		0.0000023
Acetone	**64**	**4.8**		0.0000211
Acrylonitrile	ND	2.2	U	-----
Benzene	ND	3.2	U	-----
Benzyl chloride	ND	5.2	U	-----
Bromodichloromethane	ND	6.7	U	-----
Bromoform	ND	10	U	-----
Bromomethane	ND	3.9	U	-----
Carbon Disulfide	ND	3.1	U	-----
Carbon Tetrachloride	ND	1.6	U	-----
Chlorobenzene	ND	4.6	U	-----
Chloroethane	ND	2.6	U	-----
Chloroform	ND	4.9	U	-----
Chloromethane	ND	2.1	U	-----
cis-1,2-Dichloroethene	ND	0.99	U	-----
cis-1,3-Dichloropropene	ND	4.5	U	-----
Cyclohexane	**21**	**3.4**		0.0000069
Dibromochloromethane	ND	8.5	U	-----
Dichlorodifluoromethane	ND	4.9	U	-----
Ethyl Acetate	ND	7.2	U	-----
Ethylbenzene	**9.6**	**4.3**		0.0000032
Hexachlorobutadiene	ND	11	U	-----
Isopropanol	ND	4.9	U	-----
Methyl Methacrylate	**34**	**4.1**		0.0000112
Methyl t-Butyl Ether	ND	3.6	U	-----
Methylene Chloride	ND	6.9	U	-----
n-Heptane	**8.6**	**4.1**		0.0000028
n-Hexane	**12**	**3.5**		0.0000040
o-Xylene	**15**	**4.3**		0.0000050
p- & m- Xylene	**47**	**8.7**		0.0000155
p-Ethyltoluene	ND	4.9	U	-----
Propylene	**3.3**	**1.7**		0.0000011
Styrene	ND	4.3	U	-----
Tetrachloroethene	**570**	**1.7**		0.0001882
Tetrahydrofuran	ND	5.9	U	-----
Toluene	**32**	**3.8**		0.0000106
trans-1,2-Dichloroethene	ND	4.0	U	-----
trans-1,3-Dichloropropene	ND	4.5	U	-----
Trichloroethene	**40**	**1.3**		0.0000132
Trichlorofluoromethane	ND	5.6	U	-----
Vinyl acetate	ND	3.5	U	-----
Vynyl bromide	ND	4.4	U	-----
Vinyl Chloride	ND	0.64	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15

Sample analytical results reflect a Dilution Factor of 10

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000291**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,010
Flow - CFM	**88**
Flow - m^3/minute	**2.496**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000291**
Total VOCs (lb/day)	**0.006994**
Total VOCs (lb/week)	**0.048958**
Total VOCs (lb/month)	**1.468733**

TABLE 5

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected January 3, 2018
Volatile Organic Compound Discharge Mass - 3 Months After System Start-up

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	ND	5.5	U	-----
1,1,2,2-Tetrachloroethane	ND	6.9	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	7.7	U	-----
1,1,2-Trichloroethane	ND	5.5	U	-----
1,1-Dichloroethane	ND	4.0	U	-----
1,1-Dichloroethene	ND	0.99	U	-----
1,2,4-Trichlorobenzene	ND	7.4	U	-----
1,2,4-Trimethylbenzene	ND	4.9	U	-----
1,2-Dibromoethane	ND	7.7	U	-----
1,2-Dichlorobenzene	ND	6.0	U	-----
1,2-Dichloroethane	ND	4.0	U	-----
1,2-Dichloropropane	ND	4.6	U	-----
1,2-Dichlorotetrafluoroethane	ND	7.0	U	-----
1,3,5-Trimethylbenzene	ND	4.9	U	-----
1,3-Butadiene	ND	6.6	U	-----
1,3-Dichlorobenzene	ND	6.0	U	-----
1,3-Dichloropropane	ND	4.6	U	-----
1,4-Dichlorobenzene	ND	6.0	U	-----
1,4-Dioxane	ND	7.2	U	-----
2-Butanone	ND	2.9	U	-----
2-Hexanone	ND	8.2	U	-----
3-Chloropropene	ND	16	U	-----
4-Methyl-2-Pentanone	ND	4.1	U	-----
Acetone	**7.1**	**4.8**		0.0000026
Acrylonitrile	ND	2.2	U	-----
Benzene	ND	3.2	U	-----
Benzyl chloride	ND	5.2	U	-----
Bromodichloromethane	ND	6.7	U	-----
Bromoform	ND	10	U	-----
Bromomethane	ND	3.9	U	-----
Carbon Disulfide	ND	3.1	U	-----
Carbon Tetrachloride	ND	1.6	U	-----
Chlorobenzene	ND	4.6	U	-----
Chloroethane	ND	2.6	U	-----
Chloroform	ND	4.9	U	-----
Chloromethane	ND	2.1	U	-----
cis-1,2-Dichloroethene	ND	0.99	U	-----
cis-1,3-Dichloropropene	ND	4.5	U	-----
Cyclohexane	ND	3.4	U	-----
Dibromochloromethane	ND	8.5	U	-----
Dichlorodifluoromethane	**8.4**	**4.9**		0.0000031
Ethyl Acetate	ND	7.2	U	-----
Ethylbenzene	ND	4.3	U	-----
Hexachlorobutadiene	ND	11	U	-----
Isopropanol	ND	4.9	U	-----
Methyl Methacrylate	ND	4.1	U	-----
Methyl t-Butyl Ether	ND	3.6	U	-----
Methylene Chloride	ND	6.9	U	-----
n-Heptane	ND	4.1	U	-----
n-Hexane	ND	3.5	U	-----
o-Xylene	ND	4.3	U	-----
p- & m- Xylene	ND	8.7	U	-----
p-Ethyltoluene	ND	4.9	U	-----
Propylene	**2.2**	**1.7**		0.0000008
Styrene	ND	4.3	U	-----
Tetrachloroethene	**29**	**1.7**		0.0000106
Tetrahydrofuran	ND	5.9	U	-----
Toluene	**3.8**	**3.8**		0.0000014
trans-1,2-Dichloroethene	ND	4.0	U	-----
trans-1,3-Dichloropropene	ND	4.5	U	-----
Trichloroethene	ND	1.3	U	-----
Trichlorofluoromethane	ND	5.6	U	-----
Vinyl acetate	ND	3.5	U	-----
Vynyl bromide	ND	4.4	U	-----
Vinyl Chloride	ND	0.64	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15
Sample analytical results reflect a Dilution Factor of 10

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000018**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,120
Flow - CFM	**98**
Flow - m^3/minute	**2.768**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000018**
Total VOCs (lb/day)	**0.000444**
Total VOCs (lb/week)	**0.003106**
Total VOCs (lb/month)	**0.093179**

TABLE 6

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected August 2, 2018
Volatile Organic Compound Discharge Mass - 10 Months After System Start-up

Parameter	Effluent (ug/m[1])			Total Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**7.5**	0.55		0.000002
1,1,2,2-Tetrachloroethane	ND	0.69	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.5**	0.77		0.000001
1,1,2-Trichloroethane	ND	0.55	U	-----
1,1-Dichloroethane	ND	0.40	U	-----
1,1-Dichloroethene	ND	0.099	U	-----
1,2,4-Trichlorobenzene	ND	0.74	U	-----
1,2,4-Trimethylbenzene	**3.1**	0.49		0.000001
1,2-Dibromoethane	ND	0.77	U	-----
1,2-Dichlorobenzene	ND	0.60	U	-----
1,2-Dichloroethane	ND	0.40	U	-----
1,2-Dichloropropane	ND	0.46	U	-----
1,2-Dichlorotetrafluoroethane	ND	0.70	U	-----
1,3,5-Trimethylbenzene	**1.3**	0.49		0.000000
1,3-Butadiene	ND	0.66	U	-----
1,3-Dichlorobenzene	ND	0.60	U	-----
1,3-Dichloropropane	ND	0.46	U	-----
1,4-Dichlorobenzene	**0.72**	0.60		0.000000
1,4-Dioxane	ND	0.72	U	-----
2-Butanone	**7.2**	0.29		0.000002
2-Hexanone	ND	0.82	U	-----
3-Chloropropene	ND	1.6	U	-----
4-Methyl-2-Pentanone	**3.0**	0.41		0.000001
Acetone	ND	19	U	-----
Acrylonitrile	ND	0.22	U	-----
Benzene	**1.6**	0.32		0.000000
Benzyl chloride	ND	0.52	U	-----
Bromodichloromethane	ND	0.67	U	-----
Bromoform	ND	1.0	U	-----
Bromomethane	ND	0.39	U	-----
Carbon Disulfide	**1.1**	0.31		0.000000
Carbon Tetrachloride	**0.82**	0.16		0.000000
Chlorobenzene	ND	0.46	U	-----
Chloroethane	**2.0**	0.26		0.000001
Chloroform	**4.2**	0.49		0.000001
Chloromethane	**3.0**	0.21		0.000001
cis-1,2-Dichloroethene	**9.7**	0.099		0.000002
cis-1,3-Dichloropropene	ND	0.45	U	-----
Cyclohexane	**6.9**	0.34		0.000002
Dibromochloromethane	ND	0.85	U	-----
Dichlorodifluoromethane	**2.2**	0.49		0.000001
Ethyl Acetate	**1.7**	0.72		0.000000
Ethylbenzene	**3.0**	0.43		0.000001
Hexachlorobutadiene	ND	1.1	U	-----
Isopropanol	**11**	0.49		0.000003
Methyl Methacrylate	ND	0.41	U	-----
Methyl t-Butyl Ether	ND	0.36	U	-----
Methylene Chloride	**5.5**	0.69		0.000001
n-Heptane	**10**	0.41		0.000003
n-Hexane	**76**	0.35		0.000019
o-Xylene	**3.2**	0.43		0.000001
p- & m- Xylene	**10**	0.87		0.000003
p-Ethyltoluene	**2.6**	0.49		0.000001
Propylene	**2.8**	0.17		0.000001
Styrene	**4.9**	0.43		0.000001
Tetrachloroethene	**1000**	6.8		0.000253
Tetrahydrofuran	**1.8**	0.59		0.000000
Toluene	**29**	0.38		0.000007
trans-1,2-Dichloroethene	ND	0.40	U	-----
trans-1,3-Dichloropropene	ND	0.45	U	-----
Trichloroethene	**69**	0.13		0.000017
Trichlorofluoromethane	**1.9**	0.56		0.000000
Vinyl acetate	ND	0.35	U	-----
Vynyl bromide	ND	0.44	U	-----
Vinyl Chloride	ND	0.064	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour
Note - Samples analyzed by EPA Method TO-15

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000327**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	775
Flow - CFM	**68**
Flow - m^3/minute	**1.915**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000327**
Total VOCs (lb/day)	**0.007838**
Total VOCs (lb/week)	**0.054868**
Total VOCs (lb/month)	**1.646053**

TABLE 7

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected June 4, 2019
Volatile Organic Compound Discharge Mass - 20 Months After System Start-up

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**3.10**	**0.55**		0.000002
1,1,2,2-Tetrachloroethane	ND	0.69	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.10**	**0.77**		0.000001
1,1,2-Trichloroethane	ND	0.55	U	-----
1,1-Dichloroethane	**0.45**	**0.40**		0.000000
1,1-Dichloroethene	ND	0.099	U	-----
1,2,4-Trichlorobenzene	ND	0.74	U	-----
1,2,4-Trimethylbenzene	**2.80**	**0.49**		0.000001
1,2-Dibromoethane	ND	0.77	U	-----
1,2-Dichlorobenzene	ND	0.60	U	-----
1,2-Dichloroethane	ND	0.40	U	-----
1,2-Dichloropropane	ND	0.46	U	-----
1,2-Dichlorotetrafluoroethane	ND	0.70	U	-----
1,3,5-Trimethylbenzene	**0.79**	**0.49**		0.000000
1,3-Butadiene	ND	0.66	U	-----
1,3-Dichlorobenzene	ND	0.60	U	-----
1,3-Dichloropropane	ND	0.46	U	-----
1,4-Dichlorobenzene	ND	0.60	U	-----
1,4-Dioxane	ND	0.72	U	-----
2-Butanone	**3.0**	**0.3**		0.000001
2-Hexanone	ND	0.82	U	-----
3-Chloropropene	ND	1.60	U	-----
4-Methyl-2-Pentanone	**1.10**	**0.41**		0.000001
Acetone	**80**	**0**		0.000039
Acrylonitrile	ND	0.22	U	-----
Benzene	**0.51**	**0.32**		0.000000
Benzyl chloride	ND	0.52	U	-----
Bromodichloromethane	ND	0.67	U	-----
Bromoform	ND	1.0	U	-----
Bromomethane	ND	0.39	U	-----
Carbon Disulfide	**0.40**	**0.31**		0.000000
Carbon Tetrachloride	**0.50**	**0.16**		0.000000
Chlorobenzene	ND	0.46	U	-----
Chloroethane	**0.37**	**0.26**		0.000000
Chloroform	**1.90**	**0.49**		0.000001
Chloromethane	**2.30**	**0.21**		0.000001
cis-1,2-Dichloroethene	**0.12**	**0.099**		0.000000
cis-1,3-Dichloropropene	ND	0.45	U	-----
Cyclohexane	ND	0.34	U	-----
Dibromochloromethane	ND	0.85	U	-----
Dichlorodifluoromethane	**1.90**	**0.49**		0.000001
Ethyl Acetate	**1.20**	**0.72**		0.000001
Ethylbenzene	**2.30**	**0.43**		0.000001
Hexachlorobutadiene	ND	1.10	U	-----
Isopropanol	**4.10**	**0.49**		0.000002
Methyl Methacrylate	**12**	**0.41**		0.000006
Methyl t-Butyl Ether	ND	0.36	U	-----
Methylene Chloride	**1.40**	**0.69**		0.000001
n-Heptane	**0.66**	**0.41**		0.000000
n-Hexane	**0.56**	**0.35**		0.000000
o-Xylene	**2.40**	**0.43**		0.000001
p- & m- Xylene	**8.10**	**0.87**		0.000004
p-Ethyltoluene	**2.10**	**0.49**		0.000001
Propylene	ND	0.17	U	-----
Styrene	**2.60**	**0.43**		0.000001
Tetrachloroethene	**77**	**0.17**		0.000038
Tetrahydrofuran	ND	0.59	U	-----
Toluene	**20**	**0.38**		0.000010
trans-1,2-Dichloroethene	ND	0.40	U	-----
trans-1,3-Dichloropropene	ND	0.45	U	-----
Trichloroethene	**19**	**0.13**		0.000009
Trichlorofluoromethane	**1.30**	**0.56**		0.000001
Vinyl acetate	ND	0.35	U	-----
Vynyl bromide	ND	0.44	U	-----
Vinyl Chloride	ND	0.064	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour
Note - Samples analyzed by EPA Method TO-15

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000125**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,500
Flow - CFM	**131**
Flow - m^3/minute	**3.707**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000125**
Total VOCs (lb/day)	**0.003001**
Total VOCs (lb/week)	**0.021010**
Total VOCs (lb/month)	**0.630292**

TABLE 8

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected December 18, 2019
Volatile Organic Compound Discharge Mass - 26 Months After System Start-up

