PARAGON PAINT AND VARNISH CORP. SITE

QUEENS, NEW YORK

Remedial Action Work Plan

NYSDEC BCP Number: C241108

Prepared for:

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CERTIFICATION

I, Charles J. McGuckin, certify that I am currently a NYS registered professional engineer or Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

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

STATE OF NEW YORK
CHARLES J. McGUCKIN
069509
LICENSED PROFESSIONAL ENGINEER

Charles J. McGuckin, P.E.	October 7, 2015	
NYS Professional Engineer #069509	Date	Signature

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

REMEDIAL ACTION WORK PLAN

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LIST OF ACRONYMS

µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
AOCs	Areas of Concern
AST	Aboveground Storage Tank
AWQSGVs	Ambient Water Quality Standards and Guidance Values
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BLS	Below Land Surface
BNA	Base Neutral Acids
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CVOCs	Chlorinated Volatile Organic Compounds
DER-10	NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation
DUSR	Data Usability Summary Report
EA	Exposure Assessment
ELAP	Environmental Laboratory Approval Program
FSP	Field Sampling Plan
HASP	Health and Safety Plan
IRM	Interim Remedial Action
LNAPL	Light Non-aqueous Phase Liquid
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
MW	Monitoring Well
NTUs	Nephelometric Turbidity Units
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxidation – Reduction Potential
PAHs	Polycyclic Aromatic Hydrocarbons

PCBs ....Polychlorinated Biphenyls
PID ....Photo Ionization Detector
PPE.............................Personal Protective Equipment
PVC............................Polyvinyl Chloride
QAPP ....Quality Assurance Project Plan
RAWP........................Remedial Action Work Plan
RCA…………………Recycled Concrete Aggregate
RRSCO ....Restricted Residential Soil Cleanup Objectives
RI................................Remedial Investigation
RIR.............................Remedial Investigation Report
RIWP..........................Remedial Investigation Work Plan
SCOs ....Soil Cleanup Objectives
SVOCs ....Semivolatile Organic Compounds
TAL............................Target Analyte List
TCL............................Target Compound List
TDS............................Total Dissolved Solids
USEPA.......................United States Environmental Protection Agency
USGS ....United States Geological Survey
UST............................Underground Storage Tank
UUSCO......................Unrestricted Use Soil Cleanup Objectives
VOCs..........................Volatile Organic Compounds

EXECUTIVE SUMMARY

Vernon 4540 Realty, LLC (Vernon 4540) entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) dated September 4, 2008 to investigate, remediate, and redevelop the former Paragon Paint and Varnish Company manufacturing facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard (Tax Block 26, Lot 4) in Long Island City, State of New York (Site).

The proposed Site redevelopment plan consists of retrofitting the existing former Paint Factory building and constructing a 28 story cantilever tower connected to the Paint Factory. The existing warehouse and garage buildings will be demolished and replaced with a new eight story building on 46th Avenue. All buildings will be ground level retail and commercial with residential above. Site redevelopment (demolition of select buildings and construction of new buildings) is scheduled to take place after the completion of the remedial action (RA).

Site Description/Physical Setting/Site History

The Site was accepted into the Brownfield Cleanup Program (BCP) as a Volunteer, and the BCA was signed on September 4, 2008. Site Number C241108 has been assigned.

The Site consists of an approximately 33,150 square foot lot improved by a four-story former paint factory (the "Paint Factory"), a three-story former garage and office (the "Garage"), a three-story former warehouse (the "Warehouse"), a one-story shed (the "Shed") and a concrete paved access road off 46th Avenue and a concrete rear courtyard that fronts approximately 50 feet of Anable Basin.

The buildings were reportedly constructed between 1923 and 1947. The Site had been used for industrial purposes since 1898, including: paint and varnish manufacturing, packaging, storage and shipping, bottle and crate storage, a "Chalk Products Company", sheet metal works including metal painting, and vehicle transfer garage.

The Site is currently vacant and is located in an industrial area consisting of a variety of warehousing activities as well as light industrial and manufacturing businesses. The entire lot is either concrete or covered by buildings. Historical fill and the storage, transfer, and usage of mineral oils, linseed oil, and fuel oils on Site have resulted in impacts to soil, soil vapor, and groundwater.

Summary of the Remedial Investigation

Soil and groundwater were characterized in the Remedial Investigation (RI) though analysis of soil borings and monitoring wells, test pitting, light non-aqueous phase liquid (LNAPL) fingerprinting, and underground storage tank (UST) characterization. Results of the RI indicate that soil and groundwater exceedances are limited and are largely restricted to polycyclic aromatic hydrocarbons (PAHs) and metals commonly associated with historic fill. The potential for vapor intrusion will be addressed as part of the redevelopment of the Site; therefore, grossly impacted soil and LNAPL are the primary concerns at the Site. Based on the good condition of the six USTs from the courtyard and two USTs from the driveway that were removed in January through March of 2015, the primary source of LNAPL was likely subsurface piping.

Soil Investigation Results

The soil investigation included 37 soil borings and 122 soil samples. No samples exceeded the NYSDEC Part 375 Restricted Residential Use Soil Cleanup Standards (RRSCOs) for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) or pesticides. However, four VOCs exceeded Protection of Groundwater (PoG) SCOs and were also found in Site groundwater in on e or more well locations. These four VOCs detected above the PoG SCOs included:

- Benzene exceeded the PoG SCO (60 µg/kg) in 1 sample at 1 locations from 14-15 ft bls.
- Ethylbenzene exceeded the PoG SCO (1,000 µg/kg) in 11 samples at 6 locations at depths ranging from 4-6 ft bls to 16-18 ft bls.
- Isopropylbenzene exceeded the SCO in NYSDEC CP-51 Table 1 Supplemental Cleanup Objectives for Protection of Groundwater (2,300 µg/kg) in 28 samples at 20 locations at depths ranging from 0-2 ft bls to 18-19 ft bls.
- Xylenes (total) exceeded the PoG SCO (1600 µg/kg) in 11 samples at 7 locations at depths ranging from 5-7 ft bls to 16-18 ft bls.

Semivolatile organic compounds (SVOCs) exceeded the RRSCOs for 49 (out of 122) soil samples at 27 locations. All exceedances ranged in depth from 0-2 feet below land surface (bls) to 10-12 feet bls. Therefore, these exceedances are likely a result of historic fill and are not indicative of a prior release. The results are summarized below:

- Benzo[a]anthracene exceeded RRSCO (1,000 micrograms per kilogram [µg/kg]) in 44 samples at 24 locations.
- Benzo[a]pyrene exceeded RRSCO (1,000 µg/kg) in 42 samples at 25 locations.
- Benzo[b]fluoranthene exceeded RRSCO (1,000 µg/kg) in 49 samples at in 27 locations.
- Benzo[k]fluoranthene exceeded RRSCO (3,900 µg/kg) in five samples at five locations.
- Chrysene exceeded RRSCO (3,900 µg/kg) in 13 samples at 11 locations.
- Dibenzo[a,h]anthracene exceeded RRSCO (330 µg/kg) in 19 samples at 15 locations.
- Indeno[1,2,3-cd]pyrene exceeded RRSCO (5,000 µg/kg) in 45 samples at 26 locations.

Many metals are naturally occurring in soil and many of the exceedances noted below occurred in samples collected from historic fill. Six metals were detected above the RRSCOs, as summarized below. These metals are likely naturally occurring or attributable to the use of historic fill and are not indicative of a release.

- Arsenic exceeded the RRSCO (16 milligrams per kilogram [mg/kg]) in two samples B-5_0-2 (29 mg/kg) and B-13_0-2 (18 mg/kg).
- Barium exceeded the RRSCO (400 mg/kg) in three samples at three locations: B-7_5-7 (480 mg/kg), B-8_0-2 (530 mg/kg) and MW-14_7-9 (530 mg/kg).
- Copper exceeded the RRSCO (270 mg/kg) in five samples at four locations: B-11_0-2 (480 mg/kg), B-11_8-10 (390 mg/kg), B-17_0-2 (480 mg/kg), B-18_0-2 (1,700 mg/kg), MW-17_0-2 (770 mg/kg).
- Lead exceeded the RRSCO (400 mg/kg) in nine samples at seven locations, with concentrations ranging from 2.7 mg/kg to 1,000 mg/kg. Depth of the exceedances ranged from 0-2 feet bls to 8-10 feet bls.
- Manganese was detected in all 122 soil samples ranging in concentration from 67 mg/kg to 2,500 mg/kg and exceeded the RRSCO (2,000 mg/kg) in one sample: B-12_21-22.5 (2,500 mg/kg).
- Mercury exceeded RRSCO (0.81 mg/kg) in seven samples at seven locations, with concentrations ranging from 0.02 mg/kg (estimated) to 5.2 mg/kg. Depth of the exceedances ranged from 0-2 feet bls to 7-8 feet bls.

Groundwater Investigation Results

The general direction of groundwater flow across the Site is to the west; ranging in elevation from 6 to 10 feet bls. The groundwater laboratory analytical results were compared to NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs) for Class GA groundwater (even though the groundwater at the Site is not used for drinking since the area is connected to the public water supply and the majority of the Site exhibits saline conditions).

There were no exceedances of NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs) for PCBs or pesticides.

LNAPL was detected in 11 out of 23 groundwater monitoring wells, including MW-2R, MW-3, MW-6/6R, MW-7/7R, MW-8, MW-9, MW-12, MW-13, MW-17, MW-19, and MW-23. Two distinct plumes were located on Site; one plume was centered in the courtyard and the other at the southwestern edge of the Site.

A total of 26 groundwater samples were collected and analyzed for VOCs. Analytical data for VOCs indicated detections above AWQSGV for seven (7) compounds, details are summarized below:

- Acetone exceeded the NYSDEC AWQSGV (50 micrograms per liter [µg/L]) at one location, MW-21 (190 µg/L), an off-Site and upgradient location.
- Benzene exceeded the AWQSGV (1 µg/L) at MW-24 (1.1 µg/L).
- Ethylbenzene exceeded the AWQSGV (5 µg/L) at MW-34 (5.9 µg/L).
- Isopropylbenzene exceeded the AWQSGV (5 µg/L) at thirteen locations: MW-1 (11.6 µg/L), MW-7R (6 µg/L [estimated]), MW-16 (20 µg/L [estimated]), MW-18 (6.8 µg/L), MW-20 (21 µg/L), MW-22 (8 µg/L), MW-24 (22 µg/L), MW-25 (12 µg/L), MW-27 (14 µg/L), MW-34 (45 µg/L), MW-36 (32 µg/L), MW-37 (42 µg/L) and MW-38 (14 µg/L).
- M&P xylenes exceeded the AWQSGV (5 µg/L) at MW-16 (10 µg/L).
- O-xylenes exceeded the AWQSGV (5 µg/L) at MW-16 (6.7 µg/L).
- Total xylenes exceeded the AWQSGV (5 µg/L) MW-16 (16.7 µg/L).

Groundwater samples collected from 17 locations were analyzed for SVOCs. SVOCs exceeded their respective AWQSGVs at six locations, details are summarized below.

- Benzo[a]anthracene exceeded the AWQSGV (0.002 µg/L) at six locations: MW-2R (0.33 µg/L), MW-5 (0.42 µg/L), MW-7R (18 µg/L), MW-15 (2.2 µg/L), MW-16 (0.08 µg/L [estimated]) and MW-22 (0.08 µg/L [estimated]).
- Benzo[a]pyrene exceeded the AWQSGV (0 µg/L) at all four locations: MW-2R (0.31 µg/L), MW-5 (0.45 µg/L), MW-7R (14 µg/L) and MW-15 (1.7 µg/L).
- Benzo[b]fluoranthene exceeded the AWQSGV (0.002 µg/L) at all four locations: MW-2R (0.41 µg/L), MW-5 (0.54 µg/L), MW-7R (16 µg/L) and MW-15 (2.6 µg/L).
- Benzo[k]fluoranthene exceeded the AWQSGV (0.002 µg/L) at four locations: MW-2R (0.28 µg/L), MW-5 (0.3 µg/L), MW-7R (9.2 µg/L) and MW-15 (1.4 µg/L).
- Bis(2-ethlhexyl) phthalate exceeded the AWQSGV (5 µg/L) at MW-7R (29 µg/L [estimated]).
- Chrysene exceeded the AWQSGV (0.002 µg/L) at six locations: MW-2R (0.33 µg/L), MW-5 (0.36 µg/L), MW-7R (16 µg/L), MW-15 (2.2 µg/L), MW-16 (0.09 µg/L) and MW-22 (0.07 µg/L [estimated]).
- Fluoranthene exceeded the AWQSGV (50 µg/L) at MW-7R (55 µg/L).
- Indeno[1,2,3-cd]pyrene exceeded the AWQSGV (0.02 µg/L) at four locations: MW-2R (0.18 µg/L [estimated]), MW-5 (0.38 µg/L), MW-7R (9.5 µg/L), and MW-15 (1.3 µg/L).
- Naphthalene exceeded the AWQSGV (10 µg/L) at MW-7R (76 µg/L).
- Phenanthrene exceeded the AWQSGV (50 µg/L) at MW-7R (51 µg/L).

Groundwater samples collected from 17 locations were analyzed for Target Analyte List (TAL) metals. Metals were found in concentrations that exceed their respective AWQSGVs at 13 locations, as summarized below.

- Antimony exceeded the AWQSGV (3 µg/L) at MW-10 (3.25 µg/L).
- Barium exceeded the AWQSGV (1,000 µg/L) at MW-21 (1,018 µg/L).
- Cadmium exceeded the AWQSGV (5 µg/L) at MW-7R (13.74 µg/L).
- Iron was detected at 13 locations ranging in concentration from 59.7 µg/L to 71,000 µg/L and exceeded the NYSDEC AWQSGV (300 µg/L) at all 13 locations.
- Lead exceeded the AWQSGV (25 µg/L) at MW-7R (31.99 µg/L) and MW-15 (26.78 µg/L).

- Manganese was detected at 13 locations ranging in concentration from 3.85 µg/L to 11,040 µg/L and exceeded the NYSDEC AWQSGV (300 µg/L) at 11 locations.
- Sodium was detected at 13 locations ranging in concentration from 35,000 µg/L to 7,700,000 µg/L and exceeded the NYSDEC AWQSGV (20,000 µg/L) at all 13 locations.

The exceedances of PAHs and metals in many of the groundwater samples are likely attributable to historic fill and/or may be the result of a turbid sample.

Soil Vapor Investigation Results

Three sub-slab and corresponding indoor air samples were collected from beneath Site structures during a previous investigation completed in 2007. A summary of the analytical results follows:

- Hydrocarbon, alcohol, and solvent-related compounds were detected in the sub-slab and indoor air samples at concentrations ranging from 1.09 micrograms per cubic meter (µg/m^3) to 92.4 µg/m^3. The hydrocarbon compounds included 1,2,4-trimethylbenzene, ethylbenzene, toluene, xylenes, propylene and methyl tert-butyl ether (MTBE), and ranged in concentrations from 2.68 µg/m^3 (1,2,4-trimethylbenzene) in SV-1 to 39.5 µg/m^3 (MTBE) in SV-2. The alcohol compounds included ethanol and isopropanol and were detected at concentrations ranging from 1.3 µg/m^3 (isopropanol) to 92.4 µg/m^3 (ethanol). The solvent-related compounds included 1,2,4-trichlorobenzene, ketones including 2-butanone or methyl ethyl ketone (MEK) and acetone, methylene chloride, n-heptane, and tetrahydrofuran. These concentrations ranged from 2.34 µg/m^3 of n-heptane in SV-3 to 69.2 µg/m^3 of methylene chloride in SV-3 (SS). The detected concentrations in the sub-slab samples were generally higher than the corresponding ambient air samples, but overall the detections were consistent.

Regulatory guidance on soil vapor and indoor air quality is presented in Matrix 1 and Matrix 2 from the New York State Department of Health (NYSDOH) Center for Environmental Health (CEH) Bureau of Environmental Exposure Investigation (BEEI) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. Matrix 1 addresses trichloroethene (TCE), carbon tetrachloride, and vinyl chloride, and Matrix 2 addresses 1,1-dichloroethene, *cis*-1,2-dichloroethene, tetrachloroethene (PCE), and 1,1,1-trichloroethane. The matrices establish the conditions that require a response (i.e., monitoring, mitigation, or source identification) based on an evaluation of indoor air concentrations and sub-slab vapor concentrations. None of the seven compounds included in the NYSDOH Guidance were detected in the three sub-slab soil vapor samples analyzed.

Additionally, at the direction of NYSDEC, two separate offsite soil vapor investigations were completed at buildings adjacent to the Site (identified as offsite properties A through E on Figure 2). Based on the results of the two offsite investigations, In July of 2010 NYSDOH determined that actions are not needed to address exposures related to soil vapor intrusion at the properties sampled.

Qualitative Human Health Exposure Assessment

As described in Appendix 3B of DER-10, "The overall purpose of the Qualitative Human Health Exposure Assessment (QHHEA) is to evaluate and document how people might be exposed to site-related contaminants, and to identify and characterize the potentially exposed population(s) now and under the reasonably anticipated future use of the site." The following section details the exposure assessment based on data collected during the RI.

Soil Exposure

Soil samples collected during the RI indicate the presence of SVOCs and metals at concentrations above the RRSCOs. An individual could be exposed to these contaminants through direct contact with the soil during ground-intrusive work at the Site. Direct contact without the use of proper personal protective equipment (PPE) and personal hygiene measures could lead to dermal contact and incidental ingestion of these compounds. Since the entire Site is covered by either buildings or concrete, the potential for contact with the soil is limited to remedial and construction contract workers at the Site performing ground intrusive activities. The Site will be fully fenced during demolition activities and access will be controlled. The general public will not be exposed to direct contact with Site soil. PPE will be required during any intrusive Site work. A community air monitoring program (CAMP) will be implemented during intrusive activities to minimize the potential for off-Site exposures from soil/dust leaving the Site.

A review of RI soil data indicated that there is the potential for off-Site soil beneath the sidewalk along 46th Avenue (immediately southwest of the Site) to be impacted with PAHs from a LNAPL plume at concentrations above Unrestricted Use SCOs.

The proposed use for the redevelopment of the Site is mixed commercial/residential buildings. The redevelopment construction plans include a slab-on-grade building and a cantilever building. The areas outside of buildings will be capped by concrete, asphalt, or at least 24-inches of clean fill. Because the Site will be completely capped by the proposed complex, the potential for exposure by direct contact with contaminated soil will be minimized for both the public and any future construction workers performing ground intrusive activities at the Site.

Groundwater Exposure

Groundwater samples collected during the RI indicated the presence of VOCs, SVOCs and metals above the AWQSGVs. Groundwater is not used for drinking (the area is connected to the public water supply), and there is no direct contact with or ingestion of groundwater by the general public. Individuals who perform ground intrusive work (i.e., utility repair), perform groundwater sampling or remedial activities may come into contact with contaminated groundwater. Proper PPE and personal hygiene measures will be required to prevent dermal contact and the potential for incidental ingestion of these compounds.

Site buildings will be serviced by the public water supply. During the Remedial Action, underground piping and mobile LNAPL will be removed from the Site, effectively eliminating the source of groundwater impacts. In addition, a Site-wide cap will be installed to eliminate; the potential for public exposure by direct contact with contaminated groundwater.

Groundwater flows to the west across the Site. Two distinct LNAPL plumes were delineated during the RI; both of the plumes extended off-Site. Potential for off-Site migration will be addressed by eliminating the source of groundwater impacts, as described in the Summary of the Remedy.

Soil Vapor Exposure

In accordance with the Remedial Investigation Work Plan (RIWP), soil vapor sampling was not conducted during the RI. The Site is unoccupied space and therefore, there was no current soil vapor intrusion pathway at the Site. However, PAHs and VOCs were detected in soil and groundwater below the former paint factory building (to remain in place) and the other buildings (which will be removed after the completion of the remedial action). Prior to any buildings being occupied, potential soil vapor concerns will be evaluated and mitigated if necessary with the installation of a sub-slab depressurization system. Evaluation of soil vapor and design and installation of sub-slab depressurization system(s) will be part of the Site Management Plan (SMP).

Summary of the Remedy

A Track 4 cleanup is proposed consisting of the following remedial components:

- Implementation of erosion and sediment controls.
- Site Monitoring of potentially airborne VOCs and particulates in accordance with a NYSDEC approved CAMP during all ground intrusive and soil handling activities; Implementation of proper dust and odor suppression techniques during all ground intrusive and soil handling activities, including use of an enclosure for excavation work.
- Closure of remaining USTs by removal or, as a contingency, closure in place.
- Excavation and disposal of subsurface piping.
- Excavation and off-Site disposal of grossly contaminated soil in the courtyard LNAPL source area, including:
    a. grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u);
    b. soil containing non-aqueous phase liquid (NAPL);
    c. soil containing SVOCs exceeding 500 ppm;
    d. soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
    e. Soils that create a nuisance condition, as defined in NYSDEC Commissioner Policy CP-51 Section G.
- Screening for indications of contamination (by visual means, odor, and monitoring with a photoionization detector) of all excavated soil during all ground intrusive Site work.
- Excavated unsaturated soil free from mobile LNAPL will be stockpiled for reuse on Site (Assuming it meets soil re-use criteria as noted in DER-10).
- Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal.
- Backfill of excavated areas with recycled concrete aggregate (RCA) or clean stone to 1 foot above groundwater table, backfill one-foot above the water table to two-feet below

proposed development grade with fill reused from the excavation (as available), and backfill the top two-feet with RCA as a temporary cover prior to redevelopment. RCA will meet NYSDEC Part 360-1.15 requirements and will be free of asphalt.

- Dewatering and treatment or offsite disposal of groundwater as needed to facilitate excavation.

- In-situ chemical oxidation (ISCO) injection for treatment of VOCs in soil and groundwater underneath the Warehouse.

- Installation of a minimum of five automatic product-only recovery pumps at property boundary areas where the LNAPL plume extends off-Site, and underneath the Warehouse.

- A Site cover system consisting of building slabs (the existing Paint Factory, the Warehouse and the Garage), pavement or 24-inches minimum of RCA as a temporary cover in the courtyard area. Following Site redevelopment, the site cover system will consist of new concrete building slabs, pavement and a minimum of two feet of clean fill meeting RRSCOs in new landscaped areas as will be detailed in the SMP.

- Recording of an Environmental Easement, including Institutional Controls, to prevent future exposure to any residual contamination remaining at the Site.

- Preparation of an SMP for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

REMEDIAL ACTION WORK PLAN

1.0 INTRODUCTION

Vernon 4540 Realty, LLC (Vernon 4540) entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) dated September 2008, to investigate and remediate a 0.76-acre property located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard (Tax Block 26, Lot 4) in Long Island City, Queens, New York (Site). Vernon 4540 is a Volunteer in the Brownfield Cleanup Program. Mixed commercial and residential use is proposed for the property. When completed, the Site will contain multi-level, mixed use development including ground level retail space with residential space above. Refer to the Brownfield Cleanup Program (BCP) application for additional details.

This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation (RI) and subsequent studies, performed between December 2013 and January 2015. It provides an evaluation of a Track 1 cleanup and other applicable Remedial Action alternatives, their associated costs, and the recommended and preferred remedy. The remedy described in this document is consistent with the procedures defined in DER-10 and complies with all applicable standards, criteria and guidance. The remedy described in this document also complies with all applicable Federal, State and local laws, regulations and requirements. The NYSDEC and NYSDOH have determined that this Site does pose a significant threat to human health and the environment. The RI for this Site did not identify fish and wildlife resources.

A formal Remedial Design document will be prepared and submitted specifically for the ISCO design basis and injection layout, and the recovery well and pump details.

1.1 SITE LOCATION AND DESCRIPTION

The Site is located in the County of Queens, Long Island City, New York and is identified as Block 26 and Lot 4 on the New York City Tax Map. A United States Geological Survey (USGS) 7.5 Minute Series Topographical Map – Brooklyn Quadrangle Figure 1 shows the Site location. The Site is situated on an approximately 0.76-acre area bounded by a one-story commercial property and Anable Basin to the north, 46th Avenue to the south, Vernon Boulevard and multi-story residential/commercial buildings to the east, and a two-story warehouse to the west (see Figure 2). A boundary map is attached to the BCA as required by Environmental Conservation Law (ECL) Title 14 Section 27-1419. The 0.76-acre property is fully described in Figures 1 and 2.

1.2 CONTEMPLATED REDEVELOPMENT PLAN

The Remedial Action to be performed under the RAWP is intended to make the Site protective of human health and the environment consistent with the contemplated end use. The proposed redevelopment plan and end use is described here to provide the basis for this assessment. However, the Remedial Action contemplated under this RAWP may be implemented independent of the proposed redevelopment plan.

The planned future use of the Site is ground floor commercial retail space with residential units above. The proposed redevelopment plan is attached in Appendix A. The existing Paint Factory building will remain in place, while all other buildings on Site will be demolished for the new construction.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

The Site is surrounded by a mix of residential, commercial and light industrial development. To the north, the Site borders Anable Basin and a one-story commercial building. The Site is separated from Anable Basin by a bulkhead. To the south, the Site borders 46th Avenue, beyond which are an auto repair shop and a light industrial building. To the east, the Site borders mixed-use commercial/residential use buildings and Vernon Boulevard, beyond which is a parking lot utilized by Blood Centers of New York. The area west of the Site contains a two-story warehouse. The nearest school is located approximately 0.10 miles away from the site to the west.

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The Site was investigated in accordance with the scope of work presented in the NYSDEC-approved Remedial Investigation Work Plan (RIWP) dated February 2013 and NYSDEC's January 15, 2014 email approving necessary modifications to the RIWP. The investigation was conducted between December 2013 and January 2015. The RI was submitted to NYSDEC on May 15, 2015 and the RI Report is waiting to be approved by NYSDEC.

2.1 SUMMARY REMEDIAL INVESTIGATIONS PERFORMED

Roux Associates completed a RI of soil, groundwater and underground storage tanks (USTs) at the Site. The RI was performed in December 2013 through January 2015. The investigations included a round of soil and two rounds of groundwater sampling. The RI included:

- Installation of 37 soil borings;
- Ten new monitoring wells were installed including eight water table monitoring wells (screened across the water table interface) and two deep groundwater monitoring wells (screened from the top of bedrock);
- Four existing monitoring wells were replaced with monitoring wells appropriately screened to allow for LNAPL monitoring;
- The contents of accessible USTs were quantified, and, if found to contain LNAPL, characterized through fingerprinting analysis;
- Exploratory excavation was completed under the Shed slab to determine the nature and construction of the underground varnish cooking pots; and
- New and existing monitoring wells were developed, gauged and sampled. When a monitoring well was observed to contain LNAPL, the LNAPL was collected for fingerprinting analysis.

In addition to the RI activities listed above which were completed in accordance with the RIWP, the following supplementary tasks were completed during the RI activities to further assess identified data gaps.

- Test pits were completed in the courtyard to investigate subsurface anomalies encountered during drilling activities being conducted as part of the RI. Test Pit activities were completed in accordance with the May 1, 2014 Test Pit Work Plan, approved by NYSDEC on June 23, 2014.
- An additional four monitoring wells were installed under the Garage to determine if LNAPL was present in that area. The four additional monitoring wells were installed in

accordance with the June 24, 2014 Additional Delineation Work Plan (ADWP) approved by NYSDEC on August 1, 2014.

- Six additional monitoring wells (MW-33 through MW-38) were installed in the courtyard, basement and driveway to provide further LNAPL delineation.
- Six USTs (CT-3/4, CT-2/5, CT-1, CT-8 and CT-6/7) were removed in the courtyard. Two USTs (F1 and F2) were removed from the driveway.

A summary of the sampling location and analyses performed are provided in Table 1.

2.1.1 Borings and Wells

A total of 37 soil borings were completed during the RI (14 of the 37 soil borings were converted to monitoring wells) between December 16, 2013 and January 21, 2014. Soil boring locations are shown on Figure 2.

One hundred twenty two soil samples (not including duplicates) were analyzed during the RI. A direct push Geoprobe® drill rig was used to install the soil borings, with the exception of the borings located in the Warehouse basement (B-22 through B-27, MW-7R and MW-19). Borings located in the Warehouse basement were installed using a hand auger. The terminal depth of the soil borings ranged between 6 and 26.5 ft bls. Prior to subsurface activity, soil boring locations were hand cleared for utilities and USTs using soft digging techniques to a depth of five feet bls. Shallow soil samples (samples collected within the first five feet) were collected using a hand auger.

During soil boring activities, soil lithology was recorded and the soil samples were screened for impacts using visual and olfactory observations. Additionally, a photoionization detector (PID) was used to screen each soil sample for VOCs. Soil samples were collected continuously at each soil boring location using a 5-foot macro core sampler via the Geoprobe® drill (or by hand auger as with the borings located in the Warehouse basement) from five feet bls to seven feet below the water table. In the event that impacted soils were identified, the borings were advanced until impacts were no longer observed (i.e., clean soil) or refusal/bedrock was encountered.

A total of ten (10) new groundwater monitoring wells (MW-14 through MW-23) were installed during the RI and four existing monitoring wells (MW-1R, MW-2R MW-6R and MW-7R) were replaced due to improper well construction for LNAPL monitoring. Note, due to logistical/constraint issues, monitoring wells MW-1 and MW-2 were replaced, with MW-1R and MW-2R respectively. However, MW-6R and MW-7R were installed proximate to MW-7 and MW-6 (monitoring well locations are shown on Figure 2).

All monitoring wells were installed in accordance with the RIWP. Monitoring wells MW-14 through MW-18 were installed to determine the extent and configuration of the courtyard LNAPL plume; monitoring wells MW-19 through MW-21 were installed in areas believed to be outside the courtyard LNAPL plume to determine groundwater quality and flow direction. As such, the screen zones of monitoring wells MW-14 through MW-21 were constructed to intersect the LNAPL/water table interface. Two additional wells (MW-22 and MW-23) were installed at the top of presumed bedrock.

Monitoring wells located at exterior locations were constructed of four-inch diameter poly vinyl chloride (PVC) and consist of ten feet of 0.020-inch slot well screen that intersects the LNAPL/water table (with the exception of MW-22 and MW-23 as stated above). Due to size limitations associated with the Geoprobe® drill rig, four-inch diameter wells could not be installed at interior locations. Instead a smaller Geoprobe® drill rig was used at those locations, which was only capable of installing two-inch monitoring wells. This modification from the RIWP was approved by NYSDEC via email on January 15, 2014. Monitoring wells installed at interior locations were constructed of two-inch diameter PVC and consist of 0.020-inch slot well screen that intersects the LNAPL/water table. Note, as with the soil borings, monitoring wells MW-7R and MW-19 located in the basement of the Warehouse were installed by hand methods due to height restrictions preventing access with any drill rig. All monitoring well locations are shown on Figure 2.

Following monitoring well installation activities, each well was developed to ensure proper hydraulic connection with the aquifer and to reduce/eliminate turbidity of the water. Each monitoring well was developed using a submersible pump and a surge block, which was surged periodically until well yield was consistent and had turbidity below 50 nephelometric turbidity units (NTUs), when possible. Monitoring wells MW-6R, MW-14, MW-15, MW-20, and

MW-22 ran dry during development, but did not run dry during subsequent sampling events (with the exception of MW-14), and were sampled as planned.

2.1.2 Samples Collected

All soil samples were sent to Alpha Analytical of Westboro, Massachusetts (Alpha) which is part of the Environmental Laboratory Approved Program (ELAP) certified by the NYSDOH, and analyzed for the following parameters:

- Target Compound List plus 30/ Target Analyte (TCL + 30/TAL) which includes:
  - TCL VOC + Tentatively identified compounds (TICS);
  - TCL Base neutral acids (BNA)/SVOCs + 20;
  - TCL Pesticides (25% of samples);
  - TCL PCBs (25% of samples); and
  - TAL Metals (including hexavalent chromium).

Table 1 provides the list of all the soil samples and the analytic testing conducting on each soil sample.

Analytical results for soil samples were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential SCOs (RRSCOs) for the Protection of Public Health presented in 6 NYCRR Subpart 375-6.

In accordance with the RIWP, an initial groundwater gauging and sampling round was completed on March 20, 2013 prior to the installation of the RI soil borings and monitoring wells. Following well installation and development, the entire network of monitoring wells was gauged on January 29, 2014. During both gauging rounds, water-level measurements were recorded for all monitoring wells to further define groundwater flow patterns beneath the Site.

Following each groundwater gauging event, a comprehensive groundwater sampling event was completed. Groundwater samples were collected from all wells that did not contain LNAPL or have an LNAPL sheen. Because snow and ice prevented access to multiple monitoring wells on the January 29, 2014 gauging event, an additional gauging event was completed on March 14, 2014.

All groundwater samples were sent to either Accutest Laboratories of Dayton, New Jersey (2013 sampling event) or Alpha (2014 sampling event) and were analyzed for the following parameters:

- TCL + 30/TAL, which includes:
  - TCL VOA + ID TICS;
  - TCL BNA/(SVOCs) + 20;
  - TCL Pesticides (25%);
  - TCL PCBs (25%); and
  - TAL Metals.

Analytical results for groundwater samples were compared to the NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs), presented in the June 1998 Division of Water Technical and Operational Guidance Series (1.1.1) – Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, and an April 2000 Addendum to the June 1998 Division of Water Technical Operational Guidance Series (1.1.1).

2.1.3 Chemical Analytical Work Performed

Table 1 provides a summary of all samples performed during the RI, including matrices, analytes, and sample identification numbers.

2.1.4 UST Inventory

The following section describes the UST sampling that took place during April 2013 and included USTs in the courtyard, Garage and driveway. The USTs in the courtyard and driveway were subsequently removed as per the December 22, 2014 Underground Storage Tank Removal Notification (see Section 2.1.7).

Courtyard and Garage

The UST inventory and LNAPL sampling task was initiated on April 15, 2013. Accessible USTs were opened and gauged through existing vaults. Based on the number of vaults and historical documentation it was estimated that nine USTs were located in the courtyard (based on the number of compartments observed); however, six USTs were identified during recent UST removal activities. LNAPL within the USTs (if present) was collected for fingerprinting analysis. Eleven USTs in the garage and seven USTs/compartments in the courtyard were accessed and inspected. An additional twelfth UST was observed in the garage which was opened and inspected and determined to be a former pneumatic tank and is, therefore, not discussed further. Upon accessing each of the USTs/compartments, an electronic oil/water interface probe capable of detecting an LNAPL thickness of 0.01 feet was used to determine the depth to liquids/materials in the UST/compartment and to determine depth of the bottom of the UST/compartment. If LNAPL was observed in the USTs/compartments, a sample of the LNAPL was collected for fingerprinting analysis. An inventory of discovered USTs/compartments is included in Table 16.

Of the 18 USTs/ compartments accessed, three were observed to be empty (GT-3, GT-4 and GT-5), nine were observed to contain only water (CT-2 [southern compartment of CT-2/5], CT-3 [southern compartment of UST CT-3/4], CT-5 [northern compartment of CT-2/5], CT-6 [northern compartment of CT-6/7], CT-9, GT-1, GT-7, GT-9 and GT-11) and six were observed to contain LNAPL (CT-1, CT-4 [northern compartment of CT-3/4], GT-2, GT-6, GT-8 and GT-10). Of the six that contained LNAPL, two were observed to contain a mixture of LNAPL and water (CT-1 and CT-4) and four were observed to contain only LNAPL (GT-2, GT-6, GT-8, and GT-10).

Following the UST inventory inspection, an Interim Remedial Measure (IRM) Work Plan was submitted to NYSDEC on May 31, 2013, which proposed removing recoverable LNAPL. LNAPL was subsequently removed from USTs CT-1, CT-4, and GT-2. In accordance with the May 31st IRM Work Plan, LNAPL was not removed from USTs GT-6, GT-8, and GT-10 due to the material within these USTs extremely high viscosity which prevented vacuum extraction.

Underground Varnish Cooking Pots

Exploratory excavation under the Shed slab was included in the UST inventory task to determine the nature and condition of the seven underground varnish cooking pots previously reported to be located there. On May 1, 2013 Metro Environmental Contracting Corp. (Metro) of Lindenhurst New York utilized a mini excavator to break up the concrete slab and remove the overburden in the area above the pots. In total, six pot structures were located; the excavation was extended to both the north and south; however, a presumed seventh pot was not located and may not ever have existed. Furthermore, the structures observed are more appropriately described as pot holders as it does not appear that they themselves were ever capable of holding fluids and it is more likely a pot was inserted into the structures observed. Due to mechanical limitations inherent with the mini-excavator, the bottom of the structures could not be penetrated; however, the sides were penetrated, soil from around them was screened with a PID, no response was observed.

Dished USTs

Immediately following the exploratory excavation of the underground varnish cooking pots, test pitting was performed to identify the three dished USTs reported to be located in the vicinity of the Shed and boiler room. None of the three dished USTs were located; verification of the presence or absence of the reported dished USTs will be addressed in this RAWP. The depth of the excavation was limited due to the physical limitations associated with using the mini-excavator, which was necessary due to the space limitations posed by performing the excavation inside the Shed. It is possible the dished USTs are buried deeper than the mini-excavator was able to achieve. Note that evidence (fill and vent line) of a UST was observed under the boiler (Figure 2). Due to its proximity to the boiler it is believed that this UST likely supplied fuel oil to the boiler and is not one of the purported dished USTs. Dished USTs were presumably pressurized raw material USTs, and not the type of UST that supplies heating fuel oil.

2.1.5 Test Pitting

Concrete anomalies surrounding existing monitoring well MW-8. Since the majority of the LNAPL recovered during the IRM visits was recovered from MW-8, it was deemed necessary to explore the nature of the concrete refusal as it may pose an impediment to future LNAPL recovery efforts. Test Pitting activities were completed in accordance with the May 1, 2014 Test Pit Work Plan, approved by NYSDEC on June 23, 2014.

All trenches were extended to 8 to10 feet bls or to an intact structure or pipe. The top layer of concrete was approximately 10-inches thick, with some rebar reinforcement. The subgrade consisted primarily of fill until approximately 6 to 8 feet bls. The fill was highly variable but consisted of wood, brick, ceramic, concrete, rocks, some metal/rebar and chalk mixed with some sand and silt. Native material underlying the fill consisted predominantly of sand with some silt. Discontinuous peat lenses were encountered closer to MW-1. Groundwater was encountered between 8 to 9 feet bls.

Several pipes were encountered throughout the test pits, ranging from 1.5-inch diameter to 8-inch diameter. Care was taken not to break any intact pipes. The location of each pipe was documented in the field notes.

The test pitting revealed there are numerous buried structures, including piping, concrete, and wood, making a limited excavation difficult but, due to their limited size, no major obstructions to LNAPL movement or recovery were found in the vicinity of MW-23 and MW-8.

2.1.6 Additional Delineation

An additional four monitoring wells were installed under the Garage to determine if LNAPL was present in that area. The four additional monitoring wells were installed in accordance with the June 24, 2014 Additional Delineation Work Plan (ADWP) approved by NYSDEC on August 1, 2014. Nine additional monitoring wells (MW-30 through MW-38) were installed in the courtyard, basement and driveway to provide further LNAPL delineation.

2.1.7 UST Removal

Six USTs (CT-3/4, CT-2/5, CT-1, CT-8, and CT-6/7) were removed in the courtyard. Two USTs (F1 and F2) were removed from the driveway (see Figure 2).

All six of the USTs recently removed from the courtyard were 20,000-gallons in capacity and were of steel construction and were in the water table. None of the courtyard USTs were located in a vault nor was a concrete bottom slab observed below the USTs; the USTs were held in place with metal straps connected to concrete “deadmen” anchors. The two USTs removed from the driveway were also steel (550-gallon) and were encased in a concrete vault, the top and sides of which were removed; however, the bottom slab of the concrete vault could not be removed. A hole was observed in compartment CT-5 of UST CT-2/5 and in compartment CT-6 of UST CT-6/7; however, in both instances impacted soils were not observed in the area of the holes and it does not appear the courtyard USTs were a significant contributor to the LNAPL plume.

The groundwater entering the excavation of CT-2/5 exhibited a sheen on the surface (rainwater entered the excavation through a roof drain and exacerbated the situation). The visible layer was contained using a rope barrier to corral the product, which was then vacuumed out of the excavation until there was no remaining sheen. The water under the other USTs exhibited no sheen, no odor, nor other evidence of impacts. The presence of the groundwater precluded the collection of bottom soil samples; therefore, one soil sample was collected from the north and south side walls of each excavation. Samplings could not be collected on the western sidewall due to the presence of a subgrade concrete wall. While a slight odor was observed during the UST removal activities none of the side wall samples exhibited evidence of impacts such as odor, staining, or sheen with the exception of the northern sidewall of UST CT-6/7 where soil impacts were observed. Based on observations made during UST removal activities it appears likely that the LNAPL in the subsurface is likely a result of leaks and spills from UST-associated subsurface piping.

Post excavation samples were collected in accordance with DER-10 and are summarized on Tables 25 through 27 and Plate 8. There were no detections of VOCs above RRSCOs or the Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) with the exception of acetone (a common laboratory artifact) in six samples and 2-butanone (MEK) in two samples. SVOCs exceeded RRSCOs at several locations for PAHs (benzo(a)anthacene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and ideno(1,2,3-cd)pyrene) and metals at one location on the north side of CT-8 (arsenic, barium, copper, lead and mercury). Plastic sheeting was installed prior to backfilling to reduce potential for migration of LNAPL to the newly backfilled areas.

2.1.8 Documentation

Site plan showing soil, groundwater and UST sampling locations from the RI is provided a Figure 2. Tables 3 through 15 and 17 through 25 provide the RI analytical results for all soil, groundwater and UST/LNAPL fingerprinting samples collected during the RI. Below is a summary of RI findings.

The results of the investigation indicated that on-Site soil had few exceedances of RRSCOs. There were no exceedances for PCBs or pesticides. Low levels of SVOCs and metals were detected in excess of RRSCOs. The SVOCs and metals consistent with samples collected from historic fill. VOCs were compared to Protection of Groundwater SCOs, seven compounds were observed to exceed: 2-butanone (MEK), acetone, benzene, ethylbenzene, isopropylbenzene, methylene chloride and total xylenes, none of which were detected above the RRSCOs.

On-Site and off-Site groundwater is impacted with low levels of VOCs, SVOCs and metals in excess of the AWQSGVs. Groundwater remediation is not recommended due source removal (excavation of LNAPL impacted soil), the presence of off-Site and upgradient impacts to groundwater, and the lack of groundwater use in the area. If groundwater dewatering is necessary during any future construction activities, then groundwater treatment or off-Site disposal would be necessary.

A total of 17 LNAPL samples were submitted for fingerprinting analysis. Nine of the samples were collected from USTs, eight from monitoring wells. Results of the fingerprinting analysis are summarized on Table 14. Three specific chemicals were identified: diesel fuel/fuel oil, mineral spirits, and linseed oil.

2.2 SIGNIFICANT THREAT

The NYSDEC and NYSDOH have determined that this Site does pose a significant threat to human health and the environment. Notice of that determination has been provided for public review.

2.3 SITE HISTORY

The following describes the operation history of the Site.

2.3.1 Past Uses and Ownership

According to available sources the earliest noted development at the Site, as indicated on the 1898 historical Sanborn fire insurance map, consists of a one to three-story building identified as the Ward and Companies Lard Oil Works building. The current day four-story Paint Factory building was originally constructed in 1923. By 1936, the Site, partially occupied by Paragon consists of the Paint Factory building, the Shed, and the Warehouse building identified as "Chalk Products Company." The 1947 historical Sanborn shows the Site much as it exists today and wholly occupied by Paragon. Paragon owned and operated the Site as a paint manufacturing facility until 1998. Since then the Site has been unutilized.

2.3.2 Phase I and Phase II Reports

A Phase I Environmental Site Assessment was completed by Roux Associates, Inc. and is dated July 21, 2011.

2.3.2.1 TRC Phase I

In September 2005, TRC Engineers, Inc. (TRC) prepared a Phase I Environmental Site Assessment (ESA) for 94 Joralemon Street in Brooklyn, New York 11201. The Phase I report indicated that the Site has been used for industrial purposes for over 100 years, primarily as a paint manufacturing company. Multiple storage tanks, including 24 known USTs and 53 known above ground storage tanks (ASTs) and 400 drums were located on the Site (the 400 drums were subsequently removed). Most of the ASTs and drums were empty, but the tanks could have included mineral spirits, Stoddard solvents, number 2 fuel oil, kerosene, varnoline, linseed oil, fish oil, alkyd resin in mineral spirits, cycled mineral spirits, "direr" and propylene glycol.

2.3.2.2 AKRF Subsurface Investigation Report

AKRF conducted a subsurface investigation at the Site in 2006 on behalf of 549 46th Ave LLC. AKRF's subsurface investigation included the advancement of five soil borings, which were retrofitted with groundwater monitoring wells (MW-1 through MW-5) and the collection of soil, and groundwater samples for laboratory analysis. AKRF's conclusion of the investigation is as follows:

- Field observations and analytical data indicated that widespread hydrocarbon contamination exists in the shallow soil throughout the Site.

- LNAPL was observed in two of the monitoring wells (MW-2 and MW-3).
- Elevated concentrations of PAHs were detected in soil samples collected in borings MW-1, MW-2, MW-3 and MW-4, several of these detections exceeded applicable NYSDEC Technical and Administrative Guidance Memo (TAGM) #4046 Recommended Soil Cleanup Objectives (RSCOs).
- Xylenes were detected in soil at boring MW-2 at concentrations that exceeded applicable NYSDEC TAGM #4046 RSCOs.
- 2-Butanone, or methyl ethyl ketone (MEK) was detected in soil at boring MW-4 at a concentration that exceeds its applicable NYSDEC TAGM #4046 RSCO.
- Napthalene and ethylbenzene were detected in a water sample at MW-4 at concentrations that exceed the AWQSGVs.
- Metals are present in soil and groundwater samples at concentrations that are consistent with naturally occurring metals in the area.

It should be noted that the laboratory did not prepare a Category B deliverable. Additionally, attempts by Roux Associates to have a Category B deliverable prepared were unsuccessful due to the age of the data; therefore, no conclusions can be made with regard to the analytical data's validity. Detection limits for the soil and groundwater analytical data appear to be within typically acceptable ranges. The case narrative included in the laboratory analytical report notes that all samples were analyzed without any apparent problems.

2.3.2.3 AKRF Additional Subsurface Investigation Report

AKRF conducted an additional subsurface investigation at the Site in 2007 on behalf of 549 46th Ave LLC. AKRF's additional subsurface investigation included the advancement of eight soil borings which were retrofitted with groundwater monitoring wells (MW-6 through MW-13), the installation of three soil-vapor sampling points inside the Paint Factory, and the collection of soil, groundwater, and soil-vapor samples for laboratory analysis. The findings of the additional subsurface investigation are as follows:

- Field observations and analytical data indicated that widespread hydrocarbon contamination exists throughout the Site, including areas beneath the Paint Factory and Warehouse building. The degree of contamination was found to be more evident at the water table (5 to 7 feet below grade) in areas surrounding the underground storage tanks; whereas the degree of contamination was found to be more evident in deeper sediments (12 to 16 feet below grade) in borings further away from the USTs (i.e., MW-1, MW-6, and MW-9).

- LNAPL was observed in monitoring wells MW-1 (near Anable Basin), MW-2 (driveway), MW-3 (sidewalk along 46th Avenue), MW-6 (beneath the historical varnish pot area in the northern end of Shed), MW-8 (center of courtyard, next to USTs), MW-9 (southern end of the driveway), MW-12 (western property boundary), and MW-13 (western property boundary). The LNAPL was identified as primarily a petroleum-based paint thinner. A second LNAPL, identified as weathered fuel oil, was documented in the sample collected from monitoring well MW-3. Free-phase product samples were found to be less weathered in wells near the USTs and more weathered in wells further away. This suggests the USTs are the probable source for the free-phase product and weathering is occurring as the product disperses away from the source.

- Elevated concentrations of VOCs and SVOCs were detected in soil samples collected from borings MW-6 through MW-9, MW-12, and MW-13. Samples from these borings contained concentrations that exceeded the applicable NYSDEC TAGM #4046 RSCOs.

- There were no polychlorinated biphenyls (PCBs) or pesticides detected in the soil samples above the method detection limits.

- VOCs including isopropylbenzene and isopropyltoluene, which are used in the production of paint products including paint thinner, were detected in groundwater samples from MW-4 and MW-7 at concentrations that exceeded the AWQSGVs. Residual VOCs were detected in MW-11 at concentrations well below the AWQSGVs. VOCs were not detected in groundwater samples collected from monitoring wells MW-5 and MW-10.

- PAHs, a subset of SVOCs, were detected in groundwater collected from monitoring well MW-10 at concentrations that exceeded the AWQSGVs. Bis(2-ethylhexyl) phthalate was detected in monitoring well MW-4 at a concentration of 5 micrograms per liter (µg/L), which is below the AWQSGV. SVOCs were not detected in monitoring wells MW-5, and MW-7. Due to concentration of SVOCs in the groundwater sample from MW-7, the achievable detection limits for many of the SVOC compounds were above the AWQSGVs.

- Metals are present in soil and groundwater samples at concentrations that are generally representative of naturally occurring metals in the area or typical urban fill quality.

- Hydrocarbon, alcohol, and solvent-related compounds were detected in the sub-slab and indoor air samples at concentrations ranging from 1.09 micrograms per cubic meter ($\mu g/m^3$) to 92.4 $\mu g/m^3$. The hydrocarbon compounds included 1,2,4-trimethylbenzene, ethylbenzene, toluene, xylenes, propylene and methyl tert-butyl ether (MTBE), and ranged in concentrations from 2.68 $\mu g/m^3$ (1,2,4-trimethylbenzene) in SV-1 to 39.5 $\mu g/m^3$ (MTBE) in SV-2. The alcohol compounds included ethanol and isopropanol and were detected at concentrations ranging from 1.3 $\mu g/m^3$ (isopropanol) to 92.4 $\mu g/m^3$ (ethanol). The solvent-related compounds included 1,2,4-trichlorobenzene, ketones including 2-butanone (MEK) and acetone, methylene chloride, n-heptane, and tetrahydrofuran. These concentrations ranged from 2.34 $\mu g/m^3$ of n-heptane in SV-3 to 69.2 $\mu g/m^3$ of methylene chloride in SV-3 (SS). The detected concentrations in the sub-slab samples were generally higher than the corresponding ambient air samples, but overall the detections were consistent. A summary of soil vapor data is provided on Table 15 and Plate 17.