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**8.8**	**0.55**		0.000004
1,1,2,2-Tetrachloroethane	ND	0.69	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	**3.4**	**0.77**		0.0000017
1,1,2-Trichloroethane	ND	0.55	U	-----
1,1-Dichloroethane	**1.4**	**0.40**		0.0000007
1,1-Dichloroethene	ND	0.099	U	-----
1,2,4-Trichlorobenzene	ND	0.74	U	-----
1,2,4-Trimethylbenzene	**2.5**	**0.49**		0.0000012
1,2-Dibromoethane	ND	0.77	U	-----
1,2-Dichlorobenzene	ND	0.60	U	-----
1,2-Dichloroethane	**5.5**	**0.40**		0.0000027
1,2-Dichloropropane	ND	0.46	U	-----
1,2-Dichlorotetrafluoroethane	ND	0.70	U	-----
1,3,5-Trimethylbenzene	**1.1**	**0.49**		0.0000005
1,3-Butadiene	ND	0.66	U	-----
1,3-Dichlorobenzene	ND	0.60	U	-----
1,3-Dichloropropane	ND	0.46	U	-----
1,4-Dichlorobenzene	ND	0.60	U	-----
1,4-Dioxane	ND	0.72	U	-----
2-Butanone	**1.7**	**0.29**		0.0000008
2-Hexanone	ND	0.82	U	-----
3-Chloropropene	ND	1.60	U	-----
4-Methyl-2-Pentanone	**2.6**	**0.41**		0.0000013
Acetone	**30**	**0.48**		0.0000147
Acrylonitrile	ND	0.22	U	-----
Benzene	ND	0.32	U	-----
Benzyl chloride	ND	0.52	U	-----
Bromodichloromethane	ND	0.67	U	-----
Bromoform	ND	1.0	U	-----
Bromomethane	ND	0.39	U	-----
Carbon Disulfide	**0.62**	**0.31**		0.0000003
Carbon Tetrachloride	**0.69**	**0.16**		0.0000003
Chlorobenzene	ND	0.46	U	-----
Chloroethane	**1.6**	**0.26**		0.0000008
Chloroform	**2.1**	**0.49**		0.0000010
Chloromethane	**0.76**	**0.21**		0.0000004
cis-1,2-Dichloroethene	**0.52**	**0.099**		0.0000003
cis-1,3-Dichloropropene	ND	0.45	U	-----
Cyclohexane	ND	0.34	U	-----
Dibromochloromethane	ND	0.85	U	-----
Dichlorodifluoromethane	ND	0.49	U	-----
Ethyl Acetate	**1.4**	**0.72**		0.0000007
Ethylbenzene	**1.1**	**0.73**		0.0000005
Hexachlorobutadiene	ND	1.10	U	-----
Isopropanol	**1.4**	**0.49**		0.0000007
Methyl Methacrylate	**30**	**0.41**		0.0000147
Methyl t-Butyl Ether	ND	0.36	U	-----
Methylene Chloride	**5.50**	**0.69**		0.0000027
n-Heptane	ND	0.41	U	-----
n-Hexane	**1.4**	**0.35**		0.0000007
o-Xylene	**1.8**	**0.43**		0.0000009
p- & m- Xylene	**5.1**	**0.87**		0.0000025
p-Ethyltoluene	**2.3**	**0.49**		0.0000011
Propylene	ND	0.17	U	-----
Styrene	**2.6**	**0.43**		0.0000013
Tetrachloroethene	**130**	**0.68**		0.0000637
Tetrahydrofuran	ND	0.59	U	-----
Toluene	**4.7**	**0.38**		0.0000023
trans-1,2-Dichloroethene	ND	0.40	U	-----
trans-1,3-Dichloropropene	ND	0.45	U	-----
Trichloroethene	**22**	**0.13**		0.0000108
Trichlorofluoromethane	**1.9**	**0.56**		0.000001
Vinyl acetate	ND	0.35	U	-----
Vynyl bromide	ND	0.44	U	-----
Vinyl Chloride	ND	0.064	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15

Note 2 - Effluent Flow Velocity Measured on May 2019 was utilided for December 2019 Contaminant Mass Calculation

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000135**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	**1,500**
Flow - CFM	**131**
Flow - m^3/minute	**3.707**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000135**
Total VOCs (lb/day)	**0.003230**
Total VOCs (lb/week)	**0.022610**
Total VOCs (lb/month)	**0.678307**

TABLE 9

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected August 3, 2020
Volatile Organic Compound Discharge Mass - 34 Months After System Start-up

Parameter	Effluent (ug/m[1])			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**1.5**	**1.10**		0.000001
1,1,2,2-Tetrachloroethane	ND	1.40	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.50	U	-----
1,1,2-Trichloroethane	ND	1.10	U	-----
1,1-Dichloroethane	ND	0.81	U	-----
1,1-Dichloroethene	ND	0.200	U	-----
1,2,4-Trichlorobenzene	ND	1.50	U	-----
1,2,4-Trimethylbenzene	**1.4**	**0.98**		0.0000005
1,2-Dibromoethane	ND	1.50	U	-----
1,2-Dichlorobenzene	ND	1.20	U	-----
1,2-Dichloroethane	ND	0.81	U	-----
1,2-Dichloropropane	ND	0.92	U	-----
1,2-Dichlorotetrafluoroethane	ND	1.40	U	-----
1,3,5-Trimethylbenzene	ND	0.98	U	-----
1,3-Butadiene	ND	1.30	U	-----
1,3-Dichlorobenzene	ND	1.20	U	-----
1,3-Dichloropropane	ND	0.92	U	-----
1,4-Dichlorobenzene	ND	1.20	U	-----
1,4-Dioxane	ND	1.40	U	-----
2-Butanone	**9.0**	**0.59**		0.0000035
2-Hexanone	ND	1.60	U	-----
3-Chloropropene	ND	3.10	U	-----
4-Methyl-2-Pentanone	**3.5**	**0.82**		0.0000013
Acetone	**110**	**0.95**		0.0000424
Acrylonitrile	ND	0.43	U	-----
Benzene	**1.0**	**0.64**		0.0000004
Benzyl chloride	ND	1.00	U	-----
Bromodichloromethane	ND	1.30	U	-----
Bromoform	ND	2.1	U	-----
Bromomethane	ND	0.78	U	-----
Carbon Disulfide	**2.8**	**0.62**		0.0000011
Carbon Tetrachloride	**0.50**	**0.31**		0.0000002
Chlorobenzene	ND	0.92	U	-----
Chloroethane	ND	0.53	U	-----
Chloroform	ND	0.98	U	-----
Chloromethane	**2.4**	**0.41**		0.0000009
cis-1,2-Dichloroethene	**0.63**	**0.200**		0.0000002
cis-1,3-Dichloropropene	ND	0.91	U	-----
Cyclohexane	ND	0.69	U	-----
Dibromochloromethane	ND	1.70	U	-----
Dichlorodifluoromethane	**2.2**	**0.99**		0.0000008
Ethyl Acetate	**10**	**1.40**		0.0000039
Ethylbenzene	**2.7**	**0.87**		0.0000010
Hexachlorobutadiene	ND	2.10	U	-----
Isopropanol	**390**	**0.98**		0.0001503
Methyl Methacrylate	**7.9**	**0.82**		0.0000030
Methyl t-Butyl Ether	ND	0.72	U	-----
Methylene Chloride	**30**	**1.40**		0.0000116
n-Heptane	ND	0.82	U	-----
n-Hexane	**3.6**	**0.70**		0.0000014
o-Xylene	**2.7**	**0.87**		0.0000010
p- & m- Xylene	**9.0**	**1.70**		0.0000035
p-Ethyltoluene	**1.3**	**0.98**		0.0000005
Propylene	ND	0.34	U	-----
Styrene	**3.2**	**0.85**		0.0000012
Tetrachloroethene	**57**	**1.40**		0.0000220
Tetrahydrofuran	ND	1.20	U	-----
Toluene	**39**	**0.75**		0.0000150
trans-1,2-Dichloroethene	ND	0.79	U	-----
trans-1,3-Dichloropropene	ND	0.91	U	-----
Trichloroethene	**6.9**	**0.27**		0.0000027
Trichlorofluoromethane	**1.5**	**1.10**		0.000001
Vinyl acetate	ND	0.70	U	-----
Vynyl bromide	ND	0.87	U	-----
Vinyl Chloride	ND	0.260	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15
Sample analytical results reflect a Dilution Factor of 10

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000270**

Conversion Factors

Pound	Micrograms
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,179
Flow - CFM	**103**
Flow - m^3/minute	**2.913**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000270**
Total VOCs (lb/day)	**0.006472**
Total VOCs (lb/week)	**0.045303**
Total VOCs (lb/month)	**1.359104**

TABLE 10

QUEENS MEDALLION LEASING

21-03 44TH AVENUE

LONG ISLAND CITY, NEW YORK

NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected February 24, 2022

Volatile Organic Compound Discharge Mass - 53 Months After System Start-up

Parameter	Effluent (ug/m^3) [1]			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**0.93**	**0.55**		0.0000003344
1,1,2,2-Tetrachloroethane	ND	0.69	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	0.84	0.77		0.0000003020
1,1,2-Trichloroethane	ND	0.55	U	-----
1,1-Dichloroethane	ND	0.40	U	-----
1,1-Dichloroethene	ND	0.099	U	-----
1,2,4-Trichlorobenzene	ND	0.74	U	-----
1,2,4-Trimethylbenzene	**0.69**	**0.49**		0.0000002481
1,2-Dibromoethane	ND	0.77	U	-----
1,2-Dichlorobenzene	ND	1.20	U	-----
1,2-Dichloroethane	ND	0.60	U	-----
1,2-Dichloropropane	ND	0.46	U	-----
1,2-Dichlorotetrafluoroethane	ND	0.70	U	-----
1,3,5-Trimethylbenzene	ND	0.49	U	-----
1,3-Butadiene	ND	0.66	U	-----
1,3-Dichlorobenzene	ND	0.66	U	-----
1,3-Dichloropropane	ND	0.46	U	-----
1,4-Dichlorobenzene	ND	0.60	U	-----
1,4-Dioxane	ND	0.72	U	-----
2-Butanone	**3.8**	**0.29**		0.0000013663
2-Hexanone	ND	0.82	U	-----
3-Chloropropene	ND	1.60	U	-----
4-Methyl-2-Pentanone	**2.5**	**0.41**		0.0000008989
Acetone	**34**	**0.48**		0.0000122250
Acrylonitrile	ND	0.22	U	-----
Benzene	**1.2**	**0.32**		0.0000004315
Benzyl chloride	ND	0.52	U	-----
Bromodichloromethane	ND	0.67	U	-----
Bromoform	ND	1.0	U	-----
Bromomethane	ND	0.39	U	-----
Carbon Disulfide	**0.34**	**0.31**		0.0000001223
Carbon Tetrachloride	**0.44**	**0.16**		0.0000001582
Chlorobenzene	ND	0.46	U	-----
Chloroethane	1.9	0.21		0.0000006832
Chloroform	0.49	0.49		0.0000001762
Chloromethane	**1.90**	**0.21**		0.0000006832
cis-1,2-Dichloroethene	**0.52**	**0.099**		0.0000001870
cis-1,3-Dichloropropene	ND	0.45	U	-----
Cyclohexane	ND	0.34	U	-----
Dibromochloromethane	ND	0.85	U	-----
Dichlorodifluoromethane	**2.2**	**0.099**		0.0000007910
Ethyl Acetate	**1.8**	**0.72**		0.0000006472
Ethylbenzene	**0.69**	**0.43**		0.0000002481
Hexachlorobutadiene	ND	1.1	U	-----
Isopropanol	**18.0**	**0.49**		0.0000064721
Methyl Methacrylate	**16**	**0.41**		0.0000057529
Methyl t-Butyl Ether	ND	0.36	U	-----
Methylene Chloride	**8.5**	**0.69**		0.0000030563
n-Heptane	1.20	0.41		0.0000004315
n-Hexane	**2.3**	**0.35**		0.0000008270
o-Xylene	**0.69**	**0.43**		0.0000002481
p- & m- Xylene	**2.0**	**0.87**		0.0000007191
p-Ethyltoluene	**0.5**	**0.49**		0.0000001942
Propylene	ND	0.17	U	-----
Styrene	**1.5**	**0.43**		0.0000005393
Tetrachloroethene	**13**	**0.68**		0.0000046743
Tetrahydrofuran	0.97	0.59		0.0000003488
Toluene	**5.7**	**0.38**		0.0000020495
trans-1,2-Dichloroethene	ND	0.40	U	-----
trans-1,3-Dichloropropene	ND	0.45	U	-----
Trichloroethene	**3.1**	**0.13**		0.0000011146
Trichlorofluoromethane	**1.2**	**0.56**		0.0000004315
Vinyl acetate	ND	0.35	U	-----
Vynyl bromide	ND	0.44	U	-----
Vinyl Chloride	ND	0.13	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15

Sample analytical results reflect a Dilution Factor of 1

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.0000463616**

Conversion Factors

Microgram	Pounds
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,100
Flow - CFM	**96**
Flow - m^3/minute	**2.718**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.00004636**
Total VOCs (lb/day)	**0.00111268**
Total VOCs (lb/week)	**0.00778874**
Total VOCs (lb/month)	**0.03338033**

TABLE 11

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Sample Collected April 14, 2022
Volatile Organic Compound Discharge Mass - 55 Months After System Start-up

Parameter	Effluent (ug/m^3) [1]			Total VOCs Discharge Mass
	Result	Lab RL [3]	Q	lbs/hr [4]
1,1,1,2-Tetrachloroethane	ND [2]	0.69	U	-----
1,1,1-Trichloroethane	**3.5**	0.55		0.000002174
1,1,2,2-Tetrachloroethane	ND	0.69	U	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.0**	0.77		0.000001242
1,1,2-Trichloroethane	ND	0.55	U	-----
1,1-Dichloroethane	**0.57**	0.40		0.000000354
1,1-Dichloroethene	ND	0.099	U	-----
1,2,4-Trichlorobenzene	ND	0.74	U	-----
1,2,4-Trimethylbenzene	**0.64**	0.49		0.000000397
1,2-Dibromoethane	ND	0.77	U	-----
1,2-Dichlorobenzene	ND	0.60	U	-----
1,2-Dichloroethane	ND	0.40	U	-----
1,2-Dichloropropane	ND	0.46	U	-----
1,2-Dichlorotetrafluoroethane	ND	0.70	U	-----
1,3,5-Trimethylbenzene	ND	0.49	U	-----
1,3-Butadiene	ND	0.66	U	-----
1,3-Dichlorobenzene	ND	0.60	U	-----
1,3-Dichloropropane	ND	0.46	U	-----
1,4-Dichlorobenzene	ND	0.60	U	-----
1,4-Dioxane	ND	0.72	U	-----
2-Butanone	**2.3**	0.29		0.000001428
2-Hexanone	ND	0.82	U	-----
3-Chloropropene	ND	1.6	U	-----
4-Methyl-2-Pentanone	**0.66**	0.41		0.000000410
Acetone	**40**	0.48		0.000024842
Acrylonitrile	ND	0.22	U	-----
Benzene	**0.77**	0.32		0.000000478
Benzyl chloride	ND	0.52	U	-----
Bromodichloromethane	ND	0.67	U	-----
Bromoform	ND	1.0	U	-----
Bromomethane	ND	0.39	U	-----
Carbon Disulfide	ND	0.31	U	-----
Carbon Tetrachloride	**0.44**	0.16		0.000000273
Chlorobenzene	ND	0.46	U	-----
Chloroethane	ND	0.26	U	-----
Chloroform	**2.5**	0.49		0.000001553
Chloromethane	**0.35**	0.21		0.000000217
cis-1,2-Dichloroethene	**0.28**	0.099		0.000000174
cis-1,3-Dichloropropene	ND	0.45	U	-----
Cyclohexane	**0.62**	0.34		0.000000385
Dibromochloromethane	ND	0.85	U	-----
Dichlorodifluoromethane	**3.2**	0.49		0.000001987
Ethyl Acetate	**1.4**	0.72		0.000000869
Ethylbenzene	**1.8**	0.43		0.000001118
Hexachlorobutadiene	ND	1.1	U	-----
Isopropanol	**19**	0.49		0.000011800
Methyl Methacrylate	ND	0.41	U	-----
Methyl t-Butyl Ether	ND	0.36	U	-----
Methylene Chloride	**0.94**	0.69		0.000000584
n-Heptane	**0.70**	0.41		0.000000435
n-Hexane	**1.8**	0.35		0.000001118
o-Xylene	**1.9**	0.43		0.000001180
p- & m- Xylene	**6.3**	0.87		0.000003913
p-Ethyltoluene	**0.54**	0.49		0.000000335
Propylene	ND	0.17	U	-----
Styrene	**0.51**	0.43		0.000000317
Tetrachloroethene	**43**	0.68		0.000026705
Tetrahydrofuran	**0.80**	0.59		0.000000497
Toluene	**13**	0.38		0.000008074
trans-1,2-Dichloroethene	ND	0.40	U	-----
trans-1,3-Dichloropropene	ND	0.45	U	-----
Trichloroethene	**14**	0.13		0.000008695
Trichlorofluoromethane	**1.6**	0.56		0.000000994
Vinyl acetate	ND	0.35	U	-----
Vynyl bromide	ND	0.44	U	-----
Vinyl Chloride	ND	0.13	U	-----

1) Micrograms per cubic meter
2) Not detected
3) Reportable Limit
4) Pounds per hour

Note - Sample analyzed by EPA Method TO-15
Sample analytical results reflect a Dilution Factor of 10

Effluent (Total VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.000102549**

Conversion Factors

Microgram	Pounds
1	0.00000000220462262185

ft^3	m^3
1	0.028316847

Effluent Parameters Measured in Field

Pipe Area (ft^2)	0.087266463
Flow Velocity (fpm)	1,900
Flow - CFM	**166**
Flow - m^3/minute	**4.695**

Effluent (VOC Mass) Discharge Rate

Total VOCs (lb/hr)	**0.00010255**
Total VOCs (lb/day)	**0.00246117**
Total VOCs (lb/week)	**0.01722822**
Total VOCs (lb/month)	**0.07383522**

TABLE 12

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Summary of SSD System Effluent Air Quality

Volatile Organic Compound (VOC) Discharge Mass in Effluent

Sample Date	Months after System Start-up	Effluent (VOC Mass) Discharge Rate	
		(lb/hr)	(lb/month)
10/02/2017	0	0.000939	0.676154
11/06/2017	1	0.000007	0.004701
12/04/2017	2	0.000291	0.209819
01/03/2018	3	0.000018	0.013311
08/02/2018	10	0.000327	0.235150
06/04/2019	20	0.000125	0.090042
12/18/2019	26	0.000135	0.096901
08/03/2020	34	0.000270	0.194158
02/24/2022	53	0.000046	0.033380
04/14/2022	55	0.000103	0.073835

lb/hr - Pounds per hour
lb/month - Pounds per month

TABLE 13

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK
NYSDEC BCP SITE NO. C241144

Groundwater Quality - Chromium and Hexavalent Chromium Concentrations
Compared to Technical and Operational Guidance Series Groundwater Quality Standards
(all concentrations in ug/L)

Sample Identification	MW-1				MW-2				MW-5				MW-6				TOGS GWQS
Sample Collection Date	08/15/18	12/18/19	08/03/20	02/24/22	08/28/18	12/18/19	08/03/20	02/24/22	08/15/18	12/18/19	08/03/20	02/24/22	08/15/18	12/18/19	08/03/20	02/24/22	
Chromium (Unfiltered)	2,350	1,730	---	---	2.5	NS	---	---	<5.6	3.6	---	---	NS	46	---	---	50
Hexavalent Chromium (Unfiltered)	1,700	1,960	---	---	<10	NS	---	---	<10	<10	---	---	NS	64	---	---	
Chromium (Dissolved - Field Filtered)	---	---	1,800	999	---	---	9.2	9.0	---	---	NS	NS	---	---	40	5.6	
Hexavalent Chromium (Dissolved - Field Filtered)	---	---	1,500	958	---	---	<10	ND	---	---	NS	NS	---	---	36	ND	
Chromium (Dissolved - Lab Filtered)	2,090	1,530	1,810	1,140	2.0	NS	6.5	ND	<5.6	1.2	NS	NS	NS	44	41	2.7	
Hexavalent Chromium (Dissolved - Lab Filtered)	1,720	1,940	1,450	961	<10	NS	<10	ND	<10	<10	NS	NS	NS	39	36	ND	

ug/L - Micrograms per liter
ND - Not detected
NA - No longer analyzed
NS - Not sampled
--- Not included in sampling protocol
TOGS GWQS - NYSDEC Technical and Operational Guidance Series Groundwater Quality Standards

FIGURES

SOURCE: USGS TOPOGRAPHIC QUADRANGLES CENTRAL PARK, NEW YORK-NEW JERSEY AND BROOKLYN, NEW YORK (1995).

QUADRANGLE LOCATION

0 2000

SCALE IN FEET

WSP USA Inc.
500 Summit Lake Drive
Suite 450
Valhalla, New York 10595
(914) 694-5711

Queens Medallion Leasing
21-03 44th Avenue
Long Island City, New York
NYSDEC BCP Site No. C241144

SITE LOCATION MAP

FIGURE 1

A | Drawn By: RAC | Checked: MKD | Approved: JB | DWG Date: 07/28/22

O:\DWG\Exclusive Reality Services, Inc\2022\CONVEYANCE PIPE-AS-BUILT\Figure1.dwg, Layout1, 7/28/2022 7:33:08 AM, DWG To PDF.pc3

MW-5
MW-222B
MW-215D
MW-214D
MW-6
VSS-9
VSS-1
VSS-6
21 ST STREET
MW-7
AREA OF FORMER
7,500-GALLON FUEL-OIL UST
(ABANDONED IN PLACE)
MW-4
QUEENS MEDALLION
LEASING BUILDING
FORMER CONCRETE
SUB-GRADE STRUCTURE
VSS-2
APPROXIMATE LOCATION
OF BASEMENT
MW-3
VSS-3
MW-217
VSS-5
VSS-4
MW-8
MW-223B
MW-1
44TH AVENUE
MW-2

LEGEND

PROPERTY BOUNDARY

2-INCH MONITORING WELL LOCATION

APPROXIMATE MONITORING WELL LOCATION

APPROXIMATE LOCATION OF BEDROCK MONITORING WELL

VSS-1 APPROXIMATE LOCATION OF FORMER SUB-SURFACE DRAINAGE STRUCTURE

0 25
SCALE IN FEET

WSP USA Inc.
500 Summit Lake Drive
Suite 450
Valhalla, New York 10595
(914) 694-5711

Drawn By:	RAC
Checked:	MKD
Approved:	JB
DWG Date:	07/28/22

Queens Medallion Leasing
21-03 44th Avenue
Long Island City, New York
NYSDEC BCP Site No. C241144

SITE PLAN

FIGURE 2

B

MW-5
ASPHALT ALLEYWAY
MW-222B
MW-214D
MW-6
MW-215D
VSS-9
CONCRETE SIDEWALK
21 ST STREET
ASPHALT ALLEYWAY
VSS-1
VSS-6
AREA OF FORMER
7,500-GALLON FUEL-OIL UST
(ABANDONED IN PLACE)
MW-7
CONCRETE
SLAB FLOOR
MW-4
QUEENS MEDALLION
LEASING BUILDING
FORMER CONCRETE
SUB-GRADE STRUCTURE
VSS-2
APPROXIMATE LOCATION
OF BASEMENT
CONCRETE FLOOR SLAB
MW-3
VSS-3
MW-217
VSS-5
VSS-4
MW-8
MW-223B
MW-1
CONCRETE SIDEWALK
44TH AVENUE
MW-2

LEGEND

PROPERTY BOUNDARY

2-INCH MONITORING WELL LOCATION

APPROXIMATE MONITORING WELL LOCATION

APPROXIMATE LOCATION OF BEDROCK MONITORING WELL

VSS-1 APPROXIMATE LOCATION OF FORMER SUB-SURFACE DRAINAGE STRUCTURE

0 25
SCALE IN FEET

WSP USA Inc.
500 Summit Lake Drive
Suite 450
Valhalla, New York 10595
(914) 694-5711

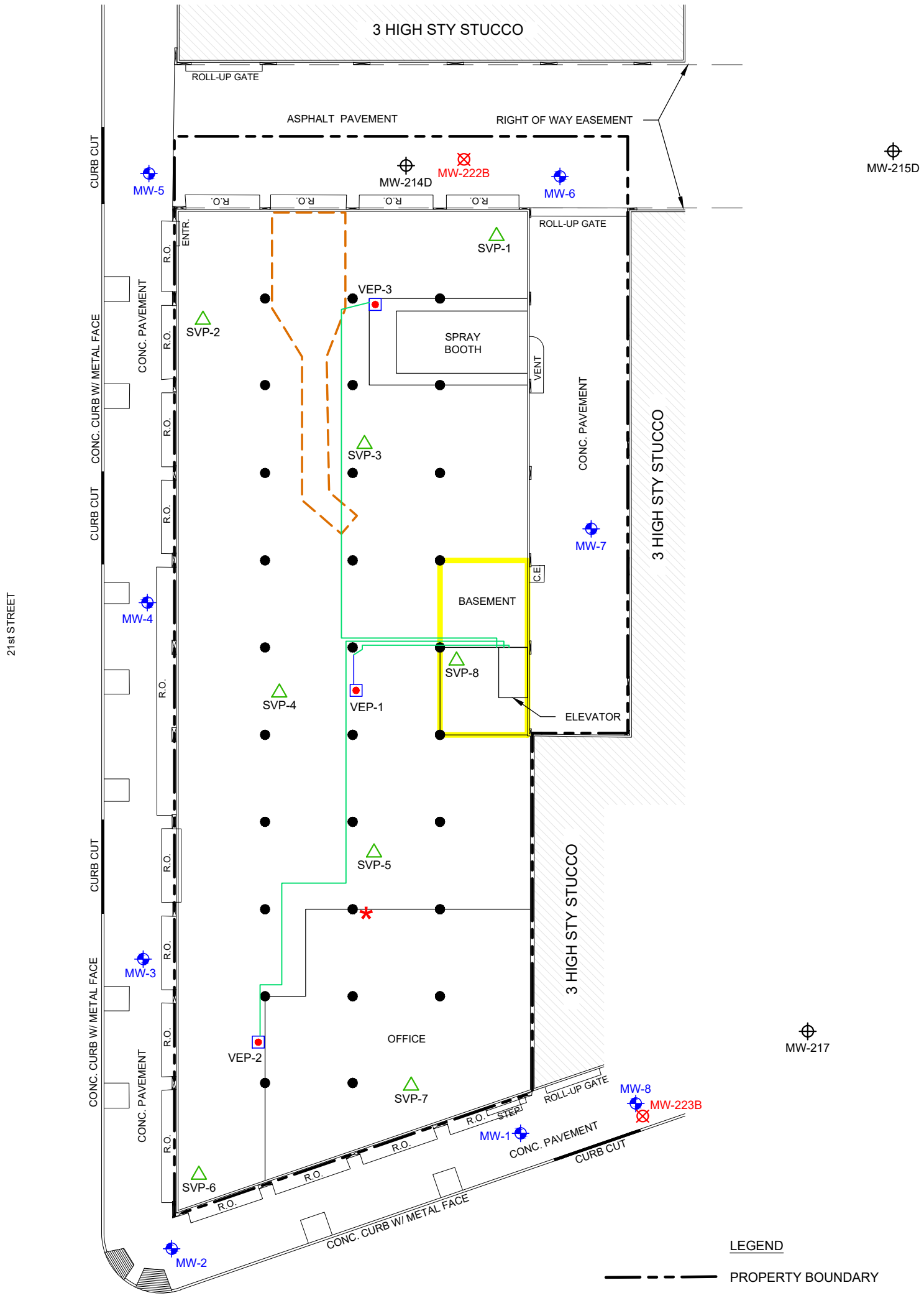
Drawn By:	RAC
Checked:	MKD
Approved:	JB
DWG Date:	07/28/22

Queens Medallion Leasing
21-03 44th Avenue
Long Island City, New York
NYSDEC BCP Site No. C241144

COVER TYPE AND LOCATION

FIGURE 3

B



WSP USA Inc.
500 Summit Lake Drive
Suite 450
Valhalla, New York 10595
(914) 694-5711

Drawn By:	RAC
Checked:	MKD
Approved:	JB
DWG Date:	07/28/22

Queens Medallion Leasing
21-03 44th Avenue
Long Island City, New York
NYSDEC BCP Site No. C241144

AS-BUILT SSDS LAYOUT AND LOCATIONS OF PERMANENT SUB-SLAB SOIL VAPOR/VACUUM MONITORING POINTS

FIGURE 4

B

APPENDIX A

OM&M Site Inspection Field Sheets

Date - 02/24/2022

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK

NYSDEC BCP SITE NO. C241144

SMP - Site Inspection Field Sheet
Site Cover System

Inspection Area	Inspection Location	Site Cover Material	Site Cover Condition	Evidence of Damage or Ground Invasive Activities	
				Yes	No
Exterior	Alley (south 1/2)	Concrete	Good		X
	Alley (north 1/2)	Asphalt	Good		X
Building Interior	First Floor	Painted Reinforced Concrete Slab	Good		X
	Partial Basement	Reinforced Concrete Slab with Vinyl Tiles	Good		X

General Site Conditions

Location	General Weather	Temperature (^{o}F)	Relative Humidity (%)	Dew Point (^{o}F)	Barometric Pressure (" mercury)
Site	Cloudy	35	~50	34	31

NOTES

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK

NYSDEC BCP SITE NO. C241144

SMP - Site Inspection Field Sheet
Sub-Slab Depressurization System and Soil Vapor Monitoring Points

Date - **2/24/2022**

Sub-Slab Depressurization System Monitoring									
Information	**Sample Location**	**Time**	**Vacuum Pressure - "H_2O**		**Air Flow (Vacuum/Discharge)**		**VOC Concentration (ppm)**	**Sample (Yes/No)**	**Sample Time**
			Gauge	**Manometer**	**(FPM)**	**(SCFM)**			
Sub-Slab Soil Vapor Monitoring Points	SVP-1	14:10	--	-0.30	--	--	0.0	No	--
	SVP-2	14:30	--	-0.22	--	--	0.0	No	--
	SVP-3	14:25	--	-0.75	--	--	0.0	No	--
	SVP-4	14:20	--	-0.80	--	--	0.0	No	--
	SVP-5	14:00	--	-0.02	--	--	0.0	No	--
	SVP-6	14:10	--	-0.04	--	--	0.0	No	--
	SVP-7	15:00	--	-0.04	--	--	0.0	No	--
	SVP-8	14:50	--	-0.04	--	--	0.0	No	--
SSD System Intake Manifold Vapor Extraction Pit Vacuum Pipes	VEP-1	15:30		-7.00	1,400	30.5	0.0	No	--
	VEP-2	15:35		-7.00	1,100	24.0	0.0	No	--
	VEP-3	15:40		-8.00	1,900	41.5	0.0	No	--
SSD System	Blower (Vacuum)	--	-30.00	--	--	--	--	No	--
	Efflent Pipe (Discharge)	--	--	--	1,100	96.0	0.0	yes	12:45
SSDS Roof Stack	Effluent	--	--	--	--	--	0.0	No	--

"H_2O - Inches of Water Column
SCFM - Standard cubic Feet per Minute
ppm - parts per million

2" VEP Pipe Cross-Section Area (square feet) 0.021816616
4" Effluent Pipe Cross-Section Area (square feet) 0.087266463