2.3.2.4 Interim Remedial Measure Monthly Reports

On February 11, 2010, the NYSDEC approved a December 18, 2009, *Revised Interim Remedial Measure Work Plan* prepared by Apex for the Site. The December 18, 2009 Work Plan prescribed the use of vacuum extraction on a monthly basis to recover LNAPL, contaminated groundwater and soil vapor. Apex documented each extraction event in a monthly report (a total of six extraction events were completed by Apex.

A review of available monthly reports indicated one gauging and sampling event occurred in March 2010 followed by six vacuum extraction events which occurred on a monthly basis; the last reported event occurred in August 2010. Apex reports that in total, 434 gallons of total fluid and 224 gallons of LNAPL were recovered during the extraction events. Vacuum extraction occurred only at the monitoring wells which exhibited LNAPL on the day of the event, which most often included monitoring wells: MW-6, MW-8, MW-9, MW-12, MW-13, and occasionally other wells. Thirty-five-percent of the total LNAPL recovered (78 gallons) was recovered from monitoring well MW-8. Also of note, monitoring well MW-3, which typically contained less than one foot of LNAPL thickness, on the last vacuum extraction event, contained more than seven feet of LNAPL.

2.3.2.5 Off-Site Soil Vapor Intrusion Investigations

Two offsite soil vapor investigations were completed. The first investigation was completed in 2009 by Apex Companies, LLC (Apex), and the second by EnviroTrac Ltd. (EnviroTrac) in 2010. Analytical results from both offsite soil vapor investigations are summarized on Table 15. A brief summary of both investigations is provided below.

Apex was retained by the Volunteer, 549 46th Ave LLC, to conduct an off-Site soil vapor intrusion investigation within one off-site building adjacent to the southwest of the Site (identified as offsite property E on Figure 2). Apex collected two soil vapor samples and one sub-slab vapor sample from inside offsite property E. Additionally one sub-slab vapor sample was collected from the sidewalk directly south of the Site boundaries (identified as SS-2 on Figure 2). One outdoor ambient air sample was collected from the southwest of the Site.

In the Soil Vapor Intrusion Investigation Report, Apex noted that none of the VOCs assigned specific thresholds by the NYSDOH were present exceeding concentrations of concern during the soil vapor intrusion investigation and no further action was recommended.

EnviroTrac was retained by NYSDEC to conduct an off-Site soil vapor intrusion investigation within four off-Site buildings adjacent to the west, north and east Site boundaries (identified as offsite properties A, B C and D respectively on Figure 2). EnviroTrac collected sub-slab soil vapor samples and indoor air samples from within four off-Site buildings. Additionally, two outdoor ambient air samples were collected to the west and southwest of the Site.

Laboratory analytical results include the following:

- Tetrachloroethene (PCE) was detected in all collected samples, with ranges in concentrations from 3.2 micrograms per cubic meter ($\mu g/m^3$) to 8.9 $\mu g/m^3$
- Carbon tetrachloride concentrations ranged from non-detect to 1.5 $\mu g/m^3$
- Trichloroethene (TCE) concentrations ranged from non-detect to 12 $\mu g/m^3$
- 1,1,1-Trichloroethane (1,1,1-TCA) was non-detect in all but one sample collected (Concentration for the one detection was 1.5 $\mu g/m^3$)

In the Summary and Conclusion Section of the Final Report, EnviroTrac noted that the New York State Department of Health (NYSDOH) evaluated the analytical data to determine if vapor mitigation is warranted within any of the sampled structures. In July of 2010 the NYSDOH determined that no additional soil vapor intrusion investigation was warranted at this time for those structures sampled.

2.3.3 Sanborn Maps

Sanborn maps were reviewed prior to preparation of the RAWP. The maps are presented in Appendix E of the TRC 2005 Phase I Report. The following is a summary of the Site from 1898 to 2006, as determined from the historical Sanborn fire insurance maps:

Year	Description
1898	The Site is developed with a one to three story Ward and Company's Lard Oil Works building. The Site contained a bleaching and pressing house, a press cooperage and kettles. The lard oil works appear to be part of the larger D.D. Williamson Chemical Manufacturing. The surrounding area to the west appears to be largely occupied by Standard Oil Works with multiple bulk storage oil tanks. Areas to the south (across 46th Avenue) are occupied by Long Island Paint Works and W.D. Wilson-Printing Inks. Areas to the east, are largely undeveloped properties and Vernon Boulevard, and to the north are Anable Basin and J. Harper Bunnell Printing Ink Manufacturing.
1915	The Lard Oil Works building remains; however, is labeled vacant. Surrounding properties include: to the west is the D.D. Williamson Chemical Manufactures, Standard Oil continues to operate on the western end of the block; to the south is the W.D. Wilson Manufacturing of Printing Inks and the Standard Oil Company Paint Manufacturer; to the east is vacant land and Vernon Boulevard; to the north is Anable Basin, a wagon house and a stone works.
1936	By 1936 the Site was occupied by the Paragon Paint and Varnish Corporation. The four story building is noted to be constructed of reinforced concrete with mushroom columns in 1923 and 1931. The building was constructed of steel with brick walls and contained a garage on the first floor and an office on the second floor. The one-story shed located adjacent to the Paragon Paint building in the courtyard is labeled as a varnish plant with a cooking, thinning and boiler room. The one to two-story building located where the current Warehouse is, is labeled as Chalk Products Company Inc. What is now known as the courtyard was occupied by a one-story Chalk Products building labeled as whiting storage.
1936 (Continued)	The surrounding area is occupied by industrial occupants. The Gottos Transfer Garage is located to the north, a filling station with three gasoline USTs is located to the east across Vernon Boulevard, and the D.D. Williamson Chemical Manufacturer is located to the west of the Site. Buildings located within the D.D. Williamson Chemical Manufacturer property include a malt roaster, filter kettles, sulpher burner, and retort tank. The Standard Oil Company was no longer located on the western end of the block. To the south (across 46th Avenue) is Standard Oil Paint Manufacturing, W.D. Wilson Manufacturing of Printing Inks and a Lumber Yard.
1947	The 1947 map showed the Site much as it exists today with four buildings and a courtyard. The Chalk Products Company was no longer present and is replaced by the three-story paint warehouse. The access road is present and the rear courtyard contains an incinerator located near Anable Basin. The surrounding area is occupied by industrial occupants. A transfer garage is located to the north, a filling station with three gasoline USTs and an auto wrecker are located to the east across Vernon Boulevard, Taccalin Chemical Corporation and a lumber storage yard are located to the south across 46th Avenue, and the D.D. Williamson Chemical Manufacturer is located to the west of the Site.

Year	Description
1950	No significant changes noted for the Site. The north adjacent property is now occupied by an empty bottle and crate storage facility. A plastic manufacturing company is noted to the southwest of the Site across 46th Avenue. No other significant changes noted in the surrounding area.
1970	A fourth section of the one-story shed was added in the courtyard. No other significant changes noted to the Site from the 1947 Sanborn. The north adjacent property is now occupied by a sheet metal works and additional paint and plastic manufactures are noted to the south across 46th Avenue replacing the lumber yard. The western end of the block is noted to be occupied by a Pepsi Co warehouse.
1977	No significant changes noted.
1979	No significant changes to the Site. The property to the east, identified as a filling station on earlier Sanborn Maps is now identified as a parking lot. No other changes of note.
1980	No significant changes noted.
1985	The incinerator previously located in the northwest section of the Site by Anable Basin is no longer there, the Site now appears largely as it does today. The adjacent property to the west previously identified as D.D. Williamson Chemical Manufacturer is identified in the 1985 Sanborn Map as Amcor warehouse.
1986	No significant changes noted.
1988	No significant changes noted.
1989	No significant changes noted.
1990	No significant changes noted.
1991	The property south of the Site across 46th Avenue on the corner of 46th Avenue and Vernon Boulevard is identified as an auto repair station on the 1991 Sanborn Map.
1992	No significant changes noted.
1993	An auto repair shop is identified on the southeast corner of 46th Avenue and Vernon Boulevard (southeast of the Site).
1994	No significant changes noted.
1995	No significant changes noted.
1996	No significant changes noted.

Year	Description
1999	No significant changes noted.
2001	No significant changes noted.
2002	No significant changes noted.
2003	No significant changes noted.
2004	No significant changes noted.
2005	No significant changes noted.
2006	No significant changes noted.

2.4 GEOLOGICAL CONDITIONS

A total of 37 soil borings were completed during the RI. Soil boring locations are shown on Figure 2. During soil boring activities, soil lithology was recorded. A geologic section is shown in Plates 1 and 2.

The geology in the area of the Site consists of Cambrian-Ordovician granitic rock of the Ravenswood Granodiorite Formation (Baskerville, 1994). Approximate depth to bedrock based on borings completed at the Site is 12 to 28 feet below land surface (bls).

The unconsolidated overburden consists of an unsorted heterogeneous mix of Pleistocene and Recent glacial material (i.e., glacial till) including, silt, sands, and gravel. An intermittent Peat layer was observed at approximately 10 feet bls. This overburden is overlain with approximately 10-feet of historic urban fill used to reclaim land from the East River.

Groundwater is present at approximately 6 to 10 feet bls and, based on the proximity of Anable Basin, subject to tidal fluctuations. The water level data collected during the gauging events were used to prepare Site groundwater elevation contour and flow pattern maps to determine the groundwater flow direction. Based on the data collected, Figure 3 provides a representative groundwater contour map. Results indicate that groundwater flow is predominantly to the west towards the East River. It is important to note that there is a tidal influence that can be seen in the monitoring wells closest to Anable Basin.

Monitoring wells located in the basement of the Warehouse were not used in constructing the groundwater contours due to anomalous data likely associated with the building's foundation structure altering groundwater flow. Additionally, LNAPL thickness as observed on the January 2015 event is graphically provided on Figure 4. Groundwater gauging data collected during sampling events are summarized on Table 2. When appropriate the groundwater elevations were corrected for the presence of LNAPL using a laboratory-derived specific gravity of 0.75.

2.5 CONTAMINATION CONDITIONS

The following sections provide a summary of the Site contamination identified during the RI.

2.5.1 Conceptual Model of Site Contamination

Based on the results of previous investigations and data collected during RI, impacts related to historical Site operations appear primarily limited to an accumulation of LNAPL. Additionally, impacts related to the use of historic fill have been identified. Thirty-one USTs are known to have formerly existed at the Site (and there may be additional unknown/unreported USTs). Six 20,000-gallon USTs were recently removed from the courtyard and two 550-gallon USTs were removed from the driveway. The sizes of the remaining USTs are not known; however, the reported sizes range from 550 gallons to 20,000 gallons. The majority of the USTs are believed to be steel construction. Based on the reported sizes and the shallow water table at the Site, some of the USTs may be in contact with groundwater. All six of the USTs recently removed from the courtyard were 20,000-gallons in capacity and were of steel construction and were in the water table. A hole was observed in compartment CT-5 of UST CT-2/5 and in compartment CT-6 of UST CT-6/7; however, in both instances impacted soils were not observed in the area of the holes and it does not appear the courtyard USTs were a significant contributor to the LNAPL plume. The majority of USTs beneath the buildings have conveyance pipes in concrete pipe trenches, and there was no evidence of releases observed during a preliminary inspection. The conveyance pipes from the USTs in the courtyard and the USTs in the garage are below grade and are not visible for inspection; however, it is likely they have leaked. The USTs and conveyance pipes handled liquid raw materials for the manufacture of paints and varnishes for decades. Based on past operational data, the liquids may have included mineral spirits, Stoddard solvents, No. 2 fuel oil, kerosene, varnoline, linseed oil, fish oil, slay alkyd and xylenes among others. Sample analytical results have indicated that chlorinated VOCs and PCBs are not constituents of concern. No historic documentation has been found regarding UST integrity.

The entire Site is covered either by the concrete floor slabs of the buildings or the concrete courtyard. There was very little staining observed on the concrete, indicating that surface spills or overfilling of the USTs were not significant sources of contamination. Therefore, releases from the outdoor underground conveyance pipes associated with USTs are the most likely source(s) of subsurface contamination.

2.5.2 Description of Areas of Concern

LNAPL Observed in multiple monitoring wells

There are two distinct LNAPL plumes, one centered under the courtyard, the other centered on the southern end of the driveway, as well as one detection of LNAPL underneath the Warehouse (MW-7). It appears likely that the LNAPL courtyard plume followed a preferential pathway through the USTs and has been detected in monitoring wells MW-12 and MW-13.

LNAPL fingerprinting analysis indicates that the courtyard LNAPL plume consists entirely of mineral spirits and that the LNAPL plume located in the driveway consists of a more degraded/weathered mineral spirits in addition to trace amounts of diesel/fuel oil.

Grossly Contaminated Soil

Grossly impacted soils, as defined in subdivision 375-1.2 (u) has been observed in soil borings located proximate to the LNAPL plume. The grossly impacted soils appear largely limited to soil in and around the water table.

Site-wide Historic Fill Material

SVOCs were detected at multiple locations throughout the Site soils in exceedance of the RRSCOs; however, the SVOC exceedances are limited to PAHs and were restricted to the shallow Site soils (i.e., less than 12 feet bls). Therefore, these exceedances are likely a result of historic fill and are not indicative of a prior release. The majorities of SVOC exceedances in groundwater are limited to PAHs and closely correlate to the compounds observed to exceed the

RRSCOs. Considering the above it is likely that the PAH exceedances are a result of turbid samples and are not indicative of a release.

Metals observed in shallow Site soils (i.e., less than 10 feet bls) in exceedance of the RRSCOs. These metals are likely naturally occurring or attributable to the use of historic fill and are not indicative of a release. Groundwater metal exceedances of Class GA AWQSGVs (antimony, barium, cadmium lead) are likely attributable to historic fill and may also be the result of a turbid sample.

Hydrocarbon Contamination in Groundwater

VOCs were detected above the Class GA AWQSGVs at fourteen locations. An exceedance for acetone was limited to MW-21 which is located off-Site on the corner of 46th Avenue and Vernon Boulevard at an upgradient location and is therefore attributable to an off-Site upgradient source. Exceedances of isopropylbenzene were observed in thirteen locations spread across the Site; however it is worth noting that the isopropylbenzene was detected in a well that is cross-gradient to the Site (MW-18) and wells upgradient of the northern LNAPL plume (MW-20 and MW-22). There were marginal exceedances of benzene at one location (MW-24) and ethylbenzene at a one location (MW-34). Monitoring well MW-34 is located off-Site in the sidewalk along 46th Avenue and MW-24 is located in the garage along the Sites southern border. Exceedances of xylenes (including exceedances of o-xylenes, m&p-xylenes and total xylenes) were limited to MW-16 which is located downgradient of the courtyard LNAPL plume which is the likely source of the xylenes.

2.5.3 Identification of Standards, Criteria and Guidance

Standards, criteria and guidance (SCGs) are promulgated requirements ("standards" and "criteria") and non-promulgated guidance ("guidance") that govern activities that may affect the environment and are used by the NYSDEC Department of Environmental Remediation (DER) at various stages in the investigation and remediation of a site. SCGs incorporate both the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (CERCLA), concept of "applicable or relevant and appropriate requirements" (ARARs) and the United States

Environmental Protection Agency's (USEPA) "to be considered" (TBCs) category of non-enforceable criteria or guidance. SCGs applicable to the Site are summarized below.

SCGs for Soil

The proposed remedy will achieve a Track 4 Restricted Use cleanup as set forth in 6 NYCRR Part 375-6 based on the intended future use of the Site. Based upon the evaluation of the current soil data discussed in the RI and the proposed future use of the Site, the SCOs for soil are the RRSCOs. For four compounds detected in groundwater above the AWQSGVs in the RI benzene, ethylbenzene, isopropylbenzene, and xylenes, the Protection of Groundwater SCOs (PoG SCOs) will be the SCOs for the Track 4 Restricted–Residential Cleanup. Additionally, grossly contaminated soil (as defined in Part 375-1.2[ac]), soil containing SVOCs exceeding 500 parts per million and soils that create a nuisance condition (as defined in Commissioner Policy CP-51, Section G) will also be removed.

If a Track 1 Unrestricted Use cleanup is determined to be the only practicable option for the Site, the UUSCOs will be the SCOs.

Grossly contaminated soil will be addressed by the Remedial Action. Grossly contaminated soil contains sources or substantial quantities of mobile contamination in the form of NAPL, as defined in subdivision 375-1.2 (ac), that is identifiable either visually, through strong odor, by elevated contaminant vapor levels or is otherwise readily detectable without laboratory analysis. To verify the removal of mobile LNAPL, grossly contaminated soil will be removed and endpoint soil samples must be below the Protection of Groundwater criteria for the four VOCs listed above.

SCOs for the Protection of Ecological Resources were considered, but were determined not to be applicable based on Site-specific conditions. In accordance with the Part 375 Regulations, protection of ecological resources SCOs do not and/or will not apply to sites or portion of sites where the condition of the land (e.g., paved, covered by impervious surfaces, buildings and other structures) precludes the existence of an ecological resource that constitutes an important component of the environment. At this site, the majority of on-site areas are either paved or covered by buildings, therefore, use of SCOs for protection of ecological resources is not applicable.

In addition to the Part 375 Regulations, the following SCGs apply to soil:

- 6 NYCRR Part 364 – NYS Waste Transporter Permits; and
- 6 NYCRR Part 360 and Part 364 – NYS Solid Waste Management Requirements.

Comparison of site specific soil data with SCGs is presented in Tables 17 – 20 and Plates 3 – 5.

SCGs for Groundwater

Although the groundwater beneath the Site is not used as a drinking water source, based upon the evaluation of the current groundwater data discussed in the RI, the following SCGs for the groundwater will be considered:

- New York State Groundwater Quality Standards – 6 NYCRR Part 703; and
- NYSDEC AWQSGVs – TOGS 1.1.1.

Comparison of Site-specific groundwater data with SCGs is presented in Tables 21 – 24 and Plate 6.

2.5.4 Soil/Fill Contamination

Soil beneath the Site is impacted by SVOCs and metals above SCOs.

2.5.4.1 Summary of Soil/Fill Data

A total of 122 soil samples were analyzed for VOCs. There were no detections above the Part 375 Restricted Residential Use SCOs; however, VOCs exceeded PoG SCOs. VOCs detected above the PoG SCOs included:

- Benzene was detected in 2 samples, ranging in concentration from 0.81µg/kg to 130 µg/kg and exceeded the PoG SCO (60 µg/kg) in 1 sample at 1 locations from 14-15 ft bls.
- Ethylbenzene was detected in 14 samples, ranging in concentration from 1.7 µg/kg to 26,000 µg/kg and exceeded the PoG SCO (1,000 µg/kg) in 11 samples at 6 locations at depths ranging from 4-6 ft bls to 16-18 ft bls.
- Isopropylbenzene was detected in 59 samples, ranging in concentration from 0.76 µg/kg to 78,000 µg/kg and exceeded the SCO in NYSDEC CP-51 Table 1 Supplemental

Cleanup Objectives for Protection of Groundwater (2,300 µg/kg) in 28 samples at 20 locations at depths ranging from 0-2 ft bls to 18-19 ft bls.

- Xylenes (total) were detected in 28 samples, ranging in concentration from 1 µg/kg estimated to 77,000 µg/kg and exceeded the PoG SCO (1600 µg/kg) in 11 samples at 7 locations at depths ranging from 5-7 ft bls to 16-18 ft bls.

SVOCs exceeded the RRSCOs for 49 (out of 122) soil samples at 27 locations. SVOCs detected above the RRSCOs included:

- Benzo[a]anthracene was detected in 76 soil samples, ranging in concentration from an estimated 40 µg/kg to 34,000 µg/kg and exceeded the RRSCO (1,000 µg/kg) in 44 samples at 24 locations at depths ranging from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

- Benzo[a]pyrene was detected in 72 soil samples ranging in concentration from 53 µg/kg (estimated) to 35,000 µg/kg and exceeded the RRSCO (1,000 µg/kg) in 42 samples at 25 locations. Depth of the exceedances ranged from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

- Benzo[b]fluoranthene was detected in 76 soil samples, ranging in concentration from 77 µg/kg (estimated) to 44,000 µg/kg and exceeded the RRSCO (1,000 µg/kg) in 49 samples at in 27 locations. Depth of the exceedances ranged from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

- Benzo[k]fluoranthene was detected in 70 soil samples ranging in concentration from 40 µg/kg (estimated) to 17,000 µg/kg and exceeded the RRSCO (3,900 µg/kg) in five samples at five locations. Depth of the exceedances ranged from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

- Chrysene was detected in 75 soil samples, ranging in concentration from 47 µg/kg (estimated) to 36,000 µg/kg and exceeded the RRSCO (3,900 µg/kg) in 13 samples at 11 locations. Depth of the exceedances ranged from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

- Dibenzo[a,h]anthracene was detected in 54 soil samples, ranging in concentration from 41 µg/kg (estimated) to 5,300 µg/kg and exceeded the RRSCO (330 µg/kg) in 19 samples at 15 locations. Depth of the exceedances ranged from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

- Indeno[1,2,3-cd]pyrene was detected in 72 soil samples ranging in concentration from 44 µg/kg (estimated) to 22,000 µg/kg and exceeded the RRSCO (5,000 µg/kg) in 45 samples at 26 locations. Depth of the exceedances ranged from 0-2 feet bls to 10-12 feet bls. See Table 4 and Plate 4 for details.

A total of 39 samples were analyzed for PCBs. Detections were observed in nine samples ranging in concentration from 35 µg/kg to 60.8 µg/kg and were limited to Aroclor-1254 and 1260. None of the samples analyzed exceeded the RRSCO for total PCBs (1,000 µg/kg).

A total of 39 soil samples were analyzed for pesticides. Detections were observed in three samples at two locations. There were no exceedances of the RRSCOs for any of the pesticides analyzed.

Many metals are naturally occurring in soil and many of the exceedances noted below occurred in samples collected from historic fill. As shown on Plate 5, analytical data for metals indicate RRSCOs were exceeded in 19 samples at 17 locations. Six metals were detected above the RRSCOs, details are summarized below.

- Arsenic was detected in all 122 soil samples ranging in concentration from an estimated 0.4 milligrams per kilogram (mg/kg) to 29 mg/kg and exceeded the RRSCO (16 mg/kg) in two samples B-5_0-2 (29 mg/kg) and B-13_0-2 (18 mg/kg).

- Barium was detected in all 122 soil samples ranging in concentration from 11 mg/kg to 530 mg/kg and exceeded the RRSCO (400 mg/kg) in three samples at three locations: B-7_5-7 (480 mg/kg), B-8_0-2 (530 mg/kg) and MW-14_7-9 (530 mg/kg).

- Copper was detected in all 122 soil samples ranging in concentration from 7 mg/kg to 1,700 mg/kg and exceeded the RRSCO (270 mg/kg) in five samples at four locations: B-11_0-2 (480 mg/kg), B-11_8-10 (390 mg/kg), B-17_0-2 (480 mg/kg), B-18_0-2 (1,700 mg/kg), MW-17_0-2 (770 mg/kg).

- Lead was detected in all 122 soil samples ranging in concentration from 2.7 mg/kg (estimated) to 1,000 mg/kg and exceeded the RRSCO (400 mg/kg) in nine samples at seven locations. Depth of the exceedances ranged from 0-2 feet bls to 8-10 feet bls. See Table 5 and Plate 5 for details.

- Manganese was detected in all 122 soil samples ranging in concentration from 67 mg/kg to 2,500 mg/kg and exceeded the RRSCO (2,000 mg/kg) in one sample: B-12_21-22.5 (2,500 mg/kg).

- Mercury was detected in 70 soil samples ranging in concentration from 0.02 mg/kg (estimated) to 5.2 mg/kg and exceeded the RRSCO (400 mg/kg) in seven samples at seven locations. Depth of the exceedances ranged from 0-2 feet bls to 7-8 feet bls. See Table 5 and Plate 5 for details.

2.5.4.2 Comparison of Soil/Fill with SCGs

Tables 17 – 20 show exceedances from Track 1 UUSCOs, Track 4 RRSCOs and PGWSCOs (VOCs only) for all soil/fill at the Site. Plate 3 is a spider map that shows the location and summarizes exceedances of PGWSCOs for all soil/fill. Plates 4 and 5 are also spider maps that show the locations and summarize exceedances of SVOC compounds and metals in soil/fill respectively.

2.5.5 On-Site and Off-Site Groundwater Contamination

Groundwater beneath the Site is impacted by VOCs, SVOCs and metals above the NYSDEC AWQSGVs. The degree of contamination (the number of compounds detected and concentration of compounds detected) was higher at the water table and in areas surrounding the USTs and underground conveyance pipes.

2.5.5.1 Summary of Groundwater Data

A total of 26 groundwater samples were collected and analyzed for VOCs. Analytical data for VOCs indicated detections above NYSDEC AWQSGV for five (5) compounds, details are summarized below:

- Acetone was detected in ten samples ranging in concentration from an estimated 1.5 micrograms per liter (µg/L) to 190 µg/L and exceeded the NYSDEC AWQSGV (50 µg/L) at only one location, MW-21 (190 µg/L). Note MW-21 is located off-Site at an upgradient location indicating that the acetone is from an upgradient source.

- Benzene was detected in two samples ranging from 0.38 µg/L (estimated) to 1.1 µg/L and exceeded the NYSDEC AWQSGV (1 µg/L) at one location: MW-24 (1.1 µg/L).

- Ethylbenzene was detected in one ranging with a concentration of 5.9 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at one location: MW-34 (5.9 µg/L).

- Isopropylbenzene was detected in 17 samples ranging in concentration from 0.92 µg/L (estimated) to 45 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at thirteen locations: MW-1 (11.6 µg/L), MW-7R (6 µg/L [estimated]), MW-16 (20 µg/L [estimated]), MW-18 (6.8 µg/L), MW-20 (21 µg/L), MW-22 (8 µg/L), MW-24 (22 µg/L), MW-25 (12 µg/L), MW-27 (14 µg/L), MW-34 (45 µg/L), MW-36 (32 µg/L), MW-37 (42 µg/L) and MW-38 (14 µg/L).

- M&P xylenes were detected at four locations ranging in concentration from 0.74 µg/L (estimated) to 10 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at one location: MW-16 (10 µg/L).

- O-xylenes were detected at three locations at concentrations ranging from 0.24 µg/L (estimated) to 6.7 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at one location: MW-16 (6.7 µg/L).

- Total xylenes were detected at four locations at concentrations ranging from 0.74 µg/L (estimated) to 16.7 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at one location: MW-16 (16.7 µg/L).

Groundwater samples collected from 17 locations were analyzed for SVOCs (Monitoring well MW-14 ran dry before enough material could be collected to analyze for SVOCs). Ten SVOCs were detected at 14 of the locations and were found in concentrations that exceed their respective NYSDEC AWQSGVs at six locations, details are summarized below. The SVOC exceedances are limited to PAHs and closely correlate to the compounds observed to exceed the NYSDEC Part 375 Restricted Residential Use SCOs. Considering the above it is likely that the PAH exceedances are a result of turbid samples and are not indicative of a release. The likely source of the naphthalene is the LNAPL located north of MW-7.

- Benzo[a]anthracene was detected at six locations ranging in concentration from 0.08 µg/L (estimated) to 18 µg/L and exceeded the NYSDEC AWQSGV (0.002 µg/L) at six locations: MW-2R (0.33 µg/L), MW-5 (0.42 µg/L), MW-7R (18 µg/L), MW-15 (2.2 µg/L), MW-16 (0.08 µg/L [estimated]) and MW-22 (0.08 µg/L [estimated]).

- Benzo[a]pyrene was detected at four locations ranging in concentration from 0.31 µg/L to 14 µg/L and exceeded the NYSDEC AWQSGV (0 µg/L) at all four locations: MW-2R (0.31 µg/L), MW-5 (0.45 µg/L), MW-7R (14 µg/L) and MW-15 (1.7 µg/L).

- Benzo[b]fluoranthene was detected at four locations ranging in concentration from 0.41 µg/L to 16 µg/L and exceeded the NYSDEC AWQSGV (0.002 µg/L) at all four locations: MW-2R (0.41 µg/L), MW-5 (0.54 µg/L), MW-7R (16 µg/L) and MW-15 (2.6 µg/L).

- Benzo[k]fluoranthene was detected at four locations ranging in concentration from 0.28 µg/L to 9.2 µg/L and exceeded the NYSDEC AWQSGV (0.002 µg/L) at all four locations: MW-2R (0.28 µg/L), MW-5 (0.3 µg/L), MW-7R (9.2 µg/L) and MW-15 (1.4 µg/L).

- Bis(2-ethlhexyl) phthalate was detected at four locations ranging in concentration from 1 µg/L (estimated) to 29 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at only one location: MW-7R (29 µg/L [estimated]).

- Chrysene was detected at six locations ranging in concentration from 0.07 µg/L (estimated) to 16 µg/L and exceeded the NYSDEC AWQSGV (0.002 µg/L) at all six locations: MW-2R (0.33 µg/L), MW-5 (0.36 µg/L), MW-7R (16 µg/L), MW-15 (2.2 µg/L), MW-16 (0.09 µg/L) and MW-22 (0.07 µg/L [estimated]).

- Fluoranthene was detected at 10 locations ranging in concentration from 0.06 µg/L (estimated) to 55 µg/L and exceeded the NYSDEC AWQSGV (50 µg/L) at one location: MW-7R (55 µg/L).
- Indeno[1,2,3-cd]pyrene was detected at four locations ranging in concentration from 0.18 µg/L (estimated) to 9.5 µg/L and exceeded the NYSDEC AWQSGV (0.02 µg/L) at all four locations: MW-2R (0.18 µg/L [estimated]), MW-5 (0.38 µg/L), MW-7R (9.5 µg/L), and MW-15 (1.3 µg/L).
- Naphthalene was detected at 13 locations ranging in concentration from 0.1 µg/L (estimated) to 76 µg/L and exceeded the NYSDEC AWQSGV (10 µg/L) at only one location: MW-7R (76 µg/L).
- Phenanthrene was detected at 11 locations ranging in concentration from 0.1 µg/L (estimated) to 51 µg/L and exceeded the NYSDEC AWQSGV (50 µg/L) at only one location: MW-7R (51 µg/L).

Groundwater samples collected from 17 locations were analyzed for TAL metals (Monitoring well MW-14 ran dry before enough material could be collected to analyze for metals). Seven metals were detected at 13 of the locations and were found in concentrations that exceed their respective NYSDEC AWQSGVs at all 13 locations, details are summarized below.

- Antimony was detected at 10 locations ranging in concentration from 0.14 µg/L (estimated) to 3.25 µg/L and exceeded the NYSDEC AWQSGV (3 µg/L) at only one location: MW-10 (3.25 µg/L).
- Barium was detected at 12 locations ranging in concentration from 21.25 µg/L to 1,018 µg/L and exceeded the NYSDEC AWQSGV (1,000 µg/L) in only one location: MW-21 (1,018 µg/L).
- Cadmium was detected at three locations ranging in concentration from 0.09 µg/L (estimated) to 13.74 µg/L and exceeded the NYSDEC AWQSGV (5 µg/L) at only one location: MW-7R (13.74 µg/L).
- Iron was detected at 13 locations ranging in concentration from 59.7 µg/L to 71,000 µg/L and exceeded the NYSDEC AWQSGV (300 µg/L) at all 13 locations: MW-1 (24,900 µg/L), MW-2R (30,700 µg/L), MW-4 (7,800 µg/L [3-20-2013] and 22,100 µg/L [1-30-2014]), MW-5 (1,590 µg/L [3-20-2013] and 5,190 µg/L [1-30-2014]), MW-7R (17,100 µg/L), MW-10 (490 µg/L), MW-11 (1,290 µg/L), MW-15 (2,550 µg/L), MW-16 (48,800 µg/L), MW-18 (12,300 µg/L), MW-20 (16,200 µg/L), MW-21 (71,000 µg/L) and MW-22 (17,300 µg/L).
- Lead was detected at 12 locations ranging in concentration from 0.34 µg/L (estimated) to 31.99 µg/L and exceeded the NYSDEC AWQSGV (25 µg/L) at two locations: MW-7R (31.99 µg/L) and MW-15 (26.78 µg/L).

- Manganese was detected at 13 locations ranging in concentration from 3.85 µg/L to 11,040 µg/L and exceeded the NYSDEC AWQSGV (300 µg/L) at 11 locations: MW-1 (1,280 µg/L), MW-2R (6,028 µg/L), MW-4 (2,470 µg/L [3-20-2013] and 7,5301 µg/L [1-30-2014]), MW-5 (620 µg/L [3-20-2013] and 1,378 µg/L [1-30-2014]), MW-7R (564 µg/L), MW-11 (411.3 µg/L), MW-16 (5,378 µg/L), MW-18 (2,012 µg/L), MW-20 (3,694 µg/L), MW-21 (3,012 µg/L) and MW-22 (11,040 µg/L).

- Sodium was detected at 13 locations ranging in concentration from 35,000 µg/L to 7,700,00 µg/L and exceeded the NYSDEC AWQSGV (20,000 µg/L) at all 13 locations: MW-1 (1,640,000 µg/L), MW-2R (225,000 µg/L), MW-4 (88,300 µg/L), MW-5 (725,000 µg/L [3-20-2013] and 706,000 µg/L [1-30-2014]), MW-7R (174,000 µg/L), MW-10 (3,850,000 µg/L [3-20-2013] and 770,000 µg/L [1-30-2014]), MW-11 (1,300,000 µg/L [3-20-2013] and 3,280,000 µg/L [1-30-2014]), MW-15 (358,000 µg/L), MW-16 (816,000 µg/L), MW-18 (38,400 µg/L), MW-20 (446,000 µg/L), MW-21 (1,790,000 µg/L) and MW-22 (35,000 µg/L).

The exceedance of sodium which is commonly found in seawater can be attributed to the Sites proximity to the Anable Basin and the East River. There were limited exceedances of antimony (MW-10), barium (MW-21), cadmium (MW-7R) and lead (MW-7R and MW-15). These exceedances are likely attributable to historic fill and may also be the result of a turbid sample. The exceedances of iron and manganese observed in most of the monitoring wells is likely attributed to anoxic conditions within the aquifer, and is indicative of natural aquifer conditions. Additionally, both metals were observed (in concentrations above the AWQSGVs) in upgradient wells.

A total of nine samples were analyzed for PCBs. As shown on Table 12, PCBs were not detected in any of the groundwater samples collected during this investigation.

A total of nine samples were analyzed for pesticides. As shown on Table 13, pesticides were not detected in any of the groundwater samples collected during this investigation.

2.5.5.2 Comparison of Groundwater with SCGs

The groundwater laboratory analytical results were compared to NYSDEC AWQSGVs for Class GA groundwater (even though the groundwater at the Site is not used for drinking since the area is connected to the public water supply and, as is discussed below, the majority of the Site exhibits saline conditions). A table that indicates exceedances from GA groundwater standards in monitor wells prior to the remedy is shown in Tables 21 - 24. A spider map that indicates the location(s) of and summarizes exceedances from GA groundwater standards prior to the remedy is shown in Plate 6.

2.5.6 On-Site and Off-Site Soil Vapor Contamination

In accordance with the RIWP, soil vapor sampling was not conducted during the RI. The Site is unoccupied space and therefore, there was no current soil vapor intrusion pathway at the Site. Furthermore, historical indoor air sampling at the Site did not indicate indoor air quality concerned. Soil vapor intrusion will be addressed in the SMP.

2.5.7 LNAPL Fingerprinting

A total of 17 LNAPL samples were submitted for fingerprinting analysis. Nine of the samples were collected from USTs, eight from monitoring wells. Three specific chemicals were identified: diesel fuel/fuel oil, mineral spirits and linseed oil. The distribution of LNAPL is shown on Figure 4 and the results of the LNAPL fingerprinting analysis is shown in Table 14. As shown on Figure 4, it appears there are two distinct LNAPL plumes, one centered under the courtyard, the other centered on the southern end of the driveway. LNAPL fingerprinting analysis indicates that the courtyard LNAPL plume consists entirely of mineral spirits and that the LNAPL plume located in the driveway consists of a more degraded/weathered mineral spirits in addition to trace amounts of diesel/fuel oil.

2.6 Environmental and Public Health Assessments

2.6.1 Qualitative Human Health Exposure Assessment

The objective of the qualitative exposures assessment is to describe how human and environmental receptors may be exposed to site contaminants based upon the site-specific conditions and to assess whether there are any complete or potentially complete exposure pathways. As specified in ECL Article 27-1415(2), the exposure assessment should consider the current Site conditions, as well as the reasonable anticipated future land use of the Site and the affected off-Site areas, and the reasonable anticipated future groundwater use.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a Site. An exposure pathway has five elements: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a receptor population; (4) a point of exposure; and (5) a route of exposure.

As discussed above, the main contaminants of concern (COCs) at the Site include SVOCs and metals in soil, VOCs, SVOCs and metals in groundwater, and soil vapor concerns (after redevelopment). The following paragraphs provide an overview discussion of exposure pathways that may potentially exist associated with the Site.

Contaminant Sources

The main source of VOCs in soil and groundwater is the LNAPL plume, which likely occurred as a result of leaks and spills from clusters of UST associated piping. SVOCs and metals in soil and groundwater are consistent with, and are likely a result, of historic fill.

Contaminant Release and Transport Mechanisms

The contaminants at the Site exist in the form of residual material adsorbed to soil particles in the saturated and unsaturated zones and compounds dissolved in groundwater. The leaching of contaminants from the soil serves as an ongoing source of contamination to groundwater beneath portions of the Site. In addition, VOCs from the LNAPL are migrating through volatilization of compounds into soil vapor.

Receptor Population

The potential on-Site receptors include occupational workers, construction workers, visitors, or trespassers. Future on-Site receptors are expected to also include residents, guests and retail customers/workers based on the potential future use for the property. The potential off-Site receptors include off-Site workers, visitors, residents, and trespassers.

Potential Points and Routes of Exposure

An individual could be exposed to these contaminants through direct contact with Site soil during ground intrusive work at the Site. Direct contact without the use of proper personal protective equipment (PPE) and personal hygiene measures could lead to dermal contact and incidental ingestion of these compounds. Since the Site is completely covered by either buildings or paved with concrete and access is controlled, potential contact with Site soil is restricted to remedial and construction contract workers at the Site performing ground intrusive activities. The general public is not exposed to direct contact with Site soil. The future use includes a complete cap across the Site either through buildings, clean fill, or concrete/paved areas thereby minimizing the potential for exposure by direct contact with contaminated soil for both the public and any future construction workers performing non-ground intrusive activities at the Site.

Since the groundwater table is encountered at approximately 9 to 13 ft bls, and groundwater is not used for drinking (the area is connected to the public water supply), there is no direct contact with or ingestion of groundwater by the general public. Individuals who perform groundwater sampling or remedial activities may come into contact with contaminated groundwater if proper PPE and personal hygiene measures are not used, which could lead to dermal contact and the potential for incidental ingestion of these compounds.

The planned future use of the Site is ground floor commercial retail space with residential units above. All buildings will be serviced by the public water supply. Based on this, the potential for public exposure by direct contact with contaminated groundwater will be reduced or eliminated.

Potential soil vapor concerns will be mitigated with the installation of a vapor/barrier or sub-slab depressurization system in existing buildings that will remain at the Site and any new construction. Furthermore, commercial/retail space is proposed for the ground floor will make the potential for soil vapor intrusion into the residential units above minimal.

2.6.2 Fish and Wildlife Remedial Impact Analysis

A fish and wildlife impact analysis was not applicable.

2.7 Interim Remedial Actions and Work Plans

LNAPL Interim Remedial Measure (IRM) recovery events were initiated at the Site on December 22, 2011 pursuant to the November 17, 2011 IRM Work Plan which was approved by NYSDEC in a letter dated December 12, 2011. The IRM recovery events consisted of manually removing LNAPL using bailers. Beginning December 21, 2012, with NYSDEC approval, the frequency of the IRM recovery visits was reduced from weekly to bi-weekly (twice a month). Bi-weekly IRM recovery events continued at the Site through June of 2014 when vacuum enhanced LNAPL recovery was assessed. The manual LNAPL recovery IRM events resumed in the month of August 2014. In total, Roux Associates has performed 103 LNAPL recovery IRM events.

In total, approximately 2,239-gallons of LNAPL have been recovered since initiation of the LNAPL Recovery IRM, with an average of approximately 21-gallons of LNAPL recovered during each of the 103 events. Approximately 1,298 gallons of LNAPL has been recovered from MW-8 alone accounting for approximately 60% of the total. An IRM approved on December 18, 2009 which included monthly vacuum extraction was suspended after six months due to a change of ownership of the Site. Approximately 224 gallons of product were removed from the Site.

2.8 Remedial Action Objectives

The goal of the remedy selection process in the BCP is to select a remedy for a site that is protective of public health and the environment, taking into account the current, intended, and reasonably anticipated future land use of the site.

The remedial goals for soil at the Site are to meet the RRSCOs for on-site areas, and to limit exposure through use of an engineered site cover system for areas above RRSCOs. Groundwater beneath the Site will be addressed through removal of UST-associated piping, dewatering, LNAPL recovery, in-situ treatment and removal of grossly impacted soil. The remedial goals for the Site are to prevent exposure to soil vapor, prevent direct contact with contaminated soil and groundwater, and mitigate off-Site impacts to groundwater, to the extent practicable. Consistent with Part 375, the proposed remedies for the Site will be fully protective of public health and the environment, taking into account the current, intended and potential future land use.

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) have been identified for this Site.

2.8.1 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

2.8.2 Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

2.8.3 Soil Vapor

RAOs for Public Health Protection

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

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

The following is a detailed description of the alternatives analysis and remedy selection process to address impacted media from historic releases. The Site contains LNAPL plumes, soils above RRSCOs for SVOCs and metals (likely due to historic fill) and groundwater exceeding AWQSGVs for SVOCs, metals, and, VOCs (predominantly associated with the LNAPL plume).

This section of the RAWP was prepared in accordance with Part 375 – 3.8(f), Part 375 – 1.8(f), and Section 4.3 of DER-10. As required, a minimum of two remedial alternatives (one being an unrestricted use scenario) are evaluated, as follows:

- One alternative that will achieve unrestricted use relative to on-Site soil without the use of institutional or engineering controls; and
- One alternative assuming a restricted residential cleanup scenario for on-site areas (which is more protective than the current commercially zoned use and reasonably anticipated future use), coupled with the use of institutional and engineering controls.

The remedial alternatives considered are as follows:

Remedial Alternative 1: Track 1 Unrestricted cleanup:

- Demolition of Site buildings to access USTs and impacted soil above UUSCOs.
- Closure and removal of USTs.
- Excavation and off-site disposal of soil to meet the UUSCOs for the entire Site.
- Backfill of excavated areas with soil meeting UUSCOs. Soil generated from the excavation may be used for backfill if it meets UUSCOs.
- ISCO injection for treatment of VOCs in groundwater as necessary pending results of excavation to remove all onsite sources.
- Assess the need for vapor mitigation prior to occupation of any onsite building.

Remedial Alternative 2: Track 4 Restricted Residential cleanup (Plate 9):

- Implementation of erosion and sediment controls.
- Site Monitoring of potentially airborne VOCs and particulates in accordance with a NYSDEC approved CAMP during all ground intrusive and soil handling activities; Implementation of proper dust and odor suppression techniques during all ground intrusive and soil handling activities, including use of an enclosure for excavation work.

- Closure of remaining USTs by removal or, as a contingency, closure in place.

- Excavation and disposal of subsurface piping.

- Excavation and off-Site disposal of grossly contaminated soil in the courtyard LNAPL source area, including:
    a. grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u);
    b. soil containing non-aqueous phase liquid (NAPL);
    c. soil containing SVOCs exceeding 500 ppm;
    d. soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
    e. Soils that create a nuisance condition, as defined in NYSDEC Commissioner Policy CP-51 Section G.

- Screening for indications of contamination (by visual means, odor, and monitoring with a photoionization detector) of all excavated soil during all ground intrusive Site work.

- Excavated unsaturated soil free from mobile LNAPL will be stockpiled for reuse on-Site (Assuming it meets soil re-sue criteria as noted in DER-10).

- Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal.

- Backfill of excavated areas with recycled concrete aggregate (RCA) or clean stone to 1 foot above groundwater table, backfill one-foot above the water table to two-feet below proposed development grade with reuse soil from the excavation (as available), and backfill the top two-feet with RCA as a temporary cover prior to redevelopment. RCA will meet NYSDEC Part 360-1.15 requirements and will be free of asphalt.

- Dewatering and treatment or offsite disposal of groundwater as needed to facilitate excavation.

- In-situ chemical oxidation (ISCO) injection for treatment of VOCs in soil and groundwater underneath the Warehouse.

- Installation of a minimum of five automatic product only recovery pumps at property boundary areas where the LNAPL plume extends off-Site, and underneath the Warehouse.

- A Site cover system consisting of building slabs (the existing Paint Factory, the Warehouse and the Garage), pavement or 24-inches minimum of RCA as a temporary cover in the courtyard area. Following Site redevelopment, the site cover system will consist of new concrete building slabs, pavement and a minimum of two feet of clean fill in new landscaped areas as will be detailed in the SMP.

- Recording of an Environmental Easement, including Institutional Controls, to prevent future exposure to any residual contamination remaining at the Site.
- Preparation of an SMP for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

3.1 Evaluation of Remedial Alternatives

The goal of the remedy selection process is to select a remedy that is protective of human health and the environment taking into consideration the current, intended, and reasonably anticipated future use of the property. Each remedial alternative is evaluated based on the factors listed below:

- Protection of human health and the environment;
- Compliance with standards, criteria, and guidelines (SCGs);
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;
- Community Acceptance; and
- Land use.

Applicable Remedial Action standards, criteria, and guidance are listed below:

- 6 NYCRR Part 375-6 Soil Cleanup Objectives – The unrestricted use and restricted residential criteria listed in the guidance were used to evaluate soils, delineate areas with impacts, and specify cleanup objectives.
- New York State Groundwater Quality Standards – 6 NYCRR Part 703; the standards listed in the guidance were used to evaluate groundwater quality, delineate areas with impacts, and specify cleanup objects.

- NYSDEC Ambient Water Quality Standards and Guidance Values – TOGS 1.1.1; the standards listed in the guidance were used to evaluate groundwater quality, delineate areas with impacts, and specify cleanup objects.

- NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation – May 2010; the proposed remedial alternatives were developed in accordance with the abovementioned document.

- NYSDEC Draft Brownfield Cleanup Program Guide – May 2004; the project is part of the BCP, and as such, the abovementioned guidance document was used to prepare this report.

- NYSDOH Generic Community Air Monitoring Plan (CAMP) will be required for all ground intrusive activities, and the abovementioned document was used to prepare the CAMP.

- NYS Waste Transporter Permits – 6 NYCRR Part 364; as the proposed remedies include excavation and disposal of soil, the abovementioned guidance document applies.

- NYS Solid Waste Management Requirements – 6 NYCRR Part 360 and Part 364; as the proposed remedies include excavation and disposal of soil, the abovementioned guidance document applies.

3.1.1 Overall Protection of Human Health and the Environment

Alternative 1 would be protective of human health and the environment by removing all soil above the UUSCOs at the Site, thus eliminating the potential for human and environmental exposure to contaminated soil/fill once construction is complete and eliminating the risk of contamination leaching into groundwater. Though there is minimal potential for contact with contaminated groundwater as it is not used for potable purposes, the concentration of any contaminants in groundwater will be addressed by the removal of impacted soil. Potential soil vapors would be addressed through source removal of contaminated soil.

Alternative 2 will be protective of human health and the environment by source removal, containment and/or treatment. Excavation and off-Site disposal of grossly contaminated soil in the designated LNAPL source areas will remove potentially mobile LNAPL in accessible areas. Dewatering and treatment or offsite disposal of groundwater during the excavation will remove potentially impacted groundwater. The installation of a minimum of five Spill Busters™ will ensure containment and removal of remnant mobile LNAPL located underneath the Warehouse and where the plume extends off-Site. A site cover system consisting of building slabs, pavement, and a temporary 24-inch thick RCA cover would prevent direct contact with any remaining on-Site soil/fill. The need for vapor mitigation will be evaluated during redevelopment, and addressed in the SMP. If vapor mitigation is necessary, a sub-slab depressurization system (SSDS) may be required as an engineering control. Implementing institutional controls including an Environmental Easement and a SMP would ensure that the site cover system and engineering controls remain intact and protective. Targeted soil excavation would also minimize the risk of contamination leaching into groundwater through removal of soils exceeding the applicable protection of groundwater criteria and dewatering completed during the excavation.

3.1.2 Compliance with Remedial Goals, SCGs and RAOs

Alternative 1 will achieve compliance with the remedial goals, SCGs and RAOs for soil by meeting Track 1 UUSCOs. Compliance with the SCGs for groundwater and soil vapor will be achieved through source removal.

Alternative 2 would achieve compliance with remedial goals, SCGs, and RAOs for soil through the removal of grossly contaminated soil and potentially impacted groundwater in LNAPL source areas to meet Protection of Groundwater SCOs for benzene, ethylbenzene, isopropylbenzene and xylenes and treatment of VOCs in soil and groundwater underneath the Warehouse through ISCO to meet the GA AWQSGVs for these same four VOCs. Remnant soil above the Track 4 RRSCOs will meet RAOs through implementation of the site cover system. Groundwater SCGs and RAOs would be met through source removal in the LNAPL source area and ISCO underneath the Warehouse. Soil vapor SCGs will be met by capping the Site with a site cover system. Soil vapor will be reevaluated during redevelopment, as described in the SMP. Soil vapor may be mitigated by installation of an SSDS for buildings with planned occupancy. The SMP would ensure that these engineering controls remain protective for the long term.

For both alternatives, focused attention on means and methods employed during the Remedial Action would ensure that handling and management of contaminated material would be in compliance with the applicable SCGs.

3.1.3 Long-term Effectiveness and Permanence

This evaluation criterion addresses the results of a Remedial Action in terms of its permanence and quantity/nature of waste or residual contamination remaining at the Site after response objectives have been met, such as permanence of the remedial alternative, magnitude of remaining contamination, adequacy of controls including the adequacy and suitability of ECs/ICs that may be used to manage contaminant residuals that remain at the Site and assessment of containment systems and ICs that are designed to eliminate exposures to contaminants, and long-term reliability of Engineering Controls.

Alternative 1 removes all soil that was impacted by the historic releases. Therefore, incremental risk from soil impacts is eliminated, and Alternative 1 will continue to meet RAOs in the future, thus providing a permanent long-term solution for the Site.

Alternative 2 would provide long-term effectiveness by removing potentially mobile LNAPL, removing grossly contaminated soil, removing soil containing NAPL, treating VOCs in soil and groundwater underneath the Warehouse through ISCO, establishing engineering controls including five product recovery systems and a site cover system across the entire Site, and establishing institutional controls to ensure long-term management including use restrictions, an SMP, and placement of an Environmental Easement to memorialize these controls for the long term. The SMP will ensure long-term effectiveness of all engineering controls and institutional controls by requiring periodic inspection and certification that these controls and restrictions continue to be in place and are functioning as they were intended to and assuring that protections designed in the remedy will provide continued high levels of protection, in perpetuity. The SMP will also include an evaluation of soil vapor, and pending results, may require the installation of an SSDS for occupied buildings with slab-on-grade construction.

3.1.4 Reduction in Toxicity, Mobility or Volume through Treatment

This evaluation criterion assesses the remedial alternative's use of remedial technologies that permanently and significantly reduce toxicity, mobility, or volume of contaminants as their principal element. The following is the hierarchy of source removal and control measures that are to be used to remediate a Site, ranked from most preferable to least preferable: removal and/or treatment, containment, elimination of exposure and treatment of source at the point of exposure. It is preferred to use treatment or removal to eliminate contaminants at a Site, reduce the total mass of toxic contaminants, cause irreversible reduction in contaminants mobility, or reduce of total volume of contaminated media.

By removing all soil with concentrations that exceeded the Unrestricted Use criteria, Remedial Alternative 1 will permanently eliminate the toxicity, mobility, and volume of contaminants from on-Site soil, groundwater and soil vapor.

Alternative 2 would permanently eliminate the majority of the toxicity, mobility, and volume of contaminants from on-Site soil by removing soil and groundwater in LNAPL source areas and treating VOCs in soil and groundwater underneath the Warehouse through ISCO. In addition to source removal, five product recovery systems will reduce the mobility, toxicity and volume of contaminants in groundwater at the Site. The SMP will address soil vapor concerns in occupied buildings, and depending on results, may require the installation of an SSDS for multiple buildings. The remainder of the Site will be capped to permanently eliminate exposures and associated toxicity.

3.1.5 Short-term Effectiveness

Under this criterion, alternatives are evaluated with respect to their effects on public health and the environment during implementation of the Remedial Action, including protection of the community, environmental impacts, time until remedial response objectives are achieved, and protection of workers during remedial actions.

Although Alternative 1 and 2 both require excavation of impacted material, the length of construction for Alternative 1 would be greater than Alternative 2. Thus, Alternative 1 has higher potential exposure risks to the community and construction workers, all of which would be managed in a CAMP. Alternative 2 includes the construction of a tent surrounding the excavation footprint, thus limiting exposure risks to the community and construction workers.

Both Alternative 1 and 2 would both employ appropriate measures to prevent short term impacts, including a CAMP and a Soil Management Plan (SoMP), during all on-Site soil disturbance activities and would effectively prevent the release of significant contaminants into the environment. Both alternatives provide short term effectiveness in protecting the surrounding community by decreasing the risk of contact with on-Site contaminants.

Potential worker exposure to soil and groundwater during remediation activities will be mitigated through the required OSHA training and appropriate Health and Safety Plans (HASPs). Construction workers operating under appropriate management procedures and a HASP will be protected from on-Site contaminants (personal protective equipment would be worn consistent with the documented risks within the respective work zones). Any potential environmental exposure will be mitigated by engineering controls implemented during construction, including a vacuum truck or sump pumps to immediately remove LNAPL that may accumulate in the excavation, potentially causing odors. If necessary, a foam unit to suppress vapors and odors that are generated during the soil excavations will also be employed. A tent with an air purification unit will also be used to contain and treat any odors generated from the excavation.

3.1.6 Implementability

This evaluation criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation, including technical feasibility of construction and operation, reliability of the selected technology, ease of undertaking Remedial Action, monitoring considerations, administrative feasibility (i.e., obtaining permits for remedial activities), and availability of services and materials.

Remedial Alternative 1 poses some difficulties with constructability, as impacted soil and the LNAPL plume extends underneath existing buildings both on and off-Site. The soil underneath the 4-Story Paint Factory contains exceedances of UUSCOs for metals, VOCs and SVOCs in soil as deep as 22.5 feet (B-12), 19 feet (MW-20) and 18 feet (B-13). As a result, it is not feasible to excavate all of the impacted soil under Alternative 1 without compromising the structural integrity of the buildings on Site and risking additional impact to the structural integrity of the surrounding buildings as well. All buildings on Site would need to be demolished. In addition, due to increased soil removal, Alternative 1 would require additional construction time and traffic disruption to the surrounding area.

The techniques, materials and equipment to implement Alternative 2 are readily available and have been proven effective in remediating the contaminants associated with the Site. They use standard materials, services, and well-established technology. The reliability of these remedies is also high and thus Alternative 2 is much feasible to implement than Alternative 1.

3.1.7 Cost

This evaluation criterion addresses the cost of alternatives, including capital costs (such as construction costs, equipment costs, and disposal costs, engineering expenses) and site management costs (costs incurred after remedial construction is complete) necessary to ensure the continued effectiveness of a Remedial Action.

The construction and equipment costs associated with Remedial Alternative 1 are estimated at approximately $8,528,653 as shown on Table 28. The following assumptions were made to develop this cost estimate:

- It is anticipated that long-term Operation, Maintenance and Monitoring (OM&M) related to Alternative 1 are not required due to the nature of the remedy, which is anticipated to achieve the unrestricted use goal;
- All buildings need to be demolished to remove soil above UUSCOs;
- Excavation depths will be approximately 25 feet bls at the Paint Factory and 18 feet bls across the rest of the Site to meet the unrestricted SCGs; and
- The excavated volume is estimated to be approximately 24,625 cubic yards.

The construction and equipment costs associated with Remedial Alternative 2 are estimated at approximately $1,891,476 as shown on Table 29. The following assumptions were made to develop this cost estimate:

- Long-term Operation, OM&M related to Alternative 2 include a Spill Buster™ or similar device for product recovery, performance monitoring of groundwater, and an SSDS for soil vapor mitigation.
- The Site Cover System consists of the building’s concrete slabs, asphalt, a waterproofing membrane (for the new building only), or at least two feet of clean fill.

3.1.8 Compatibility with Land Use

This evaluation criterion addresses the proposed use of the property. This evaluation has considered reasonably anticipated future uses of the Site and takes into account: current use and historical and/or recent development patterns; applicable zoning laws and maps; NYS Department of State's Brownfield Opportunity Areas (BOA) pursuant to section 970-r of the general municipal law; applicable land use plans; proximity to real property currently used for residential use, and to commercial, industrial, agricultural, and/or recreational areas; environmental justice impacts, Federal or State land use designations; population growth patterns and projections; accessibility to existing infrastructure; proximity of the site to important cultural resources and natural resources, potential vulnerability of groundwater to contamination that might emanate from the Site, proximity to flood plains, geography and geology; and current Institutional Controls applicable to the Site.

Both alternatives provide protection of public health and the environment. The Remedial Action for both alternatives is beneficial to the surrounding community and is consistent with the goals of New York City for remediating and redeveloping brownfield sites.

3.1.9 Community Acceptance

This evaluation criterion addresses community opinion and support for the remedial action. Observations here will be supplemented by public comment received on the RAWP.

Based on the overall goals of the remedial program and initial observations by the project team, both of the alternatives are expected to be acceptable to the community. This RAWP will be subject to a public review per the requirements of the BCP, and will provide the opportunity for detailed public input on the remedial alternatives and the selected remedial action. The Citizen Participation Plan for the project is provided in Appendix B.

3.2 Selection of the Preferred Remedy

Remedial Alternative 2 was selected for implementation in on-site areas since it adequately meets each of the evaluation criteria, and is readily implementable. Alternative 1 was not selected due to constructability concerns for removing soil directly adjacent to and underneath buildings on and adjacent to the Site. In addition, Alternative 1 would cause more disturbances to the community with increased noise, traffic and potential exposure to vapors due to a larger excavation volume.

In summary, Alternative 2:

- is protective of public health and the environment;
- complies with SCOs and RAOs for the Site;
- provides long-term effectiveness and permanence through source removal, product recovery and, and a Site-cover system with engineering and institutional controls;
- reduces the toxicity, mobility, or volume of impacted material through source removal and containment (bulkhead and Site-cover system);
- provides short-term effectiveness, including minimal impacts to workers or the surrounding neighborhood through the implementation of engineering controls during construction;
- can be readily implemented;
- can be implemented for less cost than Alternative 1; and
- is compatible with land use.

Alternative 2 is consistent with the approach for a restricted residential use scenario described in the Part 375 Regulations.

As described in Section 3.1, the preferred Remedial Alternative 2 includes UST removal or closure, excavation and disposal of subsurface piping and grossly contaminated soil, treatment of soil and groundwater under the Warehouse with ISCO, backfill of the excavated area with RCA and excavated reuse soil (as applicable), installation of engineering controls (a product recovery system and Site-wide cover system) and institutional controls. A land use factor evaluation of the preferred remedial alternative is provided below based on the following criteria as required by Article 27, Title 14 of the Environmental Conservation Law 27-1415.

3.2.1 Zoning

The current zoning for the Site is M1-4, however, the Site is in the process of being re-zoned. The RAWP assumes that the changes to zoning will occur to allow the redevelopment to proceed. No action will occur with regard to the re-development until zoning changes are finalized.

3.2.2 Applicable Comprehensive Community Master Plans or Land Use Plans

As depicted in the Land Use Map (Attachment D of the BCP Application), the redevelopment of the Former Paragon Paint and Varnish Corporation Site is consistent with the surrounding community redevelopment plans.

3.2.3 Surrounding Property Uses

The Site is located in an urban neighborhood comprised of mixed use commercial and residential buildings as well as a few industrial buildings. Anable Basin borders the north end of the Site. In addition to Anable Basin, a one-story commercial building is located north of the Site. An auto repair shop and a light industrial building are located to the south, a parking lot of Blood Centers of New York is located to the east of the site, and a two-story warehouse is located to the west. The proposed end use of this redevelopment includes a mixed commercial/residential building, consistent with the current land use. Zoning variances will be acquired from the New York City Department of City Planning, as required to accommodate the new development.

3.2.4 Citizen Participation

Citizen participation will be pursued throughout the remedial process in accordance with the BCP guide. A Citizen Participation Plan is included as Appendix B.

3.2.5 Environmental Justice Concerns

The property is not located in a potential environmental justice area (PEJA) according to the maps issued by NYSDEC.

3.2.6 Land Use Designations

As described in the BCP application for the Site, there are no land use limitations in effect for the Site.

3.2.7 Population Growth Patterns

Population growth patterns and land development patterns in the area are consistent with the proposed use for the Site. Furthermore, the proposed use will support the existing local business trends and promote increased business and investment in the area.

3.2.8 Accessibility to Existing Infrastructure

The Site's location in Queens is accessible to existing infrastructure. The Site is within close proximity to the Long Island Expressway and several subway stations.

3.2.9 Proximity to Cultural Resources

There are no cultural resources, including federal or state historic or heritage sites or Native American religious sites within ½ mile of the Site.

3.2.10 Proximity to Natural Resources

Anable Basin, an inlet to the East River, is along the north end of the Site. Removal of grossly contaminated soil in the courtyard LNAPL source area and installation of product recovery systems where the LNAPL extends off-Site will eliminate any potential impacts to Anable Basin. Natural resources will not be endangered by the Preferred Remedy for the Site.

3.2.11 Off-Site Groundwater Impacts

On-Site and off-Site groundwater is impacted with LNAPL, and contains VOCs, SVOCs and metals in excess of the AWQSGVs for Class GA Groundwater. Excavation of grossly impacted soil in the courtyard LNAPL source area will reduce on-site impacts to groundwater. Furthermore, LNAPL recovery using product recovery systems will reduce mobile LNAPL on-Site and prevent off-Site migration. The Preferred Remedy will reduce the toxicity, mobility, and volume of contaminants, and thereby mitigate potential off-Site groundwater impacts.

3.2.12 Proximity to Floodplains

The Site is located within the 100-year flood zone. As part of the redevelopment, the ground level of the Site will be raised approximately 4 feet.

3.2.13 Geography and Geology of the Site

The Site is shown on the 1995 USGS Topograhic Quadrangle Map (Figure 1). The surface elevation of the Site is approximately seven feet above mean sea level. The Site topography slopes gently to the northwest toward Anable Basin.

Approximately 5 to 11 feet of fill material is underlain by layered glacial deposits that consist of poorly sorted sand, silt and gravel in a sand matrix. Most areas consist primarily of fine to medium sands, with various amounts of silt and lesser amounts of coarse sand and gravel. Peat was observed in thin lenses at a number of borings completed during the RI ranging in depth from approximately 8 to 15 feet bls and was often observed in a silt or sand matrix. Bedrock was encountered during the RI at depths ranging from 25 to 16 feet bls.

3.2.14 Current Institutional Controls

There are currently no institutional controls on the property.

3.3 SUMMARY OF SELECTED REMEDIAL ACTIONS

The elements of the Preferred Remedy include:

- Implementation of erosion and sediment controls;
- Site Monitoring of airborne VOCs and particulates in accordance with a NYSDEC approved CAMP during all ground intrusive and soil handling activities; Implementation of proper dust and odor suppression techniques during all ground intrusive and soil handling activities, including use of an enclosure for excavation work.
- Closure of remaining USTs by removal or, as a contingency, closure in place.
- Excavation and disposal of subsurface piping.
- Excavation and off-Site disposal of grossly contaminated soil in the courtyard LNAPL source area, including:
    a. grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u);
    b. soil containing non-aqueous phase liquid (NAPL);
    c. soil containing SVOCs exceeding 500 ppm;
    d. soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and

e. Soils that create a nuisance condition, as defined in NYSDEC Commissioner Policy CP-51 Section G.

- Screening for indications of contamination (by visual means, odor, and monitoring with a photoionization detector) of all excavated soil during all ground intrusive Site work.

- Excavated unsaturated soil free from mobile LNAPL will be stockpiled for reuse on Site (Assuming it meets soil re-use criteria as noted in DER-10).

- Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal.

- Backfill of excavated areas with recycled concrete aggregate (RCA) or clean stone to 1 foot above groundwater table, backfill one-foot above the water table to two-feet below proposed development grade with reuse soil from the excavation (as available), and backfill the top two-feet with RCA as a temporary cover prior to redevelopment. RCA will meet NYSDEC Part 360-1.15 requirements and will be free of asphalt.

- Dewatering and treatment or offsite disposal of groundwater as needed to facilitate excavation.

- In-situ chemical oxidation (ISCO) injection for treatment of VOCs in soil and groundwater underneath the Warehouse.

- Installation of a minimum of five automatic product only recovery pumps at property boundary areas where the LNAPL plume extends off-site, and underneath the Warehouse.

- A Site cover system consisting of building slabs (the existing Paint Factory, the Warehouse and the Garage), pavement or 24-inches minimum of RCA as a temporary cover in the courtyard area. Following Site redevelopment, the site cover system will consist of new concrete building slabs, pavement and a minimum of two feet of clean fill in new landscaped areas as will be detailed in the SMP.

- Recording of an Environmental Easement, including Institutional Controls, to prevent future exposure to any residual contamination remaining at the Site.

- Preparation of a Site Management Plan for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations. Remedial activities will be performed at the Site in accordance with this NYSDEC-approved RAWP and the Department-issued Decision Document. All deviations from the RAWP will be promptly reported to NYSDEC for approval and fully explained in the FER.

4.0 REMEDIAL ACTION PROGRAM

4.1 GOVERNING DOCUMENTS

Governing documents are described in the sections below.

4.1.1 Site Specific Health & Safety Plan (HASP)

The HASP for the site is included in Appendix C. All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA. The HASP also includes the CAMP.

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

The Health and Safety Plan (HASP) and requirements defined in this Remedial Action Work Plan pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion.

Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses.

4.1.2 Quality Assurance Project Plan (QAPP)

A Quality Assurance Project Plan (QAPP) provides a detailed description of site specific sampling and analytical methods and sample handling procedures for end-point soil sampling. The elements are provided in Section 5.2. A copy of the Site-specific QAPP is presented as Appendix D.

4.1.3 Construction Quality Assurance Plan (CQAP)

The Construction Quality Assurance Plan (CQAP) for all construction activities provides a detailed description of the observation and testing activities that will be used to monitor construction quality and confirm that the remedial construction is in conformance with the remediation objectives and specifications. The CQAP will be prepared by the selected Excavation/Remedial Contractor and will include the following.

- Responsibilities and authorities of the organizations and key personnel involved in the design and construction of the remedy.
- Qualifications of the quality assurance personnel that demonstrate that they possess the proper training and experience necessary to fulfill project-specific responsibilities.
- The observations and tests that will be used to monitor construction and the frequency of performance of such activities.
- The sampling activities, sample size, sample locations, frequency of testing, acceptance and rejection criteria, and plans for implementing corrective measures as addressed in the plans and specifications.
- Requirements for project coordination meetings between the Applicant and its representatives, the Construction Manager, Excavation Contractor, remedial or environmental subcontractors, and other involved parties.
- Description of the reporting requirements for quality assurance activities including such items as daily summary reports, schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.
- Description of the final documentation retention provisions.

4.1.4 Soil/Materials Management Plan (SoMP)

A detailed SoMP is included in Section 5.4 of the RAWP. The SoMP includes detailed plans for managing all soils/materials that are disturbed at the Site, including excavation, handling, storage, transport and disposal. It also includes all of the controls that will be applied to these efforts to assure effective, nuisance-free performance in compliance with all applicable Federal, State and local laws and regulations.

4.1.5 Storm-Water Pollution Prevention Plan (SWPPP)

The erosion and sediment controls will be in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control. As necessary, hay bales will be placed at locations upgradient of excavation areas to control stormwater runoff and surface water from entering or exiting the excavation to the adjacent body of water (Anable Basin) or the community. Catch basin inlets and surface water immediately adjacent to the work area will be protected using silt sack basin inserts and silt fencing along Anable Basin to prevent disturbed soil from entering (Plate 10). Construction water will be managed in accordance with the SoMP described in section 5.4.

The Site is exempt from the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-02-01) requirement as the area disturbed on the site will be less than one acre in size.

4.1.6 Community Air Monitoring Plan (CAMP)

Site monitoring of VOCs and particulates will be conducted during all ground intrusive and soil handling activities. The CAMP is included as Appendix J of the HASP (Appendix C).

4.1.7 Contractors Site Operations Plan (SOP);

The Remediation Engineer has reviewed all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) and confirms that they are in compliance with this RAWP. The Remediation Engineer is responsible to ensure that all later document submittals for this remedial project, including contractor and sub-contractor document submittals, are in compliance with this RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work. A detailed remedial construction design document will be submitted to NYSDEC for approval.

4.1.8 Citizen Participation Plan

A Citizen Participation Plan (CPP) was prepared and submitted in November 2009.

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

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

The approved Citizen Participation Plan for this project is attached in Appendix B.

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

Queensborough Public Library
Court Square Branch
25-01 Jackson Avenue
Long Island City, NY 10011

718-937-2790

Monday:	12:00 PM – 7:00 PM
Tuesday:	1:00 PM – 6:00 PM
Wednesday:	10:00 AM – 6:00 PM
Thursday:	12:00 PM – 6:00 PM
Friday:	12:00 PM – 6:00 PM
Saturday:	10:00 AM – 5:30 PM
Sunday:	Closed

Community Board #2 Office
43-22 50th Street- Second Floor
Woodside, NY 11377

718-553-8773

Call for days and hours

New York State Department of Environmental Conservation Region 2
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

718-482-4891

9:00 AM – 3:00 PM: By Appointment Only

4.2 GENERAL REMEDIAL CONSTRUCTION INFORMATION

4.2.1 Project Organization

The excavation/remediation general contractor has not been selected yet. Professional profiles for the Remedial Engineer and the data validator are presented in Appendix E. The overall management and a general summary of the responsibilities of project team members are presented below.

Project Manager

Omar Ramotar, P.E., of Roux Associates/Remedial Engineering will serve as Project Manager. The Project Manager is responsible for defining project objectives and bears ultimate responsibility for the successful completion of the investigation. This individual will provide overall management for the implementation of the scope of work and will coordinate all field activities. The Project Manager is also responsible for data review/interpretation and report preparation. Activities of the Project Manager are supported by the Project Quality Assurance Coordinator.

Field Team Leader /Site Health and Safety Officer (SSO)

Jordanna Kendrot of Roux Associates will serve as the Field Team Leader and SSO. The Field Team Leader bears the responsibility for the successful execution of the RAWP excavation, as scoped in the RAWP Work Plan. The Field Team Leader will direct the activities of all technical staff in the field as well all subcontractors. The Field Team Leader will also assist in the interpretation of data and in report preparation. The SSO directs and coordinates health and safety monitoring activities. The Field Team Leader/SSO reports to the Project Manager.

Field CAMP Monitor

Rachel Henke of Roux Associates will serve as the Field CAMP Monitor. The Field CAMP Monitor bears the responsibility for the successful implementation of the Site-specific CAMP. The Field CAMP Monitor will setup dust and odor monitors both upwind and downwind of work prior to, during, and following work completion and make note of exceedances and community complaints if necessary. The Field CAMP Monitor reports to the Project Manager or the Field Team Leader.

4.2.2 Remedial Engineer

The Remedial Engineer for this project will be Charles J. McGuckin. The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the remedial program for the

Former Paragon Paint and Varnish Company Manufacturing Facility Site (NYSDEC BCA Index No. W2-1119-08-03 Site No. C241108). The Remedial Engineer will certify in the Final Engineering Report that the remedial activities were observed by qualified environmental professionals under his supervision and that the remediation requirements set forth in the Remedial Action Work Plan and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RAWP.

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

The Remedial Engineer will review all pre-remedial plans submitted by contractors for compliance with this Remedial Action Work Plan and will certify compliance in the Final Remediation Report.

The Remedial Engineer will provide the certifications listed in Section 10.1 in the Final Engineering Report.

4.2.3 Remedial Action Construction Schedule

A proposed schedule for the major elements of the remedial construction and portions of the redevelopment construction are presented on Table 30.

4.2.4 Work Hours

The hours for operation of remedial construction will conform to the New York City Department of Buildings construction code requirements or according to specific variances issued by that agency. DEC will be notified by the Applicant of any variances issued by the Department of Buildings. NYSDEC reserves the right to deny alternate remedial construction hours.

4.2.5 Site Security

Security for the work, equipment, materials, supplies, facilities, personnel, and incidentals will be provided throughout the performance of the work at the Site. The Site will be surrounded by perimeter fencing in accordance with the New York City construction and building code requirements. The fences and gates will be closed and locked when there is no activity on the Site and any breaks or gaps will be repaired immediately. Temporary fencing will supplement the perimeter fencing to delineate and secure the area of ongoing remediation activities within the Site such as soil stockpiles, and health and safety exclusion zones.

All personnel and visitors will be required to sign-in upon entering the Site and sign-out upon leaving. A sign-in/sign-out sheet will be maintained at the Site. To restrict access during remediation activities, warning signs and barrier tape will be installed at certain locations, such as open excavations.

4.2.6 Traffic Control

The Remediation Contractor/General Contractor will be responsible for providing all necessary personnel and materials (i.e., traffic lanes, safety cones) to control traffic entering and exiting the Site and for coordinating traffic control measures, as necessary. The route will be selected based on the existing access roads and an effort to limit transportation of work vehicles through neighboring residential and commercial areas and may be modified based on input from the community prior to the start of construction. The truck route ingress and egress to the Site, as shown on Figure 5 uses New York State Department of Transportation (NYSDOT) approved routes through the surrounding area. Any changes in the truck route will be submitted to NYSDEC for review and approval prior to implementation.

4.2.7 Contingency Plan

A contingency plan describes procedures to be conducted in the event of an emergency, or the remedial work fails to meet any of its objectives or otherwise fails to protect human health or the environment. This plan shall address the recommended procedures after encountering an unknown UST.

For known USTs, the preferred closure method is removal. If removal of a UST is not feasible due to the size and location of USTs and the close proximity of surrounding buildings, the tank will be closed in place. If an unknown UST is encountered during the Remedial Action, the UST will be closed in accordance with DER-10.

Additional rounds of ISCO or enhanced bioremediation will be considered after evaluating performance monitoring results, with a proposed layout shown on Plate 9. Performance monitoring will be discussed in the remedial design document. Any additional rounds of treatment will be addressed in the SMP.

4.2.8 Worker Training and Monitoring

As discussed in Section 4.1.1, all Site workers conducting ground intrusive activities in the exclusion zone will be required to have 40-hour HAZWOPER training in accordance with the referenced regulations.

4.2.9 Agency Approvals

The Volunteer has addressed all SEQRA requirements for this Site. All permits or government approvals required for remedial construction have been, or will be, obtained prior to the start of remedial construction.

Evidence to show that the planned use conforms to zoning designations will be provided to the NYSDEC prior to issuance of a COC. A Certificate of Completion will not be issued for the project unless conformance with zoning designation is demonstrated.

A complete list of all local, regional and national governmental permits, certificates or other approvals or authorizations required to perform the remedial and development work is attached in Table 30. This list includes a citation of the law, statute or code to be complied with, the originating agency. This list will be updated in the Final Engineering Report.

All planned remedial or construction work in regulated wetlands and adjacent areas will be specifically approved by the NYSDEC Division of Natural Resources to ensure that it meets the requirements for substantive compliance with those regulations prior to the start of construction.

Nothing in the approved Remedial Action Work Plan or its approval by NYSDEC should be construed as an approval for this purpose.

4.2.10 NYSDEC BCP Signage

A project sign will be erected at the main entrance to the Site prior to the start of any remedial activities. The sign will indicate that the project is being performed under the New York State Brownfield Cleanup Program. The sign will meet the detailed specifications provided by the NYSDEC Project Manager.

4.2.11 Pre-Construction Meeting with NYSDEC

A project kick-off meeting will be conducted with the Volunteer, Roux Associates/Remedial Engineering, and the selected Contractor prior to the commencement of any ground intrusive remedial activities.

4.2.12 Emergency Contact Information

An emergency contact sheet with names and phone numbers will be included on Site during the RA. That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency.

4.2.13 Remedial Action Costs

The total estimated cost of the Remedial Action is $1,591,476, which was based on the assumption that soil within the 0.1 foot LNAPL contour will have to be removed to achieve SCOs. The actual volume of soil to be removed will be based on the requirement to meet Site SCOs, as documented by confirmation sampling. An itemized and detailed summary of estimated costs for all remedial activity is attached as Table 28. The estimate will be revised based on actual costs and submitted as an Appendix to the Final Engineering Report.

4.3 SITE PREPARATION

Site preparation activities will include: identification of unmapped utilities, utility relocation (if required); Site survey for pre-existing conditions, establishment of temporary construction facilities including construction of odor control tent, security and perimeter fencing inspection and installation (as necessary). The preparatory tasks are described in more detail below.

4.3.1 Mobilization

Prior to commencing the remediation construction activities, the Remediation and General Contractor will perform the following mobilization and Site preparation activities:

- Identification and markout of all aboveground and underground utilities;
- De-energizing, turning off and disconnecting existing subsurface utility services known to be present in the work area (e.g., water, gas, electric and sewer);
- Mobilization of remediation equipment and materials;
- Traffic control measures;
- Work zone demarcation;
- Installation of erosion control devices in accordance with Section 4.3.2 and 4.3.3;
- Installation of perimeter air monitoring system;
- Removal of concrete at the surface of the Site courtyard and driveway;
- Installation of temporary facilities;
- Installation of odor control tent surrounding the excavation and loadout area;
- Installation of dewatering and water treatment system or containers for storage and disposal; and
- Installation of decontamination facilities.

4.3.2 Erosion and Sedimentation Controls

Soil erosion and sediment control measures for management of storm water will be installed in accordance with the New York Guidelines for Urban Erosion and Sediment Control. Hay bales and/or silt fence will be placed by the remedial contractor at locations surrounding excavation areas, within the perimeter fencing, to control storm water runoff and surface water from entering or exiting the excavation. These control measures will be installed prior to initiating the soil excavation.

4.3.3 Stabilized Construction Entrance(s)

Stabilized construction entrances will be installed at all points of vehicle ingress and egress to the Site. The decontamination pad (see Section 4.3.7) and the stone-based egress path will be continuous so that trucks do not get recontaminated prior to departure from the Site.

4.3.4 Utility Marker and Easements Layout

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

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

4.3.5 Sheeting and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities include excavation is the sole responsibility of the Applicant and its contractors. The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Applicant and its contractors must obtain any local, State or Federal permits or approvals that may be required to perform work under this Plan. Further, the Applicant and its contractors are solely responsible for the implementation of all required, appropriate, or necessary health and safety measures during performance of work under the approved Plan.

4.3.6 Odor and Dust Suppression

Temporary dust and odor suppression equipment, including an odor control tent surrounding the excavation and loadout area, will be installed on-Site prior to the excavation of LNAPL source areas. The tent will be closed (except for doors) and contain an air filtration system consisting of activated vapor phase carbon with a blower to create negative pressure within the tent. All excavation of LNAPL source area, stockpiling, and loading of soil will take place within this odor control tent.

4.3.7 Equipment and Material Staging

All equipment and work materials will be staged on Site in the courtyard area.

4.3.8 Decontamination Area

A temporary decontamination pad will be constructed to decontaminate trucks and other vehicles/equipment leaving the Site within the erected tent. The decontamination pad will be constructed using 60-mil high density polyethylene (HDPE) liner with perimeter berms, sloped to a low-lying sump to contain any liquids. The decontamination pad will be sized to accommodate the largest construction vehicle used and located prior to the stabilized construction egress. All decontamination material will be collected and properly disposed of offsite.

4.3.9 Site Fencing

An eight-foot high plywood construction fence will be erected around the entire Site perimeter per NYC Department of Buildings (DOB) requirements. Temporary silt fencing will be installed around the perimeter of soil stockpiles, staging areas, and around the excavation limit of disturbance. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

4.3.10 Demobilization

In conjunction with the remedial activities, the Site will be prepared for the construction activities required for the development project. All temporary structures not required for the subsequent construction work will be removed. Materials used in constructing the waste staging area (e.g., plastic sheeting, haybales) will be removed and disposed properly. Soil underlying the plastic sheeting in the waste staging area will be inspected for any visual staining or evidence of waste materials. Any impacts to the soil in this area will be removed and disposed as well. All equipment will be decontaminated prior to leaving the Site.

4.4 REPORTING

All daily and monthly Reports will be prepared and maintained on Site and included in the Final Engineering Report. The following sections provide a summary of reports that will be prepared and maintained throughout the Remedial Action.

4.4.1 Daily Reports

Daily activity reports will be prepared and maintained on site for compilation and record management.

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

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

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

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

The NYSDEC assigned project number will appear on all reports.

4.4.2 Monthly Reports

Monthly reports prepared consistent with DER-10 section 5.7(b) will be submitted to NYSDEC and NYSDOH Project Managers within one week following the end of the month of the reporting period and will include:

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

4.4.3 Other Reporting

Photographs will be taken of all remedial activities and submitted to NYSDEC in digital (JPEG) format. Photos will illustrate all remedial program elements and will be of acceptable quality. Representative photos of the Site prior to any Remedial Actions will be provided. Representative photos will be provided of each contaminant source, source area and Site structures before, during and after remediation. Photos will be submitted to NYSDEC on CD or other acceptable electronic media and will be sent to NYSDEC's Project Manager (2 copies) and to NYSDOH's Project Manager (1 copy). CD's will have a label and a general file inventory structure that separates photos into directories and sub-directories according to logical Remedial Action components. A photo log keyed to photo file ID numbers will be prepared to provide explanation for all representative photos. For larger and longer projects, photos should be submitted on a monthly basis or another agreed upon time interval.

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

4.4.4 Complaint Management Plan

Any complaints received from the public regarding nuisances or other Site conditions will be communicated within 24-hours to NYSDEC and NYSDOH, investigated and remedied, if required.

4.4.5 Deviations from the Remedial Action Work Plan

Any required deviations from this RAWP will be discussed by Volunteer's representatives with the NYSDEC. At that time, the reasons for necessary deviations from the approved RAWP will be explained and the effect of the required deviations on the overall remedy will be evaluated. If the deviation is deemed to be a significant change to the RAWP by the NYSDEC, a description and reasons for the proposed change will be emailed to the NYSDEC Project Manager for review and written approval. All deviations from the RAWP will be fully documented in the FER.

5.0 REMEDIAL ACTION: MATERIAL REMOVAL FROM SITE

Soil Excavation

The Site will be excavated to remove all grossly contaminated soil in the LNAPL source area. The extent of the excavation is estimated to follow the 0.1 foot contour of the LNAPL plume, to a depth of two feet below the low water table (Plate 9). The actual extent of excavation will be dependent on pre-excavation delineation samples, field observations and post excavation samples.

Following delineation of the horizontal extents of the excavation, an odor control tent will be installed around the perimeter of the excavation offset by 5 feet. The tent will remain closed (except for the doors during work and soil loadout) and contain an air filtration system consisting of activated vapor phase carbon with a blower to create negative pressure within the tent. The maintenance and operation of this tent and air handling system will be completed by the contractor completing the Work.

The excavation will be performed by an experienced contractor (to be selected). The excavation will be conducted in a manner that protects the integrity of the adjacent structures. Soil excavation will generally be conducted using traditional excavation equipment. If any underground utilities or other subsurface piping are encountered, the excavation will be performed by hand as required to safely expose and support the utilities.

Because the excavation of the Site soils in the LNAPL source area will involve removing soil from two feet below the groundwater table, hydraulic control measures (i.e., excavation dewatering system) will be required to manage groundwater. Wastewater resulting from site dewatering will be containerized onsite pending proper off-Site disposal or treated and discharged to the New York City Department of Environmental Protection (NYCDEP) sewer system in accordance with NYCDEP permitting procedures.

All trucks removing material from the Site will be loaded on-Site and properly decontaminated before leaving the Site.

During the excavation activities, any existing subsurface structures will be demolished and removed when encountered to the extent required to remove grossly contaminated soil. The debris will be managed as discussed in the Section 5.4.5. Subsurface obstructions/conditions that may be encountered include concrete, brick, former piping, former bulkhead cribbing, and large pieces of demolition debris. This material, if encountered, will be managed as described below and disposed of in accordance with all federal, state, and local regulations. If encountered within the excavation area, these materials will be cut or broken into lengths or pieces suitable for off-Site disposal in accordance with approved disposal facility requirements. If this type of debris is not visually impacted, it will be disposed of as construction and demolition debris (C&D) at an approved licensed C&D disposal facility. If the debris is visually impacted, it will be either decontaminated (if possible) and managed as non-impacted C&D, or sampled for waste characterization purposes and disposed of at an appropriate approved facility.

Excavated unsaturated soil may be used as backfill provided it meets soil reuse criteria as noted in DER-10 Table 5.4 and with subsequent approval of NYSDEC. The soil must be inspected prior to reuse, and must be free from odors or staining. Excavated material to be used for backfill will be stockpiled on Site in accordance with Section 5.4.

Excavated material slated for off-Site disposal will be disposed in accordance with the Soil and Materials Management Plan.

Following excavation, end-point soil samples will be collected in accordance with the remedial performance evaluation described in Section 5.2.2. Soil shake tests will be conducted in the field to help determine when endpoint samples should be collected.

Groundwater

Dewatering will be required during excavation activities to facilitate work below the groundwater table. Extracted groundwater will either be containerized for off-Site disposal or be treated as necessary to meet NYCDEP requirements, and discharged to the NYCDEP sewer system. The groundwater will be extracted through the use of a vacuum truck, drainage sumps and/or perimeter well points to maintain dry conditions within the excavation. Drainage sumps will be installed within the excavation, as necessary, to dewater the excavation area. The water from the drainage sumps will be pumped to either an on-Site wastewater storage tank or an on-Site treatment system. The Remediation Contractor will identify the means and methods for dewatering and treatment, and the Remedial Engineer and NYSDEC will approve the method. If the dewatering system requires a pumping rate greater than 45 gallons per minute on average, then a NYSDEC Long Island Well Permit will be acquired.

If required, the treatment system may entail a settling tank, oil/water separator, bag filters, and carbon filter vessels, respectively. The effluent from the treatment system will be discharged to the NYCDEP sewer system under a sewer discharge permit that will be obtained from the NYCDEP following the submission of information regarding the proposed treatment system. The effluent from the treatment system will be sampled as required by NYCDEP. If wastewater is to be disposed of off-Site, it will be stored onsite in a vacuum truck or an approved water storage tank pending characterization and transport for proper off-Site disposal.

The quantity of groundwater to be extracted and treated will be determined based upon the following factors:

- Duration of excavation work below the water table;
- Depth of excavation beneath the water table; and
- Hydrogeologic factors including hydraulic permeability, hydraulic gradient, and rate of recharge into the excavation.

The extracted and treated groundwater will serve a beneficial role in reducing the toxicity, mobility, and volume of contaminated groundwater beneath the Site.

Provided below is a more detailed description of the Remedial Action, including the soil cleanup objectives, remedial performance evaluation, estimated material removal quantities, and Soil and Materials Management Plan.

5.1 SOIL CLEANUP OBJECTIVES

The proposed alternative is pursuing a Track 4 cleanup to the extent feasible up to the Site property line. The Soil Cleanup Objectives for this Site are to remove grossly contaminated soil acting as LNAPL source areas, mobile LNAPL, soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), and soils that create a nuisance condition (as defined in NYSDEC Commissioner Policy CP-51 Section G). All other soil/historic fill above Track 4 Restricted Residential SCOs (summarized in Tables 17- 20) will be addressed through the Site cover.

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

Tables 17 – 20 summarize all soil samples that exceed the SCOs proposed for this Remedial Action. A spider map that shows all soil samples that exceed the SCOs proposed for this Remedial Action is shown in Plates 4 and 5.

UST closures will, at a minimum, conform to criteria defined in DER-10.

5.2 REMEDIAL PERFORMANCE EVALUATION POST EXCAVATION END-POINT SAMPLING)

End-point sampling and reporting will be conducted in accordance with the DER-10 and the QAPP and is discussed in the sections below.

5.2.1 End-Point Sampling Frequency

End-point samples will be collected to verify compliance with SCOs. End-point excavation bottom samples will be collected at a frequency of one sample per 1,000 square feet of excavation bottom and sidewall samples will be collected pre-excavation at a frequency of one sample per 30 linear feet of the excavation in accordance with NYSDEC DER-10 Section 5.4. The end-point samples will be analyzed for benzene, ethylbenzene, isopropylbenzene, and xylenes to comply with the proposed PoG SCOs. Areas that appear more heavily impacted, will be removed from the excavation. Samples will be collected for laboratory analysis only when observable grossly impacted soils have been removed.

If the endpoint bottom or sidewall soil sample results indicate that benzene, ethylbenzene, isopropylbenzene, and/or xylenes are above the Protection of Groundwater criteria, the proposed excavation boundary will be expanded. Additional bottom or sidewall soil sampling will continue until these conditions are met or to the extent feasible due to excavation shoring limitations and the risk of undermining adjacent roadways and structures.

5.2.2 Methodology

Soil shake tests will be conducted in the field to help determine when endpoint samples should be collected. The soil shake test will be conducted by placing approximately 1 ounce of soil in a 2-ounce laboratory supplied jar. Deionized water will be placed in the sample jar, and the sample jar will be capped and shaken for approximately 30 seconds. Visual observations of contamination (i.e., sheen) will be recorded after a period of time to allow for phase separation.

Each sample will be inspected for visual evidence of contamination (i.e., staining, presence of petroleum or odors) and field screened for VOCs using a portable photoionization detector (PID). If samples are free from visual evidence of contamination and the PID indicates soil is not contaminated, the sample will be sent to the lab. If samples contain visible evidence of contamination or the PID indicates soil may be contaminated, then additional excavation will take place until both visual observations and the PID indicate the sample is not grossly contaminated.

Soil samples to be submitted for analysis will be placed in a laboratory sample jar, and transported to the laboratory in an iced container. Samples will be submitted for analysis for benzene, ethylbenzene, ispropylbenzene, and xylenes. Laboratory analysis will be performed by a NYSDEC-approved laboratory using USEPA SW846 Method 8260.

5.2.3 Reporting of Results

The laboratory will report analytical results in Analytical Services Protocol (ASP) Category B deliverable packages. An electronic data deliverable (EDD) will also be provided by the laboratory.

All end-point sample data generated for the Remedial Action will be logged in a database and organized to facilitate data review and evaluation. The electronic dataset will include the data flags provided in accordance with USEPA Laboratory Data Validation Functional Guidelines for Evaluating Organic Analysis and Inorganic Analyses, as well as additional comments of the data review for ASP/CLP analyses. The data flags include such items as: 1) concentration below required detection limit, 2) estimated concentration due to poor recovery below required detection limit, 3) estimated concentration due to poor spike recovery, and 4) concentration of chemical also found in laboratory blank.

5.2.4 QA/QC

Quality control (QC) samples serve as checks on both the sampling and measurements systems and assist in determining the overall data quality with regard to representation, accuracy, and precision. Field duplicates and matrix spike samples are analyzed to assess the quality of the data resulting from the field sampling. Field duplicate samples are individual portions of the same field sample. These samples can be used to estimate the overall precision of the data collection activity. Sampling error can be estimated by the comparison of field sample result and duplicated sample result. During end-point sampling, one field duplicate sample will be collected for each 20 samples collected. Matrix spike and matrix spike duplicates are used to evaluate analytical accuracy and precision, respectively. MS/MSDs will be analyzed by the laboratory at a frequency of one per preparation batch.

5.2.5 DUSR

A Data Usability Summary Report (DUSR) will be prepared to evaluate the end-point samples by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10.

5.2.6 Reporting of End-Point Data in FER

Chemical labs used for all end-point sample results and contingency sampling will be NYSDOH ELAP certified.

End point sampling, including bottom and side-wall sampling, will be performed in accordance with DER-10 sample frequency requirements. Side-wall samples will be collected a minimum of every 30 linear feet. Bottom samples will be collected at a rate of one for every 2,500 square feet. The FER will provide a tabular and map summary of all end-point sample results and exceedances of SCOs.

5.3 ESTIMATED MATERIAL REMOVAL QUANTITIES

The estimated quantity of soil/fill to be removed from the Site is 1,534 tons. The estimated quantity of fill material (RCA) to be imported into the Site for backfill and cover soil is 2,814 tons. The estimated quantity of soil/fill expected to be reused/relocated on Site is 877 tons.

5.4 SOIL/MATERIALS MANAGEMENT PLAN

The following sections provide the Soil Management Plan to be implemented during the Remedial Action.

5.4.1 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (Residual Contamination Zone). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy and during development phase, such as excavations for foundations and utility work, prior to issuance of the COC.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. This information will be provided on maps in the Final Engineering Report.

Screening will be performed by the Remedial Engineer or person under their supervision.

5.4.2 Stockpile Methods

Stockpiles will be constructed on a minimum of 60 mil poly sheeting and will be kept covered at all times with appropriately anchored tarps.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Soil stockpiles will be continuously encircled with silt fences. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

On-Site dust control will be provided as described in Section 5.4.13.

5.4.3 Materials Excavation and Load Out

The Remediation Engineer or a qualified environmental professional under his supervision will oversee all invasive work and the excavation and load-out of all excavated material.

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

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

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

A truck wash will be operated on-Site. The Remediation Engineer will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the remedial construction is complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking.

The Remedial Engineer will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during Site remediation and development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

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

The Remedial Engineer will ensure that Site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this Remedial Action Work Plan.

Each hotspot and structure to be remediated (USTs, vaults and associated piping, transformers, etc.) will be removed and end-point remedial performance sampling completed before excavations related to Site development commence proximal to the hotspot or structure.

Development-related grading cuts and fills will not be performed without NYSDEC approval and will not interfere with, or otherwise impair or compromise, the performance of remediation required by this plan.

Mechanical processing of historical fill and contaminated soil on-Site is prohibited.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. The survey information will be shown on maps to be reported in the Final Engineering Report.

5.4.4 Materials Transport Off-Site

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

Trucks will transport Site materials for disposal using the routes detailed in Section 4.1.4.4. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes.

Proposed in-bound and out-bound truck routes to the Site will take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off- Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

5.4.5 Materials Disposal Off-Site

The total quantity of material expected to be disposed off-Site is approximately 1,025 cubic yards of non-hazardous waste. The disposal locations will be reported to the NYSDEC Project Manager.

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

Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

The following documentation will be obtained and reported by the Remedial Engineer for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the Remedial Engineer or BCP Applicant to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be disposed is contaminated material generated at an environmental remediation Site in New York State. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported (including Site Characterization data); and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents will be included in the FER.

Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2

Historical fill and contaminated soils from the Site are prohibited from being disposed at Part 360-16 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Solid & Hazardous Materials (DSHM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 2 DSHM. This material is prohibited from being sent or redirected to a Part 360-16 Registration Facility. In this case, as dictated by DSHM, special procedures will include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported.

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

Bill of Lading system or equivalent will be used for off-Site movement of non-hazardous wastes and contaminated soils. This information will be reported in the Final Engineering Report.

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

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

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

5.4.6 Materials Reuse On-Site

Chemical criteria for on-Site reuse of material will be in accordance with DER-10 5.4(e)4, with contaminants meeting the lower of the PoG SCOs or the RRSCOs and NYSDEC approval. Note that soil reused onsite will only be reused under the Site cover system. The Remedial Engineer will ensure that procedures defined for materials reuse in this RAWP are followed and that unacceptable material will not remain on-Site.

Excavated soil above the water table with no visual staining and no odor can be reused as backfill if it meets the applicable SCOs. The reuse of soil as backfill will be restricted to one-foot above the groundwater table and will be contained by the Site cover. A demarcation layer will be placed above the reused material and below the cap.

Acceptable demolition material proposed for reuse on-Site, if any, will be sampled for asbestos.

Concrete crushing or processing on-Site is prohibited.

Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site is prohibited for reuse on-Site.

Contaminated on-Site material, including historic fill and contaminated soil, removed for grading or other purposes will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines. This will be expressed in the final Site Management Plan.

5.4.7 Fluids Management

Construction wastewater will be generated from dewatering, personnel/equipment decontamination and run-off/run-on in bermed soil stockpile and/or excavation areas. Construction wastewater will be collected and stored on-Site in leak-tight drums, vacuum trucks or temporary storage tanks or treated by an on-Site wastewater treatment system and discharged to the adjacent NYCDEP sewer system in accordance with NYCDEP permits. If containerized, the wastewater will be sampled and submitted for analysis for disposal/discharge characterization. Based on the laboratory analytical results, the construction wastewater will be disposed off-Site at a permitted disposal/recycling facility or discharged to the public sewer system, if approved in writing by the NYCDEP. The remedial contractor will acquire any required permits.

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Liquids discharged into the New York City sewer system will be addressed through approval by NYCDEP.

Dewatered fluids will not be recharged back to the land surface or subsurface of the Site. Dewatering fluids will be managed off-Site. Discharge of water generated during remedial construction to surface waters (i.e., a local pond, stream or river) is prohibited without a SPDES permit.

5.4.8 Demarcation

After the completion of soil removal and any other invasive remedial activities and prior to backfilling, a land survey will be performed by a New York State licensed surveyor. The survey will define the top elevation of residual contaminated soils, including any excavated soil used as backfill. A physical demarcation layer, consisting of orange snow fencing material or equivalent material will be placed on this surface to provide a visual reference. This demarcation layer will constitute the top of the 'Residuals Management Zone', the zone that requires adherence to special conditions for disturbance of contaminated residual soils defined in the Site Management Plan. The survey will measure the grade covered by the demarcation layer before the placement of cover soils, pavement and sub-soils, structures, or other materials. This survey and the demarcation layer placed on this grade surface will constitute the physical and written record of the upper surface of the 'Residuals Management Zone' in the Site Management Plan. A map showing the survey results will be included in the Final Remediation Report and the Site Management Plan.

5.4.9 Backfill from Off-Site Sources

RCA will be used to backfill the bottom of the excavation to 1-foot above the water table, and will serve as the two-foot Site cover for areas without an impermeable cover (i.e., asphalt or concrete building slab). The RCA will be free from asphalt, and will meet the requirements in DER-10 Section 5.4. The RCA will be inspected prior to use on Site. If additional soil is required backfill excavated areas, the soil will meet the clean fill requirements of 6 NYCRR Part 375-6. 7(d).

All imported media will meet the specifications of the geotechnical engineer, Remedial Engineer, and Redevelopment Construction Documents.

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

Material from industrial sites, spill sites, other environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

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

All imported soils will meet NYSDEC approved backfill or cover soil quality objectives for this Site. These NYSDEC approved backfill or cover soil quality objectives are the lower of the protection of groundwater or the protection of public health soil cleanup objectives for the Site as set forth in Table 375-6.8(b) of 6 NYCRR Part 375. Non-compliant soils will not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved Remedial Action Work Plan or its approval by NYSDEC should be construed as an approval for this purpose.

Soils that meet ‘exempt’ fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Nothing in this Remedial Action Work Plan should be construed as an approval for this purpose.

Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers.

5.4.10 Stormwater Pollution Prevention

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the RAWP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the remedial construction area.

5.4.11 Contingency Plan

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

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

5.4.12 Community Air Monitoring Plan

Each of the components of the Remedial Action will require air monitoring; as these activities include excavation of soil with LNAPL and VOCs. The air monitoring program will be implemented during all ground intrusive remedial actions to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative or remedial work activities.

A Site-Specific CAMP is provided in the HASP (Appendix C). The CAMP includes real-time continuous air monitoring at the Site's downwind perimeter for VOCs and particulates. Implementation and management procedures are specified within the CAMP. During all phases of work, the remedial contractor will be responsible for mitigating any vapor and particulate issues, via suppression techniques defined in the CAMP.