Additional Checks	Check Performed		Functioning as Designed		Issue Identified		Repair Required	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
SSDS Knock-out Tank Status	X		X			X		X
SSDS Blower Alarm Conditions	X		X			X		X
Blower Status Light Functioning Properly	X		X			X		X
Blower Status Light Confirmation Test	X		X			X		X
SSDS Manifold Connections Checked	X		X			X		X
SSDS Effluent Connections/Stack Checked	X		X			X		X

ADDITIONAL FIELD NOTES

Date - 4/14/2022

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK

NYSDEC BCP SITE NO. C241144

SMP - Site Inspection Field Sheet
Site Cover System

Inspection Area	Inspection Location	Site Cover Material	Site Cover Condition	Evidence of Damage or Ground Invasive Activities	
				Yes	No
Exterior	Alley (south 1/2)	Concrete	Good		X
	Alley (north 1/2)	Asphalt	Good		X
Building Interior	First Floor	Painted Reinforced Concrete Slab	Good		X
	Partial Basement	Reinforced Concrete Slab with Vinyl Tiles	Good		X

General Site Conditions

Location	General Weather	Temperature (^{o}F)	Relative Humidity (%)	Dew Point (^{o}F)	Barometric Pressure (" mercury)
Site	Sunny / Clear	~80	---	---	---

NOTES
All Site cover systems are in goood condition and are a barrier to exposure to the subsurface soils.
System running properly with no issues

QUEENS MEDALLION LEASING
21-03 44TH AVENUE
LONG ISLAND CITY, NEW YORK

NYSDEC BCP SITE NO. C241144

SMP - Site Inspection Field Sheet
Sub-Slab Depressurization System and Soil Vapor Monitoring Points

Date - 4/14/2022

Sub-Slab Depressurization System Monitoring										
Information	**Sample Location**	**Sample ID**	**Time**	**Vacuum Pressure - "H_2O**		**Air Flow (Vacuum/Discharge)**		**VOC Concentration (ppm)**	**Sample (Yes/No)**	**Sample Time**
				Gauge	**Manometer**	**(FPM)**	**(SCFM)**			
Sub-Slab Soil Vapor Monitoring Points	**1st Floor**	SVP-1	10:37	--	-0.35	--	--	0.0	No	--
		SVP-2	10:30	--	-0.23	--	--	0.0	No	--
		SVP-3	10:27	--	-0.64	--	--	0.0	No	--
		SVP-4	10:20	--	-0.69	--	--	0.0	No	--
		SVP-5	10:10	--	-0.07	--	--	0.0	No	--
		SVP-6	10:15	--	-0.02	--	--	0.0	No	--
		SVP-7	10:08	--	-0.03	--	--	0.0	No	--
	Basement	SVP-8	9:55	--	-0.02	--	--	0.0	No	--
SSD System Intake Manifold Vapor Extraction Pit Vacuum Pipes	**Blower Intake Manifold**	VEP-1	9:45	-5.0	-7.02	2,650	57.8	0.0	No	--
		VEP-2	9:46	-8.5	-7.02	2,140	46.7	0.0	No	--
		VEP-3	9:47	-9.0	-7.04	2,280	49.7	0.0	No	--
SSD System	**Intake Suction (Vacuum)**	Blower	--	-32	--	--	--	--	No	--
	Effluent Pipe (+ Pressure)	**Effluent**	--	+6.5	+1.48	1,900	165.8	0.0	**Yes**	**9:35**
SSDS Effluent Roof Stack	**NE Roof Parapet**	Effluent (Stack)	--	--	--	--	--	0.0	No	--

"H_2O - Inches of Water Column
SCFM - Standard cubic Feet per Minute
ppm - parts per million

2" VEP Pipe Cross-Section Area (square feet) 0.021816616
4" Effluent Pipe Cross-Section Area (square feet) 0.087266463

Additional Checks	Check Performed		Functioning as Designed		Issue Identified		Repair Required	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
SSDS Knock-out Tank Status	**X**		**X**			**X**		**X**
SSDS Blower Alarm Conditions	**X**		**X**			**X**		**X**
Blower Status Light Functioning Properly	**X**		**X**			**X**		**X**
Blower Status Light Confirmation Test	**X**		**X**			**X**		**X**
SSDS Manifold Connections Checked	**X**		**X**			**X**		**X**
SSDS Effluent Connections/Stack Checked	**X**		**X**			**X**		**X**

ADDITIONAL FIELD NOTES
System running properly with no issues.
SSD vacuum coverage maintained throughout the entire footprint of the building.
A steel wire was used to clear accumulated debris from inside of SVP-3 -- functioning properly after clearing.
Effluent pressure gauge is installed on a 2" diameter section of pipe ---- but the effluent sample port (and anemometer gauging port) is on a 4" diameter section of the effluent pipe.

APPENDIX B

Annual Groundwater Monitoring Field Sheets and Low-Flow Sampling Logs

WSP USA

PAGE: 1 OF _____.

SAMPLE DATE: 02/24/22

Low-Flow Sampling Log

TOTAL # WELLS: 3

Client Name: Queens Medallion Leasing
Sample Pump: Peristaltic
Project Location: 21-03 44th Ave., Long Island City, NY
Tubing Type: Polyethylene/Tygon
Sampler(s): Michael K. De Felice
Monitoring Equipment: Horiba

Well I.D. MW_1
Screen Setting (ft btoc): -- to --
Well Diameter (inches): 2-Inches
Tubing Intake (ft btoc): 14.72
Total Depth (ft btoc): 18.66
Comments: Purged well for approx. 5 minutes.
Depth to Water (ft btoc): 12.72
before recording parameters

Time		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water-Quality Monitoring Parameters					
#	hour			pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	ORP (mv)
1	9:58	12.88	100	6.18	1.89	72.200	9.160	10.37	200
2	10:01	12.80	100	6.25	1.86	65.200	7.150	10.82	204
3	10:04	12.84	100	6.24	1.87	53.200	6.790	11.02	201
4	10:07	12.89	100	6.27	1.87	29.200	6.380	11.23	199
5	10:10	12.92	100	6.31	1.87	23.200	6.240	11.39	195
6	10:13	12.99	100	6.37	1.89	20.100	6.100	11.35	194
7	10:16	13.02	100	6.41	1.88	19.000	5.960	11.25	191
8	10:19	13.10	100	6.46	1.90	18.450	5.860	11.15	189
9	10:22	13.12	100	6.5	1.94	17.650	5.690	11.16	182
10	10:25	13.15	100	6.55	1.90	16.850	5.660	11.10	180

Stabilazation of Parameters (Stabilization Achieved for three consecutive measurements)

Time #		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	pH	Conductivity (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	ORP (mv)
From	To								
1	2	-0.08	100	0.07	-1.59	-9.69529086	-21.94	4.34	4
2	3	0.04	100	-0.01	0.537634409	-18.40	-5.03	1.85	-3
3	4	0.05	100	0.03	0	-45.112782	-6.04	1.905626134	-2
4	5	0.03	100	0.04	0	-20.55	-2.19435737	1.42475512	-4
5	6	0.07	100	0.06	1.069518717	-13.36	-2.24	-0.35118525	-1
6	7	0.03	100	0.04	-0.53	-5.47263682	-2.29508197	-0.88105727	-3
7	8	0.08	100	0.05	1.063829787	-2.89473684	-1.67785235	-0.88888889	-2
8	9	0.02	100	0.04	2.105263158	-4.33604336	-2.90102389	0.089686099	-7
9	10	0.03	100	0.05	-2.06185567	-4.5325779	-0.52724077	-0.53763441	-2
Recommended Stabilization		-0.3	(100 - 500)	0.1	3%	10%	10%	3%	10
Stabilization: (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sample Time: 1030

Reviewed By: SCG

ft btoc feet below top of casing
ml/min millimeters per minute
mS/cm milliseimons per centimeter
NTU Nephelometric Turbidity Units
mg/l milligrams per liter
°C degrees Celcius
mv millivolts

WSP USA

PAGE: 1 OF 1

SAMPLE DATE: 2/24/2022

TOTAL # WELLS: 3

Low-Flow Sampling Log

Client Name:	Queens Medallion Leasing	Sample Pump:	Peristaltic
Project Location:	21-03 44th Ave., Long Island City, NY	Tubing Type:	Polyethylene/Tygon
Sampler(s):	Michael K. De Felice	Monitoring Equipment:	Horiba
Well I.D.	MW-2	Screen Setting (ft btoc):	-- to --
Well Diameter (inches):	2-Inches	Tubing Intake (ft btoc):	15.74
Total Depth (ft btoc):	18.55	Comments:	Purged well for approx. 5 minutes
Depth to Water (ft btoc):	13.74		before recording parameters

Time		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water-Quality Monitoring Parameters					
#	hour			pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	ORP (mv)
1	10:55	14.28	100	7.4	1.83	94	6.200	10.3	191.2
2	10:53	14.32	100	7.39	1.81	81	5.810	10.0	192.6
3	10:56	14.44	100	7.4	1.87	80	4.220	10.2	190.9
4	10:59	14.71	100	7.4	1.87	79	3.210	10.2	190.5
5	11:02	14.99	100	7.4	1.88	79	3.000	10.3	189.7
6	11:05	14.20	100	7.4	1.88	79	2.950	10.5	188.2
7									
8									
9									
10									

Stabilazation of Parameters (Stabilization Achieved for three consecutive measurements)

Time #		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	pH	Conductivity (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	ORP (mv)
From	To								
1	2	0.04	100	-0.01	-1.09	-13.8297872	-6.29	-2.91	1.4
2	3	0.12	100	0.01	3	-1.23	-27.37	2.00	-1.7
3	4	0.27	100	0	0	-1.25	-23.93	0	-0.4
4	5								
5	6								
6	7								
7	8								
8	9								
9	10								
Recommended Stabilization		-0.3	(100 - 500)	0.1	3%	10%	10%	3%	10
Stabilization: (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sample Time: 1130

Reviewed By: SCG

ft btoc feet below top of casing
ml/min millimeters per minute
mS/cm milliseimons per centimeter
NTU Nephelometric Turbidity Units
mg/l milligrams per liter
°C degrees Celcius
mv millivolts

WSP USA

PAGE: 1 OF 1

SAMPLE DATE: 2/24/2022

TOTAL # WELLS: 3 Sampled

Low-Flow Sampling Log

Client Name:	Queens Medallion Leasing	Sample Pump:	Peristaltic
Project Location:	21-03 44th Ave., Long Island City, NY	Tubing Type:	Polyethylene/Tygon
Sampler(s):	Mike De Felice	Monitoring Equipment:	Horiba
Well I.D.	MW-6	Screen Setting (ft btoc):	-- to --
Well Diameter (inches):	2-Inches	Tubing Intake (ft btoc):	15.74
Total Depth (ft btoc):	19.95	Comments:	Purged well for approx. 5 minutes
Depth to Water (ft btoc):	13.74		before recording parameters

Time		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water-Quality Monitoring Parameters					
#	hour			pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (^{0}C)	ORP (mv)
1	12:05	13.78	300	7.2	1.44	44.6	3.780	11.000	185
2	12:08	13.82	100	7.22	1.43	35.0	3.750	10.940	182
3	12:11	13.93	100	7.25	1.43	30.0	3.750	10.890	181
4	12:14	13.96	100	7.26	1.42	28.5	3.880	10.860	180
5	12:17	13.99	100	7.26	1.42	28.4	3.830	10.840	180
6	12:20	13.96	100	7.26	1.40	28.4	3.830	10.840	180
7									
8									
9									
10									

Stabilazation of Parameters (Stabilization Achieved for three consecutive measurements)

Time #		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	pH	Conductivity (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (^{0}C)	ORP (mv)
From	To								
1	2	0.04	200	0.02	-0.69	-21.5246637	-0.79	-0.55	-3
2	3	0.11	100	0.03	0	-14.29	0.00	-0.46	-1
3	4	0.03	100	0.01	-0.6993007	-5	3.47	-0.27548209	-1
4	5	0.03	100	0	0	-0.35	-1.28865979	-0.18416206	0
5	6								
6	7								
7	8								
8	9								
9	10								
Recommended Stabilization		-0.3	(100 - 500)	0.1	3%	10%	10%	3%	10
Stabilization: (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sample Time: 12:30

Reviewed By: SCG

ft btoc feet below top of casing
ml/min millimeters per minute
mS/cm milliseimons per centimeter
NTU Nephelometric Turbidity Units
mg/l milligrams per liter
^{0}C degrees Celcius
mv millivolts

APPENDIX C

SMP Biannual SSD System Sampling
Laboratory Analytical Reports

Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: Sean Groszkowski

Report Date: 03/03/2022
Client Project ID: 31402007.001 Queens Medallion
York Project (SDG) No.: 22B1168

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 03/03/2022
Client Project ID: 31402007.001 Queens Medallion
York Project (SDG) No.: 22B1168

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: Sean Groszkowski

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 25, 2022 and listed below. The project was identified as your project: **31402007.001 Queens Medallion**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22B1168-01	SYS. EFF.	Air	02/24/2022	02/25/2022

General Notes for York Project (SDG) No.: 22B1168

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: Cassie L. Mosher **Date:** 03/03/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: SYS. EFF. **York Sample ID:** 22B1168-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1168	31402007.001 Queens Medallion	Air	February 24, 2022 12:45 pm	02/25/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-TD

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications:	02/28/2022 09:30	02/28/2022 22:47	AS
71-55-6	**1,1,1-Trichloroethane**	**0.93**		ug/m³	0.55	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.84**		ug/m³	0.77	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.099	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.74	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
95-63-6	**1,2,4-Trimethylbenzene**	**0.69**		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.77	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.70	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
106-99-0	1,3-Butadiene	ND		ug/m³	0.66	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications:	02/28/2022 09:30	02/28/2022 22:47	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
123-91-1	1,4-Dioxane	ND		ug/m³	0.72	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
78-93-3	**2-Butanone**	**3.8**		ug/m³	0.29	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/28/2022 09:30	02/28/2022 22:47	AS
591-78-6	* 2-Hexanone	ND		ug/m³	0.82	1	EPA TO-15 Certifications:	02/28/2022 09:30	02/28/2022 22:47	AS

Sample Information

Client Sample ID: SYS. EFF. **York Sample ID:** 22B1168-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1168	31402007.001 Queens Medallion	Air	February 24, 2022 12:45 pm	02/25/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-TD

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.6	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	**4-Methyl-2-pentanone**	**2.5**		ug/m³	0.41	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**34**		ug/m³	0.48	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.22	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**1.2**		ug/m³	0.32	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.52	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.67	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	1.0	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.39	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	**Carbon disulfide**	**0.34**		ug/m³	0.31	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.44**		ug/m³	0.16	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.46	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.26	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**0.49**		ug/m³	0.49	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.9**		ug/m³	0.21	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	**cis-1,2-Dichloroethylene**	**0.52**		ug/m³	0.099	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.34	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.85	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.2**		ug/m³	0.49	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**1.8**		ug/m³	0.72	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:			
100-41-4	**Ethyl Benzene**	**0.69**		ug/m³	0.43	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SYS. EFF. **York Sample ID:** 22B1168-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1168	31402007.001 Queens Medallion	Air	February 24, 2022 12:45 pm	02/25/2022

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-TD

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	**Isopropanol**	**18**		ug/m³	0.49	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	**Methyl Methacrylate**	**16**		ug/m³	0.41	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.36	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**8.5**		ug/m³	0.69	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**1.2**		ug/m³	0.41	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**2.3**		ug/m³	0.35	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**0.69**		ug/m³	0.43	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**2.0**		ug/m³	0.87	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	*** p-Ethyltoluene**	**0.54**		ug/m³	0.49	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.17	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:			
100-42-5	**Styrene**	**1.5**		ug/m³	0.43	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**13**		ug/m³	0.68	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	*** Tetrahydrofuran**	**0.97**		ug/m³	0.59	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications:			
108-88-3	**Toluene**	**5.7**		ug/m³	0.38	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**3.1**		ug/m³	0.13	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.2**		ug/m³	0.56	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.35	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.44	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.13	1	EPA TO-15	02/28/2022 09:30	02/28/2022 22:47	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample and Data Qualifiers Relating to This Work Order

TO-TD	The sample was received in a tedlar bag which is not compliant with EPA TO-15 requirements.
TO-LCS-L	The result reported for this compound may be biased low due to its behavior in the analysis batch LCS where it recovered less 70% of the expected value.
TO-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).
ICV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675 | Page _____ of _____

YORK Project No. 22B1168

YOUR Information	Report To:	Invoice To:
Company: WSP	Company: SAME	Company: SAME
Address: 500 SUMMIT LAKE DR. VALHALLA, NY	Address:	Address:
Phone: 9144612963	Phone:	Phone:
Contact: JAN.GROSZKOWSKI@WSP.COM	Contact:	Contact:
E-mail:	E-mail:	E-mail:

YOUR Project Number: 31402007.001

YOUR Project Name: QUEENS MEDALLION (QNS. MEDALLION)

YOUR PO#:

Turn-Around Time

- RUSH - Next Day
- RUSH - Two Day
- RUSH - Three Day
- RUSH - Four Day
- **Standard (5-7 Day)** X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

MICHAEL E. DEFELICE

Samples Collected by: (print AND sign your name)

Matrix Codes

- S - soil / solid
- GW - groundwater
- DW - drinking water
- WW - wastewater
- O - Oil | Other

Samples From

- New York
- New Jersey
- Connecticut
- Pennsylvania
- Other:

Report / EDD Type (circle selections)

- (Summary Report)
- QA Report
- NY ASP A Package
- NY ASP B Package
- CT RCP
- CT RCP DQA/DUE
- NJDEP Reduced Deliverables
- NJDKQP
- (Standard Excel EDD)
- EQuIS (Standard)
- (NYSDEC EQuIS)
- NJDEP SRP HazSite
- Other:

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SYS. EFF.	AIR	2.24.22/1245	TO-15	1 TED.

Comments:

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other: _____

Special Instruction

- Field Filtered / Lab to Filter

Samples iced/chilled at time of lab pickup? circle Yes or No

1. Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
WSP	2.24.22		2/24/22 1445		2/24/22 1415
2. Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
3. Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
				Arlene A Schenk	2/25/22 18:00 Degrees C

Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: Sean Groszkowski

Report Date: 04/18/2022
Client Project ID: 31402007.001 Queens Medallion
York Project (SDG) No.: 22D0767

Report Date: 04/18/2022
Client Project ID: 31402007.001 Queens Medallion
York Project (SDG) No.: 22D0767

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: Sean Groszkowski

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 14, 2022 and listed below. The project was identified as your project: **31402007.001 Queens Medallion**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22D0767-01	EFFLUENT	Soil Vapor	04/14/2022	04/14/2022

General Notes for York Project (SDG) No.: 22D0767

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: Cassie L. Mosher **Date:** 04/18/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **EFFLUENT** **York Sample ID:** **22D0767-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22D0767	31402007.001 Queens Medallion	Soil Vapor	April 14, 2022 9:35 am	04/14/2022

Volatile Organics, EPA TO15 Full List **Log-in Notes:** TO-TD **Sample Notes:** **TO-TD**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications:	04/15/2022 09:00	04/16/2022 01:53	AS
71-55-6	**1,1,1-Trichloroethane**	**3.5**		ug/m³	0.55	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**2.0**		ug/m³	0.77	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-34-3	**1,1-Dichloroethane**	**0.57**		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.099	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.74	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
95-63-6	**1,2,4-Trimethylbenzene**	**0.64**		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.77	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.70	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
106-99-0	1,3-Butadiene	ND		ug/m³	0.66	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications:	04/15/2022 09:00	04/16/2022 01:53	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
123-91-1	1,4-Dioxane	ND		ug/m³	0.72	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
78-93-3	**2-Butanone**	**2.3**		ug/m³	0.29	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
591-78-6	* 2-Hexanone	ND		ug/m³	0.82	1	EPA TO-15 Certifications:	04/15/2022 09:00	04/16/2022 01:53	AS

Sample Information

Client Sample ID: EFFLUENT **York Sample ID:** 22D0767-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22D0767	31402007.001 Queens Medallion	Soil Vapor	April 14, 2022 9:35 am	04/14/2022

Volatile Organics, EPA TO15 Full List **Log-in Notes:** TO-TD **Sample Notes:** TO-TD

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.6	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
108-10-1	**4-Methyl-2-pentanone**	**0.66**		ug/m³	0.41	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
67-64-1	**Acetone**	**40**		ug/m³	0.48	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
107-13-1	Acrylonitrile	ND		ug/m³	0.22	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
71-43-2	**Benzene**	**0.77**		ug/m³	0.32	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
100-44-7	Benzyl chloride	ND		ug/m³	0.52	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-27-4	Bromodichloromethane	ND		ug/m³	0.67	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-25-2	Bromoform	ND		ug/m³	1.0	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
74-83-9	Bromomethane	ND		ug/m³	0.39	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-15-0	Carbon disulfide	ND		ug/m³	0.31	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
56-23-5	**Carbon tetrachloride**	**0.44**		ug/m³	0.16	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
108-90-7	Chlorobenzene	ND		ug/m³	0.46	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-00-3	Chloroethane	ND		ug/m³	0.26	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
67-66-3	**Chloroform**	**2.5**		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
74-87-3	**Chloromethane**	**0.35**		ug/m³	0.21	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
156-59-2	**cis-1,2-Dichloroethylene**	**0.28**		ug/m³	0.099	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
110-82-7	**Cyclohexane**	**0.62**		ug/m³	0.34	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
124-48-1	Dibromochloromethane	ND		ug/m³	0.85	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
75-71-8	**Dichlorodifluoromethane**	**3.2**		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
141-78-6	*** Ethyl acetate**	**1.4**		ug/m³	0.72	1	EPA TO-15 Certifications:	04/15/2022 09:00	04/16/2022 01:53	AS
100-41-4	**Ethyl Benzene**	**1.8**		ug/m³	0.43	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/15/2022 09:00	04/16/2022 01:53	AS

Sample Information

Client Sample ID: **EFFLUENT** **York Sample ID:** **22D0767-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22D0767	31402007.001 Queens Medallion	Soil Vapor	April 14, 2022 9:35 am	04/14/2022

Volatile Organics, EPA TO15 Full List **Log-in Notes:** TO-TD **Sample Notes:** **TO-TD**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	**Isopropanol**	**19**		ug/m³	0.49	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.41	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.36	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**0.94**		ug/m³	0.69	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**0.70**		ug/m³	0.41	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**1.8**		ug/m³	0.35	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**1.9**		ug/m³	0.43	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**6.3**		ug/m³	0.87	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	*** p-Ethyltoluene**	**0.54**		ug/m³	0.49	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.17	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications:			
100-42-5	**Styrene**	**0.51**		ug/m³	0.43	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**43**		ug/m³	0.68	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	*** Tetrahydrofuran**	**0.80**		ug/m³	0.59	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications:			
108-88-3	**Toluene**	**13**		ug/m³	0.38	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**14**		ug/m³	0.13	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.6**		ug/m³	0.56	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.35	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.44	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.13	1	EPA TO-15	04/15/2022 09:00	04/16/2022 01:53	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Analytical Batch Summary

Batch ID: BD20955 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
22D0767-01	EFFLUENT	04/15/22
BD20955-BLK1	Blank	04/15/22
BD20955-BS1	LCS	04/15/22
BD20955-DUP1	Duplicate	04/15/22

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD20955 - EPA TO15 PREP											
Blank (BD20955-BLK1)											Prepared & Analyzed: 04/15/2022
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD20955 - EPA TO15 PREP											
Blank (BD20955-BLK1)											Prepared & Analyzed: 04/15/2022
n-Heptane	ND	0.41	ug/m³								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.68	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.13	"								
LCS (BD20955-BS1)											Prepared & Analyzed: 04/15/2022
1,1,1,2-Tetrachloroethane	10.5		ppbv	10.0		105	70-130				
1,1,1-Trichloroethane	10.9		"	10.0		109	70-130				
1,1,2,2-Tetrachloroethane	10.2		"	10.0		102	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.1		"	10.0		111	70-130				
1,1,2-Trichloroethane	10.3		"	10.0		103	70-130				
1,1-Dichloroethane	10.1		"	10.0		101	70-130				
1,1-Dichloroethylene	10.4		"	10.0		104	70-130				
1,2,4-Trichlorobenzene	8.80		"	10.0		88.0	70-130				
1,2,4-Trimethylbenzene	9.99		"	10.0		99.9	70-130				
1,2-Dibromoethane	10.1		"	10.0		101	70-130				
1,2-Dichlorobenzene	10.7		"	10.0		107	70-130				
1,2-Dichloroethane	10.3		"	10.0		103	70-130				
1,2-Dichloropropane	9.50		"	10.0		95.0	70-130				
1,2-Dichlorotetrafluoroethane	9.50		"	10.0		95.0	70-130				
1,3,5-Trimethylbenzene	10.0		"	10.0		100	70-130				
1,3-Butadiene	9.60		"	10.0		96.0	70-130				
1,3-Dichlorobenzene	11.0		"	10.0		110	70-130				
1,3-Dichloropropane	9.65		"	10.0		96.5	70-130				
1,4-Dichlorobenzene	11.1		"	10.0		111	70-130				
1,4-Dioxane	9.74		"	10.0		97.4	70-130				
2-Butanone	9.81		"	10.0		98.1	70-130				
2-Hexanone	9.48		"	10.0		94.8	70-130				
3-Chloropropene	10.3		"	10.0		103	70-130				
4-Methyl-2-pentanone	9.19		"	10.0		91.9	70-130				
Acetone	8.85		"	10.0		88.5	70-130				
Acrylonitrile	9.98		"	10.0		99.8	70-130				
Benzene	10.4		"	10.0		104	70-130				
Benzyl chloride	8.69		"	10.0		86.9	70-130				
Bromodichloromethane	10.3		"	10.0		103	70-130				
Bromoform	11.4		"	10.0		114	70-130				
Bromomethane	11.0		"	10.0		110	70-130				
Carbon disulfide	10.3		"	10.0		103	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD20955 - EPA TO15 PREP											
LCS (BD20955-BS1)								Prepared & Analyzed: 04/15/2022			
Carbon tetrachloride	11.7		ppbv	10.0		117	70-130				
Chlorobenzene	9.91		"	10.0		99.1	70-130				
Chloroethane	10.5		"	10.0		105	70-130				
Chloroform	10.6		"	10.0		106	70-130				
Chloromethane	8.81		"	10.0		88.1	70-130				
cis-1,2-Dichloroethylene	10.0		"	10.0		100	70-130				
cis-1,3-Dichloropropylene	10.1		"	10.0		101	70-130				
Cyclohexane	10.2		"	10.0		102	70-130				
Dibromochloromethane	10.8		"	10.0		108	70-130				
Dichlorodifluoromethane	10.4		"	10.0		104	70-130				
Ethyl acetate	10.1		"	10.0		101	70-130				
Ethyl Benzene	9.83		"	10.0		98.3	70-130				
Hexachlorobutadiene	11.2		"	10.0		112	70-130				
Isopropanol	9.32		"	10.0		93.2	70-130				
Methyl Methacrylate	9.51		"	10.0		95.1	70-130				
Methyl tert-butyl ether (MTBE)	10.5		"	10.0		105	70-130				
Methylene chloride	9.00		"	10.0		90.0	70-130				
n-Heptane	10.1		"	10.0		101	70-130				
n-Hexane	10.5		"	10.0		105	70-130				
o-Xylene	9.87		"	10.0		98.7	70-130				
p- & m- Xylenes	20.1		"	20.0		100	70-130				
p-Ethyltoluene	10.3		"	10.0		103	70-130				
Propylene	9.52		"	10.0		95.2	70-130				
Styrene	10.5		"	10.0		105	70-130				
Tetrachloroethylene	8.93		"	10.0		89.3	70-130				
Tetrahydrofuran	8.11		"	10.0		81.1	70-130				
Toluene	9.69		"	10.0		96.9	70-130				
trans-1,2-Dichloroethylene	10.4		"	10.0		104	70-130				
trans-1,3-Dichloropropylene	10.0		"	10.0		100	70-130				
Trichloroethylene	9.98		"	10.0		99.8	70-130				
Trichlorofluoromethane (Freon 11)	11.0		"	10.0		110	70-130				
Vinyl acetate	10.1		"	10.0		101	70-130				
Vinyl bromide	11.2		"	10.0		112	70-130				
Vinyl Chloride	9.16		"	10.0		91.6	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD20955 - EPA TO15 PREP											
Duplicate (BD20955-DUP1)	*Source sample: 22D0767-01 (EFFLUENT)								Prepared: 04/15/2022 Analyzed: 04/16/2022		
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³		ND					25	
1,1,1-Trichloroethane	2.9	0.55	"		3.5				20.3	25	
1,1,2,2-Tetrachloroethane	ND	0.69	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.6	0.77	"		2.0				21.3	25	
1,1,2-Trichloroethane	ND	0.55	"		ND					25	
1,1-Dichloroethane	0.45	0.40	"		0.57				24.0	25	
1,1-Dichloroethylene	ND	0.099	"		ND					25	
1,2,4-Trichlorobenzene	ND	0.74	"		ND					25	
1,2,4-Trimethylbenzene	0.64	0.49	"		0.64				0.00	25	
1,2-Dibromoethane	ND	0.77	"		ND					25	
1,2-Dichlorobenzene	ND	0.60	"		ND					25	
1,2-Dichloroethane	ND	0.40	"		ND					25	
1,2-Dichloropropane	ND	0.46	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	0.70	"		ND					25	
1,3,5-Trimethylbenzene	ND	0.49	"		ND					25	
1,3-Butadiene	ND	0.66	"		ND					25	
1,3-Dichlorobenzene	ND	0.60	"		ND					25	
1,3-Dichloropropane	ND	0.46	"		ND					25	
1,4-Dichlorobenzene	ND	0.60	"		ND					25	
1,4-Dioxane	ND	0.72	"		ND					25	
2-Butanone	2.2	0.29	"		2.3				3.97	25	
2-Hexanone	ND	0.82	"		ND					25	
3-Chloropropene	ND	1.6	"		ND					25	
4-Methyl-2-pentanone	0.74	0.41	"		0.66				11.8	25	
Acetone	39	0.48	"		40				2.11	25	
Acrylonitrile	ND	0.22	"		ND					25	
Benzene	0.73	0.32	"		0.77				4.26	25	
Benzyl chloride	ND	0.52	"		ND					25	
Bromodichloromethane	ND	0.67	"		ND					25	
Bromoform	ND	1.0	"		ND					25	
Bromomethane	ND	0.39	"		ND					25	
Carbon disulfide	ND	0.31	"		ND					25	
Carbon tetrachloride	0.44	0.16	"		0.44				0.00	25	
Chlorobenzene	ND	0.46	"		ND					25	
Chloroethane	ND	0.26	"		ND					25	
Chloroform	2.1	0.49	"		2.5				14.7	25	
Chloromethane	0.35	0.21	"		0.35				0.00	25	
cis-1,2-Dichloroethylene	0.20	0.099	"		0.28				33.3	25	Non-dir.
cis-1,3-Dichloropropylene	ND	0.45	"		ND					25	
Cyclohexane	0.55	0.34	"		0.62				11.8	25	
Dibromochloromethane	ND	0.85	"		ND					25	
Dichlorodifluoromethane	4.0	0.49	"		3.2				21.9	25	
Ethyl acetate	1.4	0.72	"		1.4				2.53	25	
Ethyl Benzene	1.6	0.43	"		1.8				12.7	25	
Hexachlorobutadiene	ND	1.1	"		ND					25	
Isopropanol	24	0.49	"		19				25.8	25	Non-dir.
Methyl Methacrylate	ND	0.41	"		ND					25	
Methyl tert-butyl ether (MTBE)	ND	0.36	"		ND					25	
Methylene chloride	1.4	0.69	"		0.94				41.2	25	Non-dir.
n-Heptane	0.70	0.41	"		0.70				0.00	25	