Two CAMP stations will be deployed prior to the start of all ground intrusive activities. Once establishing the predominant wind direction, the location of the CAMP stations will be placed to provide a measure of protection for the downwind community (i.e., off-site residences) from potential airborne contaminant releases. A PID with a 10.6 eV lamp, such as the MiniRae 3000, will be used to monitor VOCs. A particulate monitor capable of measuring PM-10 such as the DustTrak 2 will be used to monitor dust. Each monitor will record 15-minute time weighted averages. The action level for VOCs is 5 ppm above background. At this level, odor suppression techniques will be implemented. If the VOC level does not drop, work will be stopped. The exceedance level is 25 ppm above the background. The action level for particulates is 100 mcg/m^3 above the upwind or baseline level. If 100 mcg/m^3 is reached, dust suppression techniques will be implemented. Work must be stopped at 150 mcg/m^3 above the upwind level.

The CAMP monitoring locations will be moved depending on wind directions. The location of the stations will be recorded.

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report.

5.4.13 Odor, Dust and Nuisance Control Plan

Dust will be controlled by spraying a water mist over the work area if perimeter action levels established in the CAMP are exceeded. The water mist will be generated by connecting a misting device to a hose, which will be connected to any potable water source. The degree to which these measures will be used will depend on particulate levels in ambient air at the Site perimeter as determined through implementation of the CAMP.

A vacuum truck or sump pumps will be deployed at all times during excavation at the water table to immediately remove LNAPL that may accumulate in the excavation potentially causing odors. A foam unit will also be used to suppress vapors and odors that are generated during the soil excavations if necessary.

To reduce the potential for odor generation during excavation, a tent enclosure with an air filtration unit will be used. The tent will encompass the excavation and loadout area. The tent would be closed (except for doors) and contain an air filtration system consisting of activated vapor phase carbon. A blower will create negative pressure within the tent and draw air through the activated carbon.

The foam unit, such as a Rusmar PFU-400, includes a self-contained 400-gallon tank for mixing foam concentrate. Foam will be applied, if warranted, to stockpiled soil and excavation sidewalls in an effort to maintain work zone and perimeter air monitoring criteria established in the HASP and CAMP. Alternately (or in concert with the foam machine(s)) an odor suppressant misting system will be used both within the excavation and stockpiling areas and at the perimeter to control odors and airborne VOC concentrations. Tarps will also be employed to suppress vapor and odors from stockpiled soil in the staging area.

The Final Engineering Report will include the following certification by the Remedial Engineer: "I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology defined in the Remedial Action Work Plan."

5.4.13.1 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off Site. Specific odor control methods to be used on a routine basis will include assigning a dedicated air monitoring technician to monitor odors, backfilling excavations in a timely manner, and maintaining covers over any stockpiled impacted soils. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of all other complaints about the project. Implementation of all odor controls, including the halt of work, will be the responsibility of the Applicant's Remediation Engineer, who is responsible for certifying the Final Engineering Report.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

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

5.4.13.2 Dust Control Plan

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

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

5.4.13.3 Other Nuisances

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

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

6.0 RESIDUAL CONTAMINATION TO REMAIN ON-SITE

The selected remedial alternative is designed to reduce the concentration of Site contaminants through soil excavation of the LNAPL source area followed by product recovery at the edges of the LNAPL plume that extend off-Site. While grossly contaminated soil will be removed during the RA, soil and groundwater above UUSCOs and RRSCOs is expected to remain on Site.

Since residual contaminated soil, groundwater and soil vapor will exist beneath the Site after the remedy is complete, Engineering and Institutional Controls (ECs and ICs) are required to protect human health and the environment. These ECs and ICs are described hereafter. Long-term management of EC/ICs and of residual contamination will be executed under a Site specific Site Management Plan (SMP) that will be developed and included in the FER.

ECs will be implemented to protect public health and the environment by appropriately managing residual contamination. The Controlled Property (the Site) will have three primary ECs. These are:

1. A site cover system consisting of concrete building slabs, pavement or clean fill (greater than 24-inches), and a vapor barrier for newly constructed buildings with slabs on grade;
2. LNAPL recovery using product recovery systems; and
3. ISCO treatment and groundwater monitoring.

The FER will report residual contamination on the Site in tabular and map form. This will include presentation of exceedances of both Track 1 and Track 4 sites.

The Site Management Plan will include groundwater monitoring and soil vapor monitoring. The need for additional groundwater treatment using ISCO or enhanced bioremediation will be evaluated following completion of the RA as described in the SMP. During redevelopment, the need for soil vapor mitigation will be evaluated. New buildings with occupancy and slab-on-grade design may require a vapor barrier and an SSDS. The existing Paint Factory will likely require an SSDS.

7.0 ENGINEERING CONTROLS: SITE COVER SYSTEM

A site cover will be required to allow for restricted residential and commercial use of the Site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the Site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential and commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the Site will meet the requirements for the identified Site use as set forth in 6 NYCRR Part 375-6.7(d).

The current, post remediation and possible future locations of the building slabs are as shown in Figure 2, Plate 9, and Appendix A, respectively. The existing Paint Factory will remain in place, and the existing concrete building slab will serve as the cover for that portion of the Site. The existing Warehouse building and 1-story brick building will remain after remediation is complete, but will have no occupancy. During redevelopment, these two buildings will be demolished.

In the time between the RA and redevelopment, a temporary Site cover will consist of the concrete building slabs for the Paint Factory, the 1-Story Brick Building, and the 3-Story Warehouse, pavement and/or a minimum of 2-feet of RCA.

The proposed new buildings include one slab-on-grade building and one cantilever building off of the existing Paint Factory. A vapor barrier will be installed during any redevelopment activities that require removal of the current building slab to the underlying soil. Technical information on the vapor barrier will be provided in the SMP.

As part of proposed redevelopment, the grade at the Site will be raised approximately four-feet in certain areas. Due to the increase in Site grade, the existing concrete Site cover in the courtyard will be removed in some areas during RA, and replaced with a minimum of 24 inches of RCA as a temporary cover prior to redevelopment. Details on the post-redevelopment cap will be addressed in the SMP.

A site plan detailing the specific layout of the building foundation and site cover components will be provided in the FER. A Soil and Underground Structure Management Plan will be included in the Site Management Plan and will outline the procedures to be followed in the event that the site cover system and underlying residual contamination are disturbed after the Remedial Action is complete. Maintenance of this site cover system will be described in the Site Management Plan in the FER.

8.0 ENGINEERING CONTROLS: TREATMENT SYSTEMS

8.1 IN SITU CHEMICAL OXIDATION INJECTIONS

ISCO is proposed to address VOCs in soil and groundwater underneath the Warehouse. One round of ISCO is proposed for the RA; the need for additional rounds of treatment using ISCO or enhanced bioremediation and monitoring will be evaluated and addressed in the SMP. The following sections present the detailed injection plan.

8.1.1 Chemical Oxidant Injections

As discussed above, an in situ chemical oxidation injection program will be performed to address contaminated groundwater beneath the Warehouse (Plate 9). The constituents of concern are VOCs over the Protection of Groundwater standards in soil, consisting of benzene, ethylbenzene, isopropylbenzene and xylenes. As a result, either Klozur CR as manufactured by PeroxyChem or RegenOx as manufactured by Regenesis is proposed since either will be a strong oxidant, and will enhance aerobic and anaerobic biodegradation. Product brochures of Klozur CR and RegenOx are provided in Appendix G.

Volume and density application rates for the chemical oxidant will be based on the manufacturer’s recommendations.

The chemical oxidant will be injected using approximately 12 temporary points. Due to low ceilings, the injection points in the Warehouse will likely be installed by hand; alternative methods will be considered and approved at the discretion of the engineer. Points outside the Warehouse will be much more readily accessible and installed using a geoprobe drill rig. Based on expected subsurface conditions and accessibility, the injection points will be evenly spaced as shown on Plate 9 to inject the slurry into the subsurface. The injection wells will be installed to a depth of approximately 8 ft below grade in the Warehouse (basement) and approximately 14 ft below grade outside of the Warehouse; both corresponding to approximately 6-7 ft into the water table. The depth of injection is based on exceedances of PoG SCOs for benzene, ethylbenzene, isopropylbenzene and xylenes in soil (Plate 3).

The oxidant will be pumped evenly among the injection points using a 20% to 30% oxidant solution mixed with potable water. Details regarding the chemical oxidant injection program, including, determination of the radius of influence, dosing calculations and post remedial groundwater monitoring will be provided under separate cover in a Design Report.

8.1.2 Groundwater Monitoring

To assess the performance of the oxidant injections, a groundwater monitoring program will be provided in the Design Report. This will include two components: baseline sampling and performance monitoring. Baseline sampling will be completed prior to ISCO injection implementation. Performance monitoring of water-quality indicator parameters (pH, conductivity, dissolved oxygen [DO], oxidation-reduction potential [ORP], temperature, and turbidity) will be the primary indicator of the effects of the injection solution on the groundwater.

Monitoring will include monitoring existing groundwater wells to ensure the COCs are removed to meet AWQSGVs. The sampling, sample handling, decontamination, and field instrument calibration procedures will be performed in accordance with the QAPP.

Baseline Sampling

The results of the groundwater sampling performed during the RI will be utilized as the baseline sampling. The amount of oxidant proposed is based on those sampling results.

Performance Monitoring

Approximately four weeks after the oxidant injection event, performance monitoring samples will be collected from the post remedial well network (to be provided in the Design Report). The monitoring wells will be sampled for Target Compound List (TCL) of VOCs using USEPA SW846 Method 8260.

8.1.3 Data Evaluation and Reporting

After the injection and the performance monitoring have been completed, Remedial Engineering, P.C. and Roux Associates will evaluate the results the injection round to determine the effectiveness of the oxidant at reducing the residual benzene, ethylbenzene, ispropylbenzene, and xylenes concentrations in the groundwater. The evaluation and recommended course of action will be summarized in a report to NYSDEC, and as necessary, any additional rounds of injections and monitoring will be conducted as part of the SMP.

All as-built drawings, diagrams, calculation and manufacturer documentation for treatment components will be presented in the FER.

8.2 LNAPL RECOVERY

LNAPL recovery using automatic product only pumps will be performed to collect any residual mobile LNAPL. The proposed product is the Mangum Spill Buster™ or an approved equal system. A product brochure is provided in Appendix F.

The Magnum Spill Buster™ system consists of an automated product only recovery pump designed to remove LNAPL using an auto-seeking device that allows the pump intake to automatically follow the elevation of the oil/water interface as it fluctuates. The product only recovery pump is connected to a 55-gallon drum that is stored on top of a secondary containment pallet. The 55-gallon drum is vented to the exterior (via the loading dock).

Anticipated Spill Buster locations are shown on Plate 9. Exact location may vary based on field conditions encountered during excavation. Revised locations will be approved by NYSDEC.

The Magnum Spill Buster™ will be monitored on a monthly basis following completion of the RA. The drum will be replaced if/when the drum is at 80% capacity. The product drum will be disposed of in accordance with applicable rules and regulations.

9.0 CRITERIA FOR COMPLETION OF REMEDIATION/ TERMINATION OF REMEDIAL SYSTEMS

9.1 SITE COVER SYSTEM

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

9.2 IN-SITU CHEMICAL OXIDATION

Groundwater samples will be collected four weeks following the completion of the chemical injection round. If the groundwater quality standards are not met, additional rounds of treatment and monitoring will be included as necessary under the SMP.

9.3 LNAPL RECOVERY

LNAPL recovery using product only pumps will continue until permission to discontinue use is granted in writing by NYSDEC. A proposal to discontinue product recover will be submitted to the NYSDEC after no product is recovered for 3 consecutive months. Once the system is shut down, monitoring for rebound will continue for a minimum of 4 quarters.

10.0 INSTITUTIONAL CONTROLS

After the remedy is complete, the Site will have residual contamination remaining in place. Engineering Controls (ECs) for the residual contamination have been incorporated into the remedy to render the overall Site remedy protective of public health and the environment. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a Site Management Plan. These elements are described in this Section. A Site -specific Environmental Easement will be recorded with Queens County to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all Engineering and Institutional Controls (ECs/ICs) placed on this Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. The Site Management Plan (SMP) describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

10.1 ENVIRONMENTAL EASEMENT

An Environmental Easement, as defined in Article 71 Title 36 of the Environmental Conservation Law, is required when residual contamination is left on-Site after the Remedial Action is complete. If the Site will have residual contamination after completion of all Remedial Actions than an Environmental Easement is required. As part of this remedy, an Environmental Easement approved by NYSDEC will be filed and recorded with the Queens County Clerk. The Environmental Easement will be submitted as part of the Final Remediation Report.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the Office of the City Register before the Certificate of Completion can be issued by NYSDEC. A series of Institutional Controls are required under this remedy to implement, maintain and monitor these Engineering Control systems, prevent future exposure to residual contamination by controlling disturbances of the subsurface soil and restricting the use of the Site to restricted residential use(s) only. These Institutional Controls are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement. Institutional Controls can, generally, be subdivided between controls that support Engineering Controls, and those that place general restrictions on Site usage or other requirements. Institutional Controls in both of these groups are closely integrated with the Site Management Plan, which provides all of the methods and procedures to be followed to comply with this remedy.

The Institutional Controls that support Engineering Controls are:

- Compliance with the Environmental Easement by the Grantee and the Grantee's successors and adherence of all elements of the SMP is required.
- All Engineering Controls must be operated and maintained as specified in the SMP.
- A site cover system consisting of concrete building slabs, asphalt pavement and/or a minimum of 2 feet of clean fill must be inspected, certified and maintained as required in the SMP.
- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils) will be required by the SMP.
- The need for vapor mitigation will be evaluated during redevelopment, and addressed in the SMP. If vapor mitigation is necessary, asoil vapor mitigation system consisting of a sub-slab depressurization system under all occupied building structures must be inspected, certified, operated and maintained as required by the SMP.
- Injection wells and monitoring points relating to ISCO will be installed, operated and maintained as required by the SMP.
- LNAPL recovery systems must be installed, operated and maintained as required by the SMP.
- All Engineering Controls on the Controlled Property must be inspected and certified at a frequency and in a manner defined in the SMP.
- Groundwater, soil vapor, and other environmental or public health monitoring must be performed as defined in the SMP.
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in the SMP.
- On-Site environmental monitoring devices, including but not limited to, groundwater monitor wells and soil vapor probes, must be protected and replaced as necessary to ensure proper functioning in the manner specified in the SMP.

- Engineering Controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

Adherence to these Institutional Controls for the Site is mandated by the Environmental Easement and will be implemented under the Site Management Plan (discussed in the next section). The Controlled Property (Site) will also have a series of Institutional Controls in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming on the Controlled Property are prohibited.
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose.
- All future activities on the Controlled Property that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the Site Management Plan.
- The Controlled Property may be used for restricted residential, commercial or industrial use only, provided the long-term Engineering and Institutional Controls included in the Site Management Plan are employed.
- The Controlled Property may not be used for a higher level of use, such as unrestricted or residential use without an amendment or extinguishment of the Environmental Easement.
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This statement must be certified by an expert that the NYSDEC finds acceptable.

10.2 SITE MANAGEMENT PLAN

Site Management is the last phase of remediation and begins with the approval of the Final Engineering Report and issuance of the Certificate of Completion (COC) for the Remedial Action. The Site Management Plan is submitted as part of the FER but will be written in a manner that allows its removal and use as a complete and independent document. Site Management continues in perpetuity or until released in writing by NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Environmental Easement and the Site Management Plan are performed.

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

To address these needs, this SMP will include four plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems; and (4) a Site Management Reporting Plan for submittal of data, information, recommendations, and certifications to NYSDEC. The SMP will be prepared in accordance with the requirements in NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May, 2010, and the guidelines provided by NYSDEC.

Site management activities, reporting, and EC/IC certification will be scheduled on a certification period basis. The certification period will be annually. The Site Management Plan will be based on a calendar year and will be due for submission to NYSDEC by March 1 of the year following the reporting period.

The Site Management Plan in the Final Remediation Report will include a monitoring plan for groundwater at the down-gradient Site perimeter to evaluate Site-wide performance of the remedy. Appropriately placed groundwater monitor wells will also be installed immediately down-gradient of all remediation areas for the purpose of evaluation of the effectiveness of the remedy that is implemented.

No exclusions for handling of residual contaminated soils will be provided in the Site Management Plan (SMP). All handling of residual contaminated material will be subject to provisions contained in the SMP.

11.0 FINAL ENGINEERING REPORT

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

Where determined to be necessary by NYSDEC, a Financial Assurance Plan will be required to ensure the sufficiency of revenue to perform long-term operations, maintenance and monitoring tasks defined in the Site Management Plan and Environmental Easement. This determination will be made by NYSDEC in the context of the Final Engineering Report review.

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

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

The FER will provide a thorough summary of all residual contamination left on the Site after the remedy is complete. Residual contamination includes all contamination that exceeds the Track 1 Unrestricted Use SCO in 6NYCRR Part 375-6. A table that shows exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action and a map that shows the location and summarizes exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action will be included in the FER.

The FER will provide a thorough summary of all residual contamination that exceeds the SCOs defined for the Site in the RAWP and must provide an explanation for why the material was not removed as part of the Remedial Action. A table that shows residual contamination in excess of Site SCOs and a map that shows residual contamination in excess of Site SCOs will be included in the FER.

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

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

11.1 CERTIFICATIONS

The following certification will appear in front of the Executive Summary of the Final Engineering Report. The certification will be signed by the Remedial Engineer Charles J. McGuckin who is a Professional Engineer registered in New York State. This certification will be appropriately signed and stamped. The certification will include the following statements:

> *I, Charles J. McGuckin, certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Remedial Work Plan (or Remedial Design or Plans and Specifications) was implemented and that all construction activities were completed in substantial conformance with the DER-approved Remedial Work Plan (or Remedial Design or Plans and Specifications).*

If the Remedial Action Work Plan (or Remedial Design or Plans and Specifications) identifies time frames to be achieved by the remedial program, the certification must include:

> *The data submitted to DER demonstrates that the remediation requirements set forth in the Remedial Work Plan (or Remedial Design or Plans and Specifications) and all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in the work plan (or Remedial Design or Plans and Specifications).*

If the remedial program requires ICs or ECs, the certification must include:

> *All use restrictions, institutional controls, engineering controls and/or any operation and maintenance requirements applicable to the site are contained in an environmental easement created and recorded pursuant to ECL 71-3605 and that any affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.*

If the remedial program requires applicable SMP, the certification must include:

> *A Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of any engineering controls employed at the site including the proper maintenance of any remaining monitoring wells, and that such plan has been approved by DER.*

If the remedial program requires financial assurance, the certification must include:

> *Any financial assurance mechanisms required by DEC pursuant to Environmental Conservation Law have been executed.*

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law.

12.0 SCHEDULE

The RA is scheduled to begin in September 2015, contingent on approval by the NYSDEC. The RA will be completed by December 2015. A detailed schedule of RA is provided in Figure 6.

TABLES

Table 1. Summary of Remedial Investigation Samples, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Sample Location	Depth (ft bls)	Matrix	Analyses
B-5	0 - 2	Soil	VOCs, SVOCs, Metals
B-5	3 - 5	Soil	VOCs, SVOCs, Metals
B-5	10 - 12	Soil	VOCs, SVOCs, Metals
B-5	15 - 16	Soil	VOCs, SVOCs, Metals
B-6	0 - 2	Soil	VOCs, SVOCs, Metals
B-6	7 - 9	Soil	VOCs, SVOCs, Metals
B-6	12 - 14	Soil	VOCs, SVOCs, Metals
B-6	16 - 18	Soil	VOCs, SVOCs, Metals
B-7	0 - 2	Soil	VOCs, SVOCs, Metals
B-7	5 - 7	Soil	VOCs, SVOCs, Metals
B-7	14 - 15	Soil	VOCs, SVOCs, Metals
B-8	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-8	5 - 7	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-8	9 - 11	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-9	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-9	5 - 7	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-9	7 - 9	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-9	19 - 20	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-10	0 - 2	Soil	VOCs, SVOCs, Metals
B-10	5 - 7	Soil	VOCs, SVOCs, Metals
B-10	10 - 12	Soil	VOCs, SVOCs, Metals
B-10	17.5 - 18	Soil	VOCs, SVOCs, Metals
B-11	0 - 2	Soil	VOCs, SVOCs, Metals
B-11	8 - 10	Soil	VOCs, SVOCs, Metals
B-11	11 - 13	Soil	VOCs, SVOCs, Metals
B-11	15 - 17	Soil	VOCs, SVOCs, Metals
B-12	0 - 2	Soil	VOCs, SVOCs, Metals
B-12	7 - 9	Soil	VOCs, SVOCs, Metals
B-12	12 - 14	Soil	VOCs, SVOCs, Metals
B-12	21 - 22.5	Soil	VOCs, SVOCs, Metals
B-13	0 - 2	Soil	VOCs, SVOCs, Metals
B-13	7 - 9	Soil	VOCs, SVOCs, Metals
B-13	10 - 12	Soil	VOCs, SVOCs, Metals
B-13	16 - 18	Soil	VOCs, SVOCs, Metals

Table 1. Summary of Remedial Investigation Samples, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Sample Location	Depth (ft bls)	Matrix	Analyses
B-14	0 - 2	Soil	VOCs, SVOCs, Metals
B-14	7 - 9	Soil	VOCs, SVOCs, Metals
B-14	10 - 12	Soil	VOCs, SVOCs, Metals
B-14	17 - 18.5	Soil	VOCs, SVOCs, Metals
B-15	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-15	5 - 7	Soil	VOCs, SVOCs, Metals
B-15	7 - 9	Soil	VOCs, SVOCs, Metals
B-15	10 - 11	Soil	VOCs, SVOCs, Metals
B-16	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-16	7 - 9	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-16	10 - 12	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-16	18 - 20	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-17	0 - 2	Soil	VOCs, SVOCs, Metals
B-17	7 - 9	Soil	VOCs, SVOCs, Metals
B-18	0 - 2	Soil	VOCs, SVOCs, Metals
B-18	6 - 8	Soil	VOCs, SVOCs, Metals
B-18	8 - 10	Soil	VOCs, SVOCs, Metals
B-19	0 - 2	Soil	VOCs, SVOCs, Metals
B-19	6 - 8	Soil	VOCs, SVOCs, Metals
B-19	8 - 10	Soil	VOCs, SVOCs, Metals
B-20	0 - 2	Soil	VOCs, SVOCs, Metals
B-20	5 - 7	Soil	VOCs, SVOCs, Metals
B-20	7 - 8	Soil	VOCs, SVOCs, Metals
B-21	0 - 2	Soil	VOCs, SVOCs, Metals
B-21	5 - 7	Soil	VOCs, SVOCs, Metals
B-21	7 - 8	Soil	VOCs, SVOCs, Metals
B-22	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-22 DUP	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-22	4 - 6	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-23	0 - 2	Soil	VOCs, SVOCs, Metals
B-23	2 - 4	Soil	VOCs, SVOCs, Metals
B-24	0 - 2	Soil	VOCs, SVOCs, Metals
B-24	2 - 4	Soil	VOCs, SVOCs, Metals
B-25	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides

Table 1. Summary of Remedial Investigation Samples, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Sample Location	Depth (ft bls)	Matrix	Analyses
B-25	2 - 4	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-26	0 - 2	Soil	VOCs, SVOCs, Metals
B-26	4 - 6	Soil	VOCs, SVOCs, Metals
B-27	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
B-27	4 - 6	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-1/1R	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-1/1R	3 - 5	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-1/1R	6 - 8	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-1/1R	24 - 25	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-2/2R	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-2/2R DUP	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-2/2R	6 - 8	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-2/2R	14 - 15	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-2/2R	23 - 24	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-6/6R	0 - 2	Soil	VOCs, SVOCs, Metals
MW-6/6R	9 - 11	Soil	VOCs, SVOCs, Metals
MW-6/6R	11 - 12	Soil	VOCs, SVOCs, Metals
MW-6/6R	15 - 17	Soil	VOCs, SVOCs, Metals
MW-6/6R DUP	15 - 17	Soil	VOCs, SVOCs, Metals
MW-7R	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-7R	2 - 4	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-14	0 - 2	Soil	VOCs, SVOCs, Metals
MW-14 DUP	0 - 2	Soil	VOCs, SVOCs, Metals
MW-14	7 - 9	Soil	VOCs, SVOCs, Metals
MW-14	10 - 12	Soil	VOCs, SVOCs, Metals
MW-15	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-15	6 - 8	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-15	10 - 12	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-16	0 - 2	Soil	VOCs, SVOCs, Metals
MW-16	5 - 7	Soil	VOCs, SVOCs, Metals
MW-16	10 - 12	Soil	VOCs, SVOCs, Metals
MW-16	25 - 26.5	Soil	VOCs, SVOCs, Metals
MW-17	0 - 2	Soil	VOCs, SVOCs, Metals
MW-17	5 - 7	Soil	VOCs, SVOCs, Metals

Table 1. Summary of Remedial Investigation Samples, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Sample Location	Depth (ft bls)	Matrix	Analyses
MW-17	12 - 13	Soil	VOCs, SVOCs, Metals
MW-17	23 - 24	Soil	VOCs, SVOCs, Metals
MW-18	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-18	8 - 10	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-18	12 - 14	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-18	20 - 22	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-19	0 - 2	Soil	VOCs, SVOCs, Metals
MW-19	4 - 6	Soil	VOCs, SVOCs, Metals
MW-20	0 - 2	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-20	7 - 9	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-20	12 - 14	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-20 DUP	12 - 14	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-20	18 - 19	Soil	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-21	0 - 2	Soil	VOCs, SVOCs, Metals
MW-21	5 - 7	Soil	VOCs, SVOCs, Metals
MW-21	7 - 8	Soil	VOCs, SVOCs, Metals
MW-21	18 - 20	Soil	VOCs, SVOCs, Metals
MW-22	0 - 2	Soil	VOCs, SVOCs, Metals
MW-22	7 - 9	Soil	VOCs, SVOCs, Metals
MW-22	12 - 14	Soil	VOCs, SVOCs, Metals
MW-22	18 - 20	Soil	VOCs, SVOCs, Metals
MW-23	0 - 2	Soil	VOCs, SVOCs, Metals
MW-23	5 - 7	Soil	VOCs, SVOCs, Metals
MW-23	10 - 12	Soil	VOCs, SVOCs, Metals
MW-23	18 - 19	Soil	VOCs, SVOCs, Metals
MW-1/1R	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-1/1R DUP	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-2/2R	--	Groundwater	VOCs, SVOCs, Metals
MW-4	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-5	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-7/7R	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-10	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-11	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-14	--	Groundwater	VOCs, SVOCs, Metals

Table 1. Summary of Remedial Investigation Samples, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Sample Location	Depth (ft bls)	Matrix	Analyses
MW-15	--	Groundwater	VOCs, SVOCs, Metals
MW-16	--	Groundwater	VOCs, SVOCs, Metals
MW-16 DUP	--	Groundwater	VOCs
MW-18	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-20	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-21	--	Groundwater	VOCs, SVOCs, Metals
MW-22	--	Groundwater	VOCs, SVOCs, Metals, PCBs, Pesticides
MW-24	--	Groundwater	VOCs
MW-25	--	Groundwater	VOCs
MW-27	--	Groundwater	VOCs
MW-28	--	Groundwater	VOCs
MW-34	--	Groundwater	VOCs
CT-1[1]	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
CT-4[1]	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
CT-8	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
GT-1	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
GT-2	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
GT-6	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
GT-8	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
GT-10	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
GT-11	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-3[1]	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-6R	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-8	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-9	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-12	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-13	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-17	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis
MW-23	--	LNAPL	Flash Point, Density, Viscosity, Cyanide Reactivity, Sulfide Reactivity, Corrosivity, Fingerpring Analysis

Table 2. Summary of Water Level Elevations and LNAPL Thickness
Former Paragon Paint Manufacturing Facility, Long Island City, New York

Well ID	MPE (ft)	March 20, 2013				March 14, 2014			
		DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
MW-1/1R	7.55	--	6.37	1.18	--	--	6.76	0.79	--
MW-2/2R	9.23	7.11	7.12	2.12	0.01	--	7.84	1.39	--
MW-3	8.40	6.31	6.62	2.01	0.31	7.00	7.12	1.37	0.12
MW-4	11.57	--	9.68	1.89	--	--	9.73	1.84	--
MW-5	8.35	--	5.75	2.6	--	--	6.10	2.25	--
MW-6	NM	10.00	13.60	NM	3.6	--	--	NM	--
MW-6R	11.73	--	--	--	--	10.27	13.04	2.21	2.77
MW-7	NM	1.07	1.63	NM	0.56	2.39	2.66	NM	0.27
MW-7R	4.48	--	--	--	--	--	1.36	3.12	--
MW-8	8.00	5.95	10.63	0.88	4.68	6.84	9.46	0.505	2.62
MW-9	8.81	6.91	8.76	1.4375	1.85	7.39	9.88	0.7975	2.49
MW-10	7.37	--	7.53	-0.16	--	--	6.38	0.99	--
MW-11	7.36	--	6.36	1	--	--	6.70	0.66	--
MW-12	9.12	7.81	9.16	0.97	1.35	8.31	9.69	0.465	1.38
MW-13	9.13	7.30	10.87	0.94	3.57	7.98	11.02	0.39	3.04
MW-14	11.63	--	--	--	--	--	9.55	2.08	--
MW-15	11.51	--	--	--	--	--	9.46	2.05	--
MW-16	8.55	--	--	--	--	--	7.40	1.15	--
MW-17	8.35	--	--	--	--	7.03	11.02	0.3225	3.99
MW-18	8.40	--	--	--	--	--	6.81	1.59	--
MW-19	4.41	--	--	--	--	1.96	2.01	2.4375	0.05
MW-20	11.69	--	--	--	--	--	9.85	1.84	--
MW-21	8.17	--	--	--	--	--	6.44	1.73	--
MW-22	11.63	--	--	--	--	--	9.79	1.84	--
MW-23	8.27	--	--	--	--	7.02	10.13	0.4725	3.11
MW-24	8.86	--	--	--	--	--	--	--	--
MW-25	9.29	--	--	--	--	--	--	--	--
MW-27	9.55	--	--	--	--	--	--	--	--
MW-28	9.10	--	--	--	--	--	--	--	--
MW-30	8.70	--	--	--	--	--	--	--	--
MW-31	9.27	--	--	--	--	--	--	--	--
MW-32	7.76	--	--	--	--	--	--	--	--
MW-33	9.06	--	--	--	--	--	--	--	--
MW-34	8.43	--	--	--	--	--	--	--	--
MW-35	NM	--	--	--	--	--	--	--	--
MW-36	9.11	--	--	--	--	--	--	--	--
MW-37	4.45	--	--	--	--	--	--	--	--
MW-38	4.44	--	--	--	--	--	--	--	--

Notes:

LNAPL - light non-aqueous phase liquid

MPE - measuring point elevation (top of well casing)

DTW - depth to water

DTP - depth to product

GWE - groundwater elevation (corrected for presence of LNAPL when applicable[1])

FPT - free product thickness

NM - not measured

1 - for wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:

Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)

Assumes a specific gravity of 0.75

Table 2. Summary of Water Level Elevations and LNAPL Thickness
Former Paragon Paint Manufacturing Facility, Long Island City, New York

Well ID	January 9, 2015			
	DTP (ft)	DTW (ft)	GWE (ft)	FPT (ft)
MW-1/1R	--	6.62	0.93	--
MW-2/2R	--	7.14	2.09	--
MW-3	6.67	6.74	1.71	0.07
MW-4	--	9.62	1.95	--
MW-5	--	6.1	2.25	--
MW-6	10.04	13.72	NM	3.68
MW-6R	9.87	11.93	1.345	2.06
MW-7	1.78	2.14	NM	0.36
MW-7R	--	1.06	3.42	--
MW-8	6.08	10.45	0.83	4.37
MW-9	6.94	7.93	1.62	0.99
MW-10	--	7.55	-0.18	--
MW-11	--	6.52	0.84	--
MW-12	9.13	10.81	-0.43	1.68
MW-13	7.90	9.49	0.83	1.59
MW-14	--	9.35	2.28	--
MW-15	--	9.26	2.25	--
MW-16	--	6.12	2.43	--
MW-17	6.86	6.89	1.48	0.03
MW-18	--	6.68	1.72	--
MW-19	--	1.02	3.39	--
MW-20	--	9.74	1.95	--
MW-21	--	6.11	2.06	--
MW-22	--	9.66	1.97	--
MW-23	6.46	8.41	1.32	1.95
MW-24	--	6.36	2.5	--
MW-25	--	6.88	2.41	--
MW-27	--	7.29	2.26	--
MW-28	--	6.75	2.35	--
MW-30	--	7.06	1.64	--
MW-31	8.00	8.21	1.22	0.21
MW-32		6.18	1.58	--
MW-33	7.39	8.20	1.47	0.81
MW-34	--	6.76	1.67	--
MW-35	7.68	7.79	NM	0.11
MW-36	--	7.07	2.04	--
MW-37	--	1.02	3.43	--
MW-38	--	NM	NM	--

Notes:
LNAPL - light non-aqueous phase liquid
MPE - measuring point elevation (top of well casing)
DTW - depth to water
DTP - depth to product
GWE - groundwater elevation (corrected for presence of LNAPL when applicable[1])
FPT - free product thickness
NM - not measured
1 - for wells that contained LNAPL the following formula was used to calculate the corrected water table elevation:
Corrected GWE = MPE - DTW + (LNAPL thickness * LNAPL specific gravity)
Assumes a specific gravity of 0.75

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-5	B-5	B-5	B-5	B-6
				Sample Date:	12/31/2013	12/31/2013	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	0 - 2	3 - 5	10 - 12	15 - 16	0 - 2
1,1,1-Trichloroethane	100000	680	680		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
1,1,2-Trichloroethane	--	--	--		1.8 U	2 U	4600 UD	1.7 U	1.7 U
1,1-Dichloroethane	26000	270	270		1.8 U	2 U	4600 UD	1.7 U	1.7 U
1,1-Dichloroethene	100000	330	330		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
1,2,3-Trichlorobenzene	--	--	--		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
1,2,4-Trichlorobenzene	--	--	--		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
1,2-Dibromoethane	--	--	--		4.9 U	5.4 U	12000 UD	4.5 U	4.6 U
1,2-Dichlorobenzene	100000	1100	1100		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
1,2-Dichloroethane	3100	20	20		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
1,2-Dichloropropane	--	--	--		4.3 U	4.7 U	11000 UD	3.9 U	4 U
1,3-Dichlorobenzene	49000	2400	2400		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
1,4-Dichlorobenzene	13000	1800	1800		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
1,4-Dioxane	13000	100	100		120 U	130 U	310000 UD	110 U	110 U
2-Butanone (MEK)	100000	120	120		12 U	4 J	31000 UD	11 U	3.8 J
2-Hexanone	--	--	--		12 U	13 U	31000 UD	11 U	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		12 U	13 U	31000 UD	11 U	11 U
Acetone	100000	50	50		6.2 J	24	31000 UD	4.1 J	43
Benzene	4800	60	60		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Bromochloromethane	--	--	--		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
Bromodichloromethane	--	--	--		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Bromoform	--	--	--		4.9 U	5.4 U	12000 UD	4.5 U	4.6 U
Bromomethane	--	--	--		2.4 U	2.7 U	6200 UD	2.2 U	2.3 U
Carbon disulfide	--	--	--		12 U	13 U	31000 UD	11 U	11 U
Carbon tetrachloride	2400	760	760		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Chlorobenzene	100000	1100	1100		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Chloroethane	--	--	--		2.4 U	2.7 U	6200 UD	2.2 U	2.3 U
Chloroform	49000	370	370		1.8 U	2 U	4600 UD	1.7 U	1.7 U
Chloromethane	--	--	--		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
cis-1,2-Dichloroethene	100000	250	250		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
cis-1,3-Dichloropropene	--	--	--		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Dibromochloromethane	--	--	--		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Dibromochloropropane	--	--	--		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
Dichlorodifluoromethane	--	--	--		12 U	13 U	31000 UD	11 U	11 U
Ethylbenzene	41000	1000	1000		1.2 U	1.3 U	$\boxed{8900 D}$	1.1 U	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater		B-5	B-5	B-5	B-5	B-6
				Sample Designation:	B-5	B-5	B-5	B-5	B-6
				Sample Date:	12/31/2013	12/31/2013	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	0 - 2	3 - 5	10 - 12	15 - 16	0 - 2
Freon 113	--	--	--		24 U	27 U	62000 UD	22 U	23 U
Isopropylbenzene	--	--	2300*		1.2 U	1.3 U	11000 D	1.1 U	1.1 U
m+p-Xylene	--	--	--		2.4 U	2.7 U	7400 D	2.2 U	2.3 U
Methylene chloride	100000	50	50		12 U	13 U	31000 UD	11 U	11 U
MTBE	100000	930	930		2.4 U	2.7 U	6200 UD	2.2 U	2.3 U
o-Xylene	--	--	--		2.4 U	2.7 U	4400 JD	2.2 U	2.3 U
Styrene	--	--	--		2.4 U	2.7 U	6200 UD	2.2 U	2.3 U
Tetrachloroethene	19000	1300	1300		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Toluene	100000	700	700		1.8 U	2 U	4600 UD	1.7 U	1.7 U
trans-1,2-Dichloroethene	100000	190	190		1.8 U	2 U	4600 UD	1.7 U	1.7 U
trans-1,3-Dichloropropene	--	--	--		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Trichloroethene	21000	470	470		1.2 U	1.3 U	3100 UD	1.1 U	1.1 U
Trichlorofluoromethane	--	--	--		6.1 U	6.7 U	16000 UD	5.6 U	5.7 U
Vinyl chloride	900	20	20		2.4 U	2.7 U	6200 UD	2.2 U	2.3 U
Xylenes (total)	100000	260	1600		2.4 U	2.7 U	11800 D	2.2 U	2.3 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-6 1/17/2014 7 - 9	B-6 1/17/2014 12 - 14	B-6 1/17/2014 16 - 18	B-7 12/30/2013 0 - 2	B-7 12/30/2013 5 - 7
1,1,1-Trichloroethane	100000	680	680		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
1,1,2,2-Tetrachloroethane	--	--	--		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
1,1,2-Trichloroethane	--	--	--		1700 UD	9000 UD	8800 UD	1.8 U	9.4 UD
1,1-Dichloroethane	26000	270	270		1700 UD	9000 UD	8800 UD	1.8 U	9.4 UD
1,1-Dichloroethene	100000	330	330		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
1,2,3-Trichlorobenzene	--	--	--		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
1,2,4-Trichlorobenzene	--	--	--		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
1,2-Dibromoethane	--	--	--		4500 UD	24000 UD	23000 UD	4.8 U	25 UD
1,2-Dichlorobenzene	100000	1100	1100		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
1,2-Dichloroethane	3100	20	20		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
1,2-Dichloropropane	--	--	--		3900 UD	21000 UD	20000 UD	4.2 U	22 UD
1,3-Dichlorobenzene	49000	2400	2400		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
1,4-Dichlorobenzene	13000	1800	1800		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
1,4-Dioxane	13000	100	100		110000 UD	600000 UD	580000 UD	120 U	620 UD
2-Butanone (MEK)	100000	120	120		11000 UD	60000 UD	58000 UD	22 D	26 JD
2-Hexanone	--	--	--		11000 UD	60000 UD	58000 UD	12 U	62 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		11000 UD	60000 UD	58000 UD	12 U	62 UD
Acetone	100000	50	50		11000 UD	60000 UD	58000 UD	1200 D	240 D
Benzene	4800	60	60		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Bromochloromethane	--	--	--		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
Bromodichloromethane	--	--	--		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Bromoform	--	--	--		4500 UD	24000 UD	23000 UD	4.8 U	25 UD
Bromomethane	--	--	--		2200 UD	12000 UD	12000 UD	2.4 U	12 UD
Carbon disulfide	--	--	--		11000 UD	60000 UD	58000 UD	12 U	62 UD
Carbon tetrachloride	2400	760	760		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Chlorobenzene	100000	1100	1100		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Chloroethane	--	--	--		2200 UD	12000 UD	12000 UD	2.4 U	12 UD
Chloroform	49000	370	370		1700 UD	9000 UD	8800 UD	1.8 U	9.4 UD
Chloromethane	--	--	--		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
cis-1,2-Dichloroethene	100000	250	250		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
cis-1,3-Dichloropropene	--	--	--		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Dibromochloromethane	--	--	--		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Dibromochloropropane	--	--	--		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
Dichlorodifluoromethane	--	--	--		11000 UD	60000 UD	58000 UD	12 U	62 UD
Ethylbenzene	41000	1000	1000		1100 UD	11000 D	26000 D	1.2 U	6.2 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater						
				Sample Designation:	B-6	B-6	B-6	B-7	B-7
				Sample Date:	1/17/2014	1/17/2014	1/17/2014	12/30/2013	12/30/2013
				Sample Depth (ft bls):	7 - 9	12 - 14	16 - 18	0 - 2	5 - 7
Freon 113	--	--	--		22000 UD	120000 UD	120000 UD	24 U	120 UD
Isopropylbenzene	--	--	2300*		1200 D	38000 D	76000 D	1.2 U	200 D
m+p-Xylene	--	--	--		840 JD	32000 D	77000 D	2.4 U	12 UD
Methylene chloride	100000	50	50		11000 UD	60000 UD	58000 UD	12 U	62 UD
MTBE	100000	930	930		2200 UD	12000 UD	12000 UD	2.4 U	12 UD
o-Xylene	--	--	--		2200 UD	12000 UD	12000 UD	2.4 U	12 UD
Styrene	--	--	--		2200 UD	12000 UD	12000 UD	2.4 U	12 UD
Tetrachloroethene	19000	1300	1300		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Toluene	100000	700	700		1700 UD	9000 UD	8800 UD	1.8 U	9.4 UD
trans-1,2-Dichloroethene	100000	190	190		1700 UD	9000 UD	8800 UD	1.8 U	9.4 UD
trans-1,3-Dichloropropene	--	--	--		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Trichloroethene	21000	470	470		1100 UD	6000 UD	5800 UD	1.2 U	6.2 UD
Trichlorofluoromethane	--	--	--		5600 UD	30000 UD	29000 UD	5.9 U	31 UD
Vinyl chloride	900	20	20		2200 UD	12000 UD	12000 UD	2.4 U	12 UD
Xylenes (total)	100000	260	1600		840 JD	32000 D	77000 D	2.4 U	12 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-7	B-8	B-8	B-8	B-9
				Sample Date:	12/30/2013	12/30/2013	12/30/2013	12/30/2013	12/16/2013
				Sample Depth (ft bls):	14 - 15	0 - 2	5 - 7	9 - 11	0 - 2
1,1,1-Trichloroethane	100000	680	680		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
1,1,2-Trichloroethane	--	--	--		4200 UD	1.7 U	1.8 U	1900 UD	1.6 U
1,1-Dichloroethane	26000	270	270		4200 UD	1.7 U	1.8 U	1900 UD	1.6 U
1,1-Dichloroethene	100000	330	330		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
1,2,3-Trichlorobenzene	--	--	--		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
1,2,4-Trichlorobenzene	--	--	--		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
1,2-Dibromoethane	--	--	--		11000 UD	4.5 U	4.8 U	5100 UD	4.4 U
1,2-Dichlorobenzene	100000	1100	1100		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
1,2-Dichloroethane	3100	20	20		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
1,2-Dichloropropane	--	--	--		9800 UD	4 U	4.2 U	4400 UD	3.8 U
1,3-Dichlorobenzene	49000	2400	2400		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
1,4-Dichlorobenzene	13000	1800	1800		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
1,4-Dioxane	13000	100	100		280000 UD	110 U	120 U	130000 UD	110 U
2-Butanone (MEK)	100000	120	120		28000 UD	8.9 J	13	13000 UD	10 J
2-Hexanone	--	--	--		28000 UD	11 U	12 U	13000 UD	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		28000 UD	11 U	12 U	13000 UD	11 U
Acetone	100000	50	50		28000 UD	90	90	13000 UD	86
Benzene	4800	60	60		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Bromochloromethane	--	--	--		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
Bromodichloromethane	--	--	--		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Bromoform	--	--	--		11000 UD	4.5 U	4.8 U	5100 UD	4.4 U
Bromomethane	--	--	--		5600 UD	2.3 U	2.4 U	2500 UD	2.2 U
Carbon disulfide	--	--	--		28000 UD	11 U	12 U	13000 UD	11 U
Carbon tetrachloride	2400	760	760		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Chlorobenzene	100000	1100	1100		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Chloroethane	--	--	--		5600 UD	2.3 U	2.4 U	2500 UD	2.2 U
Chloroform	49000	370	370		4200 UD	1.7 U	1.8 U	1900 UD	1.6 U
Chloromethane	--	--	--		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
cis-1,2-Dichloroethene	100000	250	250		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
cis-1,3-Dichloropropene	--	--	--		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Dibromochloromethane	--	--	--		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Dibromochloropropane	--	--	--		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
Dichlorodifluoromethane	--	--	--		28000 UD	11 U	12 U	13000 UD	11 U
Ethylbenzene	41000	1000	1000		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2
Freon 113	--	--	--		56000 UD	23 U	24 U	25000 UD	22 U
Isopropylbenzene	--	--	2300*		$\boxed{9900 D}$	1.1 U	1.2 U	1300 UD	1.1 U
m+p-Xylene	--	--	--		5600 UD	2.3 U	2.4 U	2500 UD	0.95 J
Methylene chloride	100000	50	50		28000 UD	11 U	12 U	13000 UD	5.4 J
MTBE	100000	930	930		5600 UD	2.3 U	2.4 U	2500 UD	2.2 U
o-Xylene	--	--	--		5600 UD	2.3 U	2.4 U	2500 UD	2.2 U
Styrene	--	--	--		5600 UD	2.3 U	2.4 U	2500 UD	2.2 U
Tetrachloroethene	19000	1300	1300		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Toluene	100000	700	700		4200 UD	1.7 U	1.8 U	1900 UD	1.6 U
trans-1,2-Dichloroethene	100000	190	190		4200 UD	1.7 U	1.8 U	1900 UD	1.6 U
trans-1,3-Dichloropropene	--	--	--		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Trichloroethene	21000	470	470		2800 UD	1.1 U	1.2 U	1300 UD	1.1 U
Trichlorofluoromethane	--	--	--		14000 UD	5.7 U	5.9 U	6400 UD	5.5 U
Vinyl chloride	900	20	20		5600 UD	2.3 U	2.4 U	2500 UD	2.2 U
Xylenes (total)	100000	260	1600		5600 UD	2.3 U	2.4 U	2500 UD	0.95 J