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD20955 - EPA TO15 PREP											
Duplicate (BD20955-DUP1)	*Source sample: 22D0767-01 (EFFLUENT)								Prepared: 04/15/2022 Analyzed: 04/16/2022		
n-Hexane	1.5	0.35	ug/m³		1.8				15.1	25	
o-Xylene	1.7	0.43	"		1.9				9.76	25	
p- & m- Xylenes	5.5	0.87	"		6.3				13.2	25	
p-Ethyltoluene	0.54	0.49	"		0.54				0.00	25	
Propylene	ND	0.17	"		ND					25	
Styrene	0.47	0.43	"		0.51				8.70	25	
Tetrachloroethylene	38	0.68	"		43				13.3	25	
Tetrahydrofuran	0.77	0.59	"		0.80				3.77	25	
Toluene	12	0.38	"		13				6.28	25	
trans-1,2-Dichloroethylene	ND	0.40	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.45	"		ND					25	
Trichloroethylene	11	0.13	"		14				21.9	25	
Trichlorofluoromethane (Freon 11)	1.3	0.56	"		1.6				23.1	25	
Vinyl acetate	ND	0.35	"		ND					25	
Vinyl bromide	ND	0.44	"		ND					25	
Vinyl Chloride	ND	0.13	"		ND					25	

Sample and Data Qualifiers Relating to This Work Order

TO-TD	The sample was received in a tedlar bag which is not compliant with EPA TO-15 requirements.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave, Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22D0767

Page 1 of 1

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: WSP USA	Company:	Company:	31402007.001	RUSH - Next Day
Address: 500 Summit Lake Dr. Suite 450 Valhalla, NY	Address: SAME	Address: SAME	**YOUR Project Name**	RUSH - Two Day
			Queens Medallion	RUSH - Three Day X
Phone.: 914-461-2964	Phone.:	Phone.:		RUSH - Four Day
Contact: Sean Groszkowski	Contact:	Contact:		Standard (5-7 Day) X
E-mail: sean.groszkowski@wsp.com	E-mail:	E-mail:	YOUR PO#:	

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Sean Groszkowske

Samples Collected by: (print your name above and sign below)

[signature]

Matrix Codes	Samples From	Report / EDD Type (circle selections)			YORK Reg. Comp.
S - soil / solid	New York X	Summary Report (circled)	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard) (circled)	
DW - drinking water	Connecticut	NY ASP A Package	NJDEP Reduced Deliverables	NYSDEC EQuIS (circled)	
WW - wastewater	Pennsylvania	NY ASP B Package	NJDKQP	NJDEP SRP HazSite	
O - Oil / Other (circled)	Other			Other:	

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
EFFLUENT	Soil Vapor	4/14/22 935	TO-15	Tedlar X2

Comments:

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___
Ascorbic Acid ___ Other: ___

Special Instruction
Field Filtered ___
Lab to Filter ___

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
[signature] / WSP	4/14/22 1045	Andrew S. York	4/14/22 1045	Andrew S. York	4/14/22
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by / Date/Time	Temp. Received at Lab
				Anne A Schulz	4/14/22 1700 Degrees C

APPENDIX D

Annual Groundwater Monitoring
Laboratory Analytical Report

Technical Report

prepared for:

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Report Date: 03/04/2022
Client Project ID: 31402007.001 Queens Medallion
York Project (SDG) No.: 22B1162

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 03/04/2022
Client Project ID: 31402007.001 Queens Medallion
York Project (SDG) No.: 22B1162

WSP USA, Inc. (White Plains, NY)
500 Summit Lake Drive, Suite 450
Valhalla NY, 10595
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 24, 2022 and listed below. The project was identified as your project: **31402007.001 Queens Medallion**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
22B1162-01	MW-1 (FF)	Water	02/24/2022	02/24/2022
22B1162-02	MW-2 (FF)	Water	02/24/2022	02/24/2022
22B1162-03	MW-6 (FF)	Water	02/24/2022	02/24/2022
22B1162-04	MW-1 (LF)	Water	02/24/2022	02/24/2022
22B1162-05	MW-2 (LF)	Water	02/24/2022	02/24/2022
22B1162-06	MW-6 (LF)	Water	02/24/2022	02/24/2022

General Notes for York Project (SDG) No.: 22B1162

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:  **Date:** 03/04/2022

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: MW-1 (FF) **York Sample ID:** 22B1162-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 10:30 am	02/24/2022

Chromium, Dissolved by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	**Chromium**	**0.999**		mg/L	0.00556	1	EPA 6010D	03/03/2022 10:49	03/03/2022 18:38	KT
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chromium, Hexavalent-Dissolved **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	**Chromium, Hexavalent**	**0.958**		mg/L	0.0100	1	EPA 7196A	02/24/2022 20:33	02/24/2022 22:40	MAO
							Certifications:	NELAC-NY10854,CTDOH,NJDEP		

Sample Information

Client Sample ID: MW-2 (FF) **York Sample ID:** 22B1162-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 11:30 am	02/24/2022

Chromium, Dissolved by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	**Chromium**	**0.00897**		mg/L	0.00556	1	EPA 6010D	03/03/2022 10:49	03/03/2022 19:01	KT
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chromium, Hexavalent-Dissolved **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	1	EPA 7196A	02/24/2022 20:33	02/24/2022 22:40	MAO
							Certifications:	NELAC-NY10854,CTDOH,NJDEP		

Sample Information

Client Sample ID: MW-6 (FF) **York Sample ID:** 22B1162-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 12:30 pm	02/24/2022

Sample Information

Client Sample ID: MW-6 (FF) **York Sample ID:** 22B1162-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 12:30 pm	02/24/2022

Chromium, Dissolved by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	**Chromium**	**0.0564**		mg/L	0.00556	1	EPA 6010D	03/03/2022 10:49	03/03/2022 19:04	KT
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chromium, Hexavalent-Dissolved **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	1	EPA 7196A	02/24/2022 20:33	02/24/2022 22:40	MAO
							Certifications:	NELAC-NY10854,CTDOH,NJDEP		

Sample Information

Client Sample ID: MW-1 (LF) **York Sample ID:** 22B1162-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 10:30 am	02/24/2022

Chromium, Dissolved by EPA 6010 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	**Chromium**	**1.14**		mg/L	0.00556	1	EPA 6010D	03/03/2022 10:49	03/03/2022 19:07	KT
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chromium, Hexavalent-Dissolved **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	**Chromium, Hexavalent**	**0.961**		mg/L	0.0100	1	EPA 7196A	02/24/2022 20:33	02/24/2022 22:40	MAO
							Certifications:	NELAC-NY10854,CTDOH,NJDEP		

Sample Information

Client Sample ID: MW-2 (LF) **York Sample ID:** 22B1162-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 11:30 am	02/24/2022

Sample Information

Client Sample ID: MW-2 (LF) **York Sample ID:** 22B1162-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 11:30 am	02/24/2022

Chromium, Dissolved by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00556	1	EPA 6010D	03/03/2022 10:49	03/03/2022 19:10	KT
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chromium, Hexavalent-Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	1	EPA 7196A	02/24/2022 20:33	02/24/2022 22:40	MAO
							Certifications:	NELAC-NY10854,CTDOH,NJDEP		

Sample Information

Client Sample ID: MW-6 (LF) **York Sample ID:** 22B1162-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
22B1162	31402007.001 Queens Medallion	Water	February 24, 2022 12:30 pm	02/24/2022

Chromium, Dissolved by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	**Chromium**	**0.0265**		mg/L	0.00556	1	EPA 6010D	03/03/2022 10:49	03/03/2022 19:13	KT
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Chromium, Hexavalent-Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.0100	1	EPA 7196A	02/24/2022 20:33	02/24/2022 22:40	MAO
							Certifications:	NELAC-NY10854,CTDOH,NJDEP		

Analytical Batch Summary

Batch ID: BB22602 **Preparation Method:** Analysis Preparation **Prepared By:** MAO

YORK Sample ID	Client Sample ID	Preparation Date
22B1162-01	MW-1 (FF)	02/24/22
22B1162-02	MW-2 (FF)	02/24/22
22B1162-03	MW-6 (FF)	02/24/22
22B1162-04	MW-1 (LF)	02/24/22
22B1162-05	MW-2 (LF)	02/24/22
22B1162-06	MW-6 (LF)	02/24/22
BB22602-BLK1	Blank	02/24/22
BB22602-BS1	LCS	02/24/22
BB22602-DUP1	Duplicate	02/24/22
BB22602-MS1	Matrix Spike	02/24/22

Batch ID: BC21475 **Preparation Method:** EPA 3015A **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
22B1162-01	MW-1 (FF)	03/03/22
22B1162-02	MW-2 (FF)	03/03/22
22B1162-03	MW-6 (FF)	03/03/22
22B1162-04	MW-1 (LF)	03/03/22
22B1162-05	MW-2 (LF)	03/03/22
22B1162-06	MW-6 (LF)	03/03/22
BC21475-BLK1	Blank	03/03/22
BC21475-BS1	LCS	03/03/22
BC21475-DUP1	Duplicate	03/03/22
BC21475-MS1	Matrix Spike	03/03/22
BC21475-PS1	Post Spike	03/03/22

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC21475 - EPA 3015A											
Blank (BC21475-BLK1)								Prepared & Analyzed: 03/03/2022			
Chromium - Dissolved	ND	0.00556	mg/L								
LCS (BC21475-BS1)								Prepared & Analyzed: 03/03/2022			
Chromium - Dissolved	0.178		ug/mL	0.200		88.9	80-120				
Duplicate (BC21475-DUP1)	*Source sample: 22B1162-01 (MW-1 (FF))							Prepared & Analyzed: 03/03/2022			
Chromium - Dissolved	1.01	0.00556	mg/L		0.999				0.661	20	
Matrix Spike (BC21475-MS1)	*Source sample: 22B1162-01 (MW-1 (FF))							Prepared & Analyzed: 03/03/2022			
Chromium - Dissolved	1.18	0.00556	mg/L	0.222	0.999	83.8	75-125				
Post Spike (BC21475-PS1)	*Source sample: 22B1162-01 (MW-1 (FF))							Prepared & Analyzed: 03/03/2022			
Chromium - Dissolved	1.07		ug/mL	0.200	0.899	86.7	75-125				

Wet Chemistry Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB22602 - Analysis Preparation											
Blank (BB22602-BLK1)								Prepared & Analyzed: 02/24/2022			
Chromium, Hexavalent - Dissolved	ND	0.0100	mg/L								
LCS (BB22602-BS1)								Prepared & Analyzed: 02/24/2022			
Chromium, Hexavalent - Dissolved	0.493	0.0100	mg/L	0.500		98.6	80-120				
Duplicate (BB22602-DUP1)	*Source sample: 22B1162-06 (MW-6 (LF))							Prepared & Analyzed: 02/24/2022			
Chromium, Hexavalent - Dissolved	ND	0.0100	mg/L		ND					20	
Matrix Spike (BB22602-MS1)	*Source sample: 22B1162-06 (MW-6 (LF))							Prepared & Analyzed: 02/24/2022			
Chromium, Hexavalent - Dissolved	0.586	0.0100	mg/L	0.500	ND	117	75-125				

Sample and Data Qualifiers Relating to This Work Order

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Field Chain-of-Custody Record

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 22B1162

120 Research Drive Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418 | clientservices@yorklab.com | www.yorklab.com | 800-306-YORK | 800-306-9675

YOUR Information	Report To:	Invoice To:
Company: WSP	Company: SAME	Company: SAME
Address: 500 SUMMIT LAKE DR VALHALLA NY	Address:	Address:
Phone: 914 461 2963	Phone:	Phone:
Contact: SEAN.GROSZKOWSKI@WSP.COM	Contact:	Contact:
E-mail:	E-mail:	E-mail:

YOUR Project Number: 31402007.001

YOUR Project Name: QUEENS MEDALLION (QNS, MEDALLION)

YOUR PO#: 31402007.001

Turn-Around Time

- RUSH - Next Day
- RUSH - Two Day
- RUSH - Three Day
- RUSH - Four Day
- Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

MICHAEL E. DEFELICE

Samples Collected by: (print AND sign your name)

Matrix Codes: S - soil / solid; GW - groundwater; DW - drinking water; WW - wastewater; O - Oil | Other

Samples From: New York X; New Jersey; Connecticut; Pennsylvania; Other:

Report / EDD Type (circle selections): Summary Report; QA Report; NY ASP A Package; NY ASP B Package; CT RCP; CT RCP DQA/DUE; NJDEP Reduced Deliverables; NJDKQP; Standard Excel EDD; EQuIS (Standard); NYSDEC EQuIS; NJDEP SRP HazSite; Other:

YORK Reg. Comp.: Compared to the following Regulation(s): (please fill in)

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
MW-1	GW	2-24-22 1030	Cr + Cr6 (FIELD FILTERED), Cr + Cr6 (LAB FILTER)	2 UNPRES (FILTERED) 1 UNPRES + HNO3 (LAB F.)
MW-2	↓	1130	↓	↓
MW-6	↓	1230	↓	↓

Comments: *LAB TO FILTER - 1 UNPRES, 1 HNO_3 PRES. SAMPLE* FIELD FILTERED UNPRES. BOTTLES LABELED AS SUCH THX!