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-9	B-9	B-9	B-10	B-10
				Sample Date:	12/16/2013	12/16/2013	12/16/2013	12/20/2013	12/20/2013
				Sample Depth (ft bls):	5 - 7	7 - 9	19 - 20	0 - 2	5 - 7
1,1,1-Trichloroethane	100000	680	680		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
1,1,2-Trichloroethane	--	--	--		1.7 U	1900 UD	1.7 U	1.8 U	1.8 U
1,1-Dichloroethane	26000	270	270		1.7 U	1900 UD	1.7 U	1.8 U	1.8 U
1,1-Dichloroethene	100000	330	330		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
1,2,3-Trichlorobenzene	--	--	--		5.6 U	6300 UD	5.6 U	5.9 U	6 U
1,2,4-Trichlorobenzene	--	--	--		5.6 U	6300 UD	5.6 U	5.9 U	6 U
1,2-Dibromoethane	--	--	--		4.5 U	5100 UD	4.5 U	4.7 U	4.8 U
1,2-Dichlorobenzene	100000	1100	1100		5.6 U	6300 UD	5.6 U	5.9 U	6 U
1,2-Dichloroethane	3100	20	20		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
1,2-Dichloropropane	--	--	--		3.9 U	4400 UD	3.9 U	4.1 U	4.2 U
1,3-Dichlorobenzene	49000	2400	2400		5.6 U	6300 UD	5.6 U	5.9 U	6 U
1,4-Dichlorobenzene	13000	1800	1800		5.6 U	6300 UD	5.6 U	5.9 U	6 U
1,4-Dioxane	13000	100	100		110 U	130000 UD	110 U	120 U	120 U
2-Butanone (MEK)	100000	120	120		11 U	13000 UD	11 U	12 U	12 U
2-Hexanone	--	--	--		11 U	13000 UD	11 U	12 U	12 U
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U	13000 UD	11 U	12 U	12 U
Acetone	100000	50	50		21	13000 UD	7.6 J	9.4 J	10 J
Benzene	4800	60	60		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Bromochloromethane	--	--	--		5.6 U	6300 UD	5.6 U	5.9 U	6 U
Bromodichloromethane	--	--	--		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Bromoform	--	--	--		4.5 U	5100 UD	4.5 U	4.7 U	4.8 U
Bromomethane	--	--	--		2.2 U	2500 UD	2.2 U	2.3 U	2.4 U
Carbon disulfide	--	--	--		11 U	13000 UD	11 U	12 U	12 U
Carbon tetrachloride	2400	760	760		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Chlorobenzene	100000	1100	1100		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Chloroethane	--	--	--		2.2 U	2500 UD	2.2 U	2.3 U	2.4 U
Chloroform	49000	370	370		1.7 U	1900 UD	1.7 U	1.8 U	1.8 U
Chloromethane	--	--	--		5.6 U	6300 UD	5.6 U	5.9 U	6 U
cis-1,2-Dichloroethene	100000	250	250		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
cis-1,3-Dichloropropene	--	--	--		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Dibromochloromethane	--	--	--		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Dibromochloropropane	--	--	--		5.6 U	6300 UD	5.6 U	5.9 U	6 U
Dichlorodifluoromethane	--	--	--		11 U	13000 UD	11 U	12 U	12 U
Ethylbenzene	41000	1000	1000		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-9 12/16/2013 5 - 7	B-9 12/16/2013 7 - 9	B-9 12/16/2013 19 - 20	B-10 12/20/2013 0 - 2	B-10 12/20/2013 5 - 7
Freon 113	--	--	--		22 U	25000 UD	22 U	23 U	24 U
Isopropylbenzene	--	--	2300*		3.7	1400 D	5.2	1.2 U	1.2 U
m+p-Xylene	--	--	--		1 J	2500 UD	4.3	2.3 U	2.4 U
Methylene chloride	100000	50	50		5.4 J	13000 UD	11 U	12 U	12 U
MTBE	100000	930	930		2.2 U	2500 UD	2.2 U	2.3 U	2.4 U
o-Xylene	--	--	--		1.3 J	2500 UD	2.2 U	2.3 U	2.4 U
Styrene	--	--	--		2.2 U	1500 JD	2.2 U	2.3 U	2.4 U
Tetrachloroethene	19000	1300	1300		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Toluene	100000	700	700		1.7 U	1900 UD	1.7 U	1.8 U	1.8 U
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1900 UD	1.7 U	1.8 U	1.8 U
trans-1,3-Dichloropropene	--	--	--		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Trichloroethene	21000	470	470		1.1 U	1300 UD	1.1 U	1.2 U	1.2 U
Trichlorofluoromethane	--	--	--		5.6 U	6300 UD	5.6 U	5.9 U	6 U
Vinyl chloride	900	20	20		2.2 U	2500 UD	2.2 U	2.3 U	2.4 U
Xylenes (total)	100000	260	1600		2.3 J	2500 UD	4.3	2.3 U	2.4 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-10 / 12/20/2013 / 10 - 12	B-10 / 12/20/2013 / 17.5 - 18	B-11 / 1/2/2014 / 0 - 2	B-11 / 1/6/2014 / 8 - 10	B-11 / 1/6/2014 / 11 - 13
1,1,1-Trichloroethane	100000	680	680		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
1,1,2,2-Tetrachloroethane	--	--	--		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
1,1,2-Trichloroethane	--	--	--		4900 UD	1.7 U	1.7 U	100 UD	1900 UD
1,1-Dichloroethane	26000	270	270		4900 UD	1.7 U	1.7 U	100 UD	1900 UD
1,1-Dichloroethene	100000	330	330		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
1,2,3-Trichlorobenzene	--	--	--		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
1,2,4-Trichlorobenzene	--	--	--		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
1,2-Dibromoethane	--	--	--		13000 UD	4.5 U	4.6 U	270 UD	5100 UD
1,2-Dichlorobenzene	100000	1100	1100		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
1,2-Dichloroethane	3100	20	20		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
1,2-Dichloropropane	--	--	--		12000 UD	3.9 U	4 U	230 UD	4500 UD
1,3-Dichlorobenzene	49000	2400	2400		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
1,4-Dichlorobenzene	13000	1800	1800		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
1,4-Dioxane	13000	100	100		330000 UD	110 U	110 U	6700 UD	130000 UD
2-Butanone (MEK)	100000	120	120		33000 UD	11 U	11 U	670 UD	13000 UD
2-Hexanone	--	--	--		33000 UD	11 U	11 U	670 UD	13000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		33000 UD	11 U	11 U	670 UD	13000 UD
Acetone	100000	50	50		33000 UD	25	11 U	670 UD	13000 UD
Benzene	4800	60	60		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Bromochloromethane	--	--	--		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
Bromodichloromethane	--	--	--		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Bromoform	--	--	--		13000 UD	4.5 U	4.6 U	270 UD	5100 UD
Bromomethane	--	--	--		6600 UD	2.2 U	2.3 U	130 UD	2600 UD
Carbon disulfide	--	--	--		33000 UD	11 U	11 U	670 UD	13000 UD
Carbon tetrachloride	2400	760	760		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Chlorobenzene	100000	1100	1100		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Chloroethane	--	--	--		6600 UD	2.2 U	2.3 U	130 UD	2600 UD
Chloroform	49000	370	370		4900 UD	1.7 U	1.7 U	100 UD	1900 UD
Chloromethane	--	--	--		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
cis-1,2-Dichloroethene	100000	250	250		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
cis-1,3-Dichloropropene	--	--	--		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Dibromochloromethane	--	--	--		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Dibromochloropropane	--	--	--		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
Dichlorodifluoromethane	--	--	--		33000 UD	11 U	11 U	670 UD	13000 UD
Ethylbenzene	41000	1000	1000		5800 D	1.1 U	1.1 U	67 UD	1300 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-10 12/20/2013 10 - 12	B-10 12/20/2013 17.5 - 18	B-11 1/2/2014 0 - 2	B-11 1/6/2014 8 - 10	B-11 1/6/2014 11 - 13
Freon 113	--	--	--		66000 UD	22 U	23 U	1300 UD	26000 UD
Isopropylbenzene	--	--	2300*		9200 D	1.1 U	1.1 U	120 D	3200 D
m+p-Xylene	--	--	--		14000 D	2.2 U	2.3 U	130 UD	2600 UD
Methylene chloride	100000	50	50		33000 UD	11 U	11 U	670 UD	13000 UD
MTBE	100000	930	930		6600 UD	2.2 U	2.3 U	130 UD	2600 UD
o-Xylene	--	--	--		8000 D	2.2 U	2.3 U	130 UD	2600 UD
Styrene	--	--	--		6600 UD	2.2 U	2.3 U	130 UD	2600 UD
Tetrachloroethene	19000	1300	1300		3300 UD	1.1 U	1.1 U	47 JD	1300 UD
Toluene	100000	700	700		4900 UD	1.7 U	1.7 U	100 UD	1900 UD
trans-1,2-Dichloroethene	100000	190	190		4900 UD	1.7 U	1.7 U	100 UD	1900 UD
trans-1,3-Dichloropropene	--	--	--		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Trichloroethene	21000	470	470		3300 UD	1.1 U	1.1 U	67 UD	1300 UD
Trichlorofluoromethane	--	--	--		16000 UD	5.6 U	5.7 U	330 UD	6400 UD
Vinyl chloride	900	20	20		6600 UD	2.2 U	2.3 U	130 UD	2600 UD
Xylenes (total)	100000	260	1600		22000 D	2.2 U	2.3 U	130 UD	2600 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-11 / 1/6/2014 / 15 - 17	B-12 / 12/19/2013 / 0 - 2	B-12 / 1/15/2014 / 7 - 9	B-12 / 1/15/2014 / 12 - 14	B-12 / 1/15/2014 / 21 - 22.5
1,1,1-Trichloroethane	100000	680	680		1.2 U	1 U	1.1 U	61 UD	1.2 U
1,1,2,2-Tetrachloroethane	--	--	--		1.2 U	1 U	1.1 U	61 UD	1.2 U
1,1,2-Trichloroethane	--	--	--		1.7 U	1.6 U	1.6 U	92 UD	1.8 U
1,1-Dichloroethane	26000	270	270		1.7 U	1.6 U	1.6 U	92 UD	1.8 U
1,1-Dichloroethene	100000	330	330		1.2 U	1 U	1.1 U	61 UD	1.2 U
1,2,3-Trichlorobenzene	--	--	--		5.8 U	5.2 U	5.4 U	310 UD	6 U
1,2,4-Trichlorobenzene	--	--	--		5.8 U	5.2 U	5.4 U	310 UD	6 U
1,2-Dibromoethane	--	--	--		4.6 U	4.1 U	4.3 U	240 UD	4.8 U
1,2-Dichlorobenzene	100000	1100	1100		5.8 U	5.2 U	5.4 U	310 UD	6 U
1,2-Dichloroethane	3100	20	20		1.2 U	1 U	1.1 U	61 UD	1.2 U
1,2-Dichloropropane	--	--	--		4.1 U	3.6 U	3.8 U	210 UD	4.2 U
1,3-Dichlorobenzene	49000	2400	2400		5.8 U	5.2 U	5.4 U	310 UD	6 U
1,4-Dichlorobenzene	13000	1800	1800		5.8 U	5.2 U	5.4 U	310 UD	6 U
1,4-Dioxane	13000	100	100		120 U	100 U	110 U	6100 UD	120 U
2-Butanone (MEK)	100000	120	120		12 U	10 U	11 U	610 UD	2.6 J
2-Hexanone	--	--	--		12 U	10 U	11 U	610 UD	12 U
4-Methyl-2-pentanone (MIBK)	--	--	--		12 U	10 U	11 U	610 UD	12 U
Acetone	100000	50	50		7.9 J	10 U	4.3 J	610 UD	18
Benzene	4800	60	60		1.2 U	1 U	1.1 U	61 UD	1.2 U
Bromochloromethane	--	--	--		5.8 U	5.2 U	5.4 U	310 UD	6 U
Bromodichloromethane	--	--	--		1.2 U	1 U	1.1 U	61 UD	1.2 U
Bromoform	--	--	--		4.6 U	4.1 U	4.3 U	240 UD	4.8 U
Bromomethane	--	--	--		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
Carbon disulfide	--	--	--		12 U	10 U	11 U	610 UD	12 U
Carbon tetrachloride	2400	760	760		1.2 U	1 U	1.1 U	61 UD	1.2 U
Chlorobenzene	100000	1100	1100		1.2 U	1 U	1.1 U	61 UD	1.2 U
Chloroethane	--	--	--		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
Chloroform	49000	370	370		1.7 U	1.6 U	1.6 U	92 UD	1.8 U
Chloromethane	--	--	--		5.8 U	5.2 U	5.4 U	310 UD	6 U
cis-1,2-Dichloroethene	100000	250	250		1.2 U	1 U	1.1 U	61 UD	1.2 U
cis-1,3-Dichloropropene	--	--	--		1.2 U	1 U	1.1 U	61 UD	1.2 U
Dibromochloromethane	--	--	--		1.2 U	1 U	1.1 U	61 UD	1.2 U
Dibromochloropropane	--	--	--		5.8 U	5.2 U	5.4 U	310 UD	6 U
Dichlorodifluoromethane	--	--	--		12 U	10 U	11 U	610 UD	12 U
Ethylbenzene	41000	1000	1000		1.2 U	1 U	1.1 U	61 UD	1.2 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater						
				Sample Designation:	B-11	B-12	B-12	B-12	B-12
				Sample Date:	1/6/2014	12/19/2013	1/15/2014	1/15/2014	1/15/2014
				Sample Depth (ft bls):	15 - 17	0 - 2	7 - 9	12 - 14	21 - 22.5
Freon 113	--	--	--		23 U	21 U	22 U	1200 UD	24 U
Isopropylbenzene	--	--	2300*		3.3	1 U	1.1 U	61 UD	1.2 U
m+p-Xylene	--	--	--		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
Methylene chloride	100000	50	50		12 U	10 U	11 U	610 UD	12 U
MTBE	100000	930	930		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
o-Xylene	--	--	--		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
Styrene	--	--	--		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
Tetrachloroethene	19000	1300	1300		1.2 U	1 U	1.1 U	61 UD	1.2 U
Toluene	100000	700	700		1.7 U	1.6 U	1.6 U	92 UD	1.8 U
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.6 U	1.6 U	92 UD	1.8 U
trans-1,3-Dichloropropene	--	--	--		1.2 U	1 U	1.1 U	61 UD	1.2 U
Trichloroethene	21000	470	470		1.2 U	1 U	1.1 U	61 UD	1.2 U
Trichlorofluoromethane	--	--	--		5.8 U	5.2 U	5.4 U	310 UD	6 U
Vinyl chloride	900	20	20		2.3 U	2.1 U	2.2 U	120 UD	2.4 U
Xylenes (total)	100000	260	1600		2.3 U	2.1 U	2.2 U	120 UD	2.4 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	B-13 12/19/2013 0 - 2	B-13 1/15/2014 7 - 9	B-13 1/15/2014 10 - 12	B-13 1/15/2014 16 - 18	B-14 12/19/2013 0 - 2
1,1,1-Trichloroethane	100000	680	680		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
1,1,2-Trichloroethane	--	--	--		1.7 U	1.7 U	1.9 U	1800 UD	1.7 U
1,1-Dichloroethane	26000	270	270		1.7 U	1.7 U	1.9 U	1800 UD	1.7 U
1,1-Dichloroethene	100000	330	330		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
1,2,3-Trichlorobenzene	--	--	--		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
1,2,4-Trichlorobenzene	--	--	--		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
1,2-Dibromoethane	--	--	--		4.6 U	4.6 U	5.2 U	4700 UD	4.5 U
1,2-Dichlorobenzene	100000	1100	1100		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
1,2-Dichloroethane	3100	20	20		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
1,2-Dichloropropane	--	--	--		4 U	4 U	4.5 U	4100 UD	3.9 U
1,3-Dichlorobenzene	49000	2400	2400		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
1,4-Dichlorobenzene	13000	1800	1800		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
1,4-Dioxane	13000	100	100		110 U	110 U	130 U	120000 UD	110 U
2-Butanone (MEK)	100000	120	120		11 U	11 U	13 U	1900 JD	11 U
2-Hexanone	--	--	--		11 U	11 U	13 U	12000 UD	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U	11 U	13 U	12000 UD	11 U
Acetone	100000	50	50		7.8 J	6.3 J	5.1 J	4800 JD	11 U
Benzene	4800	60	60		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Bromochloromethane	--	--	--		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
Bromodichloromethane	--	--	--		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Bromoform	--	--	--		4.6 U	4.6 U	5.2 U	4700 UD	4.5 U
Bromomethane	--	--	--		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
Carbon disulfide	--	--	--		11 U	11 U	13 U	12000 UD	11 U
Carbon tetrachloride	2400	760	760		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Chlorobenzene	100000	1100	1100		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Chloroethane	--	--	--		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
Chloroform	49000	370	370		1.7 U	1.7 U	1.9 U	1800 UD	1.7 U
Chloromethane	--	--	--		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
cis-1,2-Dichloroethene	100000	250	250		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
cis-1,3-Dichloropropene	--	--	--		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Dibromochloromethane	--	--	--		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Dibromochloropropane	--	--	--		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
Dichlorodifluoromethane	--	--	--		11 U	11 U	13 U	12000 UD	11 U
Ethylbenzene	41000	1000	1000		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-13	B-13	B-13	B-13	B-14
				Sample Date:	12/19/2013	1/15/2014	1/15/2014	1/15/2014	12/19/2013
				Sample Depth (ft bls):	0 - 2	7 - 9	10 - 12	16 - 18	0 - 2
Freon 113	--	--	--		23 U	23 U	26 U	23000 UD	22 U
Isopropylbenzene	--	--	2300*		1.1 U	1.2	77	$\boxed{6000 D}$	1.1 U
m+p-Xylene	--	--	--		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
Methylene chloride	100000	50	50		2.4 J	11 U	13 U	12000 UD	11 U
MTBE	100000	930	930		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
o-Xylene	--	--	--		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
Styrene	--	--	--		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
Tetrachloroethene	19000	1300	1300		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Toluene	100000	700	700		1.7 U	1.7 U	1.9 U	1800 UD	1.7 U
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.7 U	1.9 U	1800 UD	1.7 U
trans-1,3-Dichloropropene	--	--	--		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Trichloroethene	21000	470	470		1.1 U	1.1 U	1.3 U	1200 UD	1.1 U
Trichlorofluoromethane	--	--	--		5.7 U	5.7 U	6.4 U	5800 UD	5.6 U
Vinyl chloride	900	20	20		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U
Xylenes (total)	100000	260	1600		2.3 U	2.3 U	2.6 U	2300 UD	2.2 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-14	B-14	B-14	B-15	B-15
				Sample Date:	1/15/2014	1/15/2014	1/15/2014	12/31/2013	1/10/2014
				Sample Depth (ft bls):	7 - 9	10 - 12	17 - 18.5	0 - 2	5 - 7
1,1,1-Trichloroethane	100000	680	680		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
1,1,2,2-Tetrachloroethane	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
1,1,2-Trichloroethane	--	--	--		1.7 U	1.9 U	1.7 U	1.8 U	1.8 U
1,1-Dichloroethane	26000	270	270		1.7 U	1.9 U	1.7 U	1.8 U	1.8 U
1,1-Dichloroethene	100000	330	330		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
1,2,3-Trichlorobenzene	--	--	--		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
1,2,4-Trichlorobenzene	--	--	--		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
1,2-Dibromoethane	--	--	--		4.6 U	5 U	4.6 U	4.7 U	4.7 U
1,2-Dichlorobenzene	100000	1100	1100		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
1,2-Dichloroethane	3100	20	20		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
1,2-Dichloropropane	--	--	--		4.1 U	4.4 U	4.1 U	4.1 U	4.1 U
1,3-Dichlorobenzene	49000	2400	2400		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
1,4-Dichlorobenzene	13000	1800	1800		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
1,4-Dioxane	13000	100	100		120 U	130 U	120 U	120 U	120 U
2-Butanone (MEK)	100000	120	120		12 U	13 U	12 U	4.3 J	12 U
2-Hexanone	--	--	--		12 U	13 U	12 U	12 U	12 U
4-Methyl-2-pentanone (MIBK)	--	--	--		12 U	13 U	12 U	12 U	12 U
Acetone	100000	50	50		12 U	13 U	6 J	50	12 U
Benzene	4800	60	60		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Bromochloromethane	--	--	--		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
Bromodichloromethane	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Bromoform	--	--	--		4.6 U	5 U	4.6 U	4.7 U	4.7 U
Bromomethane	--	--	--		2.3 U	2.5 U	2.3 U	2.4 U	2.4 U
Carbon disulfide	--	--	--		12 U	13 U	12 U	12 U	12 U
Carbon tetrachloride	2400	760	760		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Chlorobenzene	100000	1100	1100		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Chloroethane	--	--	--		2.3 U	2.5 U	2.3 U	2.4 U	2.4 U
Chloroform	49000	370	370		1.7 U	1.9 U	1.7 U	1.8 U	1.8 U
Chloromethane	--	--	--		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
cis-1,2-Dichloroethene	100000	250	250		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
cis-1,3-Dichloropropene	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Dibromochloromethane	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Dibromochloropropane	--	--	--		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
Dichlorodifluoromethane	--	--	--		12 U	13 U	12 U	12 U	12 U
Ethylbenzene	41000	1000	1000		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-14	B-14	B-14	B-15	B-15
				Sample Date:	1/15/2014	1/15/2014	1/15/2014	12/31/2013	1/10/2014
				Sample Depth (ft bls):	7 - 9	10 - 12	17 - 18.5	0 - 2	5 - 7
Freon 113	--	--	--		23 U	25 U	23 U	24 U	24 U
Isopropylbenzene	--	--	2300*		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
m+p-Xylene	--	--	--		2.3 U	2.5 U	2.3 U	1.2 J	2.4 U
Methylene chloride	100000	50	50		12 U	13 U	12 U	12 U	12 U
MTBE	100000	930	930		2.3 U	2.5 U	2.3 U	2.4 U	2.4 U
o-Xylene	--	--	--		2.3 U	2.5 U	2.3 U	2.4 U	2.4 U
Styrene	--	--	--		2.3 U	2.5 U	2.3 U	2.4 U	2.4 U
Tetrachloroethene	19000	1300	1300		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Toluene	100000	700	700		1.7 U	1.9 U	1.7 U	1.8 U	1.8 U
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.9 U	1.7 U	1.8 U	1.8 U
trans-1,3-Dichloropropene	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Trichloroethene	21000	470	470		1.2 U	1.3 U	1.2 U	1.2 U	1.2 U
Trichlorofluoromethane	--	--	--		5.8 U	6.3 U	5.8 U	5.9 U	5.9 U
Vinyl chloride	900	20	20		2.3 U	2.5 U	2.3 U	2.4 U	2.4 U
Xylenes (total)	100000	260	1600		2.3 U	2.5 U	2.3 U	1.2 J	2.4 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
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of the calibration range in the original sample.
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	B-15 1/10/2014 7 - 9	B-15 1/10/2014 10 - 11	B-16 12/19/2013 0 - 2	B-16 1/16/2014 7 - 9	B-16 1/16/2014 10 - 12
1,1,1-Trichloroethane	100000	680	680		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
1,1,2,2-Tetrachloroethane	--	--	--		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
1,1,2-Trichloroethane	--	--	--		1900 UD	4.8 UD	1.6 U	1.7 U	1.8 U
1,1-Dichloroethane	26000	270	270		1900 UD	4.8 UD	1.6 U	1.7 U	1.8 U
1,1-Dichloroethene	100000	330	330		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
1,2,3-Trichlorobenzene	--	--	--		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
1,2,4-Trichlorobenzene	--	--	--		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
1,2-Dibromoethane	--	--	--		5000 UD	13 UD	4.2 U	4.5 U	4.9 U
1,2-Dichlorobenzene	100000	1100	1100		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
1,2-Dichloroethane	3100	20	20		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
1,2-Dichloropropane	--	--	--		4400 UD	11 UD	3.7 U	4 U	4.3 U
1,3-Dichlorobenzene	49000	2400	2400		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
1,4-Dichlorobenzene	13000	1800	1800		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
1,4-Dioxane	13000	100	100		120000 UD	320 UD	100 U	110 U	120 U
2-Butanone (MEK)	100000	120	120		12000 UD	10 JD	10 U	11 U	12 U
2-Hexanone	--	--	--		12000 UD	32 UD	10 U	11 U	12 U
4-Methyl-2-pentanone (MIBK)	--	--	--		12000 UD	32 UD	10 U	11 U	12 U
Acetone	100000	50	50		12000 UD	49 D	10 U	11 U	4.1 J
Benzene	4800	60	60		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Bromochloromethane	--	--	--		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
Bromodichloromethane	--	--	--		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Bromoform	--	--	--		5000 UD	13 UD	4.2 U	4.5 U	4.9 U
Bromomethane	--	--	--		2500 UD	6.4 UD	2.1 U	2.3 U	2.4 U
Carbon disulfide	--	--	--		12000 UD	8.6 JD	10 U	11 U	12 U
Carbon tetrachloride	2400	760	760		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Chlorobenzene	100000	1100	1100		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Chloroethane	--	--	--		2500 UD	6.4 UD	2.1 U	2.3 U	2.4 U
Chloroform	49000	370	370		1900 UD	4.8 UD	1.6 U	1.7 U	1.8 U
Chloromethane	--	--	--		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
cis-1,2-Dichloroethene	100000	250	250		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
cis-1,3-Dichloropropene	--	--	--		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Dibromochloromethane	--	--	--		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Dibromochloropropane	--	--	--		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
Dichlorodifluoromethane	--	--	--		12000 UD	32 UD	10 U	11 U	12 U
Ethylbenzene	41000	1000	1000		1200 UD	3.2 UD	1 U	1.7	1.2 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater		B-15	B-15	B-16	B-16	B-16
				Sample Designation:	B-15	B-15	B-16	B-16	B-16
				Sample Date:	1/10/2014	1/10/2014	12/19/2013	1/16/2014	1/16/2014
				Sample Depth (ft bls):	7 - 9	10 - 11	0 - 2	7 - 9	10 - 12
Freon 113	--	--	--		25000 UD	64 UD	21 U	23 U	24 U
Isopropylbenzene	--	--	2300*		3200 D	110 D	1 U	2.1	1.2 U
m+p-Xylene	--	--	--		2500 UD	6.4 UD	2.1 U	3.2	2.4 U
Methylene chloride	100000	50	50		12000 UD	32 UD	10 U	11 U	12 U
MTBE	100000	930	930		2500 UD	6.4 UD	2.1 U	2.3 U	2.4 U
o-Xylene	--	--	--		2500 UD	6.4 UD	2.1 U	2.3 U	2.4 U
Styrene	--	--	--		2500 UD	6.4 UD	2.1 U	2.3 U	2.4 U
Tetrachloroethene	19000	1300	1300		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Toluene	100000	700	700		1900 UD	4.8 UD	1.6 U	1 J	1.8 U
trans-1,2-Dichloroethene	100000	190	190		1900 UD	4.8 UD	1.6 U	1.7 U	1.8 U
trans-1,3-Dichloropropene	--	--	--		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Trichloroethene	21000	470	470		1200 UD	3.2 UD	1 U	1.1 U	1.2 U
Trichlorofluoromethane	--	--	--		6200 UD	16 UD	5.2 U	5.7 U	6.1 U
Vinyl chloride	900	20	20		2500 UD	6.4 UD	2.1 U	2.3 U	2.4 U
Xylenes (total)	100000	260	1600		2500 UD	6.4 UD	2.1 U	3.2	2.4 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	B-16 1/16/2014 18 - 20	B-17 1/20/2014 0 - 2	B-17 1/20/2014 7 - 9	B-18 12/18/2013 0 - 2	B-18 12/18/2013 6 - 8
1,1,1-Trichloroethane	100000	680	680		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
1,1,2-Trichloroethane	--	--	--		1.7 U	1.7 U	86 UD	1.6 U	1.6 U
1,1-Dichloroethane	26000	270	270		1.7 U	1.7 U	86 UD	1.6 U	1.6 U
1,1-Dichloroethene	100000	330	330		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
1,2,3-Trichlorobenzene	--	--	--		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
1,2,4-Trichlorobenzene	--	--	--		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
1,2-Dibromoethane	--	--	--		4.7 U	4.5 U	230 UD	4.3 U	4.4 U
1,2-Dichlorobenzene	100000	1100	1100		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
1,2-Dichloroethane	3100	20	20		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
1,2-Dichloropropane	--	--	--		4.1 U	3.9 U	200 UD	3.8 U	3.8 U
1,3-Dichlorobenzene	49000	2400	2400		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
1,4-Dichlorobenzene	13000	1800	1800		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
1,4-Dioxane	13000	100	100		120 U	110 U	5800 UD	110 U	110 U
2-Butanone (MEK)	100000	120	120		12 U	2.8 J	580 UD	11 U	11 U
2-Hexanone	--	--	--		12 U	11 U	580 UD	11 U	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		12 U	11 U	580 UD	11 U	11 U
Acetone	100000	50	50		12 U	23	580 UD	8.2 J	11 U
Benzene	4800	60	60		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Bromochloromethane	--	--	--		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
Bromodichloromethane	--	--	--		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Bromoform	--	--	--		4.7 U	4.5 U	230 UD	4.3 U	4.4 U
Bromomethane	--	--	--		2.3 U	2.2 U	120 UD	2.2 U	2.2 U
Carbon disulfide	--	--	--		12 U	11 U	580 UD	11 U	11 U
Carbon tetrachloride	2400	760	760		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Chlorobenzene	100000	1100	1100		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Chloroethane	--	--	--		2.3 U	2.2 U	120 UD	2.2 U	2.2 U
Chloroform	49000	370	370		1.7 U	1.7 U	86 UD	1.6 U	1.6 U
Chloromethane	--	--	--		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
cis-1,2-Dichloroethene	100000	250	250		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
cis-1,3-Dichloropropene	--	--	--		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Dibromochloromethane	--	--	--		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Dibromochloropropane	--	--	--		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
Dichlorodifluoromethane	--	--	--		12 U	11 U	580 UD	11 U	11 U
Ethylbenzene	41000	1000	1000		1.2 U	1.1 U	58 UD	1.1 U	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-16 1/16/2014 18 - 20	B-17 1/20/2014 0 - 2	B-17 1/20/2014 7 - 9	B-18 12/18/2013 0 - 2	B-18 12/18/2013 6 - 8
Freon 113	--	--	--		23 U	22 U	1200 UD	22 U	22 U
Isopropylbenzene	--	--	2300*		1.2 U	1.1 U	370 D	1.1 U	1.1 U
m+p-Xylene	--	--	--		2.3 U	2.2 U	120 UD	1.1 J	1 J
Methylene chloride	100000	50	50		12 U	11 U	580 UD	5.1 J	4.4 J
MTBE	100000	930	930		2.3 U	2.2 U	120 UD	2.2 U	2.2 U
o-Xylene	--	--	--		2.3 U	2.2 U	120 UD	2.2 U	1.2 J
Styrene	--	--	--		2.3 U	2.2 U	120 UD	2.2 U	2.2 U
Tetrachloroethene	19000	1300	1300		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Toluene	100000	700	700		1.7 U	1.7 U	86 UD	0.74 J	1.6 U
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.7 U	86 UD	1.6 U	1.6 U
trans-1,3-Dichloropropene	--	--	--		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Trichloroethene	21000	470	470		1.2 U	1.1 U	58 UD	1.1 U	1.1 U
Trichlorofluoromethane	--	--	--		5.8 U	5.6 U	290 UD	5.4 U	5.5 U
Vinyl chloride	900	20	20		2.3 U	2.2 U	120 UD	2.2 U	2.2 U
Xylenes (total)	100000	260	1600		2.3 U	2.2 U	120 UD	1.1 J	2.2 J

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
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V - Value altered or qualifier added during data validation
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-18 12/18/2013 8 - 10	B-19 12/17/2013 0 - 2	B-19 12/17/2013 6 - 8	B-19 12/17/2013 8 - 10	B-20 12/17/2013 0 - 2
1,1,1-Trichloroethane	100000	680	680		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
1,1,2-Trichloroethane	--	--	--		1800 UD	1.6 U	1.6 U	1700 UD	1.6 U
1,1-Dichloroethane	26000	270	270		1800 UD	1.6 U	1.6 U	1700 UD	1.6 U
1,1-Dichloroethene	100000	330	330		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
1,2,3-Trichlorobenzene	--	--	--		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
1,2,4-Trichlorobenzene	--	--	--		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
1,2-Dibromoethane	--	--	--		4900 UD	4.4 U	4.4 U	4600 UD	4.4 U
1,2-Dichlorobenzene	100000	1100	1100		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
1,2-Dichloroethane	3100	20	20		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
1,2-Dichloropropane	--	--	--		4300 UD	3.8 U	3.8 U	4000 UD	3.8 U
1,3-Dichlorobenzene	49000	2400	2400		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
1,4-Dichlorobenzene	13000	1800	1800		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
1,4-Dioxane	13000	100	100		120000 UD	110 U	110 U	120000 UD	110 U
2-Butanone (MEK)	100000	120	120		12000 UD	11 U	11 U	12000 UD	11 U
2-Hexanone	--	--	--		12000 UD	11 U	11 U	12000 UD	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		12000 UD	11 U	11 U	12000 UD	11 U
Acetone	100000	50	50		12000 UD	16	11 U	12000 UD	13
Benzene	4800	60	60		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Bromochloromethane	--	--	--		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
Bromodichloromethane	--	--	--		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Bromoform	--	--	--		4900 UD	4.4 U	4.4 U	4600 UD	4.4 U
Bromomethane	--	--	--		2400 UD	2.2 U	2.2 U	2300 UD	2.2 U
Carbon disulfide	--	--	--		12000 UD	11 U	11 U	12000 UD	11 U
Carbon tetrachloride	2400	760	760		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Chlorobenzene	100000	1100	1100		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Chloroethane	--	--	--		2400 UD	2.2 U	2.2 U	2300 UD	2.2 U
Chloroform	49000	370	370		1800 UD	1.6 U	1.6 U	1700 UD	1.6 U
Chloromethane	--	--	--		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
cis-1,2-Dichloroethene	100000	250	250		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
cis-1,3-Dichloropropene	--	--	--		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Dibromochloromethane	--	--	--		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Dibromochloropropane	--	--	--		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
Dichlorodifluoromethane	--	--	--		12000 UD	11 U	11 U	12000 UD	11 U
Ethylbenzene	41000	1000	1000		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater		B-18	B-19	B-19	B-19	B-20
				Sample Designation:	B-18	B-19	B-19	B-19	B-20
				Sample Date:	12/18/2013	12/17/2013	12/17/2013	12/17/2013	12/17/2013
				Sample Depth (ft bls):	8 - 10	0 - 2	6 - 8	8 - 10	0 - 2
Freon 113	--	--	--		24000 UD	22 U	22 U	23000 UD	22 U
Isopropylbenzene	--	--	2300*		1600 D	1.1 U	1.1 U	1200 UD	1.1 U
m+p-Xylene	--	--	--		2400 UD	2.2 U	2.2 U	1100 JD	2.2 U
Methylene chloride	100000	50	50		12000 UD	11 U	11 U	12000 UD	11 U
MTBE	100000	930	930		2400 UD	2.2 U	2.2 U	2300 UD	2.2 U
o-Xylene	--	--	--		2400 UD	2.2 U	2.2 U	2300 UD	2.2 U
Styrene	--	--	--		1400 JD	2.2 U	2.2 U	2300 UD	2.2 U
Tetrachloroethene	19000	1300	1300		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Toluene	100000	700	700		1800 UD	1.6 U	1.6 U	1700 UD	1.6 U
trans-1,2-Dichloroethene	100000	190	190		1800 UD	1.6 U	1.6 U	1700 UD	1.6 U
trans-1,3-Dichloropropene	--	--	--		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Trichloroethene	21000	470	470		1200 UD	1.1 U	1.1 U	1200 UD	1.1 U
Trichlorofluoromethane	--	--	--		6100 UD	5.5 U	5.5 U	5800 UD	5.5 U
Vinyl chloride	900	20	20		2400 UD	2.2 U	2.2 U	2300 UD	2.2 U
Xylenes (total)	100000	260	1600		2400 UD	2.2 U	2.2 U	1100 JD	2.2 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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of the calibration range in the original sample.
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-20	B-20	B-21	B-21	B-21
				Sample Date:	12/17/2013	12/17/2013	12/17/2013	12/17/2013	12/17/2013
				Sample Depth (ft bls):	5 - 7	7 - 8	0 - 2	5 - 7	7 - 8
1,1,1-Trichloroethane	100000	680	680		1 U	280 UD	1.1 U	120 UD	610 UD
1,1,2,2-Tetrachloroethane	--	--	--		1 U	280 UD	1.1 U	120 UD	610 UD
1,1,2-Trichloroethane	--	--	--		1.6 U	430 UD	1.7 U	180 UD	910 UD
1,1-Dichloroethane	26000	270	270		1.6 U	430 UD	1.7 U	180 UD	910 UD
1,1-Dichloroethene	100000	330	330		1 U	280 UD	1.1 U	120 UD	610 UD
1,2,3-Trichlorobenzene	--	--	--		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
1,2,4-Trichlorobenzene	--	--	--		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
1,2-Dibromoethane	--	--	--		4.2 U	1100 UD	4.5 U	480 UD	2400 UD
1,2-Dichlorobenzene	100000	1100	1100		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
1,2-Dichloroethane	3100	20	20		1 U	280 UD	1.1 U	120 UD	610 UD
1,2-Dichloropropane	--	--	--		3.7 U	1000 UD	4 U	420 UD	2100 UD
1,3-Dichlorobenzene	49000	2400	2400		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
1,4-Dichlorobenzene	13000	1800	1800		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
1,4-Dioxane	13000	100	100		100 U	28000 UD	110 U	12000 UD	61000 UD
2-Butanone (MEK)	100000	120	120		10 U	2800 UD	2.8 J	1200 UD	6100 UD
2-Hexanone	--	--	--		10 U	2800 UD	11 U	1200 UD	6100 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		10 U	2800 UD	11 U	1200 UD	6100 UD
Acetone	100000	50	50		14	2800 UD	27	1200 UD	6100 UD
Benzene	4800	60	60		1 U	280 UD	1.1 U	120 UD	610 UD
Bromochloromethane	--	--	--		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
Bromodichloromethane	--	--	--		1 U	280 UD	1.1 U	120 UD	610 UD
Bromoform	--	--	--		4.2 U	1100 UD	4.5 U	480 UD	2400 UD
Bromomethane	--	--	--		2.1 U	570 UD	2.2 U	240 UD	1200 UD
Carbon disulfide	--	--	--		10 U	2800 UD	11 U	1200 UD	6100 UD
Carbon tetrachloride	2400	760	760		1 U	280 UD	1.1 U	120 UD	610 UD
Chlorobenzene	100000	1100	1100		1 U	280 UD	1.1 U	120 UD	610 UD
Chloroethane	--	--	--		2.1 U	570 UD	2.2 U	240 UD	1200 UD
Chloroform	49000	370	370		1.6 U	430 UD	1.7 U	180 UD	910 UD
Chloromethane	--	--	--		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
cis-1,2-Dichloroethene	100000	250	250		1 U	280 UD	1.1 U	120 UD	610 UD
cis-1,3-Dichloropropene	--	--	--		1 U	280 UD	1.1 U	120 UD	610 UD
Dibromochloromethane	--	--	--		1 U	280 UD	1.1 U	120 UD	610 UD
Dibromochloropropane	--	--	--		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
Dichlorodifluoromethane	--	--	--		10 U	2800 UD	11 U	1200 UD	6100 UD
Ethylbenzene	41000	1000	1000		1 U	280 UD	1.1 U	390 D	610 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-20 12/17/2013 5 - 7	B-20 12/17/2013 7 - 8	B-21 12/17/2013 0 - 2	B-21 12/17/2013 5 - 7	B-21 12/17/2013 7 - 8
Freon 113	--	--	--		21 U	5700 UD	22 U	2400 UD	12000 UD
Isopropylbenzene	--	--	2300*		1.1	2200 D	1.1 U	620 D	2700 D
m+p-Xylene	--	--	--		2.1 U	570 UD	2.2 U	1300 D	660 JD
Methylene chloride	100000	50	50		10 U	2800 UD	5.5 J	300 JD	1400 JD
MTBE	100000	930	930		2.1 U	570 UD	2.2 U	240 UD	1200 UD
o-Xylene	--	--	--		2.1 U	570 UD	2.2 U	1000 D	1200 UD
Styrene	--	--	--		2.1 U	330 JD	2.2 U	240 UD	1200 UD
Tetrachloroethene	19000	1300	1300		1 U	280 UD	1.1 U	120 UD	610 UD
Toluene	100000	700	700		1.6 U	430 UD	1.7 U	81 JD	910 UD
trans-1,2-Dichloroethene	100000	190	190		1.6 U	430 UD	1.7 U	180 UD	910 UD
trans-1,3-Dichloropropene	--	--	--		1 U	280 UD	1.1 U	120 UD	610 UD
Trichloroethene	21000	470	470		1 U	280 UD	1.1 U	120 UD	610 UD
Trichlorofluoromethane	--	--	--		5.3 U	1400 UD	5.6 U	600 UD	3000 UD
Vinyl chloride	900	20	20		2.1 U	570 UD	2.2 U	240 UD	1200 UD
Xylenes (total)	100000	260	1600		2.1 U	570 UD	2.2 U	2300 D	660 JD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-22 1/13/2014 0 - 2	B-22 DUP 1/13/2014 0 - 2	B-22 1/13/2014 4 - 6	B-23 1/13/2014 0 - 2	B-23 1/13/2014 2 - 4
1,1,1-Trichloroethane	100000	680	680		1.2 U	1.2 U	1600 UD	72 UD	260 UD
1,1,2,2-Tetrachloroethane	--	--	--		1.2 U	1.2 U	1600 UD	72 UD	260 UD
1,1,2-Trichloroethane	--	--	--		1.8 U	1.8 U	2400 UD	110 UD	400 UD
1,1-Dichloroethane	26000	270	270		1.8 U	1.8 U	2400 UD	110 UD	400 UD
1,1-Dichloroethene	100000	330	330		1.2 U	1.2 U	1600 UD	72 UD	260 UD
1,2,3-Trichlorobenzene	--	--	--		6.1 U	6 U	8100 UD	360 UD	1300 UD
1,2,4-Trichlorobenzene	--	--	--		6.1 U	6 U	8100 UD	360 UD	1300 UD
1,2-Dibromoethane	--	--	--		4.9 U	4.8 U	6500 UD	290 UD	1000 UD
1,2-Dichlorobenzene	100000	1100	1100		6.1 U	6 U	8100 UD	360 UD	1300 UD
1,2-Dichloroethane	3100	20	20		1.2 U	1.2 U	1600 UD	72 UD	260 UD
1,2-Dichloropropane	--	--	--		4.3 U	4.2 U	5700 UD	250 UD	920 UD
1,3-Dichlorobenzene	49000	2400	2400		6.1 U	6 U	8100 UD	360 UD	1300 UD
1,4-Dichlorobenzene	13000	1800	1800		6.1 U	6 U	8100 UD	360 UD	1300 UD
1,4-Dioxane	13000	100	100		120 U	120 U	160000 UD	7200 UD	26000 UD
2-Butanone (MEK)	100000	120	120		20	13	16000 UD	220 JD	660 JD
2-Hexanone	--	--	--		12 U	12 U	16000 UD	720 UD	2600 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		12 U	12 U	16000 UD	720 UD	2600 UD
Acetone	100000	50	50		130	80	16000 UD	240 JD	2600 UD
Benzene	4800	60	60		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Bromochloromethane	--	--	--		6.1 U	6 U	8100 UD	360 UD	1300 UD
Bromodichloromethane	--	--	--		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Bromoform	--	--	--		4.9 U	4.8 U	6500 UD	290 UD	1000 UD
Bromomethane	--	--	--		2.4 U	2.4 U	3200 UD	140 UD	530 UD
Carbon disulfide	--	--	--		7.8 J	5.1 J	16000 UD	720 UD	2600 UD
Carbon tetrachloride	2400	760	760		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Chlorobenzene	100000	1100	1100		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Chloroethane	--	--	--		2.4 U	2.4 U	3200 UD	140 UD	530 UD
Chloroform	49000	370	370		1.8 U	1.8 U	2400 UD	110 UD	400 UD
Chloromethane	--	--	--		6.1 U	6 U	8100 UD	360 UD	1300 UD
cis-1,2-Dichloroethene	100000	250	250		1.2 U	1.2 U	1600 UD	72 UD	260 UD
cis-1,3-Dichloropropene	--	--	--		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Dibromochloromethane	--	--	--		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Dibromochloropropane	--	--	--		6.1 U	6 U	8100 UD	360 UD	1300 UD
Dichlorodifluoromethane	--	--	--		12 U	12 U	16000 UD	720 UD	2600 UD
Ethylbenzene	41000	1000	1000		1.2 U	1.2 U	1600 UD	72 UD	260 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-22	B-22 DUP	B-22	B-23	B-23
				Sample Date:	1/13/2014	1/13/2014	1/13/2014	1/13/2014	1/13/2014
				Sample Depth (ft bls):	0 - 2	0 - 2	4 - 6	0 - 2	2 - 4
Freon 113	--	--	--		24 U	24 U	32000 UD	1400 UD	5300 UD
Isopropylbenzene	--	--	2300*		4.8 JV	2.7 JV	$\boxed{17000 D}$	110 D	$\boxed{4600 D}$
m+p-Xylene	--	--	--		2.4 U	2.4 U	3200 UD	140 UD	530 UD
Methylene chloride	100000	50	50		12 U	12 U	16000 UD	720 UD	2600 UD
MTBE	100000	930	930		2.4 U	2.4 U	3200 UD	140 UD	530 UD
o-Xylene	--	--	--		2.4 U	2.4 U	3200 UD	140 UD	530 UD
Styrene	--	--	--		2.4 U	2.4 U	3200 UD	140 UD	530 UD
Tetrachloroethene	19000	1300	1300		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Toluene	100000	700	700		1.8 U	1.8 U	2400 UD	110 UD	400 UD
trans-1,2-Dichloroethene	100000	190	190		1.8 U	1.8 U	2400 UD	110 UD	400 UD
trans-1,3-Dichloropropene	--	--	--		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Trichloroethene	21000	470	470		1.2 U	1.2 U	1600 UD	72 UD	260 UD
Trichlorofluoromethane	--	--	--		6.1 U	6 U	8100 UD	360 UD	1300 UD
Vinyl chloride	900	20	20		2.4 U	2.4 U	3200 UD	140 UD	530 UD
Xylenes (total)	100000	260	1600		2.4 U	2.4 U	3200 UD	140 UD	530 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-24 1/14/2014 0 - 2	B-24 1/14/2014 2 - 4	B-25 1/14/2014 0 - 2	B-25 1/14/2014 2 - 4	B-26 1/14/2014 0 - 2
1,1,1-Trichloroethane	100000	680	680		160 UD	1200 UD	610 UD	320 UD	2500 UD
1,1,2,2-Tetrachloroethane	--	--	--		160 UD	1200 UD	610 UD	320 UD	2500 UD
1,1,2-Trichloroethane	--	--	--		240 UD	1800 UD	920 UD	470 UD	3700 UD
1,1-Dichloroethane	26000	270	270		240 UD	1800 UD	920 UD	470 UD	3700 UD
1,1-Dichloroethene	100000	330	330		160 UD	1200 UD	610 UD	320 UD	2500 UD
1,2,3-Trichlorobenzene	--	--	--		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
1,2,4-Trichlorobenzene	--	--	--		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
1,2-Dibromoethane	--	--	--		630 UD	4900 UD	2400 UD	1300 UD	9900 UD
1,2-Dichlorobenzene	100000	1100	1100		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
1,2-Dichloroethane	3100	20	20		160 UD	1200 UD	610 UD	320 UD	2500 UD
1,2-Dichloropropane	--	--	--		550 UD	4200 UD	2100 UD	1100 UD	8700 UD
1,3-Dichlorobenzene	49000	2400	2400		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
1,4-Dichlorobenzene	13000	1800	1800		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
1,4-Dioxane	13000	100	100		16000 UD	120000 UD	61000 UD	32000 UD	250000 UD
2-Butanone (MEK)	100000	120	120		1600 UD	12000 UD	6100 UD	3200 UD	25000 UD
2-Hexanone	--	--	--		1600 UD	12000 UD	6100 UD	4600 D	25000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		1600 UD	12000 UD	6100 UD	3200 UD	25000 UD
Acetone	100000	50	50		1600 UD	12000 UD	6100 UD	3200 UD	25000 UD
Benzene	4800	60	60		160 UD	1200 UD	610 UD	320 UD	2500 UD
Bromochloromethane	--	--	--		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
Bromodichloromethane	--	--	--		160 UD	1200 UD	610 UD	320 UD	2500 UD
Bromoform	--	--	--		630 UD	4900 UD	2400 UD	1300 UD	9900 UD
Bromomethane	--	--	--		310 UD	2400 UD	1200 UD	630 UD	5000 UD
Carbon disulfide	--	--	--		1600 UD	12000 UD	6100 UD	3200 UD	25000 UD
Carbon tetrachloride	2400	760	760		160 UD	1200 UD	610 UD	320 UD	2500 UD
Chlorobenzene	100000	1100	1100		160 UD	1200 UD	610 UD	320 UD	2500 UD
Chloroethane	--	--	--		310 UD	2400 UD	1200 UD	630 UD	5000 UD
Chloroform	49000	370	370		240 UD	1800 UD	920 UD	470 UD	3700 UD
Chloromethane	--	--	--		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
cis-1,2-Dichloroethene	100000	250	250		160 UD	1200 UD	610 UD	320 UD	2500 UD
cis-1,3-Dichloropropene	--	--	--		160 UD	1200 UD	610 UD	320 UD	2500 UD
Dibromochloromethane	--	--	--		160 UD	1200 UD	610 UD	320 UD	2500 UD
Dibromochloropropane	--	--	--		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
Dichlorodifluoromethane	--	--	--		1600 UD	12000 UD	6100 UD	3200 UD	25000 UD
Ethylbenzene	41000	1000	1000		120 JD	1200 UD	610 UD	320 UD	2500 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-24 1/14/2014 0 - 2	B-24 1/14/2014 2 - 4	B-25 1/14/2014 0 - 2	B-25 1/14/2014 2 - 4	B-26 1/14/2014 0 - 2
Freon 113	--	--	--		3100 UD	24000 UD	12000 UD	6300 UD	50000 UD
Isopropylbenzene	--	--	2300*		160 D	5800 D	7200 D	5600 D	8100 D
m+p-Xylene	--	--	--		320 D	2400 UD	1200 UD	630 UD	5000 UD
Methylene chloride	100000	50	50		1600 UD	12000 UD	6100 UD	3200 UD	25000 UD
MTBE	100000	930	930		310 UD	2400 UD	1200 UD	630 UD	5000 UD
o-Xylene	--	--	--		310 UD	2400 UD	1200 UD	630 UD	5000 UD
Styrene	--	--	--		310 UD	2400 UD	1200 UD	630 UD	5000 UD
Tetrachloroethene	19000	1300	1300		160 UD	1200 UD	610 UD	320 UD	2500 UD
Toluene	100000	700	700		240 UD	1800 UD	920 UD	470 UD	3700 UD
trans-1,2-Dichloroethene	100000	190	190		240 UD	1800 UD	920 UD	470 UD	3700 UD
trans-1,3-Dichloropropene	--	--	--		160 UD	1200 UD	610 UD	320 UD	2500 UD
Trichloroethene	21000	470	470		160 UD	1200 UD	610 UD	320 UD	2500 UD
Trichlorofluoromethane	--	--	--		780 UD	6100 UD	3000 UD	1600 UD	12000 UD
Vinyl chloride	900	20	20		310 UD	2400 UD	1200 UD	630 UD	5000 UD
Xylenes (total)	100000	260	1600		320 D	2400 UD	1200 UD	630 UD	5000 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-26	B-27	B-27	MW-1/1R	MW-1/1R
				Sample Date:	1/14/2014	1/14/2014	1/14/2014	12/16/2013	12/16/2013
				Sample Depth (ft bls):	4 - 6	0 - 2	4 - 6	0 - 2	3 - 5
1,1,1-Trichloroethane	100000	680	680		620 UD	630 UD	1400 UD	1.2 U	1.4 U
1,1,2,2-Tetrachloroethane	--	--	--		620 UD	630 UD	1400 UD	1.2 U	1.4 U
1,1,2-Trichloroethane	--	--	--		940 UD	950 UD	2000 UD	1.8 U	2.1 U
1,1-Dichloroethane	26000	270	270		940 UD	950 UD	2000 UD	1.8 U	2.1 U
1,1-Dichloroethene	100000	330	330		620 UD	630 UD	1400 UD	1.2 U	1.4 U
1,2,3-Trichlorobenzene	--	--	--		3100 UD	3200 UD	6800 UD	5.9 U	7 U
1,2,4-Trichlorobenzene	--	--	--		3100 UD	3200 UD	6800 UD	5.9 U	7 U
1,2-Dibromoethane	--	--	--		2500 UD	2500 UD	5400 UD	4.7 U	5.6 U
1,2-Dichlorobenzene	100000	1100	1100		3100 UD	3200 UD	6800 UD	5.9 U	7 U
1,2-Dichloroethane	3100	20	20		620 UD	630 UD	1400 UD	1.2 U	1.4 U
1,2-Dichloropropane	--	--	--		2200 UD	2200 UD	4700 UD	4.1 U	4.9 U
1,3-Dichlorobenzene	49000	2400	2400		3100 UD	3200 UD	6800 UD	5.9 U	7 U
1,4-Dichlorobenzene	13000	1800	1800		3100 UD	3200 UD	6800 UD	5.9 U	7 U
1,4-Dioxane	13000	100	100		62000 UD	63000 UD	140000 UD	120 U	140 U
2-Butanone (MEK)	100000	120	120		6200 UD	6300 UD	14000 UD	3.3 J	14 U
2-Hexanone	--	--	--		6200 UD	6300 UD	14000 UD	12 U	14 U
4-Methyl-2-pentanone (MIBK)	--	--	--		6200 UD	6300 UD	14000 UD	12 U	14 U
Acetone	100000	50	50		6200 UD	6300 UD	14000 UD	37	9.7 J
Benzene	4800	60	60		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Bromochloromethane	--	--	--		3100 UD	3200 UD	6800 UD	5.9 U	7 U
Bromodichloromethane	--	--	--		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Bromoform	--	--	--		2500 UD	2500 UD	5400 UD	4.7 U	5.6 U
Bromomethane	--	--	--		1200 UD	1300 UD	2700 UD	2.4 U	2.8 U
Carbon disulfide	--	--	--		6200 UD	6300 UD	14000 UD	12 U	14 U
Carbon tetrachloride	2400	760	760		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Chlorobenzene	100000	1100	1100		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Chloroethane	--	--	--		1200 UD	1300 UD	2700 UD	2.4 U	2.8 U
Chloroform	49000	370	370		940 UD	950 UD	2000 UD	1.8 U	2.1 U
Chloromethane	--	--	--		3100 UD	3200 UD	6800 UD	5.9 U	7 U
cis-1,2-Dichloroethene	100000	250	250		620 UD	630 UD	1400 UD	1.2 U	1.4 U
cis-1,3-Dichloropropene	--	--	--		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Dibromochloromethane	--	--	--		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Dibromochloropropane	--	--	--		3100 UD	3200 UD	6800 UD	5.9 U	7 U
Dichlorodifluoromethane	--	--	--		6200 UD	6300 UD	14000 UD	12 U	14 U
Ethylbenzene	41000	1000	1000		620 UD	630 UD	1400 UD	1.2 U	1.4 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-26 1/14/2014 4 - 6	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5
Freon 113	--	--	--		12000 UD	13000 UD	27000 UD	24 U	28 U
Isopropylbenzene	--	--	2300*		$\boxed{\text{5600 D}}$	1800 D	$\boxed{\text{9500 D}}$	1.2 U	1.4 U
m+p-Xylene	--	--	--		1200 UD	1300 UD	2700 UD	1.2 J	2.8 U
Methylene chloride	100000	50	50		6200 UD	6300 UD	14000 UD	6 J	4 J
MTBE	100000	930	930		1200 UD	1300 UD	2700 UD	2.4 U	2.8 U
o-Xylene	--	--	--		1200 UD	1300 UD	2700 UD	2.4 U	2.8 U
Styrene	--	--	--		1200 UD	1300 UD	2700 UD	2.4 U	2.8 U
Tetrachloroethene	19000	1300	1300		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Toluene	100000	700	700		940 UD	950 UD	2000 UD	0.72 J	2.1 U
trans-1,2-Dichloroethene	100000	190	190		940 UD	950 UD	2000 UD	1.8 U	2.1 U
trans-1,3-Dichloropropene	--	--	--		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Trichloroethene	21000	470	470		620 UD	630 UD	1400 UD	1.2 U	1.4 U
Trichlorofluoromethane	--	--	--		3100 UD	3200 UD	6800 UD	5.9 U	7 U
Vinyl chloride	900	20	20		1200 UD	1300 UD	2700 UD	2.4 U	2.8 U
Xylenes (total)	100000	260	1600		1200 UD	1300 UD	2700 UD	1.2 J	2.8 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
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Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-1/1R 12/16/2013 6 - 8	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2
1,1,1-Trichloroethane	100000	680	680		310 UD	1.3 U	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		310 UD	1.3 U	1.1 U	1.1 U
1,1,2-Trichloroethane	--	--	--		470 UD	1.9 U	1.6 U	1.6 U
1,1-Dichloroethane	26000	270	270		470 UD	1.9 U	1.6 U	1.6 U
1,1-Dichloroethene	100000	330	330		310 UD	1.3 U	1.1 U	1.1 U
1,2,3-Trichlorobenzene	--	--	--		1600 UD	6.4 U	5.5 U	5.5 U
1,2,4-Trichlorobenzene	--	--	--		1600 UD	6.4 U	5.5 U	5.5 U
1,2-Dibromoethane	--	--	--		1200 UD	5.1 U	4.4 U	4.4 U
1,2-Dichlorobenzene	100000	1100	1100		1600 UD	6.4 U	5.5 U	5.5 U
1,2-Dichloroethane	3100	20	20		310 UD	1.3 U	1.1 U	1.1 U
1,2-Dichloropropane	--	--	--		1100 UD	4.4 U	3.8 U	3.8 U
1,3-Dichlorobenzene	49000	2400	2400		1600 UD	6.4 U	5.5 U	5.5 U
1,4-Dichlorobenzene	13000	1800	1800		1600 UD	6.4 U	5.5 U	5.5 U
1,4-Dioxane	13000	100	100		31000 UD	130 U	110 U	110 U
2-Butanone (MEK)	100000	120	120		3100 UD	13 U	7.9 J	13
2-Hexanone	--	--	--		3100 UD	13 U	11 U	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		3100 UD	13 U	11 U	11 U
Acetone	100000	50	50		3100 UD	16	78	120
Benzene	4800	60	60		310 UD	1.3 U	1.1 U	1.1 U
Bromochloromethane	--	--	--		1600 UD	6.4 U	5.5 U	5.5 U
Bromodichloromethane	--	--	--		310 UD	1.3 U	1.1 U	1.1 U
Bromoform	--	--	--		1200 UD	5.1 U	4.4 U	4.4 U
Bromomethane	--	--	--		620 UD	2.5 U	2.2 U	2.2 U
Carbon disulfide	--	--	--		3100 UD	3.3 J	11 U	11 U
Carbon tetrachloride	2400	760	760		310 UD	1.3 U	1.1 U	1.1 U
Chlorobenzene	100000	1100	1100		310 UD	1.3 U	1.1 U	1.1 U
Chloroethane	--	--	--		620 UD	2.5 U	2.2 U	2.2 U
Chloroform	49000	370	370		470 UD	1.9 U	1.6 U	1.6 U
Chloromethane	--	--	--		1600 UD	6.4 U	5.5 U	5.5 U
cis-1,2-Dichloroethene	100000	250	250		310 UD	1.3 U	1.1 U	1.1 U
cis-1,3-Dichloropropene	--	--	--		310 UD	1.3 U	1.1 U	1.1 U
Dibromochloromethane	--	--	--		310 UD	1.3 U	1.1 U	1.1 U
Dibromochloropropane	--	--	--		1600 UD	6.4 U	5.5 U	5.5 U
Dichlorodifluoromethane	--	--	--		3100 UD	13 U	11 U	11 U
Ethylbenzene	41000	1000	1000		310 UD	1.3 U	1.1 U	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-1/1R 12/16/2013 6 - 8	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2
Freon 113	--	--	--		6200 UD	25 U	22 U	22 U
Isopropylbenzene	--	--	2300*		3400 D	3.6	1.1 U	1.1 U
m+p-Xylene	--	--	--		620 UD	1.2 J	2.2 U	1 J
Methylene chloride	100000	50	50		3100 UD	5.8 J	5 J	5.1 J
MTBE	100000	930	930		620 UD	2.5 U	2.2 U	2.2 U
o-Xylene	--	--	--		620 UD	1.5 J	2.2 U	2.2 U
Styrene	--	--	--		620 UD	1.9 J	2.2 U	2.2 U
Tetrachloroethene	19000	1300	1300		310 UD	1.3 U	1.1 U	1.1 U
Toluene	100000	700	700		470 UD	1.9 U	1.6 U	1.6 U
trans-1,2-Dichloroethene	100000	190	190		470 UD	1.9 U	1.6 U	1.6 U
trans-1,3-Dichloropropene	--	--	--		310 UD	1.3 U	1.1 U	1.1 U
Trichloroethene	21000	470	470		310 UD	1.3 U	1.1 U	1.1 U
Trichlorofluoromethane	--	--	--		1600 UD	6.4 U	5.5 U	5.5 U
Vinyl chloride	900	20	20		620 UD	2.5 U	2.2 U	2.2 U
Xylenes (total)	100000	260	1600		620 UD	2.7 J	2.2 U	1 J