Samples iced/chilled at time of lab pickup? circle Yes or No

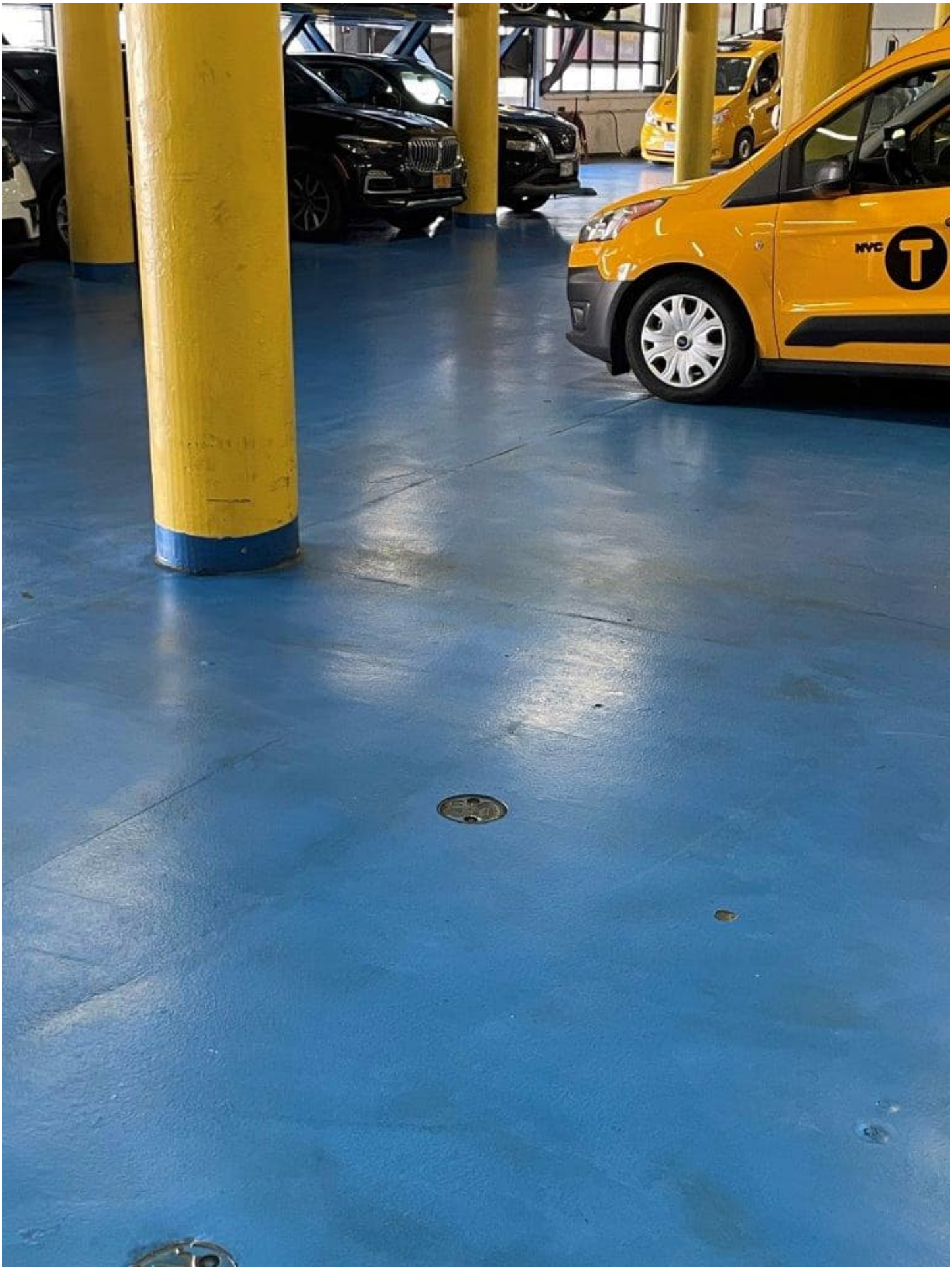
Preservation: (check all that apply) HCl ___ MeOH ___ HNO3 X H2SO4 ___ NaOH ___ ZnAc ___ Ascorbic Acid ___ Other: ___

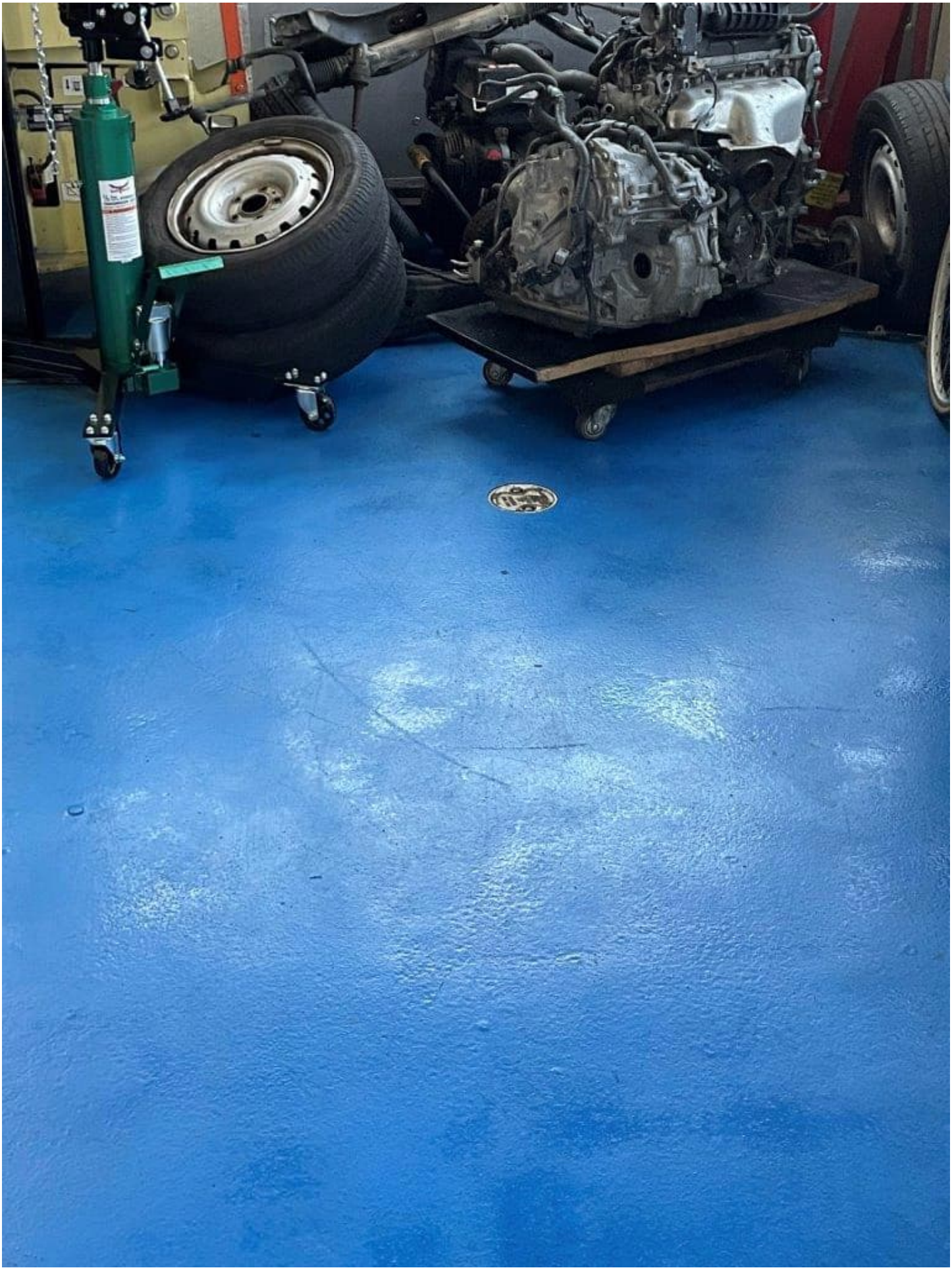
Special Instruction: Field Filtered? X; Lab to Filter (2) X

1. Samples Relinquished by / Company	Date/Time	1. Samples Received by / Company	Date/Time	2. Samples Relinquished by / Company	Date/Time
WSP	2/24/22		2/24/22 1415		2/24/22 1945 TH
2. Samples Received by / Company	Date/Time	3. Samples Relinquished by / Company	Date/Time	3. Samples Received by / Company	Date/Time
4. Samples Relinquished by / Company	Date/Time	4. Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time / Temperature
					2/24/22 1945 3.0 Degrees C

APPENDIX E

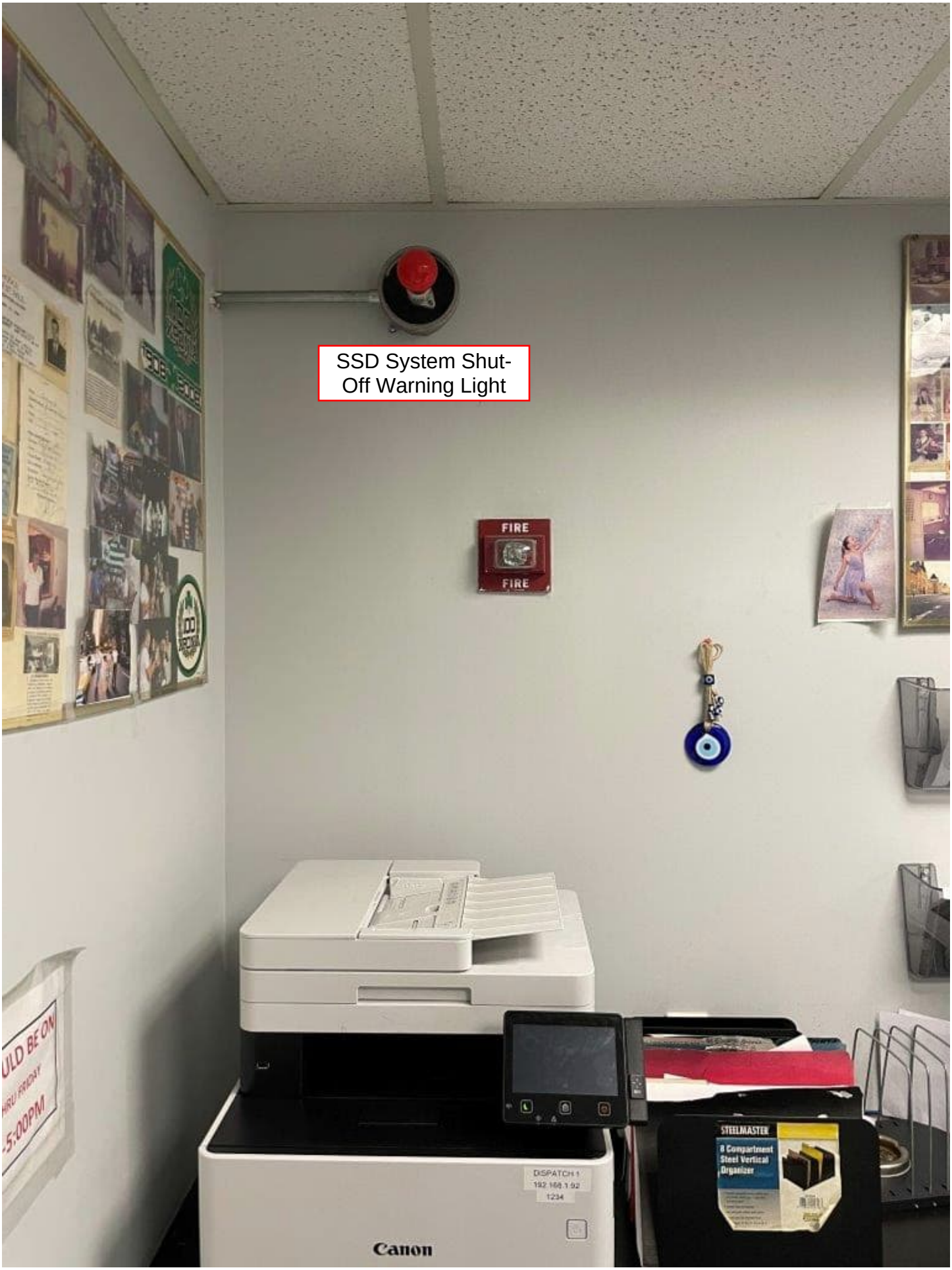
Site Inspection Photographs

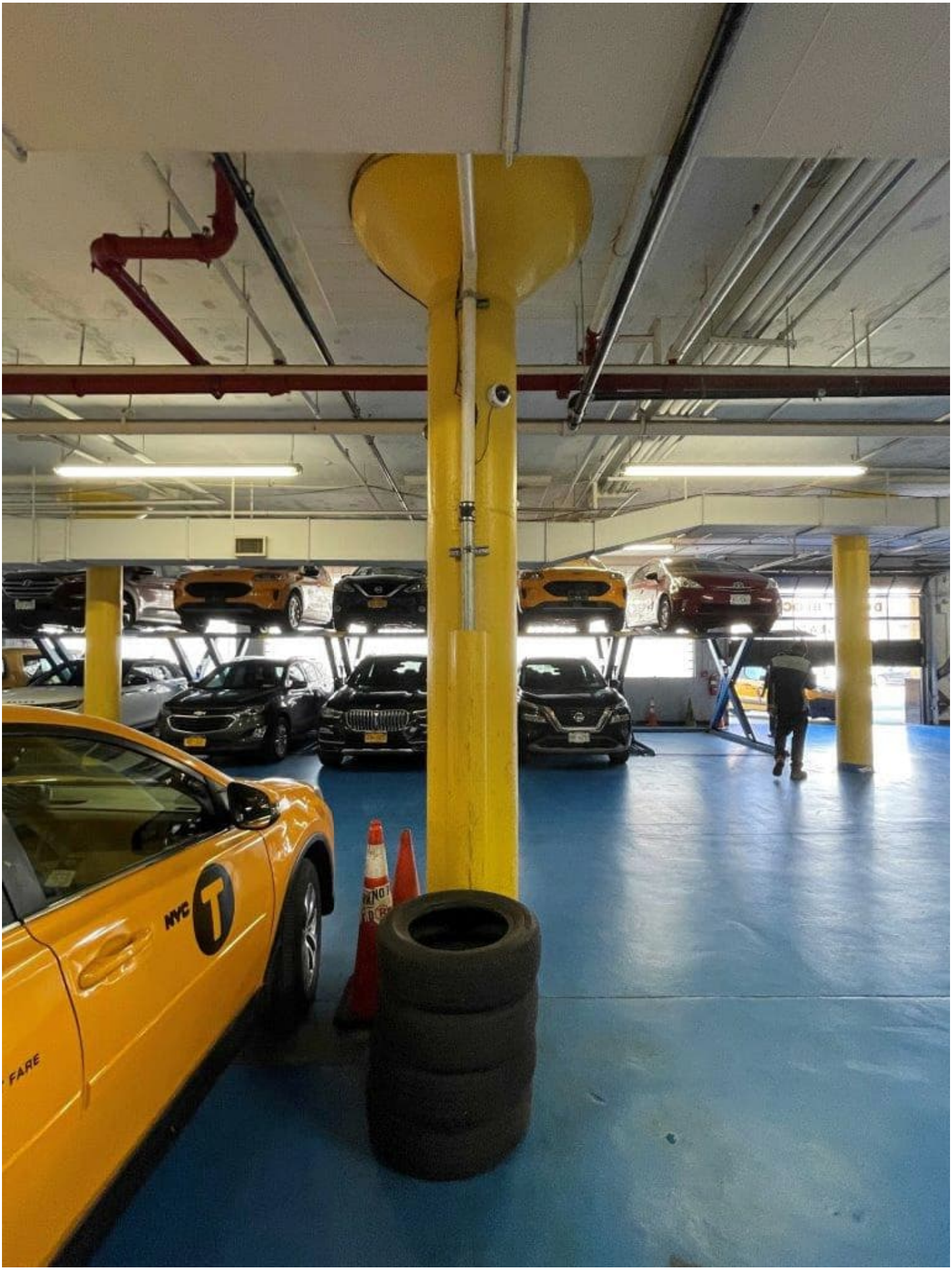

NYC

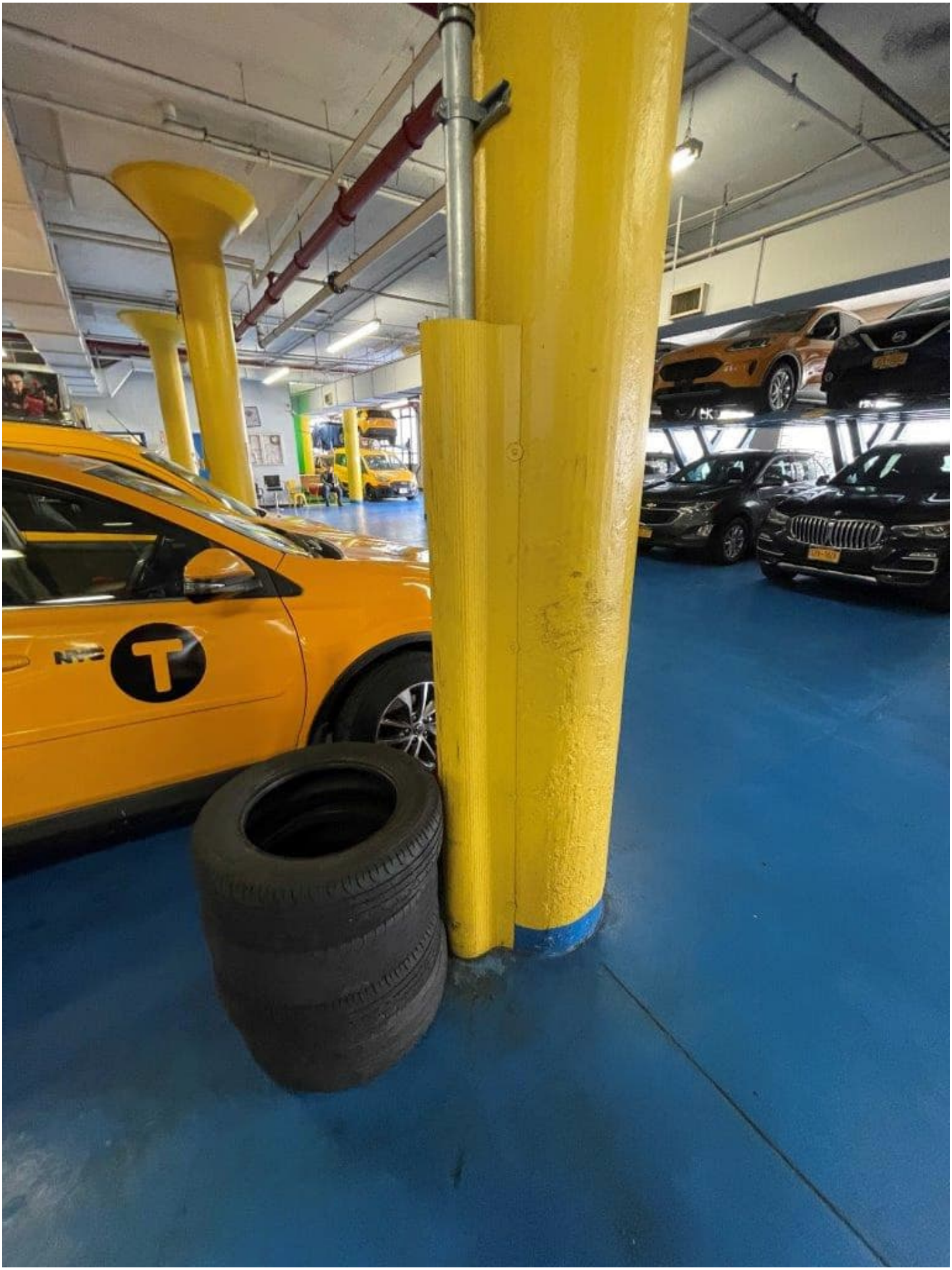



Honeywell
MiniRAE

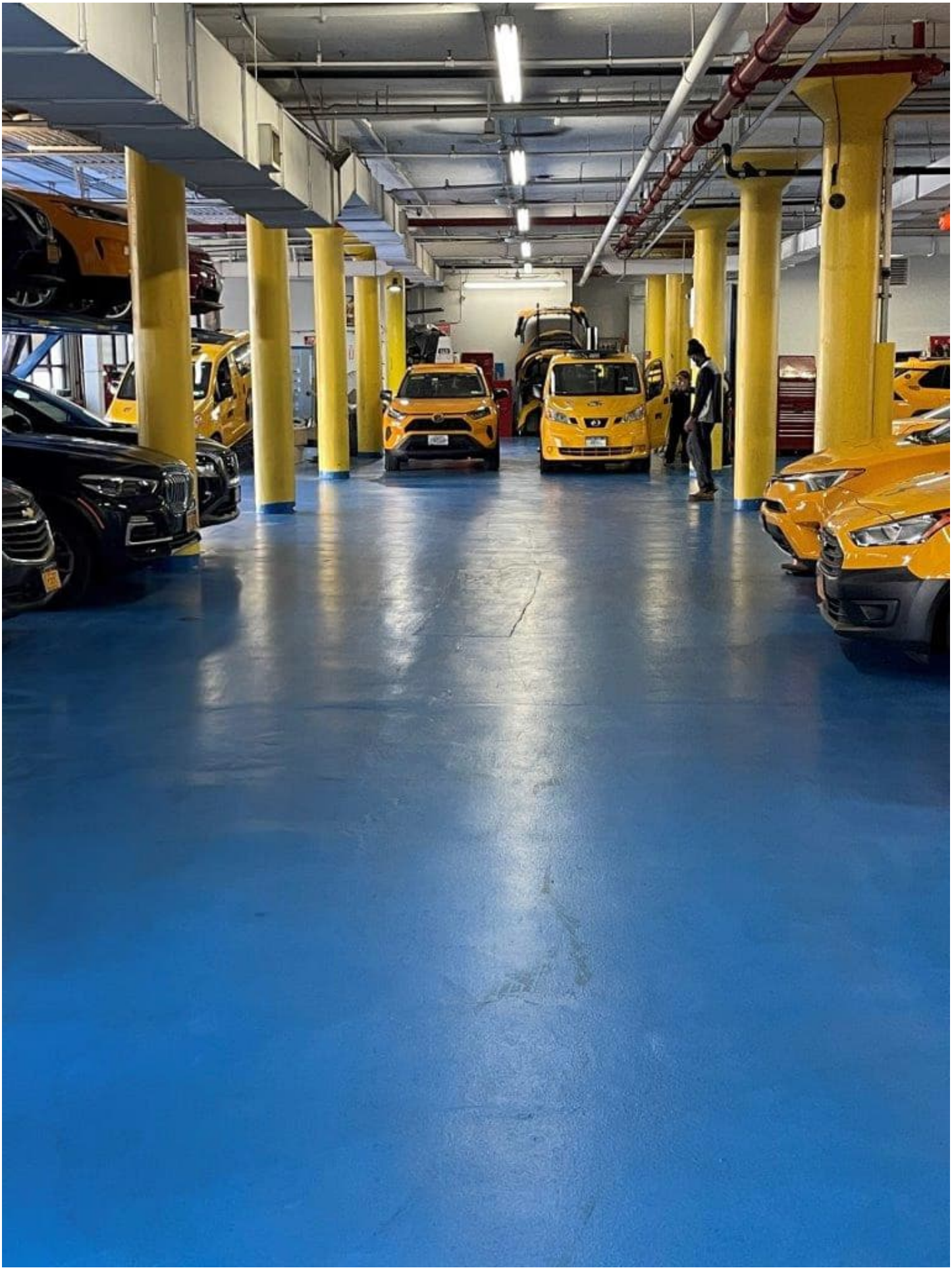

VEP-2
VEP-1
VEP-3


SSD System Shut-Off Warning Light
FIRE
FIRE
STEELMASTER
8 Compartment Steel Vertical Organizer
Canon


NYC
FARE



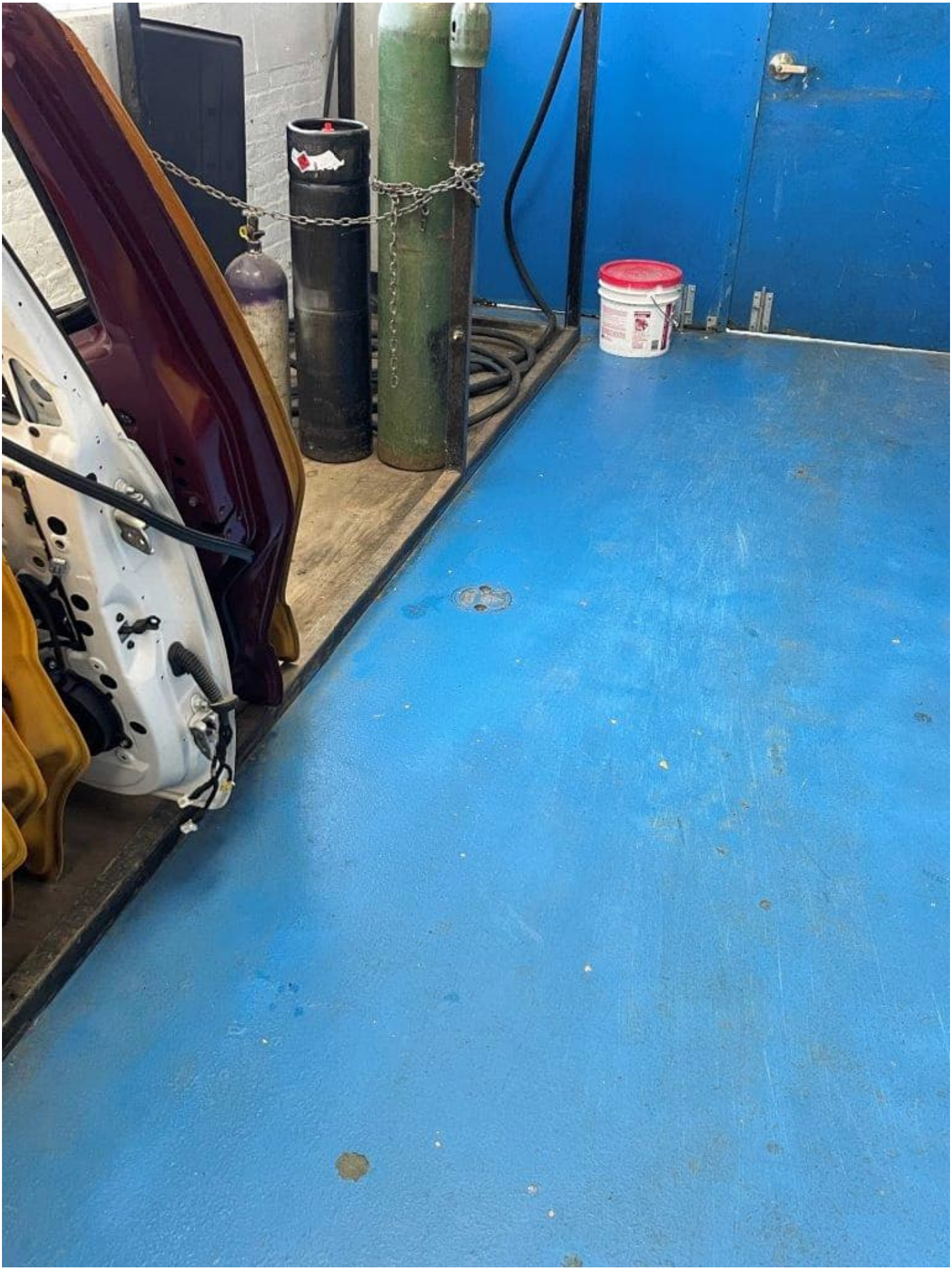

RKING
REAL ESTATE MANAGEMENT



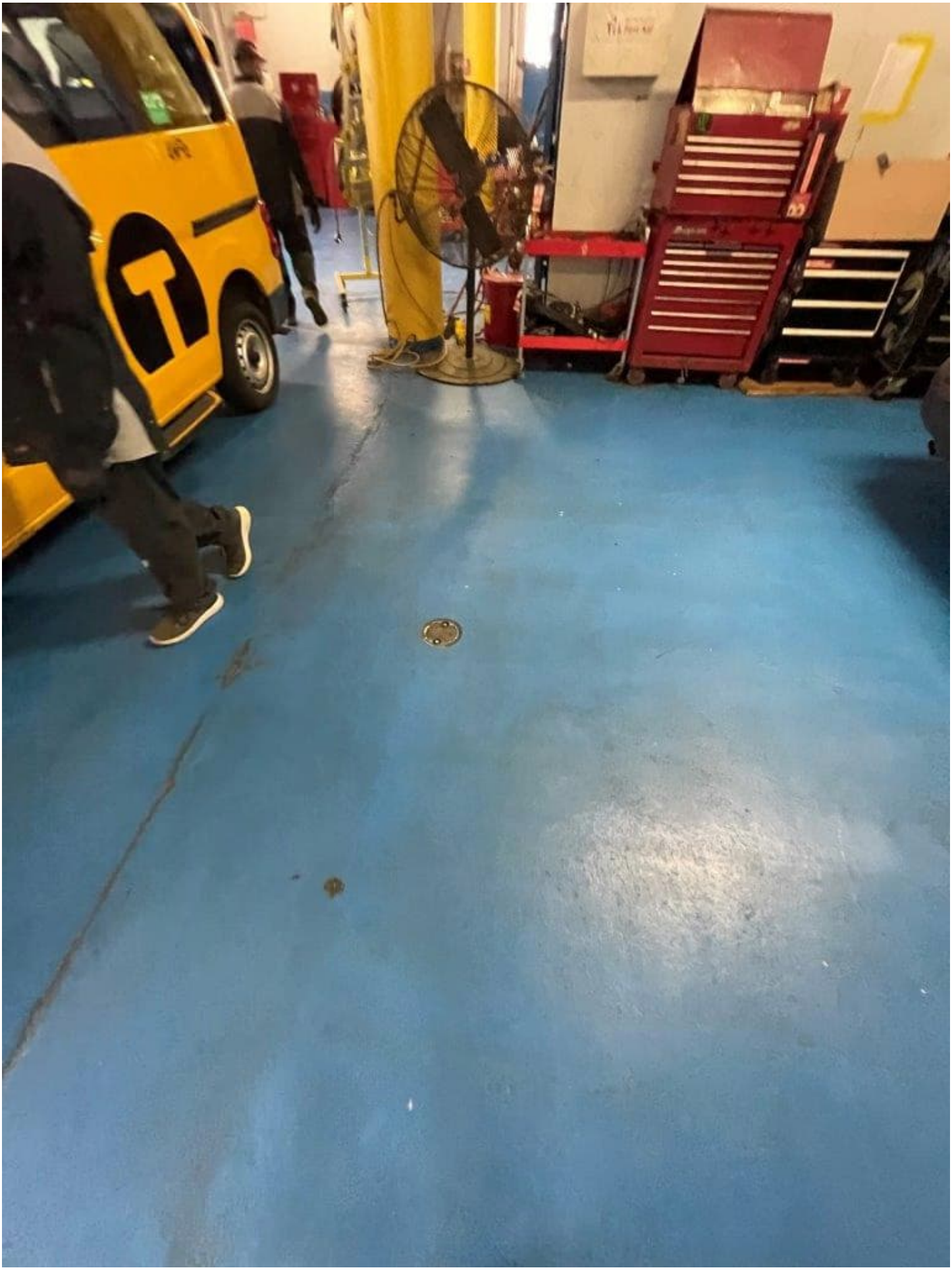

EXTRA-
6.0 CU FT
EGeG ROTRON
DANGER
DANGER

MONITORING WELL
FAIRCHILD SEMICONDUCTOR


WELL



Queens Medallion Leasing



APPENDIX F

Professional Engineer
Institutional and Engineering Control Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. C241144

Site Name Queens Medallion Leasing

Site Address: 21-03 44th Avenue Zip Code: 11101
City/Town: Long Island City
County: Queens
Site Acreage: 0.424

Reporting Period: March 25, 2021 to March 25, 2022

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

4-14-2022
Date

Box 2A

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

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	X	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

QueeSns Medallion Leasing

SITE NO. C241144 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
441-9	Exclusive Realty Services, LLC	Soil Management Plan Monitoring Plan Ground Water Use Restriction Landuse Restriction Site Management Plan O&M Plan IC/EC Plan

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted-residential, commercial or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department approved Site Management Plan.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
441-9	Vapor Mitigation Cover System

- A site cover currently exists and will be maintained on the site to allow for restricted-residential use of the site. Any site redevelopment will maintain the existing site cover, which consists either of the structures such as buildings, pavement, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted-residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).
- Operation and maintenance of a sub-slab depressurization system to prevent vapors from groundwater contamination from entering the building.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

	YES	NO
Queens M	X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

4-14-2022

Date

IC CERTIFICATIONS
SITE NO. C241144

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Sean Groszkowski (print name) at 500 Summit Lake Drive, Suite 450, Valhalla, NY (print business address),

am certifying as Remedial Party (Owner or Remedial Party)

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

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

4-14-2022
Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Steven Eget, PE at WSP, One Penn Plaza, New York, NY 10019,
print name print business address

am certifying as a Professional Engineer for the Type text here
(Owner or Remedial Party)

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

Stamp (Required for PE)

10/26/2022
Date