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
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of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-2/2R 12/16/2013 6 - 8	MW-2/2R 12/16/2013 14 - 15	MW-2/2R 12/16/2013 23 - 24	MW-6/6R 12/30/2013 0 - 2	MW-6/6R 1/17/2014 9 - 11
1,1,1-Trichloroethane	100000	680	680		1.1 U	130 UD	1.2 U	1.1 U	110 UD
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U	130 UD	1.2 U	1.1 U	110 UD
1,1,2-Trichloroethane	--	--	--		1.7 U	200 UD	1.7 U	1.6 U	160 UD
1,1-Dichloroethane	26000	270	270		1.7 U	200 UD	1.7 U	1.6 U	160 UD
1,1-Dichloroethene	100000	330	330		1.1 U	130 UD	1.2 U	1.1 U	110 UD
1,2,3-Trichlorobenzene	--	--	--		5.7 U	660 UD	5.8 U	5.4 U	550 UD
1,2,4-Trichlorobenzene	--	--	--		5.7 U	660 UD	5.8 U	5.4 U	550 UD
1,2-Dibromoethane	--	--	--		4.6 U	520 UD	4.6 U	4.3 U	440 UD
1,2-Dichlorobenzene	100000	1100	1100		5.7 U	660 UD	5.8 U	5.4 U	550 UD
1,2-Dichloroethane	3100	20	20		1.1 U	130 UD	1.2 U	1.1 U	110 UD
1,2-Dichloropropane	--	--	--		4 U	460 UD	4 U	3.8 U	390 UD
1,3-Dichlorobenzene	49000	2400	2400		5.7 U	660 UD	5.8 U	5.4 U	550 UD
1,4-Dichlorobenzene	13000	1800	1800		5.7 U	660 UD	5.8 U	5.4 U	550 UD
1,4-Dioxane	13000	100	100		110 U	13000 UD	120 U	110 U	11000 UD
2-Butanone (MEK)	100000	120	120		9 J	1300 UD	12 U	4.8 J	1100 UD
2-Hexanone	--	--	--		11 U	1300 UD	12 U	11 U	1100 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U	1300 UD	12 U	11 U	1100 UD
Acetone	100000	50	50		88	1300 UD	42	21	410 JD
Benzene	4800	60	60		1.1 U	130 D	1.2 U	1.1 U	110 UD
Bromochloromethane	--	--	--		5.7 U	660 UD	5.8 U	5.4 U	550 UD
Bromodichloromethane	--	--	--		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Bromoform	--	--	--		4.6 U	520 UD	4.6 U	4.3 U	440 UD
Bromomethane	--	--	--		2.3 U	260 UD	2.3 U	2.2 U	220 UD
Carbon disulfide	--	--	--		11 U	1300 UD	12 U	11 U	1100 UD
Carbon tetrachloride	2400	760	760		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Chlorobenzene	100000	1100	1100		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Chloroethane	--	--	--		2.3 U	260 UD	2.3 U	2.2 U	220 UD
Chloroform	49000	370	370		1.7 U	200 UD	1.7 U	1.6 U	160 UD
Chloromethane	--	--	--		5.7 U	660 UD	5.8 U	5.4 U	550 UD
cis-1,2-Dichloroethene	100000	250	250		1.1 U	130 UD	1.2 U	1.1 U	110 UD
cis-1,3-Dichloropropene	--	--	--		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Dibromochloromethane	--	--	--		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Dibromochloropropane	--	--	--		5.7 U	660 UD	5.8 U	5.4 U	550 UD
Dichlorodifluoromethane	--	--	--		11 U	1300 UD	12 U	11 U	1100 UD
Ethylbenzene	41000	1000	1000		1.1 U	1200 D	1.2 U	1.1 U	1700 D

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-2/2R 12/16/2013 6 - 8	MW-2/2R 12/16/2013 14 - 15	MW-2/2R 12/16/2013 23 - 24	MW-6/6R 12/30/2013 0 - 2	MW-6/6R 1/17/2014 9 - 11
Freon 113	--	--	--		23 U	2600 UD	23 U	22 U	2200 UD
Isopropylbenzene	--	--	2300*		1.1 U	3500 D	1.2 U	1.1 U	5200 D
m+p-Xylene	--	--	--		2.3 U	2100 D	1 J	2.2 U	2900 D
Methylene chloride	100000	50	50		5.1 J	1300 UD	5.4 J	11 U	1100 UD
MTBE	100000	930	930		2.3 U	260 UD	2.3 U	2.2 U	220 UD
o-Xylene	--	--	--		2.3 U	260 UD	2.3 U	2.2 U	220 UD
Styrene	--	--	--		2.3 U	160 JD	1.4 J	2.2 U	220 UD
Tetrachloroethene	19000	1300	1300		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Toluene	100000	700	700		1.7 U	100 JD	1.7 U	1.6 U	160 UD
trans-1,2-Dichloroethene	100000	190	190		1.7 U	200 UD	1.7 U	1.6 U	160 UD
trans-1,3-Dichloropropene	--	--	--		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Trichloroethene	21000	470	470		1.1 U	130 UD	1.2 U	1.1 U	110 UD
Trichlorofluoromethane	--	--	--		5.7 U	660 UD	5.8 U	5.4 U	550 UD
Vinyl chloride	900	20	20		2.3 U	260 UD	2.3 U	2.2 U	220 UD
Xylenes (total)	100000	260	1600		2.3 U	2100 D	1 J	2.2 U	2900 D

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-6/6R 1/17/2014 11 - 12	MW-6/6R 1/17/2014 15 - 17	MW-6/6R DUP 1/17/2014 15 - 17	MW-7R 12/19/2013 0 - 2
1,1,1-Trichloroethane	100000	680	680		5900 UD	6000 UD	5800 UD	5700 UD
1,1,2,2-Tetrachloroethane	--	--	--		5900 UD	6000 UD	5800 UD	5700 UD
1,1,2-Trichloroethane	--	--	--		8800 UD	9000 UD	8700 UD	8500 UD
1,1-Dichloroethane	26000	270	270		8800 UD	9000 UD	8700 UD	8500 UD
1,1-Dichloroethene	100000	330	330		5900 UD	6000 UD	5800 UD	5700 UD
1,2,3-Trichlorobenzene	--	--	--		29000 UD	30000 UD	29000 UD	28000 UD
1,2,4-Trichlorobenzene	--	--	--		29000 UD	30000 UD	29000 UD	28000 UD
1,2-Dibromoethane	--	--	--		24000 UD	24000 UD	23000 UD	23000 UD
1,2-Dichlorobenzene	100000	1100	1100		29000 UD	30000 UD	29000 UD	28000 UD
1,2-Dichloroethane	3100	20	20		5900 UD	6000 UD	5800 UD	5700 UD
1,2-Dichloropropane	--	--	--		20000 UD	21000 UD	20000 UD	20000 UD
1,3-Dichlorobenzene	49000	2400	2400		29000 UD	30000 UD	29000 UD	28000 UD
1,4-Dichlorobenzene	13000	1800	1800		29000 UD	30000 UD	29000 UD	28000 UD
1,4-Dioxane	13000	100	100		590000 UD	600000 UD	580000 UD	570000 UD
2-Butanone (MEK)	100000	120	120		59000 UD	60000 UD	58000 UD	57000 UD
2-Hexanone	--	--	--		59000 UD	60000 UD	58000 UD	57000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		59000 UD	60000 UD	58000 UD	57000 UD
Acetone	100000	50	50		59000 UD	60000 UD	58000 UD	57000 UD
Benzene	4800	60	60		5900 UD	6000 UD	5800 UD	5700 UD
Bromochloromethane	--	--	--		29000 UD	30000 UD	29000 UD	28000 UD
Bromodichloromethane	--	--	--		5900 UD	6000 UD	5800 UD	5700 UD
Bromoform	--	--	--		24000 UD	24000 UD	23000 UD	23000 UD
Bromomethane	--	--	--		12000 UD	12000 UD	12000 UD	11000 UD
Carbon disulfide	--	--	--		59000 UD	60000 UD	58000 UD	57000 UD
Carbon tetrachloride	2400	760	760		5900 UD	6000 UD	5800 UD	5700 UD
Chlorobenzene	100000	1100	1100		5900 UD	6000 UD	5800 UD	5700 UD
Chloroethane	--	--	--		12000 UD	12000 UD	12000 UD	11000 UD
Chloroform	49000	370	370		8800 UD	9000 UD	8700 UD	8500 UD
Chloromethane	--	--	--		29000 UD	30000 UD	29000 UD	28000 UD
cis-1,2-Dichloroethene	100000	250	250		5900 UD	6000 UD	5800 UD	5700 UD
cis-1,3-Dichloropropene	--	--	--		5900 UD	6000 UD	5800 UD	5700 UD
Dibromochloromethane	--	--	--		5900 UD	6000 UD	5800 UD	5700 UD
Dibromochloropropane	--	--	--		29000 UD	30000 UD	29000 UD	28000 UD
Dichlorodifluoromethane	--	--	--		59000 UD	60000 UD	58000 UD	57000 UD
Ethylbenzene	41000	1000	1000		31000 D	21000 JVD	10000 JVD	5700 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater		MW-6/6R	MW-6/6R	MW-6/6R DUP	MW-7R
				Sample Designation:	MW-6/6R	MW-6/6R	MW-6/6R DUP	MW-7R
				Sample Date:	1/17/2014	1/17/2014	1/17/2014	12/19/2013
				Sample Depth (ft bls):	11 - 12	15 - 17	15 - 17	0 - 2
Freon 113	--	--	--		120000 UD	120000 UD	120000 UD	110000 UD
Isopropylbenzene	--	--	2300*		78000 D	57000 JVD	30000 JVD	5700 UD
m+p-Xylene	--	--	--		60000 D	38000 JVD	18000 JVD	11000 UD
Methylene chloride	100000	50	50		59000 UD	60000 UD	58000 UD	57000 UD
MTBE	100000	930	930		12000 UD	12000 UD	12000 UD	11000 UD
o-Xylene	--	--	--		12000 UD	12000 UD	12000 UD	11000 UD
Styrene	--	--	--		12000 UD	12000 UD	12000 UD	11000 UD
Tetrachloroethene	19000	1300	1300		5900 UD	6000 UD	5800 UD	5700 UD
Toluene	100000	700	700		8800 UD	9000 UD	8700 UD	8500 UD
trans-1,2-Dichloroethene	100000	190	190		8800 UD	9000 UD	8700 UD	8500 UD
trans-1,3-Dichloropropene	--	--	--		5900 UD	6000 UD	5800 UD	5700 UD
Trichloroethene	21000	470	470		5900 UD	6000 UD	5800 UD	5700 UD
Trichlorofluoromethane	--	--	--		29000 UD	30000 UD	29000 UD	28000 UD
Vinyl chloride	900	20	20		12000 UD	12000 UD	12000 UD	11000 UD
Xylenes (total)	100000	260	1600		60000 D	38000 JVD	18000 JVD	11000 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-7R 1/14/2014 2 - 4	MW-14 12/19/2013 0 - 2	MW-14 DUP 12/19/2013 0 - 2	MW-14 1/17/2014 7 - 9	MW-14 1/17/2014 10 - 12
1,1,1-Trichloroethane	100000	680	680		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
1,1,2,2-Tetrachloroethane	--	--	--		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
1,1,2-Trichloroethane	--	--	--		1000 UD	1.6 U	1.7 U	1.8 U	4.4 UD
1,1-Dichloroethane	26000	270	270		1000 UD	1.6 U	1.7 U	1.8 U	4.4 UD
1,1-Dichloroethene	100000	330	330		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
1,2,3-Trichlorobenzene	--	--	--		3300 UD	5.4 U	5.7 U	6 U	14 UD
1,2,4-Trichlorobenzene	--	--	--		3300 UD	5.4 U	5.7 U	6 U	14 UD
1,2-Dibromoethane	--	--	--		2700 UD	4.3 U	4.6 U	4.8 U	12 UD
1,2-Dichlorobenzene	100000	1100	1100		3300 UD	5.4 U	5.7 U	6 U	14 UD
1,2-Dichloroethane	3100	20	20		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
1,2-Dichloropropane	--	--	--		2300 UD	3.8 U	4 U	4.2 U	10 UD
1,3-Dichlorobenzene	49000	2400	2400		3300 UD	5.4 U	5.7 U	6 U	14 UD
1,4-Dichlorobenzene	13000	1800	1800		3300 UD	5.4 U	5.7 U	6 U	14 UD
1,4-Dioxane	13000	100	100		67000 UD	110 U	110 U	120 U	290 UD
2-Butanone (MEK)	100000	120	120		6700 UD	11 U	11 U	12 U	8.1 JD
2-Hexanone	--	--	--		6700 UD	11 U	11 U	12 U	29 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		6700 UD	11 U	11 U	12 U	29 UD
Acetone	100000	50	50		6700 UD	11 UJV	24 JV	4.8 J	23 JD
Benzene	4800	60	60		670 UD	1.1 U	1.1 U	0.81 J	2.9 UD
Bromochloromethane	--	--	--		3300 UD	5.4 U	5.7 U	6 U	14 UD
Bromodichloromethane	--	--	--		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Bromoform	--	--	--		2700 UD	4.3 U	4.6 U	4.8 U	12 UD
Bromomethane	--	--	--		1300 UD	2.2 U	2.3 U	2.4 U	5.8 UD
Carbon disulfide	--	--	--		6700 UD	11 U	11 U	12 U	29 UD
Carbon tetrachloride	2400	760	760		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Chlorobenzene	100000	1100	1100		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Chloroethane	--	--	--		1300 UD	2.2 U	2.3 U	2.4 U	5.8 UD
Chloroform	49000	370	370		1000 UD	1.6 U	1.7 U	1.8 U	4.4 UD
Chloromethane	--	--	--		3300 UD	5.4 U	5.7 U	6 U	14 UD
cis-1,2-Dichloroethene	100000	250	250		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
cis-1,3-Dichloropropene	--	--	--		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Dibromochloromethane	--	--	--		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Dibromochloropropane	--	--	--		3300 UD	5.4 U	5.7 U	6 U	14 UD
Dichlorodifluoromethane	--	--	--		6700 UD	11 U	11 U	12 U	29 UD
Ethylbenzene	41000	1000	1000		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-7R 1/14/2014 2 - 4	MW-14 12/19/2013 0 - 2	MW-14 DUP 12/19/2013 0 - 2	MW-14 1/17/2014 7 - 9	MW-14 1/17/2014 10 - 12
Freon 113	--	--	--		13000 UD	22 U	23 U	24 U	58 UD
Isopropylbenzene	--	--	2300*		1400 D	1.1 U	1.1 U	0.76 J	2.9 UD
m+p-Xylene	--	--	--		1300 UD	2.2 U	2.3 U	1 J	5.8 UD
Methylene chloride	100000	50	50		6700 UD	11 U	11 U	12 U	29 UD
MTBE	100000	930	930		1300 UD	2.2 U	2.3 U	2.4 U	5.8 UD
o-Xylene	--	--	--		1300 UD	2.2 U	2.3 U	2.4 U	5.8 UD
Styrene	--	--	--		1300 UD	2.2 U	2.3 U	2.4 U	5.8 UD
Tetrachloroethene	19000	1300	1300		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Toluene	100000	700	700		1000 UD	1.6 U	1.7 U	1.8 U	4.4 UD
trans-1,2-Dichloroethene	100000	190	190		1000 UD	1.6 U	1.7 U	1.8 U	4.4 UD
trans-1,3-Dichloropropene	--	--	--		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Trichloroethene	21000	470	470		670 UD	1.1 U	1.1 U	1.2 U	2.9 UD
Trichlorofluoromethane	--	--	--		3300 UD	5.4 U	5.7 U	6 U	14 UD
Vinyl chloride	900	20	20		1300 UD	2.2 U	2.3 U	2.4 U	5.8 UD
Xylenes (total)	100000	260	1600		1300 UD	2.2 U	2.3 U	1 J	5.8 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
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V - Value altered or qualifier added during data validation
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-15 1/20/2014 0 - 2	MW-15 1/20/2014 6 - 8	MW-15 1/20/2014 10 - 12	MW-16 1/7/2014 0 - 2	MW-16 1/7/2014 5 - 7
1,1,1-Trichloroethane	100000	680	680		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
1,1,2,2-Tetrachloroethane	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
1,1,2-Trichloroethane	--	--	--		1.8 U	1.9 U	1.8 U	1.8 U	9300 UD
1,1-Dichloroethane	26000	270	270		1.8 U	1.9 U	1.8 U	1.8 U	9300 UD
1,1-Dichloroethene	100000	330	330		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
1,2,3-Trichlorobenzene	--	--	--		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
1,2,4-Trichlorobenzene	--	--	--		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
1,2-Dibromoethane	--	--	--		4.7 U	5.2 U	4.9 U	4.7 U	25000 UD
1,2-Dichlorobenzene	100000	1100	1100		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
1,2-Dichloroethane	3100	20	20		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
1,2-Dichloropropane	--	--	--		4.1 U	4.5 U	4.3 U	4.1 U	22000 UD
1,3-Dichlorobenzene	49000	2400	2400		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
1,4-Dichlorobenzene	13000	1800	1800		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
1,4-Dioxane	13000	100	100		120 U	130 U	120 U	120 U	620000 UD
2-Butanone (MEK)	100000	120	120		4.3 J	13 U	12 U	12 U	62000 UD
2-Hexanone	--	--	--		12 U	13 U	12 U	12 U	62000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		12 U	13 U	12 U	12 U	62000 UD
Acetone	100000	50	50		50	13 U	12	15	62000 UD
Benzene	4800	60	60		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Bromochloromethane	--	--	--		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
Bromodichloromethane	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Bromoform	--	--	--		4.7 U	5.2 U	4.9 U	4.7 U	25000 UD
Bromomethane	--	--	--		2.4 U	2.6 U	2.4 U	2.3 U	12000 UD
Carbon disulfide	--	--	--		12 U	13 U	12 U	12 U	62000 UD
Carbon tetrachloride	2400	760	760		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Chlorobenzene	100000	1100	1100		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Chloroethane	--	--	--		2.4 U	2.6 U	2.4 U	2.3 U	12000 UD
Chloroform	49000	370	370		1.8 U	1.9 U	1.8 U	1.8 U	9300 UD
Chloromethane	--	--	--		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
cis-1,2-Dichloroethene	100000	250	250		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
cis-1,3-Dichloropropene	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Dibromochloromethane	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Dibromochloropropane	--	--	--		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
Dichlorodifluoromethane	--	--	--		12 U	13 U	12 U	12 U	62000 UD
Ethylbenzene	41000	1000	1000		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-15	MW-15	MW-15	MW-16	MW-16
				Sample Date:	1/20/2014	1/20/2014	1/20/2014	1/7/2014	1/7/2014
				Sample Depth (ft bls):	0 - 2	6 - 8	10 - 12	0 - 2	5 - 7
Freon 113	--	--	--		24 U	26 U	24 U	23 U	120000 UD
Isopropylbenzene	--	--	2300*		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
m+p-Xylene	--	--	--		1.2 J	2.6 U	2.4 U	2.3 U	12000 UD
Methylene chloride	100000	50	50		12 U	13 U	12 U	12 U	62000 UD
MTBE	100000	930	930		2.4 U	2.6 U	2.4 U	2.3 U	12000 UD
o-Xylene	--	--	--		2.4 U	2.6 U	2.4 U	2.3 U	12000 UD
Styrene	--	--	--		2.4 U	2.6 U	2.4 U	2.3 U	12000 UD
Tetrachloroethene	19000	1300	1300		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Toluene	100000	700	700		1.8 U	1.9 U	1.8 U	1.8 U	9300 UD
trans-1,2-Dichloroethene	100000	190	190		1.8 U	1.9 U	1.8 U	1.8 U	9300 UD
trans-1,3-Dichloropropene	--	--	--		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Trichloroethene	21000	470	470		1.2 U	1.3 U	1.2 U	1.2 U	6200 UD
Trichlorofluoromethane	--	--	--		5.9 U	6.5 U	6.1 U	5.8 U	31000 UD
Vinyl chloride	900	20	20		2.4 U	2.6 U	2.4 U	2.3 U	12000 UD
Xylenes (total)	100000	260	1600		1.2 J	2.6 U	2.4 U	2.3 U	12000 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-16 1/7/2014 10 - 12	MW-16 1/7/2014 25 - 26.5	MW-17 1/2/2014 0 - 2	MW-17 1/2/2014 5 - 7	MW-17 1/2/2014 12 - 13	MW-17 1/2/2014 23 - 24
1,1,1-Trichloroethane	100000	680	680		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
1,1,2-Trichloroethane	--	--	--		190 UD	1.8 U	1.8 U	1.8 U	10 UD	1.7 U
1,1-Dichloroethane	26000	270	270		190 UD	1.8 U	1.8 U	1.8 U	10 UD	1.7 U
1,1-Dichloroethene	100000	330	330		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
1,2,3-Trichlorobenzene	--	--	--		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
1,2,4-Trichlorobenzene	--	--	--		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
1,2-Dibromoethane	--	--	--		510 UD	4.7 U	4.7 U	4.9 U	27 UD	4.6 U
1,2-Dichlorobenzene	100000	1100	1100		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
1,2-Dichloroethane	3100	20	20		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
1,2-Dichloropropane	--	--	--		450 UD	4.1 U	4.1 U	4.3 U	24 UD	4 U
1,3-Dichlorobenzene	49000	2400	2400		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
1,4-Dichlorobenzene	13000	1800	1800		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
1,4-Dioxane	13000	100	100		13000 UD	120 U	120 U	120 U	680 UD	110 U
2-Butanone (MEK)	100000	120	120		1300 UD	12 U	12 U	12 U	68 UD	4.9 J
2-Hexanone	--	--	--		1300 UD	12 U	12 U	12 U	68 UD	11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		1300 UD	12 U	12 U	12 U	68 UD	11 U
Acetone	100000	50	50		1300 UD	12 U	12 U	4.5 J	94 D	32
Benzene	4800	60	60		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Bromochloromethane	--	--	--		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
Bromodichloromethane	--	--	--		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Bromoform	--	--	--		510 UD	4.7 U	4.7 U	4.9 U	27 UD	4.6 U
Bromomethane	--	--	--		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
Carbon disulfide	--	--	--		1300 UD	12 U	12 U	12 U	68 UD	11 U
Carbon tetrachloride	2400	760	760		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Chlorobenzene	100000	1100	1100		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Chloroethane	--	--	--		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
Chloroform	49000	370	370		190 UD	1.8 U	1.8 U	1.8 U	10 UD	1.7 U
Chloromethane	--	--	--		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
cis-1,2-Dichloroethene	100000	250	250		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
cis-1,3-Dichloropropene	--	--	--		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Dibromochloromethane	--	--	--		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Dibromochloropropane	--	--	--		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
Dichlorodifluoromethane	--	--	--		1300 UD	12 U	12 U	12 U	68 UD	11 U
Ethylbenzene	41000	1000	1000		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-16	MW-16	MW-17	MW-17	MW-17	MW-17
				Sample Date:	1/7/2014	1/7/2014	1/2/2014	1/2/2014	1/2/2014	1/2/2014
				Sample Depth (ft bls):	10 - 12	25 - 26.5	0 - 2	5 - 7	12 - 13	23 - 24
Freon 113	--	--	--		2600 UD	23 U	23 U	24 U	140 UD	23 U
Isopropylbenzene	--	--	2300*		1300 D	1.2 U	1.2 U	1.2 U	200 D	13
m+p-Xylene	--	--	--		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
Methylene chloride	100000	50	50		1300 UD	12 U	12 U	12 U	68 UD	11 U
MTBE	100000	930	930		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
o-Xylene	--	--	--		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
Styrene	--	--	--		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
Tetrachloroethene	19000	1300	1300		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Toluene	100000	700	700		190 UD	1.8 U	1.8 U	1.8 U	10 UD	1.7 U
trans-1,2-Dichloroethene	100000	190	190		190 UD	1.8 U	1.8 U	1.8 U	10 UD	1.7 U
trans-1,3-Dichloropropene	--	--	--		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Trichloroethene	21000	470	470		130 UD	1.2 U	1.2 U	1.2 U	6.8 UD	1.1 U
Trichlorofluoromethane	--	--	--		640 UD	5.9 U	5.8 U	6.1 U	34 UD	5.7 U
Vinyl chloride	900	20	20		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U
Xylenes (total)	100000	260	1600		260 UD	2.3 U	2.3 U	2.4 U	14 UD	2.3 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-18 1/6/2014 0 - 2	MW-18 1/6/2014 8 - 10	MW-18 1/6/2014 12 - 14	MW-18 1/6/2014 20 - 22	MW-19 1/14/2014 0 - 2	MW-19 1/14/2014 4 - 6
1,1,1-Trichloroethane	100000	680	680		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
1,1,2-Trichloroethane	--	--	--		1.7 U	1.8 U	2.2 U	1.7 U	180 UD	2400 UD
1,1-Dichloroethane	26000	270	270		1.7 U	1.8 U	2.2 U	1.7 U	180 UD	2400 UD
1,1-Dichloroethene	100000	330	330		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
1,2,3-Trichlorobenzene	--	--	--		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
1,2,4-Trichlorobenzene	--	--	--		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
1,2-Dibromoethane	--	--	--		4.5 U	5 U	5.7 U	4.6 U	480 UD	6500 UD
1,2-Dichlorobenzene	100000	1100	1100		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
1,2-Dichloroethane	3100	20	20		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
1,2-Dichloropropane	--	--	--		4 U	4.3 U	5 U	4 U	420 UD	5700 UD
1,3-Dichlorobenzene	49000	2400	2400		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
1,4-Dichlorobenzene	13000	1800	1800		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
1,4-Dioxane	13000	100	100		110 U	120 U	140 U	110 U	12000 UD	160000 UD
2-Butanone (MEK)	100000	120	120		11 U	3.7 J	14 U	11 U	1200 UD	16000 UD
2-Hexanone	--	--	--		11 U	12 U	14 U	11 U	1200 UD	16000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U	12 U	14 U	11 U	1200 UD	16000 UD
Acetone	100000	50	50		11 U	22	12 J	11 U	1200 UD	16000 UD
Benzene	4800	60	60		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Bromochloromethane	--	--	--		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
Bromodichloromethane	--	--	--		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Bromoform	--	--	--		4.5 U	5 U	5.7 U	4.6 U	480 UD	6500 UD
Bromomethane	--	--	--		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
Carbon disulfide	--	--	--		11 U	12 U	14 U	11 U	1200 UD	16000 UD
Carbon tetrachloride	2400	760	760		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Chlorobenzene	100000	1100	1100		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Chloroethane	--	--	--		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
Chloroform	49000	370	370		1.7 U	1.8 U	2.2 U	1.7 U	180 UD	2400 UD
Chloromethane	--	--	--		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
cis-1,2-Dichloroethene	100000	250	250		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
cis-1,3-Dichloropropene	--	--	--		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Dibromochloromethane	--	--	--		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Dibromochloropropane	--	--	--		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
Dichlorodifluoromethane	--	--	--		11 U	12 U	14 U	11 U	1200 UD	16000 UD
Ethylbenzene	41000	1000	1000		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	3300 D

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-18 1/6/2014 0 - 2	MW-18 1/6/2014 8 - 10	MW-18 1/6/2014 12 - 14	MW-18 1/6/2014 20 - 22	MW-19 1/14/2014 0 - 2	MW-19 1/14/2014 4 - 6
Freon 113	--	--	--		22 U	25 U	29 U	23 U	2400 UD	33000 UD
Isopropylbenzene	--	--	2300*		1.1 U	1.2 U	1.4 U	1.1 U	310 D	$\boxed{17000 D}$
m+p-Xylene	--	--	--		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
Methylene chloride	100000	50	50		11 U	12 U	14 U	11 U	1200 UD	16000 UD
MTBE	100000	930	930		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
o-Xylene	--	--	--		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
Styrene	--	--	--		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
Tetrachloroethene	19000	1300	1300		1.5	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Toluene	100000	700	700		1.7 U	1.8 U	2.2 U	1.7 U	180 UD	2400 UD
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.8 U	2.2 U	1.7 U	180 UD	2400 UD
trans-1,3-Dichloropropene	--	--	--		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Trichloroethene	21000	470	470		1.1 U	1.2 U	1.4 U	1.1 U	120 UD	1600 UD
Trichlorofluoromethane	--	--	--		5.6 U	6.2 U	7.2 U	5.7 U	600 UD	8200 UD
Vinyl chloride	900	20	20		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD
Xylenes (total)	100000	260	1600		2.2 U	2.5 U	2.9 U	2.3 U	240 UD	3300 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
μg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-20 12/19/2013 0 - 2	MW-20 1/15/2014 7 - 9	MW-20 1/15/2014 12 - 14	MW-20 DUP 1/15/2014 12 - 14	MW-20 1/15/2014 18 - 19
1,1,1-Trichloroethane	100000	680	680		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
1,1,2-Trichloroethane	--	--	--		1.7 U	1.7 U	1800 UD	1800 UD	1700 UD
1,1-Dichloroethane	26000	270	270		1.7 U	1.7 U	1800 UD	1800 UD	1700 UD
1,1-Dichloroethene	100000	330	330		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
1,2,3-Trichlorobenzene	--	--	--		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
1,2,4-Trichlorobenzene	--	--	--		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
1,2-Dibromoethane	--	--	--		4.6 U	4.6 U	4800 UD	4800 UD	4600 UD
1,2-Dichlorobenzene	100000	1100	1100		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
1,2-Dichloroethane	3100	20	20		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
1,2-Dichloropropane	--	--	--		4 U	4 U	4200 UD	4200 UD	4000 UD
1,3-Dichlorobenzene	49000	2400	2400		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
1,4-Dichlorobenzene	13000	1800	1800		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
1,4-Dioxane	13000	100	100		110 U	110 U	120000 UD	120000 UD	110000 UD
2-Butanone (MEK)	100000	120	120		11 U	11 U	12000 UD	2100 JD	1700 JD
2-Hexanone	--	--	--		11 U	11 U	12000 UD	12000 UD	11000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U	11 U	12000 UD	12000 UD	11000 UD
Acetone	100000	50	50		9.7 J	11 U	12000 UD	4500 JD	4600 JD
Benzene	4800	60	60		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Bromochloromethane	--	--	--		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
Bromodichloromethane	--	--	--		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Bromoform	--	--	--		4.6 U	4.6 U	4800 UD	4800 UD	4600 UD
Bromomethane	--	--	--		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
Carbon disulfide	--	--	--		11 U	11 U	12000 UD	12000 UD	11000 UD
Carbon tetrachloride	2400	760	760		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Chlorobenzene	100000	1100	1100		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Chloroethane	--	--	--		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
Chloroform	49000	370	370		1.7 U	1.7 U	1800 UD	1800 UD	1700 UD
Chloromethane	--	--	--		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
cis-1,2-Dichloroethene	100000	250	250		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
cis-1,3-Dichloropropene	--	--	--		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Dibromochloromethane	--	--	--		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Dibromochloropropane	--	--	--		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
Dichlorodifluoromethane	--	--	--		11 U	11 U	12000 UD	12000 UD	11000 UD
Ethylbenzene	41000	1000	1000		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-20	MW-20	MW-20	MW-20 DUP	MW-20
				Sample Date:	12/19/2013	1/15/2014	1/15/2014	1/15/2014	1/15/2014
				Sample Depth (ft bls):	0 - 2	7 - 9	12 - 14	12 - 14	18 - 19
Freon 113	--	--	--		23 U	23 U	24000 UD	24000 UD	23000 UD
Isopropylbenzene	--	--	2300*		1.1 U	1.1 U	4100 D	5500 D	3700 D
m+p-Xylene	--	--	--		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
Methylene chloride	100000	50	50		2.4 J	11 U	12000 UD	12000 UD	11000 UD
MTBE	100000	930	930		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
o-Xylene	--	--	--		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
Styrene	--	--	--		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
Tetrachloroethene	19000	1300	1300		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Toluene	100000	700	700		1.7 U	1.7 U	1800 UD	1800 UD	1700 UD
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.7 U	1800 UD	1800 UD	1700 UD
trans-1,3-Dichloropropene	--	--	--		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Trichloroethene	21000	470	470		1.1 U	1.1 U	1200 UD	1200 UD	1100 UD
Trichlorofluoromethane	--	--	--		5.7 U	5.7 U	5900 UD	6000 UD	5700 UD
Vinyl chloride	900	20	20		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD
Xylenes (total)	100000	260	1600		2.3 U	2.3 U	2400 UD	2400 UD	2300 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-21 1/6/2014 0 - 2	MW-21 1/6/2014 5 - 7	MW-21 1/6/2014 7 - 8	MW-21 1/6/2014 18 - 20	MW-22 12/19/2013 0 - 2	MW-22 1/16/2014 7 - 9
1,1,1-Trichloroethane	100000	680	680		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
1,1,2-Trichloroethane	--	--	--		1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
1,1-Dichloroethane	26000	270	270		1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
1,1-Dichloroethene	100000	330	330		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
1,2,3-Trichlorobenzene	--	--	--		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
1,2,4-Trichlorobenzene	--	--	--		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
1,2-Dibromoethane	--	--	--		4.5 U	4.5 U	4.9 U	4.5 U	4.4 U	4.6 U
1,2-Dichlorobenzene	100000	1100	1100		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
1,2-Dichloroethane	3100	20	20		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
1,2-Dichloropropane	--	--	--		3.9 U	4 U	4.3 U	3.9 U	3.9 U	4 U
1,3-Dichlorobenzene	49000	2400	2400		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
1,4-Dichlorobenzene	13000	1800	1800		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
1,4-Dioxane	13000	100	100		110 U	110 U	120 U	110 U	110 U	120 U
2-Butanone (MEK)	100000	120	120		11 U	2.7 J	12 U	11 U	11 U	12 U
2-Hexanone	--	--	--		11 U	11 U	12 U	11 U	11 U	12 U
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U	11 U	12 U	11 U	11 U	12 U
Acetone	100000	50	50		11 U	42	12 U	14	11 U	4.6 J
Benzene	4800	60	60		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Bromochloromethane	--	--	--		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
Bromodichloromethane	--	--	--		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Bromoform	--	--	--		4.5 U	4.5 U	4.9 U	4.5 U	4.4 U	4.6 U
Bromomethane	--	--	--		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
Carbon disulfide	--	--	--		11 U	11 U	12 U	11 U	11 U	12 U
Carbon tetrachloride	2400	760	760		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Chlorobenzene	100000	1100	1100		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Chloroethane	--	--	--		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
Chloroform	49000	370	370		1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
Chloromethane	--	--	--		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
cis-1,2-Dichloroethene	100000	250	250		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
cis-1,3-Dichloropropene	--	--	--		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Dibromochloromethane	--	--	--		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Dibromochloropropane	--	--	--		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
Dichlorodifluoromethane	--	--	--		11 U	11 U	12 U	11 U	11 U	12 U
Ethylbenzene	41000	1000	1000		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	MW-21	MW-21	MW-21	MW-21	MW-22	MW-22
				Sample Date:	1/6/2014	1/6/2014	1/6/2014	1/6/2014	12/19/2013	1/16/2014
				Sample Depth (ft bls):	0 - 2	5 - 7	7 - 8	18 - 20	0 - 2	7 - 9
Freon 113	--	--	--		22 U	23 U	25 U	22 U	22 U	23 U
Isopropylbenzene	--	--	2300*		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
m+p-Xylene	--	--	--		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
Methylene chloride	100000	50	50		11 U	11 U	12 U	11 U	11 U	12 U
MTBE	100000	930	930		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
o-Xylene	--	--	--		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
Styrene	--	--	--		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
Tetrachloroethene	19000	1300	1300		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Toluene	100000	700	700		1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
trans-1,2-Dichloroethene	100000	190	190		1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
trans-1,3-Dichloropropene	--	--	--		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Trichloroethene	21000	470	470		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U
Trichlorofluoromethane	--	--	--		5.6 U	5.6 U	6.2 U	5.6 U	5.5 U	5.8 U
Vinyl chloride	900	20	20		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U
Xylenes (total)	100000	260	1600		2.2 U	2.3 U	2.5 U	2.2 U	2.2 U	2.3 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-22	MW-22	MW-23	MW-23	MW-23
				Sample Date:	1/16/2014	1/16/2014	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	12 - 14	18 - 20	0 - 2	5 - 7	10 - 12
1,1,1-Trichloroethane	100000	680	680		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
1,1,2,2-Tetrachloroethane	--	--	--		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
1,1,2-Trichloroethane	--	--	--		4.9 UD	180 UD	1.8 U	8.7 UD	9400 UD
1,1-Dichloroethane	26000	270	270		4.9 UD	180 UD	1.8 U	8.7 UD	9400 UD
1,1-Dichloroethene	100000	330	330		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
1,2,3-Trichlorobenzene	--	--	--		16 UD	620 UD	6 U	29 UD	31000 UD
1,2,4-Trichlorobenzene	--	--	--		16 UD	620 UD	6 U	29 UD	31000 UD
1,2-Dibromoethane	--	--	--		13 UD	490 UD	4.8 U	23 UD	25000 UD
1,2-Dichlorobenzene	100000	1100	1100		16 UD	620 UD	6 U	29 UD	31000 UD
1,2-Dichloroethane	3100	20	20		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
1,2-Dichloropropane	--	--	--		11 UD	430 UD	4.2 U	20 UD	22000 UD
1,3-Dichlorobenzene	49000	2400	2400		16 UD	620 UD	6 U	29 UD	31000 UD
1,4-Dichlorobenzene	13000	1800	1800		16 UD	620 UD	6 U	29 UD	31000 UD
1,4-Dioxane	13000	100	100		320 UD	12000 UD	120 U	580 UD	620000 UD
2-Butanone (MEK)	100000	120	120		32 UD	1200 UD	12 U	32 JD	62000 UD
2-Hexanone	--	--	--		32 UD	1200 UD	12 U	58 UD	62000 UD
4-Methyl-2-pentanone (MIBK)	--	--	--		32 UD	1200 UD	12 U	58 UD	62000 UD
Acetone	100000	50	50		14 JD	1200 UD	19	110 D	62000 UD
Benzene	4800	60	60		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Bromochloromethane	--	--	--		16 UD	620 UD	6 U	29 UD	31000 UD
Bromodichloromethane	--	--	--		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Bromoform	--	--	--		13 UD	490 UD	4.8 U	23 UD	25000 UD
Bromomethane	--	--	--		6.5 UD	250 UD	2.4 U	12 UD	12000 UD
Carbon disulfide	--	--	--		32 UD	1200 UD	12 U	58 UD	62000 UD
Carbon tetrachloride	2400	760	760		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Chlorobenzene	100000	1100	1100		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Chloroethane	--	--	--		6.5 UD	250 UD	2.4 U	12 UD	12000 UD
Chloroform	49000	370	370		4.9 UD	180 UD	1.8 U	8.7 UD	9400 UD
Chloromethane	--	--	--		16 UD	620 UD	6 U	29 UD	31000 UD
cis-1,2-Dichloroethene	100000	250	250		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
cis-1,3-Dichloropropene	--	--	--		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Dibromochloromethane	--	--	--		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Dibromochloropropane	--	--	--		16 UD	620 UD	6 U	29 UD	31000 UD
Dichlorodifluoromethane	--	--	--		32 UD	1200 UD	12 U	58 UD	62000 UD
Ethylbenzene	41000	1000	1000		3.2 UD	120 UD	1.2 U	5.8 UD	9400 D

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-22	MW-22	MW-23	MW-23	MW-23
				Sample Date:	1/16/2014	1/16/2014	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	12 - 14	18 - 20	0 - 2	5 - 7	10 - 12
Freon 113	--	--	--		65 UD	2500 UD	24 U	120 UD	120000 UD
Isopropylbenzene	--	--	2300*		100 D	320 D	1.2 U	68 D	14000 D
m+p-Xylene	--	--	--		6.5 UD	250 UD	2.4 U	12 UD	8800 JD
Methylene chloride	100000	50	50		32 UD	1200 UD	12 U	58 UD	62000 UD
MTBE	100000	930	930		6.5 UD	250 UD	2.4 U	12 UD	12000 UD
o-Xylene	--	--	--		6.5 UD	250 UD	2.4 U	12 UD	12000 UD
Styrene	--	--	--		6.5 UD	250 UD	2.4 U	12 UD	12000 UD
Tetrachloroethene	19000	1300	1300		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Toluene	100000	700	700		4.9 UD	180 UD	1.8 U	8.7 UD	9400 UD
trans-1,2-Dichloroethene	100000	190	190		4.9 UD	180 UD	1.8 U	8.7 UD	9400 UD
trans-1,3-Dichloropropene	--	--	--		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Trichloroethene	21000	470	470		3.2 UD	120 UD	1.2 U	5.8 UD	6200 UD
Trichlorofluoromethane	--	--	--		16 UD	620 UD	6 U	29 UD	31000 UD
Vinyl chloride	900	20	20		6.5 UD	250 UD	2.4 U	12 UD	12000 UD
Xylenes (total)	100000	260	1600		6.5 UD	250 UD	2.4 U	12 UD	8800 JD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-23 / 12/31/2013 / 18 - 19
1,1,1-Trichloroethane	100000	680	680		1.1 U
1,1,2,2-Tetrachloroethane	--	--	--		1.1 U
1,1,2-Trichloroethane	--	--	--		1.6 U
1,1-Dichloroethane	26000	270	270		1.6 U
1,1-Dichloroethene	100000	330	330		1.1 U
1,2,3-Trichlorobenzene	--	--	--		5.5 U
1,2,4-Trichlorobenzene	--	--	--		5.5 U
1,2-Dibromoethane	--	--	--		4.4 U
1,2-Dichlorobenzene	100000	1100	1100		5.5 U
1,2-Dichloroethane	3100	20	20		1.1 U
1,2-Dichloropropane	--	--	--		3.8 U
1,3-Dichlorobenzene	49000	2400	2400		5.5 U
1,4-Dichlorobenzene	13000	1800	1800		5.5 U
1,4-Dioxane	13000	100	100		110 U
2-Butanone (MEK)	100000	120	120		11 U
2-Hexanone	--	--	--		11 U
4-Methyl-2-pentanone (MIBK)	--	--	--		11 U
Acetone	100000	50	50		30
Benzene	4800	60	60		1.1 U
Bromochloromethane	--	--	--		5.5 U
Bromodichloromethane	--	--	--		1.1 U
Bromoform	--	--	--		4.4 U
Bromomethane	--	--	--		2.2 U
Carbon disulfide	--	--	--		11 U
Carbon tetrachloride	2400	760	760		1.1 U
Chlorobenzene	100000	1100	1100		1.1 U
Chloroethane	--	--	--		2.2 U
Chloroform	49000	370	370		1.6 U
Chloromethane	--	--	--		5.5 U
cis-1,2-Dichloroethene	100000	250	250		1.1 U
cis-1,3-Dichloropropene	--	--	--		1.1 U
Dibromochloromethane	--	--	--		1.1 U
Dibromochloropropane	--	--	--		5.5 U
Dichlorodifluoromethane	--	--	--		11 U
Ethylbenzene	41000	1000	1000		1.1 U

Table 3. Summary of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-23
				Sample Date:	12/31/2013
				Sample Depth (ft bls):	18 - 19
Freon 113	--	--	--		22 U
Isopropylbenzene	--	--	2300*		1.1 U
m+p-Xylene	--	--	--		2.2 U
Methylene chloride	100000	50	50		11 U
MTBE	100000	930	930		2.2 U
o-Xylene	--	--	--		2.2 U
Styrene	--	--	--		2.2 U
Tetrachloroethene	19000	1300	1300		1.1 U
Toluene	100000	700	700		1.6 U
trans-1,2-Dichloroethene	100000	190	190		1.6 U
trans-1,3-Dichloropropene	--	--	--		1.1 U
Trichloroethene	21000	470	470		1.1 U
Trichlorofluoromethane	--	--	--		5.5 U
Vinyl chloride	900	20	20		2.2 U
Xylenes (total)	100000	260	1600		2.2 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
* NYSDEC CP-51, Table 1 Supplemental Soil Cleanup Objectives Protection of Groundwater

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-5	B-5	B-5	B-5	B-6
				Sample Date:	12/31/2013	12/31/2013	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	0 - 2	3 - 5	10 - 12	15 - 16	0 - 2
1,1'-Biphenyl	--	--	--		84 J	2500 UD	9400 UD	410 U	430 U
1,2,4,5-Tetrachlorobenzene	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		240 U	1300 UD	4900 UD	220 U	230 U
2,4,5-Trichlorophenol	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2,4,6-Trichlorophenol	--	--	--		120 U	670 UD	2500 UD	110 U	110 U
2,4-Dichlorophenol	--	--	--		180 U	1000 UD	3700 UD	160 U	170 U
2,4-Dimethylphenol	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2,4-Dinitrophenol	--	--	--		970 U	5300 UD	20000 UD	870 U	910 U
2,4-Dinitrotoluene	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2,6-Dinitrotoluene	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2-Chloronaphthalene	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2-Chlorophenol	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2-Methylnaphthalene	--	--	--		380	620 JD	1300 JD	220 U	230 U
2-Methylphenol	100000	330	330		200 U	1100 UD	4100 UD	180 U	190 U
2-Nitroaniline	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
2-Nitrophenol	--	--	--		440 U	2400 UD	8900 UD	390 U	410 U
3&4-Methylphenol	100000	330	330		290 U	1600 UD	5900 UD	260 U	270 U
3,3'-Dichlorobenzidine	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
3-Nitroaniline	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		530 U	2900 UD	11000 UD	470 U	490 U
4-Bromophenyl phenyl ether	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
4-Chloro-3-methylphenol	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
4-Chloroaniline	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
4-Nitroaniline	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
4-Nitrophenol	--	--	--		280 U	1600 UD	5800 UD	250 U	260 U
Acenaphthene	100000	20000	98000		160 U	1600 D	3300 UD	140 U	150 U
Acenaphthylene	100000	100000	107000		160 U	1800 D	3300 UD	140 U	88 J
Acetophenone	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Anthracene	100000	100000	1000000		53 J	8600 D	2500 UD	110 U	99 J

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-5 12/31/2013 0 - 2	B-5 12/31/2013 3 - 5	B-5 12/31/2013 10 - 12	B-5 12/31/2013 15 - 16	B-6 12/31/2013 0 - 2
Benzo[a]anthracene	1000	1000	1000		410	**18000 D**	2500 UD	110 U	380
Benzo[a]pyrene	1000	1000	22000		430	**14000 D**	3300 UD	140 U	320
Benzo[b]fluoranthene	1000	1000	1700		920	**17000 D**	2500 UD	110 U	410
Benzo[g,h,i]perylene	100000	100000	1000000		390	5800 D	3300 UD	140 U	200
Benzo[k]fluoranthene	3900	800	1700		250	**7500 D**	2500 UD	110 U	150
Benzoic Acid	--	--	--		660 U	3600 UD	13000 UD	590 U	610 U
Benzyl Alcohol	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	1200 UD	4400 UD	200 U	200 U
Bis(2-chloroethyl) ether	--	--	--		180 U	1000 UD	3700 UD	160 U	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Butylbenzyl phthalate	--	--	--		200 U	1100 UD	4100 UD	180 U	150 J
Carbazole	--	--	--		200 U	820 JD	4100 UD	180 U	190 U
Chrysene	3900	1000	1000		1000	**18000 D**	2500 UD	110 U	390
Dibenzo[a,h]anthracene	330	330	1000000		140	**2100 D**	2500 UD	110 U	58 J
Dibenzofuran	59000	7000	210000		200 U	1300 D	4100 UD	180 U	190 U
Diethyl phthalate	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Dimethyl phthalate	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Di-n-butyl phthalate	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Di-n-octyl phthalate	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Fluoranthene	100000	100000	1000000		480	38000 D	2500 UD	110 U	560
Fluorene	100000	30000	386000		200 U	2000 D	4100 UD	180 U	190 U
Hexachlorobenzene	1200	330	3200		120 U	670 UD	2500 UD	110 U	110 U
Hexachlorobutadiene	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U
Hexachlorocyclopentadiene	--	--	--		580 U	3200 UD	12000 UD	520 U	540 U
Hexachloroethane	--	--	--		160 U	890 UD	3300 UD	140 U	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		360	**6900 D**	3300 UD	140 U	190
Isophorone	--	--	--		180 U	1000 UD	3700 UD	160 U	170 U
Naphthalene	100000	12000	12000		250	1100 D	7400 D	180 U	190 U
Nitrobenzene	--	--	--		180 U	1000 UD	3700 UD	160 U	170 U
n-Nitrosodi-n-propylamine	--	--	--		200 U	1100 UD	4100 UD	180 U	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-5	B-5	B-5	B-5	B-6
				Sample Date:	12/31/2013	12/31/2013	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	0 - 2	3 - 5	10 - 12	15 - 16	0 - 2
n-Nitrosodiphenylamine	--	--	--		160 U	890 UD	3300 UD	140 U	150 U
Pentachlorophenol	6700	800	800		160 U	890 UD	3300 UD	140 U	150 U
Phenanthrene	100000	100000	1000000		630	26000 D	2500 UD	110 U	260
Phenol	100000	330	330		200 U	1100 UD	4100 UD	180 U	190 U
Pyrene	100000	100000	1000000		460	33000 D	2500 UD	110 U	560

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-6 1/17/2014 7 - 9	B-6 1/17/2014 12 - 14	B-6 1/17/2014 16 - 18	B-7 12/30/2013 0 - 2	B-7 12/30/2013 5 - 7
1,1'-Biphenyl	--	--	--		4300 UD	9000 UD	17000 UD	880 UD	2300 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2,2'-oxybis (1-chloropropane)	--	--	--		2200 UD	4700 UD	9100 UD	470 UD	1200 UD
2,4,5-Trichlorophenol	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2,4,6-Trichlorophenol	--	--	--		1100 UD	2400 UD	4600 UD	230 UD	610 UD
2,4-Dichlorophenol	--	--	--		1700 UD	3500 UD	6800 UD	350 UD	920 UD
2,4-Dimethylphenol	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2,4-Dinitrophenol	--	--	--		9000 UD	19000 UD	36000 UD	1900 UD	4900 UD
2,4-Dinitrotoluene	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2,6-Dinitrotoluene	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2-Chloronaphthalene	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2-Chlorophenol	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2-Methylnaphthalene	--	--	--		2200 UD	8900 D	13000 D	470 UD	1200 UD
2-Methylphenol	100000	330	330		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2-Nitroaniline	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
2-Nitrophenol	--	--	--		4000 UD	8500 UD	16000 UD	840 UD	2200 UD
3&4-Methylphenol	100000	330	330		2700 UD	5600 UD	11000 UD	560 UD	1500 UD
3,3'-Dichlorobenzidine	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
3-Nitroaniline	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
4,6-Dinitro-2-methylphenol	--	--	--		4900 UD	10000 UD	20000 UD	1000 UD	2600 UD
4-Bromophenyl phenyl ether	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
4-Chloro-3-methylphenol	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
4-Chloroaniline	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
4-Chlorophenyl phenyl ether	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
4-Nitroaniline	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
4-Nitrophenol	--	--	--		2600 UD	5500 UD	11000 UD	540 UD	1400 UD
Acenaphthene	100000	20000	98000		1500 UD	3100 UD	6100 UD	300 JD	1300 D
Acenaphthylene	100000	100000	107000		1500 UD	3100 UD	6100 UD	770 D	560 JD
Acetophenone	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Anthracene	100000	100000	1000000		1100 UD	2400 UD	4600 UD	1500 D	3600 D

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-6 1/17/2014 7 - 9	B-6 1/17/2014 12 - 14	B-6 1/17/2014 16 - 18	B-7 12/30/2013 0 - 2	B-7 12/30/2013 5 - 7
Benzo[a]anthracene	1000	1000	1000		800 JD	2400 UD	4600 UD	**4600 D**	**7900 D**
Benzo[a]pyrene	1000	1000	22000		**1200 JD**	3100 UD	6100 UD	**4300 D**	**7300 D**
Benzo[b]fluoranthene	1000	1000	1700		**1600 D**	2400 UD	4600 UD	**5400 D**	**9300 D**
Benzo[g,h,i]perylene	100000	100000	1000000		1000 JD	3100 UD	6100 UD	2600 D	4400 D
Benzo[k]fluoranthene	3900	800	1700		570 JD	2400 UD	4600 UD	2200 D	**4000 D**
Benzoic Acid	--	--	--		6100 UD	13000 UD	24000 UD	1200 UD	3300 UD
Benzyl Alcohol	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Bis(2-chloroethoxy)methane	--	--	--		2000 UD	4200 UD	8200 UD	420 UD	1100 UD
Bis(2-chloroethyl) ether	--	--	--		1700 UD	3500 UD	6800 UD	350 UD	920 UD
Bis(2-ethylhexyl) phthalate	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Butylbenzyl phthalate	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Carbazole	--	--	--		1900 UD	3900 UD	7600 UD	580 D	1700 D
Chrysene	3900	1000	1000		930 JD	2400 UD	4600 UD	**4900 D**	**8400 D**
Dibenzo[a,h]anthracene	330	330	1000000		1100 UD	2400 UD	4600 UD	**680 D**	**1200 D**
Dibenzofuran	59000	7000	210000		1900 UD	3900 UD	7600 UD	200 JD	910 JD
Diethyl phthalate	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Dimethyl phthalate	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Di-n-butyl phthalate	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Di-n-octyl phthalate	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Fluoranthene	100000	100000	1000000		770 JD	2400 UD	4600 UD	10000 D	19000 D
Fluorene	100000	30000	386000		1900 UD	3900 UD	7600 UD	310 JD	1300 D
Hexachlorobenzene	1200	330	3200		1100 UD	2400 UD	4600 UD	230 UD	610 UD
Hexachlorobutadiene	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Hexachlorocyclopentadiene	--	--	--		5400 UD	11000 UD	22000 UD	1100 UD	2900 UD
Hexachloroethane	--	--	--		1500 UD	3100 UD	6100 UD	310 UD	820 UD
Indeno[1,2,3-cd]pyrene	500	500	8200		**1200 JD**	3100 UD	6100 UD	**2500 D**	**4500 D**
Isophorone	--	--	--		1700 UD	3500 UD	6800 UD	350 UD	920 UD
Naphthalene	100000	12000	12000		2300 D	39000 D	52000 D	160 JD	560 JD
Nitrobenzene	--	--	--		1700 UD	3500 UD	6800 UD	350 UD	920 UD
n-Nitrosodi-n-propylamine	--	--	--		1900 UD	3900 UD	7600 UD	390 UD	1000 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-6 / 1/17/2014 / 7 - 9	B-6 / 1/17/2014 / 12 - 14	B-6 / 1/17/2014 / 16 - 18	B-7 / 12/30/2013 / 0 - 2	B-7 / 12/30/2013 / 5 - 7
n-Nitrosodiphenylamine	--	--	--		1500 UD	3100 UD	6100 UD	310 UD	820 UD
Pentachlorophenol	6700	800	800		1500 UD	3100 UD	6100 UD	310 UD	820 UD
Phenanthrene	100000	100000	1000000		590 JD	920 JD	1900 JD	5700 D	17000 D
Phenol	100000	330	330		1900 UD	3900 UD	7600 UD	390 UD	1000 UD
Pyrene	100000	100000	1000000		750 JD	2400 UD	4600 UD	9400 D	16000 D

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2
1,1'-Biphenyl	--	--	--		8500 UD	430 U	440 U	9400 UD	830 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
2,2'-oxybis (1-chloropropane)	--	--	--		4500 UD	220 U	230 U	4900 UD	440 U
2,4,5-Trichlorophenol	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
2,4,6-Trichlorophenol	--	--	--		2200 UD	110 U	120 U	2500 UD	220 U
2,4-Dichlorophenol	--	--	--		3400 UD	170 U	170 U	3700 UD	160 U
2,4-Dimethylphenol	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
2,4-Dinitrophenol	--	--	--		18000 UD	900 U	920 U	20000 UD	1800 UD
2,4-Dinitrotoluene	--	--	--		3700 UD	190 U	190 U	4100 UD	360 UD
2,6-Dinitrotoluene	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
2-Chloronaphthalene	--	--	--		3700 UD	190 U	190 U	4100 UD	360 UD
2-Chlorophenol	--	--	--		3700 UD	190 U	190 U	4100 UD	180 UJVD
2-Methylnaphthalene	--	--	--		4500 UD	220 U	230 U	4900 UD	440 UD
2-Methylphenol	100000	330	330		3700 UD	190 U	190 U	4100 UD	360 U
2-Nitroaniline	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
2-Nitrophenol	--	--	--		8000 UD	400 U	420 U	8900 UD	790 U
3&4-Methylphenol	100000	330	330		5400 UD	270 U	280 U	5900 UD	530 U
3,3'-Dichlorobenzidine	--	--	--		3700 UD	190 U	190 U	4100 UD	180 UD
3-Nitroaniline	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
4,6-Dinitro-2-methylphenol	--	--	--		9700 UD	490 U	500 U	11000 UD	950 U
4-Bromophenyl phenyl ether	--	--	--		3700 UD	190 U	190 U	4100 UD	180 U
4-Chloro-3-methylphenol	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
4-Chloroaniline	--	--	--		3700 UD	190 U	190 U	4100 UD	180 U
4-Chlorophenyl phenyl ether	--	--	--		3700 UD	190 U	190 U	4100 UD	360 UD
4-Nitroaniline	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
4-Nitrophenol	--	--	--		5200 UD	260 U	270 U	5800 UD	510 UD
Acenaphthene	100000	20000	98000		3000 UD	260	200	2400 JD	180 JD
Acenaphthylene	100000	100000	107000		3000 UD	280	130 J	3300 UD	360
Acetophenone	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
Anthracene	100000	100000	1000000		2200 UD	900	610	1400 JD	480

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2
Benzo[a]anthracene	1000	1000	1000		2200 UD	**2500**	**1600**	**2400 JD**	**1600 D**
Benzo[a]pyrene	1000	1000	22000		3000 UD	**2500**	**1600**	**2300 JD**	**2300 D**
Benzo[b]fluoranthene	1000	1000	1700		2200 UD	**3200**	**2100**	**2900 D**	**2600**
Benzo[g,h,i]perylene	100000	100000	1000000		3000 UD	1600	1000	1600 JD	1200
Benzo[k]fluoranthene	3900	800	1700		2200 UD	1200	770	1200 JD	630 D
Benzoic Acid	--	--	--		12000 UD	610 U	620 U	13000 UD	1200 U
Benzyl Alcohol	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
Bis(2-chloroethoxy)methane	--	--	--		4000 UD	200 U	210 U	4400 UD	200 U
Bis(2-chloroethyl) ether	--	--	--		3400 UD	170 U	170 U	3700 UD	330 U
Bis(2-ethylhexyl) phthalate	--	--	--		3700 UD	1400	190 U	4100 UD	360 U
Butylbenzyl phthalate	--	--	--		3700 UD	190 U	190 U	4100 UD	180 U
Carbazole	--	--	--		3700 UD	350	230	4100 UD	500 JD
Chrysene	3900	1000	1000		2200 UD	2600	1700	2600 D	1500
Dibenzo[a,h]anthracene	330	330	1000000		2200 UD	**410**	270	2500 UD	280
Dibenzofuran	59000	7000	210000		3700 UD	200	130 J	4100 UD	360 UD
Diethyl phthalate	--	--	--		3700 UD	190 U	190 U	4100 UD	360 U
Dimethyl phthalate	--	--	--		3700 UD	190 U	190 U	4100 UD	360 UD
Di-n-butyl phthalate	--	--	--		3700 UD	190 U	190 U	4100 UD	180 U
Di-n-octyl phthalate	--	--	--		3700 UD	190 U	190 U	4100 UD	360 UD
Fluoranthene	100000	100000	1000000		2200 UD	4800	3400	7400 D	3000
Fluorene	100000	30000	386000		3700 UD	310	190	1300 JD	140
Hexachlorobenzene	1200	330	3200		2200 UD	110 U	120 U	2500 UD	110 U
Hexachlorobutadiene	--	--	--		3700 UD	190 U	190 U	4100 UD	180 UD
Hexachlorocyclopentadiene	--	--	--		11000 UD	540 U	550 U	12000 UD	1000 UD
Hexachloroethane	--	--	--		3000 UD	150 U	150 U	3300 UD	290 U
Indeno[1,2,3-cd]pyrene	500	500	8200		3000 UD	**1600**	**1100**	**1600 JD**	**870 D**
Isophorone	--	--	--		3400 UD	170 U	170 U	3700 UD	330 U
Naphthalene	100000	12000	12000		3700 UD	120 J	70 J	4100 UD	220
Nitrobenzene	--	--	--		3400 UD	170 U	170 U	3700 UD	330 U
n-Nitrosodi-n-propylamine	--	--	--		3700 UD	190 U	190 U	4100 UD	360 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2
n-Nitrosodiphenylamine	--	--	--		3000 UD	150 U	150 U	3300 UD	290 UD
Pentachlorophenol	6700	800	800		3000 UD	150 U	150 U	3300 UD	290 U
Phenanthrene	100000	100000	1000000		2200 UD	3400	2200	5500 D	2000
Phenol	100000	330	330		3700 UD	190 U	190 U	4100 UD	180 U
Pyrene	100000	100000	1000000		2200 UD	4400	2900	5900 D	2700 D

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

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D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

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Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-9	B-9	B-9	B-10	B-10
				Sample Date:	12/16/2013	12/16/2013	12/16/2013	12/20/2013	12/20/2013
				Sample Depth (ft bls):	5 - 7	7 - 9	19 - 20	0 - 2	5 - 7
1,1'-Biphenyl	--	--	--		420 U	960 UD	420 U	880 UD	450 U
1,2,4,5-Tetrachlorobenzene	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2,2'-oxybis (1-chloropropane)	--	--	--		220 U	500 UD	220 U	460 UD	240 U
2,4,5-Trichlorophenol	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2,4,6-Trichlorophenol	--	--	--		110 U	250 UD	110 U	230 UD	120 U
2,4-Dichlorophenol	--	--	--		170 U	380 UD	170 U	350 UD	180 U
2,4-Dimethylphenol	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2,4-Dinitrophenol	--	--	--		890 U	2000 UD	890 U	1800 UD	950 U
2,4-Dinitrotoluene	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2,6-Dinitrotoluene	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2-Chloronaphthalene	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2-Chlorophenol	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2-Methylnaphthalene	--	--	--		130 J	500 UD	220 U	460 UD	80 J
2-Methylphenol	100000	330	330		180 U	420 UD	180 U	380 UD	200 U
2-Nitroaniline	--	--	--		180 U	420 UD	180 U	380 UD	200 U
2-Nitrophenol	--	--	--		400 U	910 UD	400 U	830 UD	430 U
3&4-Methylphenol	100000	330	330		270 U	600 UD	260 U	560 UD	280 U
3,3'-Dichlorobenzidine	--	--	--		180 U	420 UD	180 U	380 UD	200 U
3-Nitroaniline	--	--	--		180 U	420 UD	180 U	380 UD	200 U
4,6-Dinitro-2-methylphenol	--	--	--		480 U	1100 UD	480 U	1000 UD	510 U
4-Bromophenyl phenyl ether	--	--	--		180 U	420 UD	180 U	380 UD	200 U
4-Chloro-3-methylphenol	--	--	--		180 U	420 UD	180 U	380 UD	200 U
4-Chloroaniline	--	--	--		180 U	420 UD	180 U	380 UD	200 U
4-Chlorophenyl phenyl ether	--	--	--		180 U	420 UD	180 U	380 UD	200 U
4-Nitroaniline	--	--	--		180 U	420 UD	180 U	380 UD	200 U
4-Nitrophenol	--	--	--		260 U	590 UD	260 U	540 UD	280 U
Acenaphthene	100000	20000	98000		480	740 D	150 U	300 JD	190
Acenaphthylene	100000	100000	107000		420	320 JD	150 U	320 D	150 J
Acetophenone	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Anthracene	100000	100000	1000000		1200	1700 D	110 U	1000 D	620

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-9	B-9	B-9	B-10	B-10
				Sample Date:	12/16/2013	12/16/2013	12/16/2013	12/20/2013	12/20/2013
				Sample Depth (ft bls):	5 - 7	7 - 9	19 - 20	0 - 2	5 - 7
Benzo[a]anthracene	1000	1000	1000		**3000**	**3600 D**	110 U	**3000 D**	**1600**
Benzo[a]pyrene	1000	1000	22000		**2900**	**3700 D**	150 U	**2600 D**	**1300**
Benzo[b]fluoranthene	1000	1000	1700		**3800**	**4400 D**	110 U	**3200 D**	**1600**
Benzo[g,h,i]perylene	100000	100000	1000000		1900	2500 D	150 U	1600 D	850
Benzo[k]fluoranthene	3900	800	1700		1400	1700 D	110 U	1100 D	520
Benzoic Acid	--	--	--		600 U	1400 UD	600 U	1200 UD	640 U
Benzyl Alcohol	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Bis(2-chloroethoxy)methane	--	--	--		200 U	450 UD	200 U	420 UD	210 U
Bis(2-chloroethyl) ether	--	--	--		170 U	380 UD	170 U	350 UD	180 U
Bis(2-ethylhexyl) phthalate	--	--	--		180 U	420 UD	75 J	380 UD	200 U
Butylbenzyl phthalate	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Carbazole	--	--	--		720	410 JD	180 U	410 D	260
Chrysene	3900	1000	1000		3000	3900 D	110 U	3200 D	1400
Dibenzo[a,h]anthracene	330	330	1000000		**550**	**420 D**	110 U	**400 D**	230
Dibenzofuran	59000	7000	210000		290	480 D	180 U	200 JD	150 J
Diethyl phthalate	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Dimethyl phthalate	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Di-n-butyl phthalate	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Di-n-octyl phthalate	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Fluoranthene	100000	100000	1000000		6700	8900 D	110 U	6100 D	3000
Fluorene	100000	30000	386000		420	720 D	180 U	300 JD	190 J
Hexachlorobenzene	1200	330	3200		110 U	250 UD	110 U	230 UD	120 U
Hexachlorobutadiene	--	--	--		180 U	420 UD	180 U	380 UD	200 U
Hexachlorocyclopentadiene	--	--	--		530 U	1200 UD	530 U	1100 UD	560 U
Hexachloroethane	--	--	--		150 U	340 UD	150 U	310 UD	160 U
Indeno[1,2,3-cd]pyrene	500	500	8200		**1600**	**2600 D**	150 U	**1500 D**	**800**
Isophorone	--	--	--		170 U	380 UD	170 U	350 UD	180 U
Naphthalene	100000	12000	12000		320	340 JD	100 J	210 JD	170 J
Nitrobenzene	--	--	--		170 U	380 UD	170 U	350 UD	180 U
n-Nitrosodi-n-propylamine	--	--	--		180 U	420 UD	180 U	380 UD	200 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-9	B-9	B-9	B-10	B-10
				Sample Date:	12/16/2013	12/16/2013	12/16/2013	12/20/2013	12/20/2013
				Sample Depth (ft bls):	5 - 7	7 - 9	19 - 20	0 - 2	5 - 7
n-Nitrosodiphenylamine	--	--	--		150 U	340 UD	150 U	310 UD	160 U
Pentachlorophenol	6700	800	800		150 U	340 UD	150 U	310 UD	160 U
Phenanthrene	100000	100000	1000000		5000	4200 D	110 U	4300 D	2900
Phenol	100000	330	330		180 U	420 UD	180 U	380 UD	200 U
Pyrene	100000	100000	1000000		5900	8000 D	110 U	5300 D	2800

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

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of the calibration range in the original sample.

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UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-10 12/20/2013 10 - 12	B-10 12/20/2013 17.5 - 18	B-11 1/2/2014 0 - 2	B-11 1/6/2014 8 - 10	B-11 1/6/2014 11 - 13	B-11 1/6/2014 15 - 17
1,1'-Biphenyl	--	--	--		9800 UD	420 U	430 U	500 U	480 U	440 U
1,2,4,5-Tetrachlorobenzene	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		5200 UD	220 U	230 U	260 U	250 U	230 U
2,4,5-Trichlorophenol	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2,4,6-Trichlorophenol	--	--	--		2600 UD	110 U	110 U	130 U	130 U	120 U
2,4-Dichlorophenol	--	--	--		3900 UD	160 U	170 U	200 U	190 U	170 U
2,4-Dimethylphenol	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2,4-Dinitrophenol	--	--	--		21000 UD	880 U	910 U	1000 U	1000 U	920 U
2,4-Dinitrotoluene	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2,6-Dinitrotoluene	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2-Chloronaphthalene	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2-Chlorophenol	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2-Methylnaphthalene	--	--	--		8000 D	220 U	230 U	74 J	250 U	230 U
2-Methylphenol	100000	330	330		4300 UD	180 U	190 U	220 U	210 U	190 U
2-Nitroaniline	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
2-Nitrophenol	--	--	--		9300 UD	400 U	410 U	480 U	460 U	420 U
3&4-Methylphenol	100000	330	330		6200 UD	260 U	270 U	320 U	300 U	280 U
3,3'-Dichlorobenzidine	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
3-Nitroaniline	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		11000 UD	480 U	490 U	570 U	550 U	500 U
4-Bromophenyl phenyl ether	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
4-Chloro-3-methylphenol	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
4-Chloroaniline	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
4-Nitroaniline	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
4-Nitrophenol	--	--	--		6000 UD	260 U	260 U	310 U	300 U	270 U
Acenaphthene	100000	20000	98000		3400 UD	150 U	58 J	230	1300	150 U
Acenaphthylene	100000	100000	107000		3400 UD	150 U	64 J	94 J	170 U	150 U
Acetophenone	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Anthracene	100000	100000	1000000		2600 UD	110 U	180	320	780	120 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater		B-10	B-10	B-11	B-11	B-11	B-11
				Sample Designation:	B-10	B-10	B-11	B-11	B-11	B-11
				Sample Date:	12/20/2013	12/20/2013	1/2/2014	1/6/2014	1/6/2014	1/6/2014
				Sample Depth (ft bls):	10 - 12	17.5 - 18	0 - 2	8 - 10	11 - 13	15 - 17
Benzo[a]anthracene	1000	1000	1000		2600 UD	110 U	880	990	500	120 U
Benzo[a]pyrene	1000	1000	22000		3400 UD	150 U	980	950	330	150 U
Benzo[b]fluoranthene	1000	1000	1700		2600 UD	110 U	**1200**	**1100**	400	120 U
Benzo[g,h,i]perylene	100000	100000	1000000		3400 UD	150 U	740	600	170	150 U
Benzo[k]fluoranthene	3900	800	1700		2600 UD	110 U	430	470	150	120 U
Benzoic Acid	--	--	--		14000 UD	600 U	610 U	710 U	680 U	620 U
Benzyl Alcohol	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Bis(2-chloroethoxy)methane	--	--	--		4700 UD	200 U	200 U	240 U	230 U	210 U
Bis(2-chloroethyl) ether	--	--	--		3900 UD	160 U	170 U	200 U	190 U	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Butylbenzyl phthalate	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Carbazole	--	--	--		4300 UD	180 U	91 J	150 J	210 U	190 U
Chrysene	3900	1000	1000		2600 UD	110 U	940	$\boxed{1200}$	500	120 U
Dibenzo[a,h]anthracene	330	330	1000000		2600 UD	110 U	110 U	110 J	130 U	120 U
Dibenzofuran	59000	7000	210000		4300 UD	180 U	190 U	170 J	1000	190 U
Diethyl phthalate	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Dimethyl phthalate	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Di-n-butyl phthalate	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Di-n-octyl phthalate	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Fluoranthene	100000	100000	1000000		1100 JD	110 U	1400	2200	1500	120 U
Fluorene	100000	30000	386000		4300 UD	180 U	190 U	170 J	2200	190 U
Hexachlorobenzene	1200	330	3200		2600 UD	110 U	110 U	130 U	130 U	120 U
Hexachlorobutadiene	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U
Hexachlorocyclopentadiene	--	--	--		12000 UD	530 U	540 U	630 U	610 U	550 U
Hexachloroethane	--	--	--		3400 UD	150 U	150 U	180 U	170 U	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		3400 UD	150 U	**780**	**580**	150 J	150 U
Isophorone	--	--	--		3900 UD	160 U	170 U	200 U	190 U	170 U
Naphthalene	100000	12000	12000		$\boxed{21000\ D}$	180 U	190 U	140 J	210 U	190 U
Nitrobenzene	--	--	--		3900 UD	160 U	170 U	200 U	190 U	170 U
n-Nitrosodi-n-propylamine	--	--	--		4300 UD	180 U	190 U	220 U	210 U	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-10 12/20/2013 10 - 12	B-10 12/20/2013 17.5 - 18	B-11 1/2/2014 0 - 2	B-11 1/6/2014 8 - 10	B-11 1/6/2014 11 - 13	B-11 1/6/2014 15 - 17
n-Nitrosodiphenylamine	--	--	--		3400 UD	150 U	150 U	180 U	170 U	150 U
Pentachlorophenol	6700	800	800		3400 UD	150 U	150 U	180 U	170 U	150 U
Phenanthrene	100000	100000	1000000		2000 JD	110 U	770	2100	5800	120 U
Phenol	100000	330	330		4300 UD	180 U	190 U	220 U	210 U	190 U
Pyrene	100000	100000	1000000		920 JD	110 U	1300	1900	1400	120 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-12 / 12/19/2013 / 0 - 2	B-12 / 1/15/2014 / 7 - 9	B-12 / 1/15/2014 / 12 - 14	B-12 / 1/15/2014 / 21 - 22.5	B-13 / 12/19/2013 / 0 - 2
1,1'-Biphenyl	--	--	--		390 U	400 U	460 U	440 U	430 U
1,2,4,5-Tetrachlorobenzene	--	--	--		170 U	180 U	200 U	190 U	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		200 U	210 U	240 U	230 U	230 U
2,4,5-Trichlorophenol	--	--	--		170 U	180 U	200 U	190 U	190 U
2,4,6-Trichlorophenol	--	--	--		100 U	100 U	120 U	120 U	110 U
2,4-Dichlorophenol	--	--	--		150 U	160 U	180 U	170 U	170 U
2,4-Dimethylphenol	--	--	--		170 U	180 U	200 U	190 U	190 U
2,4-Dinitrophenol	--	--	--		810 U	840 U	970 U	920 U	910 U
2,4-Dinitrotoluene	--	--	--		170 U	180 U	200 U	190 U	190 U
2,6-Dinitrotoluene	--	--	--		170 U	180 U	200 U	190 U	190 U
2-Chloronaphthalene	--	--	--		170 U	180 U	200 U	190 U	79 J
2-Chlorophenol	--	--	--		170 U	180 U	200 U	190 U	190 U
2-Methylnaphthalene	--	--	--		200 U	210 U	240 U	230 U	64 J
2-Methylphenol	100000	330	330		170 U	180 U	200 U	190 U	190 U
2-Nitroaniline	--	--	--		170 U	180 U	200 U	190 U	190 U
2-Nitrophenol	--	--	--		370 U	380 U	440 U	420 U	410 U
3&4-Methylphenol	100000	330	330		240 U	250 U	290 U	280 U	270 U
3,3'-Dichlorobenzidine	--	--	--		170 U	180 U	200 U	190 U	190 U
3-Nitroaniline	--	--	--		170 U	180 U	200 U	190 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		440 U	460 U	520 U	500 U	490 U
4-Bromophenyl phenyl ether	--	--	--		170 U	180 U	200 U	190 U	190 U
4-Chloro-3-methylphenol	--	--	--		170 U	180 U	200 U	190 U	190 U
4-Chloroaniline	--	--	--		170 U	180 U	200 U	190 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		170 U	180 U	200 U	190 U	190 U
4-Nitroaniline	--	--	--		170 U	180 U	200 U	190 U	190 U
4-Nitrophenol	--	--	--		240 U	240 U	280 U	270 U	260 U
Acenaphthene	100000	20000	98000		140 U	68 J	81 J	150 U	130 J
Acenaphthylene	100000	100000	107000		140 U	34 J	160 U	150 U	120 J
Acetophenone	--	--	--		170 U	180 U	200 U	190 U	190 U
Anthracene	100000	100000	1000000		33 J	190	140	120 U	380

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-12 12/19/2013 0 - 2	B-12 1/15/2014 7 - 9	B-12 1/15/2014 12 - 14	B-12 1/15/2014 21 - 22.5	B-13 12/19/2013 0 - 2
Benzo[a]anthracene	1000	1000	1000		83 J	570	280	120 U	700
Benzo[a]pyrene	1000	1000	22000		71 J	500	230	150 U	600
Benzo[b]fluoranthene	1000	1000	1700		84 J	650	280	120 U	730
Benzo[g,h,i]perylene	100000	100000	1000000		47 J	320	140 J	150 U	410
Benzo[k]fluoranthene	3900	800	1700		40 J	230	120	120 U	280
Benzoic Acid	--	--	--		550 U	570 U	650 U	620 U	610 U
Benzyl Alcohol	--	--	--		170 U	180 U	200 U	190 U	190 U
Bis(2-chloroethoxy)methane	--	--	--		180 U	190 U	220 U	210 U	200 U
Bis(2-chloroethyl) ether	--	--	--		150 U	160 U	180 U	170 U	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		170 U	95 J	200 U	190 U	190 U
Butylbenzyl phthalate	--	--	--		170 U	83 J	200 U	190 U	190 U
Carbazole	--	--	--		170 U	80 J	76 J	190 U	140 J
Chrysene	3900	1000	1000		80 J	640	320	120 U	750
Dibenzo[a,h]anthracene	330	330	1000000		100 U	82 J	41 J	120 U	92 J
Dibenzofuran	59000	7000	210000		170 U	180 U	200 U	190 U	140 J
Diethyl phthalate	--	--	--		170 U	180 U	200 U	190 U	190 U
Dimethyl phthalate	--	--	--		170 U	180 U	200 U	190 U	190 U
Di-n-butyl phthalate	--	--	--		170 U	180 U	200 U	190 U	190 U
Di-n-octyl phthalate	--	--	--		170 U	180 U	200 U	190 U	190 U
Fluoranthene	100000	100000	1000000		180	1100	650	120 U	1700
Fluorene	100000	30000	386000		170 U	67 J	78 J	190 U	160 J
Hexachlorobenzene	1200	330	3200		100 U	100 U	120 U	120 U	110 U
Hexachlorobutadiene	--	--	--		170 U	180 U	200 U	190 U	190 U
Hexachlorocyclopentadiene	--	--	--		490 U	500 U	580 U	550 U	540 U
Hexachloroethane	--	--	--		140 U	140 U	160 U	150 U	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		44 J	330	140 J	150 U	360
Isophorone	--	--	--		150 U	160 U	180 U	170 U	170 U
Naphthalene	100000	12000	12000		170 U	180 U	69 J	190 U	230
Nitrobenzene	--	--	--		150 U	160 U	180 U	170 U	170 U
n-Nitrosodi-n-propylamine	--	--	--		170 U	180 U	200 U	190 U	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-12 12/19/2013 0 - 2	B-12 1/15/2014 7 - 9	B-12 1/15/2014 12 - 14	B-12 1/15/2014 21 - 22.5	B-13 12/19/2013 0 - 2
n-Nitrosodiphenylamine	--	--	--		140 U	140 U	160 U	150 U	150 U
Pentachlorophenol	6700	800	800		140 U	140 U	160 U	150 U	150 U
Phenanthrene	100000	100000	1000000		180	870	740	120 U	1700
Phenol	100000	330	330		170 U	180 U	200 U	190 U	190 U
Pyrene	100000	100000	1000000		150	1000	600	120 U	1400

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

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Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

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of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-13 1/15/2014 7 - 9	B-13 1/15/2014 10 - 12	B-13 1/15/2014 16 - 18	B-14 12/19/2013 0 - 2	B-14 1/15/2014 7 - 9
1,1'-Biphenyl	--	--	--		420 U	480 U	8600 UD	420 U	430 U
1,2,4,5-Tetrachlorobenzene	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		220 U	250 U	4500 UD	220 U	230 U
2,4,5-Trichlorophenol	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2,4,6-Trichlorophenol	--	--	--		110 U	130 U	2300 UD	110 U	110 U
2,4-Dichlorophenol	--	--	--		170 U	190 U	3400 UD	160 U	170 U
2,4-Dimethylphenol	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2,4-Dinitrophenol	--	--	--		890 U	1000 U	18000 UD	880 U	910 U
2,4-Dinitrotoluene	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2,6-Dinitrotoluene	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2-Chloronaphthalene	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2-Chlorophenol	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2-Methylnaphthalene	--	--	--		220 U	250 U	4500 UD	160 J	230 U
2-Methylphenol	100000	330	330		190 U	210 U	3800 UD	180 U	190 U
2-Nitroaniline	--	--	--		190 U	210 U	3800 UD	180 U	190 U
2-Nitrophenol	--	--	--		400 U	450 U	8200 UD	390 U	410 U
3&4-Methylphenol	100000	330	330		270 U	300 U	5400 UD	260 U	270 U
3,3'-Dichlorobenzidine	--	--	--		190 U	210 U	3800 UD	180 U	190 U
3-Nitroaniline	--	--	--		190 U	210 U	3800 UD	180 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		480 U	550 U	9800 UD	470 U	500 U
4-Bromophenyl phenyl ether	--	--	--		190 U	210 U	3800 UD	180 U	190 U
4-Chloro-3-methylphenol	--	--	--		190 U	210 U	3800 UD	180 U	190 U
4-Chloroaniline	--	--	--		190 U	210 U	3800 UD	180 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		190 U	210 U	3800 UD	180 U	190 U
4-Nitroaniline	--	--	--		190 U	210 U	3800 UD	180 U	190 U
4-Nitrophenol	--	--	--		260 U	290 U	5300 UD	260 U	270 U
Acenaphthene	100000	20000	98000		150 U	170 U	3000 UD	300	120 J
Acenaphthylene	100000	100000	107000		150 U	170 U	3000 UD	230	150 U
Acetophenone	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Anthracene	100000	100000	1000000		110 U	130 U	2300 UD	780	610

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-13	B-13	B-13	B-14	B-14
				Sample Date:	1/15/2014	1/15/2014	1/15/2014	12/19/2013	1/15/2014
				Sample Depth (ft bls):	7 - 9	10 - 12	16 - 18	0 - 2	7 - 9
Benzo[a]anthracene	1000	1000	1000		110 U	130 U	2300 UD	**2200**	**1900**
Benzo[a]pyrene	1000	1000	22000		150 U	170 U	3000 UD	**2100**	**1800**
Benzo[b]fluoranthene	1000	1000	1700		110 U	130 U	2300 UD	**2400**	**2200**
Benzo[g,h,i]perylene	100000	100000	1000000		150 U	170 U	3000 UD	1500	1200
Benzo[k]fluoranthene	3900	800	1700		110 U	130 U	2300 UD	910	830
Benzoic Acid	--	--	--		600 U	680 U	12000 UD	590 U	620 U
Benzyl Alcohol	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Bis(2-chloroethoxy)methane	--	--	--		200 U	230 U	4100 UD	200 U	200 U
Bis(2-chloroethyl) ether	--	--	--		170 U	190 U	3400 UD	160 U	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Butylbenzyl phthalate	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Carbazole	--	--	--		190 U	210 U	3800 UD	290	140 J
Chrysene	3900	1000	1000		110 U	130 U	2300 UD	2300	1900
Dibenzo[a,h]anthracene	330	330	1000000		110 U	130 U	2300 UD	**370**	240
Dibenzofuran	59000	7000	210000		190 U	210 U	3800 UD	240	94 J
Diethyl phthalate	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Dimethyl phthalate	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Di-n-butyl phthalate	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Di-n-octyl phthalate	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Fluoranthene	100000	100000	1000000		110 U	130 U	2300 UD	4600	3800
Fluorene	100000	30000	386000		190 U	210 U	3800 UD	260	120 J
Hexachlorobenzene	1200	330	3200		110 U	130 U	2300 UD	110 U	110 U
Hexachlorobutadiene	--	--	--		190 U	210 U	3800 UD	180 U	190 U
Hexachlorocyclopentadiene	--	--	--		530 U	600 U	11000 UD	520 U	550 U
Hexachloroethane	--	--	--		150 U	170 U	3000 UD	150 U	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		150 U	170 U	3000 UD	**1300**	**1200**
Isophorone	--	--	--		170 U	190 U	3400 UD	160 U	170 U
Naphthalene	100000	12000	12000		190 U	210 U	3800 UD	330	66 J
Nitrobenzene	--	--	--		170 U	190 U	3400 UD	160 U	170 U
n-Nitrosodi-n-propylamine	--	--	--		190 U	210 U	3800 UD	180 U	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-13	B-13	B-13	B-14	B-14
				Sample Date:	1/15/2014	1/15/2014	1/15/2014	12/19/2013	1/15/2014
				Sample Depth (ft bls):	7 - 9	10 - 12	16 - 18	0 - 2	7 - 9
n-Nitrosodiphenylamine	--	--	--		150 U	170 U	3000 UD	150 U	150 U
Pentachlorophenol	6700	800	800		150 U	170 U	3000 UD	150 U	150 U
Phenanthrene	100000	100000	1000000		110 U	130 U	2300 UD	3900	2500
Phenol	100000	330	330		190 U	210 U	3800 UD	180 U	190 U
Pyrene	100000	100000	1000000		110 U	130 U	2300 UD	4300	3600

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

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of the calibration range in the original sample.

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Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-14 1/15/2014 10 - 12	B-14 1/15/2014 17 - 18.5	B-15 12/31/2013 0 - 2	B-15 1/10/2014 5 - 7	B-15 1/10/2014 7 - 9
1,1'-Biphenyl	--	--	--		470 U	430 U	4400 UD	440 U	470 U
1,2,4,5-Tetrachlorobenzene	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2,2'-oxybis (1-chloropropane)	--	--	--		250 U	230 U	2300 UD	230 U	240 U
2,4,5-Trichlorophenol	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2,4,6-Trichlorophenol	--	--	--		120 U	110 U	1200 UD	120 U	120 U
2,4-Dichlorophenol	--	--	--		190 U	170 U	1800 UD	170 U	180 U
2,4-Dimethylphenol	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2,4-Dinitrophenol	--	--	--		1000 U	900 U	9400 UD	920 U	980 U
2,4-Dinitrotoluene	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2,6-Dinitrotoluene	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2-Chloronaphthalene	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2-Chlorophenol	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2-Methylnaphthalene	--	--	--		250 U	230 U	2300 UD	230 U	240 U
2-Methylphenol	100000	330	330		210 U	190 U	2000 UD	190 U	200 U
2-Nitroaniline	--	--	--		210 U	190 U	2000 UD	190 U	200 U
2-Nitrophenol	--	--	--		450 U	410 U	4200 UD	420 U	440 U
3&4-Methylphenol	100000	330	330		300 U	270 U	2800 UD	280 U	290 U
3,3'-Dichlorobenzidine	--	--	--		210 U	190 U	2000 UD	190 U	200 U
3-Nitroaniline	--	--	--		210 U	190 U	2000 UD	190 U	200 U
4,6-Dinitro-2-methylphenol	--	--	--		540 U	490 U	5100 UD	500 U	530 U
4-Bromophenyl phenyl ether	--	--	--		210 U	190 U	2000 UD	190 U	200 U
4-Chloro-3-methylphenol	--	--	--		210 U	190 U	2000 UD	190 U	200 U
4-Chloroaniline	--	--	--		210 U	190 U	2000 UD	190 U	200 U
4-Chlorophenyl phenyl ether	--	--	--		210 U	190 U	2000 UD	190 U	200 U
4-Nitroaniline	--	--	--		210 U	190 U	2000 UD	190 U	200 U
4-Nitrophenol	--	--	--		290 U	260 U	2700 UD	270 U	290 U
Acenaphthene	100000	20000	98000		160 U	150 U	2000 D	150 U	73 J
Acenaphthylene	100000	100000	107000		160 U	150 U	6400 D	150 U	81 J
Acetophenone	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Anthracene	100000	100000	1000000		120 U	110 U	11000 D	120 U	850

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	B-14 1/15/2014 10 - 12	B-14 1/15/2014 17 - 18.5	B-15 12/31/2013 0 - 2	B-15 1/10/2014 5 - 7	B-15 1/10/2014 7 - 9
Benzo[a]anthracene	1000	1000	1000		120 U	110 U	**34000 D**	310	**5300**
Benzo[a]pyrene	1000	1000	22000		160 U	150 U	**35000 D**	410	**5000**
Benzo[b]fluoranthene	1000	1000	1700		120 U	110 U	**44000 D**	530	**6200**
Benzo[g,h,i]perylene	100000	100000	1000000		160 U	150 U	21000 D	340	3200
Benzo[k]fluoranthene	3900	800	1700		120 U	110 U	**17000 D**	190	2200
Benzoic Acid	--	--	--		670 U	610 U	6300 UD	620 U	660 U
Benzyl Alcohol	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	200 U	2100 UD	210 U	220 U
Bis(2-chloroethyl) ether	--	--	--		190 U	170 U	1800 UD	170 U	180 U
Bis(2-ethylhexyl) phthalate	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Butylbenzyl phthalate	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Carbazole	--	--	--		210 U	190 U	2700 D	190 U	56 J
Chrysene	3900	1000	1000		120 U	110 U	**36000 D**	360	**5700**
Dibenzo[a,h]anthracene	330	330	1000000		120 U	110 U	**5300 D**	72 J	**760**
Dibenzofuran	59000	7000	210000		210 U	190 U	1300 JD	190 U	200 U
Diethyl phthalate	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Dimethyl phthalate	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Di-n-butyl phthalate	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Di-n-octyl phthalate	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Fluoranthene	100000	100000	1000000		120 U	110 U	72000 D	240	7500
Fluorene	100000	30000	386000		210 U	190 U	1600 JD	190 U	100 J
Hexachlorobenzene	1200	330	3200		120 U	110 U	1200 UD	120 U	120 U
Hexachlorobutadiene	--	--	--		210 U	190 U	2000 UD	190 U	200 U
Hexachlorocyclopentadiene	--	--	--		590 U	540 U	5600 UD	550 U	590 U
Hexachloroethane	--	--	--		160 U	150 U	1600 UD	150 U	160 U
Indeno[1,2,3-cd]pyrene	500	500	8200		160 U	150 U	**22000 D**	310	**3600**
Isophorone	--	--	--		190 U	170 U	1800 UD	170 U	180 U
Naphthalene	100000	12000	12000		210 U	190 U	1200 JD	190 U	200 U
Nitrobenzene	--	--	--		190 U	170 U	1800 UD	170 U	180 U
n-Nitrosodi-n-propylamine	--	--	--		210 U	190 U	2000 UD	190 U	200 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater		B-14	B-14	B-15	B-15	B-15
				Sample Designation:	B-14	B-14	B-15	B-15	B-15
				Sample Date:	1/15/2014	1/15/2014	12/31/2013	1/10/2014	1/10/2014
				Sample Depth (ft bls):	10 - 12	17 - 18.5	0 - 2	5 - 7	7 - 9
n-Nitrosodiphenylamine	--	--	--		160 U	150 U	1600 UD	150 U	160 U
Pentachlorophenol	6700	800	800		160 U	150 U	1600 UD	150 U	160 U
Phenanthrene	100000	100000	1000000		120 U	110 U	35000 D	54 J	2700
Phenol	100000	330	330		210 U	190 U	2000 UD	190 U	200 U
Pyrene	100000	100000	1000000		120 U	110 U	73000 D	280	7000

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-15 1/10/2014 10 - 11	B-16 12/19/2013 0 - 2	B-16 1/16/2014 7 - 9	B-16 1/16/2014 10 - 12	B-16 1/16/2014 18 - 20
1,1'-Biphenyl	--	--	--		480 U	390 U	420 U	450 U	440 U
1,2,4,5-Tetrachlorobenzene	--	--	--		210 U	170 U	180 U	200 U	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		250 U	200 U	220 U	240 U	230 U
2,4,5-Trichlorophenol	--	--	--		210 U	170 U	180 U	200 U	190 U
2,4,6-Trichlorophenol	--	--	--		130 U	100 U	110 U	120 U	120 U
2,4-Dichlorophenol	--	--	--		190 U	150 U	170 U	180 U	170 U
2,4-Dimethylphenol	--	--	--		210 U	170 U	180 U	200 U	190 U
2,4-Dinitrophenol	--	--	--		1000 U	810 U	890 U	950 U	930 U
2,4-Dinitrotoluene	--	--	--		210 U	170 U	180 U	200 U	190 U
2,6-Dinitrotoluene	--	--	--		210 U	170 U	180 U	200 U	190 U
2-Chloronaphthalene	--	--	--		210 U	170 U	180 U	200 U	190 U
2-Chlorophenol	--	--	--		210 U	170 U	180 U	200 U	190 U
2-Methylnaphthalene	--	--	--		250 U	200 U	220 U	240 U	230 U
2-Methylphenol	100000	330	330		210 U	170 U	180 U	200 U	190 U
2-Nitroaniline	--	--	--		210 U	170 U	180 U	200 U	190 U
2-Nitrophenol	--	--	--		450 U	370 U	400 U	430 U	420 U
3&4-Methylphenol	100000	330	330		300 U	240 U	270 U	290 U	280 U
3,3'-Dichlorobenzidine	--	--	--		210 U	170 U	180 U	200 U	190 U
3-Nitroaniline	--	--	--		210 U	170 U	180 U	200 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		550 U	440 U	480 U	520 U	500 U
4-Bromophenyl phenyl ether	--	--	--		210 U	170 U	180 U	200 U	190 U
4-Chloro-3-methylphenol	--	--	--		210 U	170 U	180 U	200 U	190 U
4-Chloroaniline	--	--	--		210 U	170 U	180 U	200 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		210 U	170 U	180 U	200 U	190 U
4-Nitroaniline	--	--	--		210 U	170 U	180 U	200 U	190 U
4-Nitrophenol	--	--	--		290 U	240 U	260 U	280 U	270 U
Acenaphthene	100000	20000	98000		100 J	140 U	150 U	160 U	150 U
Acenaphthylene	100000	100000	107000		42 J	140 U	150 U	160 U	150 U
Acetophenone	--	--	--		210 U	170 U	180 U	200 U	190 U
Anthracene	100000	100000	1000000		150	100 U	110 U	120 U	120 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-15 1/10/2014 10 - 11	B-16 12/19/2013 0 - 2	B-16 1/16/2014 7 - 9	B-16 1/16/2014 10 - 12	B-16 1/16/2014 18 - 20
Benzo[a]anthracene	1000	1000	1000		270	100	89 J	120 U	120 U
Benzo[a]pyrene	1000	1000	22000		340	110 J	85 J	160 U	150 U
Benzo[b]fluoranthene	1000	1000	1700		470	140	110	120 U	120 U
Benzo[g,h,i]perylene	100000	100000	1000000		250	97 J	63 J	160 U	150 U
Benzo[k]fluoranthene	3900	800	1700		170	51 J	44 J	120 U	120 U
Benzoic Acid	--	--	--		680 U	550 U	600 U	640 U	630 U
Benzyl Alcohol	--	--	--		210 U	170 U	180 U	200 U	190 U
Bis(2-chloroethoxy)methane	--	--	--		230 U	180 U	200 U	210 U	210 U
Bis(2-chloroethyl) ether	--	--	--		190 U	150 U	170 U	180 U	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		210 U	170 U	180 U	200 U	190 U
Butylbenzyl phthalate	--	--	--		210 U	170 U	180 U	200 U	190 U
Carbazole	--	--	--		210 U	170 U	180 U	200 U	190 U
Chrysene	3900	1000	1000		310	130	100 J	120 U	120 U
Dibenzo[a,h]anthracene	330	330	1000000		67 J	100 U	72 J	120 U	120 U
Dibenzofuran	59000	7000	210000		79 J	170 U	180 U	200 U	190 U
Diethyl phthalate	--	--	--		210 U	170 U	180 U	200 U	190 U
Dimethyl phthalate	--	--	--		210 U	170 U	180 U	200 U	190 U
Di-n-butyl phthalate	--	--	--		210 U	170 U	180 U	200 U	190 U
Di-n-octyl phthalate	--	--	--		210 U	170 U	180 U	200 U	190 U
Fluoranthene	100000	100000	1000000		510	180	180	120 U	120 U
Fluorene	100000	30000	386000		120 J	170 U	180 U	200 U	190 U
Hexachlorobenzene	1200	330	3200		130 U	100 U	110 U	120 U	120 U
Hexachlorobutadiene	--	--	--		210 U	170 U	180 U	200 U	190 U
Hexachlorocyclopentadiene	--	--	--		600 U	490 U	530 U	570 U	560 U
Hexachloroethane	--	--	--		170 U	140 U	150 U	160 U	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		250	89 J	120 J	160 U	150 U
Isophorone	--	--	--		190 U	150 U	170 U	180 U	170 U
Naphthalene	100000	12000	12000		210 U	170 U	180 U	200 U	190 U
Nitrobenzene	--	--	--		190 U	150 U	170 U	180 U	170 U
n-Nitrosodi-n-propylamine	--	--	--		210 U	170 U	180 U	200 U	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-15 / 1/10/2014 / 10 - 11	B-16 / 12/19/2013 / 0 - 2	B-16 / 1/16/2014 / 7 - 9	B-16 / 1/16/2014 / 10 - 12	B-16 / 1/16/2014 / 18 - 20
n-Nitrosodiphenylamine	--	--	--		170 U	140 U	150 U	160 U	150 U
Pentachlorophenol	6700	800	800		170 U	140 U	150 U	160 U	150 U
Phenanthrene	100000	100000	1000000		270	120	110	120 U	120 U
Phenol	100000	330	330		210 U	170 U	180 U	200 U	190 U
Pyrene	100000	100000	1000000		440	180	150	120 U	120 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-17 1/20/2014 0 - 2	B-17 1/20/2014 7 - 9	B-18 12/18/2013 0 - 2	B-18 12/18/2013 6 - 8	B-18 12/18/2013 8 - 10
1,1'-Biphenyl	--	--	--		820 UD	440 U	400 U	410 U	450 U
1,2,4,5-Tetrachlorobenzene	--	--	--		360 UD	190 U	180 U	180 U	200 U
2,2'-oxybis (1-chloropropane)	--	--	--		430 UD	230 U	210 U	220 U	240 U
2,4,5-Trichlorophenol	--	--	--		360 UD	190 U	180 U	180 U	200 U
2,4,6-Trichlorophenol	--	--	--		220 UD	110 U	100 U	110 U	120 U
2,4-Dichlorophenol	--	--	--		320 UD	170 U	160 U	160 U	180 U
2,4-Dimethylphenol	--	--	--		360 UD	190 U	180 U	180 U	200 U
2,4-Dinitrophenol	--	--	--		1700 UD	920 U	840 U	870 U	950 U
2,4-Dinitrotoluene	--	--	--		360 UD	190 U	180 U	180 U	200 U
2,6-Dinitrotoluene	--	--	--		360 UD	190 U	180 U	180 U	200 U
2-Chloronaphthalene	--	--	--		360 UD	190 U	180 U	180 U	200 U
2-Chlorophenol	--	--	--		360 UD	190 U	180 U	180 U	200 U
2-Methylnaphthalene	--	--	--		430 UD	230 U	210 U	220 U	240 U
2-Methylphenol	100000	330	330		360 UD	190 U	180 U	180 U	200 U
2-Nitroaniline	--	--	--		360 UD	190 U	180 U	180 U	200 U
2-Nitrophenol	--	--	--		780 UD	410 U	380 U	390 U	430 U
3&4-Methylphenol	100000	330	330		520 UD	280 U	250 U	260 U	280 U
3,3'-Dichlorobenzidine	--	--	--		360 UD	190 U	180 U	180 U	200 U
3-Nitroaniline	--	--	--		360 UD	190 U	180 U	180 U	200 U
4,6-Dinitro-2-methylphenol	--	--	--		940 UD	500 U	460 U	470 U	520 U
4-Bromophenyl phenyl ether	--	--	--		360 UD	190 U	180 U	180 U	200 U
4-Chloro-3-methylphenol	--	--	--		360 UD	190 U	180 U	180 U	200 U
4-Chloroaniline	--	--	--		360 UD	190 U	180 U	180 U	200 U
4-Chlorophenyl phenyl ether	--	--	--		360 UD	190 U	180 U	180 U	200 U
4-Nitroaniline	--	--	--		360 UD	190 U	180 U	180 U	200 U
4-Nitrophenol	--	--	--		510 UD	270 U	240 U	250 U	280 U
Acenaphthene	100000	20000	98000		80 JD	150 U	140 U	46 J	160 U
Acenaphthylene	100000	100000	107000		1100 D	150 U	140 U	36 J	160 U
Acetophenone	--	--	--		360 UD	190 U	180 U	180 U	200 U
Anthracene	100000	100000	1000000		1700 D	110 U	60 J	180	120 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater						
				Sample Designation:	B-17	B-17	B-18	B-18	B-18
				Sample Date:	1/20/2014	1/20/2014	12/18/2013	12/18/2013	12/18/2013
				Sample Depth (ft bls):	0 - 2	7 - 9	0 - 2	6 - 8	8 - 10
Benzo[a]anthracene	1000	1000	1000		**5600 D**	66 J	180	510	120 U
Benzo[a]pyrene	1000	1000	22000		**4900 D**	65 J	170	480	160 U
Benzo[b]fluoranthene	1000	1000	1700		**7200 D**	90 J	220	560	120 U
Benzo[g,h,i]perylene	100000	100000	1000000		2600 D	46 J	100 J	310	160 U
Benzo[k]fluoranthene	3900	800	1700		2800 D	40 J	74 J	200	120 U
Benzoic Acid	--	--	--		1200 UD	620 U	570 U	590 U	640 U
Benzyl Alcohol	--	--	--		360 UD	190 U	180 U	180 U	200 U
Bis(2-chloroethoxy)methane	--	--	--		390 UD	210 U	190 U	200 U	210 U
Bis(2-chloroethyl) ether	--	--	--		320 UD	170 U	160 U	160 U	180 U
Bis(2-ethylhexyl) phthalate	--	--	--		360 UD	190 U	180 U	180 U	200 U
Butylbenzyl phthalate	--	--	--		360 UD	190 U	180 U	180 U	200 U
Carbazole	--	--	--		170 JD	190 U	180 U	180 U	200 U
Chrysene	3900	1000	1000		**4900 D**	69 J	180	460	120 U
Dibenzo[a,h]anthracene	330	330	1000000		**840 D**	110 U	100 U	76 J	120 U
Dibenzofuran	59000	7000	210000		360 UD	190 U	180 U	180 U	200 U
Diethyl phthalate	--	--	--		360 UD	190 U	180 U	180 U	200 U
Dimethyl phthalate	--	--	--		360 UD	190 U	180 U	180 U	200 U
Di-n-butyl phthalate	--	--	--		360 UD	190 U	180 U	180 U	200 U
Di-n-octyl phthalate	--	--	--		360 UD	190 U	180 U	180 U	200 U
Fluoranthene	100000	100000	1000000		13000 D	110	400	1100	74 J
Fluorene	100000	30000	386000		140 JD	190 U	180 U	180 U	200 U
Hexachlorobenzene	1200	330	3200		220 UD	110 U	100 U	110 U	120 U
Hexachlorobutadiene	--	--	--		360 UD	190 U	180 U	180 U	200 U
Hexachlorocyclopentadiene	--	--	--		1000 UD	550 U	500 U	520 U	570 U
Hexachloroethane	--	--	--		290 UD	150 U	140 U	140 U	160 U
Indeno[1,2,3-cd]pyrene	500	500	8200		**2900 D**	44 J	91 J	270	160 U
Isophorone	--	--	--		320 UD	170 U	160 U	160 U	180 U
Naphthalene	100000	12000	12000		170 JD	190 U	180 U	180 U	200 U
Nitrobenzene	--	--	--		320 UD	170 U	160 U	160 U	180 U
n-Nitrosodi-n-propylamine	--	--	--		360 UD	190 U	180 U	180 U	200 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-17	B-17	B-18	B-18	B-18
				Sample Date:	1/20/2014	1/20/2014	12/18/2013	12/18/2013	12/18/2013
				Sample Depth (ft bls):	0 - 2	7 - 9	0 - 2	6 - 8	8 - 10
n-Nitrosodiphenylamine	--	--	--		290 UD	150 U	140 U	140 U	160 U
Pentachlorophenol	6700	800	800		290 UD	150 U	140 U	140 U	160 U
Phenanthrene	100000	100000	1000000		4000 D	79 J	220	620	140
Phenol	100000	330	330		360 UD	190 U	180 U	180 U	200 U
Pyrene	100000	100000	1000000		11000 D	99 J	390	1000	80 J

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

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Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-19 12/17/2013 0 - 2	B-19 12/17/2013 6 - 8	B-19 12/17/2013 8 - 10	B-20 12/17/2013 0 - 2	B-20 12/17/2013 5 - 7
1,1'-Biphenyl	--	--	--		420 U	410 U	430 U	400 U	390 U
1,2,4,5-Tetrachlorobenzene	--	--	--		180 U	180 U	190 U	180 U	170 U
2,2'-oxybis (1-chloropropane)	--	--	--		220 U	220 U	220 U	210 U	210 U
2,4,5-Trichlorophenol	--	--	--		180 U	180 U	190 U	180 U	170 U
2,4,6-Trichlorophenol	--	--	--		110 U	110 U	110 U	110 U	100 U
2,4-Dichlorophenol	--	--	--		160 U	160 U	170 U	160 U	160 U
2,4-Dimethylphenol	--	--	--		180 U	180 U	190 U	180 U	170 U
2,4-Dinitrophenol	--	--	--		880 U	860 U	900 U	850 U	830 U
2,4-Dinitrotoluene	--	--	--		180 U	180 U	190 U	180 U	170 U
2,6-Dinitrotoluene	--	--	--		180 U	180 U	190 U	180 U	170 U
2-Chloronaphthalene	--	--	--		180 U	180 U	190 U	180 U	170 U
2-Chlorophenol	--	--	--		180 UJV	180 U	190 U	180 U	170 U
2-Methylnaphthalene	--	--	--		220 U	220 U	220 U	210 U	210 U
2-Methylphenol	100000	330	330		180 U	180 U	190 U	180 U	170 U
2-Nitroaniline	--	--	--		180 U	180 U	190 U	180 U	170 U
2-Nitrophenol	--	--	--		400 U	390 U	400 U	380 U	370 U
3&4-Methylphenol	100000	330	330		260 U	260 U	270 U	260 U	250 U
3,3'-Dichlorobenzidine	--	--	--		180 U	180 U	190 U	180 U	170 U
3-Nitroaniline	--	--	--		180 U	180 U	190 U	180 U	170 U
4,6-Dinitro-2-methylphenol	--	--	--		480 U	470 U	490 U	460 U	450 U
4-Bromophenyl phenyl ether	--	--	--		180 U	180 U	190 U	180 U	170 U
4-Chloro-3-methylphenol	--	--	--		180 U	180 U	190 U	180 U	170 U
4-Chloroaniline	--	--	--		180 U	180 U	190 U	180 U	170 U
4-Chlorophenyl phenyl ether	--	--	--		180 U	180 U	190 U	180 U	170 U
4-Nitroaniline	--	--	--		180 U	180 U	190 U	180 U	170 U
4-Nitrophenol	--	--	--		260 U	250 U	260 U	250 U	240 U
Acenaphthene	100000	20000	98000		150 U	140 U	150 U	140 U	140 U
Acenaphthylene	100000	100000	107000		62 J	140 U	150 U	140 U	32 J
Acetophenone	--	--	--		180 U	180 U	190 U	180 U	170 U
Anthracene	100000	100000	1000000		100	170	110 U	110 U	46 J

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-19 12/17/2013 0 - 2	B-19 12/17/2013 6 - 8	B-19 12/17/2013 8 - 10	B-20 12/17/2013 0 - 2	B-20 12/17/2013 5 - 7
Benzo[a]anthracene	1000	1000	1000		550	650	110 U	120	120
Benzo[a]pyrene	1000	1000	22000		500	600	150 U	140	96 J
Benzo[b]fluoranthene	1000	1000	1700		600	740	110 U	170	140
Benzo[g,h,i]perylene	100000	100000	1000000		360	390	150 U	100 J	64 J
Benzo[k]fluoranthene	3900	800	1700		260	290	110 U	53 J	40 J
Benzoic Acid	--	--	--		590 U	580 U	610 U	580 U	560 U
Benzyl Alcohol	--	--	--		180 U	180 U	190 U	180 U	170 U
Bis(2-chloroethoxy)methane	--	--	--		200 U	190 U	200 U	190 U	190 U
Bis(2-chloroethyl) ether	--	--	--		160 U	160 U	170 U	160 U	160 U
Bis(2-ethylhexyl) phthalate	--	--	--		180 U	180 U	190 U	180 U	170 U
Butylbenzyl phthalate	--	--	--		180 U	180 U	190 U	180 U	170 U
Carbazole	--	--	--		83 J	180 U	190 U	180 U	170 U
Chrysene	3900	1000	1000		620	620	110 U	150	110
Dibenzo[a,h]anthracene	330	330	1000000		78 J	100 J	110 U	110 U	100 U
Dibenzofuran	59000	7000	210000		180 U	180 U	190 U	180 U	170 U
Diethyl phthalate	--	--	--		180 U	180 U	190 U	180 U	170 U
Dimethyl phthalate	--	--	--		180 U	180 U	190 U	180 U	170 U
Di-n-butyl phthalate	--	--	--		180 U	180 U	190 U	180 U	170 U
Di-n-octyl phthalate	--	--	--		180 U	180 U	190 U	180 U	170 U
Fluoranthene	100000	100000	1000000		1100	1500	37 J	160	220
Fluorene	100000	30000	386000		180 U	180 U	190 U	180 U	170 U
Hexachlorobenzene	1200	330	3200		110 U	110 U	110 U	110 U	100 U
Hexachlorobutadiene	--	--	--		180 U	180 U	190 U	180 U	170 U
Hexachlorocyclopentadiene	--	--	--		520 U	510 U	540 U	510 U	500 U
Hexachloroethane	--	--	--		150 U	140 U	150 U	140 U	140 U
Indeno[1,2,3-cd]pyrene	500	500	8200		210	340	150 U	76 J	58 J
Isophorone	--	--	--		160 U	160 U	170 U	160 U	160 U
Naphthalene	100000	12000	12000		180 U	180 U	190 U	180 U	170 U
Nitrobenzene	--	--	--		160 U	160 U	170 U	160 U	160 U
n-Nitrosodi-n-propylamine	--	--	--		180 U	180 U	190 U	180 U	170 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-19	B-19	B-19	B-20	B-20
				Sample Date:	12/17/2013	12/17/2013	12/17/2013	12/17/2013	12/17/2013
				Sample Depth (ft bls):	0 - 2	6 - 8	8 - 10	0 - 2	5 - 7
n-Nitrosodiphenylamine	--	--	--		150 U	140 U	150 U	140 U	140 U
Pentachlorophenol	6700	800	800		150 U	140 U	150 U	140 U	140 U
Phenanthrene	100000	100000	1000000		990	640	37 J	84 J	160
Phenol	100000	330	330		180 U	180 U	190 U	180 U	170 U
Pyrene	100000	100000	1000000		1000	1300	38 J	200	190

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-20 12/17/2013 7 - 8	B-21 12/17/2013 0 - 2	B-21 12/17/2013 5 - 7	B-21 12/17/2013 7 - 8	B-22 1/13/2014 0 - 2
1,1'-Biphenyl	--	--	--		8500 UD	420 U	450 U	9200 UD	460 U
1,2,4,5-Tetrachlorobenzene	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2,2'-oxybis (1-chloropropane)	--	--	--		4500 UD	220 U	240 U	4900 UD	240 U
2,4,5-Trichlorophenol	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2,4,6-Trichlorophenol	--	--	--		2200 UD	110 U	120 U	2400 UD	120 U
2,4-Dichlorophenol	--	--	--		3400 UD	170 U	180 U	3600 UD	180 U
2,4-Dimethylphenol	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2,4-Dinitrophenol	--	--	--		18000 UD	890 U	950 U	19000 UD	960 U
2,4-Dinitrotoluene	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2,6-Dinitrotoluene	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2-Chloronaphthalene	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2-Chlorophenol	--	--	--		3700 UD	180 UJV	200 U	4000 UD	200 U
2-Methylnaphthalene	--	--	--		4500 UD	220 U	94 J	4900 UD	240 U
2-Methylphenol	100000	330	330		3700 UD	180 U	200 U	4000 UD	200 U
2-Nitroaniline	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
2-Nitrophenol	--	--	--		8000 UD	400 U	420 U	8800 UD	430 U
3&4-Methylphenol	100000	330	330		5400 UD	270 U	280 U	5800 UD	290 U
3,3'-Dichlorobenzidine	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
3-Nitroaniline	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
4,6-Dinitro-2-methylphenol	--	--	--		9700 UD	480 U	510 U	10000 UD	520 U
4-Bromophenyl phenyl ether	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
4-Chloro-3-methylphenol	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
4-Chloroaniline	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
4-Chlorophenyl phenyl ether	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
4-Nitroaniline	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
4-Nitrophenol	--	--	--		5200 UD	260 U	280 U	5700 UD	280 U
Acenaphthene	100000	20000	98000		3000 UD	150 U	160 U	3200 UD	160 JV
Acenaphthylene	100000	100000	107000		3000 UD	150 U	160 U	3200 UD	220
Acetophenone	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Anthracene	100000	100000	1000000		2200 UD	64 J	120 U	770 JD	520 JV

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-20 12/17/2013 7 - 8	B-21 12/17/2013 0 - 2	B-21 12/17/2013 5 - 7	B-21 12/17/2013 7 - 8	B-22 1/13/2014 0 - 2
Benzo[a]anthracene	1000	1000	1000		2200 UD	150	40 J	2400 UD	**1500**
Benzo[a]pyrene	1000	1000	22000		3000 UD	150 J	53 J	3200 UD	**1500**
Benzo[b]fluoranthene	1000	1000	1700		2200 UD	140	77 J	2400 UD	**1900**
Benzo[g,h,i]perylene	100000	100000	1000000		3000 UD	100 J	44 J	3200 UD	1000
Benzo[k]fluoranthene	3900	800	1700		2200 UD	67 J	120 U	2400 UD	670 JV
Benzoic Acid	--	--	--		12000 UD	600 U	640 U	13000 UD	650 U
Benzyl Alcohol	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Bis(2-chloroethoxy)methane	--	--	--		4000 UD	200 U	210 U	4400 UD	220 U
Bis(2-chloroethyl) ether	--	--	--		3400 UD	170 U	180 U	3600 UD	180 U
Bis(2-ethylhexyl) phthalate	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Butylbenzyl phthalate	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Carbazole	--	--	--		3700 UD	180 U	200 U	4000 UD	200
Chrysene	3900	1000	1000		2200 UD	170	47 J	2400 UD	1700
Dibenzo[a,h]anthracene	330	330	1000000		2200 UD	110 U	120 U	2400 UD	260
Dibenzofuran	59000	7000	210000		3700 UD	180 U	200 U	4000 UD	140 J
Diethyl phthalate	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Dimethyl phthalate	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Di-n-butyl phthalate	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Di-n-octyl phthalate	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Fluoranthene	100000	100000	1000000		2200 UD	330	67 J	2400 UD	3500
Fluorene	100000	30000	386000		3700 UD	180 U	200 U	4000 UD	200 JV
Hexachlorobenzene	1200	330	3200		2200 UD	110 U	120 U	2400 UD	120 U
Hexachlorobutadiene	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U
Hexachlorocyclopentadiene	--	--	--		11000 UD	530 U	560 U	12000 UD	570 U
Hexachloroethane	--	--	--		3000 UD	150 U	160 U	3200 UD	160 U
Indeno[1,2,3-cd]pyrene	500	500	8200		3000 UD	83 J	160 U	3200 UD	**960**
Isophorone	--	--	--		3400 UD	170 U	180 U	3600 UD	180 U
Naphthalene	100000	12000	12000		3700 UD	180 U	200 U	4000 UD	87 JV
Nitrobenzene	--	--	--		3400 UD	170 U	180 U	3600 UD	180 U
n-Nitrosodi-n-propylamine	--	--	--		3700 UD	180 U	200 U	4000 UD	200 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-20 / 12/17/2013 / 7 - 8	B-21 / 12/17/2013 / 0 - 2	B-21 / 12/17/2013 / 5 - 7	B-21 / 12/17/2013 / 7 - 8	B-22 / 1/13/2014 / 0 - 2
n-Nitrosodiphenylamine	--	--	--		3000 UD	150 U	160 U	3200 UD	160 U
Pentachlorophenol	6700	800	800		3000 UD	150 U	160 U	3200 UD	160 U
Phenanthrene	100000	100000	1000000		2200 UD	210	40 J	6800 D	2200
Phenol	100000	330	330		3700 UD	180 U	200 U	4000 UD	200 U
Pyrene	100000	100000	1000000		2200 UD	280	67 J	820 JD	3100

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

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of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-22 DUP 1/13/2014 0 - 2	B-22 1/13/2014 4 - 6	B-23 1/13/2014 0 - 2	B-23 1/13/2014 2 - 4	B-24 1/14/2014 0 - 2
1,1'-Biphenyl	--	--	--		450 U	9600 UD	540 U	9800 UD	470 U
1,2,4,5-Tetrachlorobenzene	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2,2'-oxybis (1-chloropropane)	--	--	--		240 U	5100 UD	280 U	5200 UD	250 U
2,4,5-Trichlorophenol	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2,4,6-Trichlorophenol	--	--	--		120 U	2500 UD	140 U	2600 UD	120 U
2,4-Dichlorophenol	--	--	--		180 U	3800 UD	210 U	3900 UD	180 U
2,4-Dimethylphenol	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2,4-Dinitrophenol	--	--	--		950 U	20000 UD	1100 U	21000 UD	980 U
2,4-Dinitrotoluene	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2,6-Dinitrotoluene	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2-Chloronaphthalene	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2-Chlorophenol	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2-Methylnaphthalene	--	--	--		140 J	5100 UD	280 U	5200 UD	250 U
2-Methylphenol	100000	330	330		200 U	4200 UD	240 U	4300 UD	200 U
2-Nitroaniline	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
2-Nitrophenol	--	--	--		430 U	9100 UD	510 U	9300 UD	440 U
3&4-Methylphenol	100000	330	330		280 U	6100 UD	340 U	6200 UD	300 U
3,3'-Dichlorobenzidine	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
3-Nitroaniline	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
4,6-Dinitro-2-methylphenol	--	--	--		510 U	11000 UD	620 U	11000 UD	530 U
4-Bromophenyl phenyl ether	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
4-Chloro-3-methylphenol	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
4-Chloroaniline	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
4-Chlorophenyl phenyl ether	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
4-Nitroaniline	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
4-Nitrophenol	--	--	--		280 U	5900 UD	330 U	6000 UD	290 U
Acenaphthene	100000	20000	98000		310 JV	3400 UD	58 J	3400 UD	47 J
Acenaphthylene	100000	100000	107000		200	3400 UD	190 U	3400 UD	39 J
Acetophenone	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Anthracene	100000	100000	1000000		1000 JV	850 JD	150	2600 UD	270

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-22 DUP 1/13/2014 0 - 2	B-22 1/13/2014 4 - 6	B-23 1/13/2014 0 - 2	B-23 1/13/2014 2 - 4	B-24 1/14/2014 0 - 2
Benzo[a]anthracene	1000	1000	1000		**2100**	**1300 JD**	410	2600 UD	**1800**
Benzo[a]pyrene	1000	1000	22000		**2300**	3400 UD	390	3400 UD	**1800**
Benzo[b]fluoranthene	1000	1000	1700		**2800**	**1200 JD**	530	2600 UD	**2000**
Benzo[g,h,i]perylene	100000	100000	1000000		1400	3400 UD	250	3400 UD	980
Benzo[k]fluoranthene	3900	800	1700		1200 JV	2500 UD	180	2600 UD	690
Benzoic Acid	--	--	--		640 U	14000 UD	770 U	14000 UD	660 U
Benzyl Alcohol	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Bis(2-chloroethoxy)methane	--	--	--		210 U	4600 UD	260 U	4600 UD	220 U
Bis(2-chloroethyl) ether	--	--	--		180 U	3800 UD	210 U	3900 UD	180 U
Bis(2-ethylhexyl) phthalate	--	--	--		200 U	4200 UD	600	4300 UD	200 U
Butylbenzyl phthalate	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Carbazole	--	--	--		340	4200 UD	240 U	4300 UD	200 U
Chrysene	3900	1000	1000		2400	1300 JD	430	2600 UD	1900
Dibenzo[a,h]anthracene	330	330	1000000		**360**	2500 UD	62 J	2600 UD	260
Dibenzofuran	59000	7000	210000		210	4200 UD	240 U	4300 UD	200 U
Diethyl phthalate	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Dimethyl phthalate	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Di-n-butyl phthalate	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Di-n-octyl phthalate	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Fluoranthene	100000	100000	1000000		5400	3500 D	940	2600 UD	2600
Fluorene	100000	30000	386000		380 JV	4200 UD	78 J	4300 UD	200 U
Hexachlorobenzene	1200	330	3200		120 U	2500 UD	140 U	2600 UD	120 U
Hexachlorobutadiene	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U
Hexachlorocyclopentadiene	--	--	--		570 U	12000 UD	680 U	12000 UD	590 U
Hexachloroethane	--	--	--		160 U	3400 UD	190 U	3400 UD	160 U
Indeno[1,2,3-cd]pyrene	500	500	8200		**1400**	3400 UD	250	3400 UD	**940**
Isophorone	--	--	--		180 U	3800 UD	210 U	3900 UD	180 U
Naphthalene	100000	12000	12000		230 JV	5100 D	240 U	4300 UD	160 J
Nitrobenzene	--	--	--		180 U	3800 UD	210 U	3900 UD	180 U
n-Nitrosodi-n-propylamine	--	--	--		200 U	4200 UD	240 U	4300 UD	200 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-22 DUP 1/13/2014 0 - 2	B-22 1/13/2014 4 - 6	B-23 1/13/2014 0 - 2	B-23 1/13/2014 2 - 4	B-24 1/14/2014 0 - 2
n-Nitrosodiphenylamine	--	--	--		160 U	3400 UD	190 U	3400 UD	160 U
Pentachlorophenol	6700	800	800		160 U	3400 UD	190 U	3400 UD	160 U
Phenanthrene	100000	100000	1000000		3600	3800 D	720	2600 UD	1000
Phenol	100000	330	330		200 U	4200 UD	240 U	4300 UD	200 U
Pyrene	100000	100000	1000000		4600	3000 D	800	2600 UD	3200

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

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ft bls - Feet below land surface

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Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-24 1/14/2014 2 - 4	B-25 1/14/2014 0 - 2	B-25 1/14/2014 2 - 4	B-26 1/14/2014 0 - 2	B-26 1/14/2014 4 - 6
1,1'-Biphenyl	--	--	--		9100 UD	9000 UD	9400 UD	9200 UD	9300 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2,2'-oxybis (1-chloropropane)	--	--	--		4800 UD	4800 UD	4900 UD	4800 UD	4900 UD
2,4,5-Trichlorophenol	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2,4,6-Trichlorophenol	--	--	--		2400 UD	2400 UD	2500 UD	2400 UD	2400 UD
2,4-Dichlorophenol	--	--	--		3600 UD	3600 UD	3700 UD	3600 UD	3600 UD
2,4-Dimethylphenol	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2,4-Dinitrophenol	--	--	--		19000 UD	19000 UD	20000 UD	19000 UD	19000 UD
2,4-Dinitrotoluene	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2,6-Dinitrotoluene	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2-Chloronaphthalene	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2-Chlorophenol	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2-Methylnaphthalene	--	--	--		4800 UD	4800 UD	4900 UD	4800 UD	4900 UD
2-Methylphenol	100000	330	330		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2-Nitroaniline	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
2-Nitrophenol	--	--	--		8600 UD	8600 UD	8900 UD	8700 UD	8800 UD
3&4-Methylphenol	100000	330	330		5800 UD	5700 UD	5900 UD	5800 UD	5800 UD
3,3'-Dichlorobenzidine	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
3-Nitroaniline	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
4,6-Dinitro-2-methylphenol	--	--	--		10000 UD	10000 UD	11000 UD	10000 UD	10000 UD
4-Bromophenyl phenyl ether	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
4-Chloro-3-methylphenol	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
4-Chloroaniline	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
4-Chlorophenyl phenyl ether	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
4-Nitroaniline	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
4-Nitrophenol	--	--	--		5600 UD	5600 UD	5800 UD	5600 UD	5700 UD
Acenaphthene	100000	20000	98000		3200 UD	3200 UD	3300 UD	3200 UD	3200 UD
Acenaphthylene	100000	100000	107000		3200 UD	3200 UD	3300 UD	3200 UD	3200 UD
Acetophenone	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Anthracene	100000	100000	1000000		2400 UD	2400 UD	2500 UD	3400 D	1100 JD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-24 1/14/2014 2 - 4	B-25 1/14/2014 0 - 2	B-25 1/14/2014 2 - 4	B-26 1/14/2014 0 - 2	B-26 1/14/2014 4 - 6
Benzo[a]anthracene	1000	1000	1000		2400 UD	2400 UD	2500 UD	**2600 D**	**1100 JD**
Benzo[a]pyrene	1000	1000	22000		3200 UD	3200 UD	3300 UD	**2100 JD**	3200 UD
Benzo[b]fluoranthene	1000	1000	1700		2400 UD	2400 UD	2500 UD	**2800 D**	**1200 JD**
Benzo[g,h,i]perylene	100000	100000	1000000		3200 UD	3200 UD	3300 UD	1300 JD	3200 UD
Benzo[k]fluoranthene	3900	800	1700		2400 UD	2400 UD	2500 UD	1000 JD	2400 UD
Benzoic Acid	--	--	--		13000 UD	13000 UD	13000 UD	13000 UD	13000 UD
Benzyl Alcohol	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Bis(2-chloroethoxy)methane	--	--	--		4300 UD	4300 UD	4400 UD	4300 UD	4400 UD
Bis(2-chloroethyl) ether	--	--	--		3600 UD	3600 UD	3700 UD	3600 UD	3600 UD
Bis(2-ethylhexyl) phthalate	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Butylbenzyl phthalate	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Carbazole	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Chrysene	3900	1000	1000		2400 UD	2400 UD	2500 UD	2600 D	1000 JD
Dibenzo[a,h]anthracene	330	330	1000000		2400 UD	2400 UD	2500 UD	2400 UD	2400 UD
Dibenzofuran	59000	7000	210000		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Diethyl phthalate	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Dimethyl phthalate	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Di-n-butyl phthalate	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Di-n-octyl phthalate	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Fluoranthene	100000	100000	1000000		1100 JD	1000 JD	2500 UD	7300 D	2600 D
Fluorene	100000	30000	386000		4000 UD	1900 JD	4100 UD	8200 D	2400 JD
Hexachlorobenzene	1200	330	3200		2400 UD	2400 UD	2500 UD	2400 UD	2400 UD
Hexachlorobutadiene	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Hexachlorocyclopentadiene	--	--	--		11000 UD	11000 UD	12000 UD	12000 UD	12000 UD
Hexachloroethane	--	--	--		3200 UD	3200 UD	3300 UD	3200 UD	3200 UD
Indeno[1,2,3-cd]pyrene	500	500	8200		3200 UD	3200 UD	3300 UD	**1200 JD**	3200 UD
Isophorone	--	--	--		3600 UD	3600 UD	3700 UD	3600 UD	3600 UD
Naphthalene	100000	12000	12000		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Nitrobenzene	--	--	--		3600 UD	3600 UD	3700 UD	3600 UD	3600 UD
n-Nitrosodi-n-propylamine	--	--	--		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-24	B-25	B-25	B-26	B-26
				Sample Date:	1/14/2014	1/14/2014	1/14/2014	1/14/2014	1/14/2014
				Sample Depth (ft bls):	2 - 4	0 - 2	2 - 4	0 - 2	4 - 6
n-Nitrosodiphenylamine	--	--	--		3200 UD	3200 UD	3300 UD	3200 UD	3200 UD
Pentachlorophenol	6700	800	800		3200 UD	3200 UD	3300 UD	3200 UD	3200 UD
Phenanthrene	100000	100000	1000000		1400 JD	5100 D	2600 D	23000 D	7300 D
Phenol	100000	330	330		4000 UD	4000 UD	4100 UD	4000 UD	4100 UD
Pyrene	100000	100000	1000000		870 JD	1100 JD	2500 UD	7100 D	2500 D

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5	MW-1/1R 12/16/2013 6 - 8
1,1'-Biphenyl	--	--	--		9400 UD	10000 UD	870 U	530 U	4700 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2,2'-oxybis (1-chloropropane)	--	--	--		4900 UD	5300 UD	460 U	280 U	2400 UD
2,4,5-Trichlorophenol	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2,4,6-Trichlorophenol	--	--	--		2500 UD	2600 UD	230 U	140 U	1200 UD
2,4-Dichlorophenol	--	--	--		3700 UD	4000 UD	340 U	210 U	1800 UD
2,4-Dimethylphenol	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2,4-Dinitrophenol	--	--	--		20000 UD	21000 UD	1800 U	1100 U	9800 UD
2,4-Dinitrotoluene	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2,6-Dinitrotoluene	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2-Chloronaphthalene	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2-Chlorophenol	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2-Methylnaphthalene	--	--	--		4900 UD	5300 UD	200 J	84 J	1600 JD
2-Methylphenol	100000	330	330		4100 UD	4400 UD	380 U	230 U	2000 UD
2-Nitroaniline	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
2-Nitrophenol	--	--	--		8900 UD	9600 UD	830 U	500 U	4400 UD
3&4-Methylphenol	100000	330	330		5900 UD	6400 UD	550 U	330 U	2900 UD
3,3'-Dichlorobenzidine	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
3-Nitroaniline	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
4,6-Dinitro-2-methylphenol	--	--	--		11000 UD	12000 UD	1000 U	600 U	5300 UD
4-Bromophenyl phenyl ether	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
4-Chloro-3-methylphenol	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
4-Chloroaniline	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
4-Chlorophenyl phenyl ether	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
4-Nitroaniline	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
4-Nitrophenol	--	--	--		5800 UD	6200 UD	540 U	320 U	2900 UD
Acenaphthene	100000	20000	98000		3300 UD	1800 JD	310 U	220	1600 UD
Acenaphthylene	100000	100000	107000		3300 UD	3500 UD	110 J	62 J	1600 UD
Acetophenone	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Anthracene	100000	100000	1000000		720 JD	2200 JD	350	570	1200 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5	MW-1/1R 12/16/2013 6 - 8
Benzo[a]anthracene	1000	1000	1000		**1700 JD**	**3200 D**	**1500**	**1600**	1200 UD
Benzo[a]pyrene	1000	1000	22000		**1700 JD**	**3000 JD**	**1500**	**1400**	1600 UD
Benzo[b]fluoranthene	1000	1000	1700		**2100 JD**	**3700 D**	**1800**	**1700**	1200 UD
Benzo[g,h,i]perylene	100000	100000	1000000		1100 JD	1900 JD	1000	910	1600 UD
Benzo[k]fluoranthene	3900	800	1700		2500 UD	1300 JD	570	570	1200 UD
Benzoic Acid	--	--	--		13000 UD	14000 UD	1200 U	750 U	6600 UD
Benzyl Alcohol	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Bis(2-chloroethoxy)methane	--	--	--		4400 UD	4800 UD	410 U	250 U	2200 UD
Bis(2-chloroethyl) ether	--	--	--		3700 UD	4000 UD	340 U	210 U	1800 UD
Bis(2-ethylhexyl) phthalate	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Butylbenzyl phthalate	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Carbazole	--	--	--		4100 UD	4400 UD	92 J	160 J	2000 UD
Chrysene	3900	1000	1000		1700 JD	3400 D	1700	1700	1200 UD
Dibenzo[a,h]anthracene	330	330	1000000		2500 UD	2600 UD	200 J	250	1200 UD
Dibenzofuran	59000	7000	210000		4100 UD	4400 UD	380 U	150 J	2000 UD
Diethyl phthalate	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Dimethyl phthalate	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Di-n-butyl phthalate	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Di-n-octyl phthalate	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Fluoranthene	100000	100000	1000000		3700 D	8000 D	2600	3200	460 JD
Fluorene	100000	30000	386000		4100 UD	1800 JD	380 U	210 J	2000 UD
Hexachlorobenzene	1200	330	3200		2500 UD	2600 UD	230 U	140 U	1200 UD
Hexachlorobutadiene	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD
Hexachlorocyclopentadiene	--	--	--		12000 UD	13000 UD	1100 U	660 U	5900 UD
Hexachloroethane	--	--	--		3300 UD	3500 UD	310 U	180 U	1600 UD
Indeno[1,2,3-cd]pyrene	500	500	8200		**1000 JD**	**1700 JD**	**990**	**860**	1600 UD
Isophorone	--	--	--		3700 UD	4000 UD	340 U	210 U	1800 UD
Naphthalene	100000	12000	12000		4100 UD	4400 UD	200 J	170 J	2000 UD
Nitrobenzene	--	--	--		3700 UD	4000 UD	340 U	210 U	1800 UD
n-Nitrosodi-n-propylamine	--	--	--		4100 UD	4400 UD	380 U	230 U	2000 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5	MW-1/1R 12/16/2013 6 - 8
n-Nitrosodiphenylamine	--	--	--		3300 UD	3500 UD	310 U	180 U	1600 UD
Pentachlorophenol	6700	800	800		3300 UD	3500 UD	310 U	180 U	1600 UD
Phenanthrene	100000	100000	1000000		3500 D	9100 D	1500	2800	640 JD
Phenol	100000	330	330		4100 UD	4400 UD	380 U	230 U	2000 UD
Pyrene	100000	100000	1000000		3300 D	6700 D	2700	3100	510 JD

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

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D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8
1,1'-Biphenyl	--	--	--		480 U	830 UD	810 UD	430 U
1,2,4,5-Tetrachlorobenzene	--	--	--		210 U	360 U	360 UD	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		250 U	440 U	430 UD	230 U
2,4,5-Trichlorophenol	--	--	--		210 U	360 UD	360 UD	190 U
2,4,6-Trichlorophenol	--	--	--		120 U	220 U	210 UD	110 U
2,4-Dichlorophenol	--	--	--		190 U	330 UD	320 U	170 U
2,4-Dimethylphenol	--	--	--		210 U	180 U	360 U	190 U
2,4-Dinitrophenol	--	--	--		1000 U	1800 U	860 U	910 U
2,4-Dinitrotoluene	--	--	--		210 U	360 U	360 UD	190 U
2,6-Dinitrotoluene	--	--	--		210 U	360 UD	360 U	190 U
2-Chloronaphthalene	--	--	--		210 U	360 U	360 U	190 U
2-Chlorophenol	--	--	--		210 U	180 UJVD	360 U	190 U
2-Methylnaphthalene	--	--	--		250 U	440 UD	160 JD	110 J
2-Methylphenol	100000	330	330		210 U	360 UD	360 U	190 U
2-Nitroaniline	--	--	--		210 U	360 U	360 UD	190 U
2-Nitrophenol	--	--	--		450 U	390 U	770 UD	410 U
3&4-Methylphenol	100000	330	330		300 U	530 UD	510 UD	270 U
3,3'-Dichlorobenzidine	--	--	--		210 U	360 UD	180 UD	190 U
3-Nitroaniline	--	--	--		210 U	360 U	360 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		540 U	950 U	930 UD	490 U
4-Bromophenyl phenyl ether	--	--	--		210 U	360 U	360 U	190 U
4-Chloro-3-methylphenol	--	--	--		210 U	360 U	360 U	190 U
4-Chloroaniline	--	--	--		210 U	360 UD	360 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		210 U	180 UD	360 U	190 U
4-Nitroaniline	--	--	--		210 U	360 UD	360 UD	190 U
4-Nitrophenol	--	--	--		290 U	510 U	500 UD	260 U
Acenaphthene	100000	20000	98000		170 U	270	500 D	550
Acenaphthylene	100000	100000	107000		170 U	490	350 JV	280
Acetophenone	--	--	--		210 U	360 UD	360 U	190 U
Anthracene	100000	100000	1000000		120 U	970 D	1500	1400

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8
Benzo[a]anthracene	1000	1000	1000		120 U	**2400 D**	**3500**	**4100**
Benzo[a]pyrene	1000	1000	22000		170 U	**2400 D**	**2900**	**3100**
Benzo[b]fluoranthene	1000	1000	1700		120 U	**4100**	**3600 D**	**3900**
Benzo[g,h,i]perylene	100000	100000	1000000		170 U	1900	1900	2000
Benzo[k]fluoranthene	3900	800	1700		120 U	1000 D	1400 D	1600
Benzoic Acid	--	--	--		680 U	1200 U	1200 UD	610 U
Benzyl Alcohol	--	--	--		210 U	360 U	360 UD	190 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	200 UD	190 UD	200 U
Bis(2-chloroethyl) ether	--	--	--		190 U	330 UD	320 UD	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		210 U	360 U	360 U	190 U
Butylbenzyl phthalate	--	--	--		210 U	360 U	360 U	190 U
Carbazole	--	--	--		210 U	450 D	690	550
Chrysene	3900	1000	1000		120 U	3200 D	3500	**4000**
Dibenzo[a,h]anthracene	330	330	1000000		120 U	**520**	**540**	**490**
Dibenzofuran	59000	7000	210000		210 U	160 JD	470 D	230
Diethyl phthalate	--	--	--		210 U	360 UD	360 U	190 U
Dimethyl phthalate	--	--	--		210 U	180 UD	360 UD	190 U
Di-n-butyl phthalate	--	--	--		210 U	360 UD	180 UD	190 U
Di-n-octyl phthalate	--	--	--		210 U	360 U	360 UD	190 U
Fluoranthene	100000	100000	1000000		120 U	5100	7600	7300
Fluorene	100000	30000	386000		210 U	260	480 D	460
Hexachlorobenzene	1200	330	3200		120 U	220 U	210 UD	110 U
Hexachlorobutadiene	--	--	--		210 U	180 UD	360 U	190 U
Hexachlorocyclopentadiene	--	--	--		600 U	1000 U	520 UD	540 U
Hexachloroethane	--	--	--		170 U	290 UD	140 UD	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		170 U	**1600**	**2100**	**1700**
Isophorone	--	--	--		190 U	160 U	320 UD	170 U
Naphthalene	100000	12000	12000		210 U	200	290 JD	120 J
Nitrobenzene	--	--	--		190 U	330 U	320 UD	170 U
n-Nitrosodi-n-propylamine	--	--	--		210 U	360 U	360 UD	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8
n-Nitrosodiphenylamine	--	--	--		170 U	290 U	140 UD	150 U
Pentachlorophenol	6700	800	800		170 U	140 U	280 U	150 U
Phenanthrene	100000	100000	1000000		120 U	3500	3800	8500 E
Phenol	100000	330	330		210 U	360 UD	180 U	190 U
Pyrene	100000	100000	1000000		120 U	6000	6500 D	7400

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater						
				Sample Designation:	MW-2/2R	MW-2/2R	MW-6/6R	MW-6/6R	MW-6/6R
				Sample Date:	12/16/2013	12/16/2013	12/30/2013	1/17/2014	1/17/2014
				Sample Depth (ft bls):	14 - 15	23 - 24	0 - 2	9 - 11	11 - 12
1,1'-Biphenyl	--	--	--		9900 UD	440 U	410 U	8200 UD	8900 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2,2'-oxybis (1-chloropropane)	--	--	--		5200 UD	230 U	210 U	4300 UD	4700 UD
2,4,5-Trichlorophenol	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2,4,6-Trichlorophenol	--	--	--		2600 UD	110 U	110 U	2200 UD	2300 UD
2,4-Dichlorophenol	--	--	--		3900 UD	170 U	160 U	3200 UD	3500 UD
2,4-Dimethylphenol	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2,4-Dinitrophenol	--	--	--		21000 UD	920 U	860 U	17000 UD	19000 UD
2,4-Dinitrotoluene	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2,6-Dinitrotoluene	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2-Chloronaphthalene	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2-Chlorophenol	--	--	--		4300 UD	190 U	180 UJV	3600 UD	3900 UD
2-Methylnaphthalene	--	--	--		4300 JD	230 U	210 U	1400 JD	15000 D
2-Methylphenol	100000	330	330		4300 UD	190 U	180 U	3600 UD	3900 UD
2-Nitroaniline	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
2-Nitrophenol	--	--	--		9400 UD	410 U	380 U	7800 UD	8400 UD
3&4-Methylphenol	100000	330	330		6200 UD	270 U	260 U	5200 UD	5600 UD
3,3'-Dichlorobenzidine	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
3-Nitroaniline	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
4,6-Dinitro-2-methylphenol	--	--	--		11000 UD	500 U	460 U	9300 UD	10000 UD
4-Bromophenyl phenyl ether	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
4-Chloro-3-methylphenol	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
4-Chloroaniline	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
4-Chlorophenyl phenyl ether	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
4-Nitroaniline	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
4-Nitrophenol	--	--	--		6100 UD	270 U	250 U	5000 UD	5500 UD
Acenaphthene	100000	20000	98000		3500 UD	150 U	390	1600 JD	3100 UD
Acenaphthylene	100000	100000	107000		3500 UD	150 U	78 J	2900 UD	3100 UD
Acetophenone	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Anthracene	100000	100000	1000000		2600 UD	110 U	820	2700 D	2300 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater						
				Sample Designation:	MW-2/2R	MW-2/2R	MW-6/6R	MW-6/6R	MW-6/6R
				Sample Date:	12/16/2013	12/16/2013	12/30/2013	1/17/2014	1/17/2014
				Sample Depth (ft bls):	14 - 15	23 - 24	0 - 2	9 - 11	11 - 12
Benzo[a]anthracene	1000	1000	1000		2600 UD	110 U	**2000**	**5700 D**	2300 UD
Benzo[a]pyrene	1000	1000	22000		3500 UD	150 U	**1700**	**4900 D**	3100 UD
Benzo[b]fluoranthene	1000	1000	1700		2600 UD	110 U	**2200**	**6500 D**	2300 UD
Benzo[g,h,i]perylene	100000	100000	1000000		3500 UD	150 U	920	3000 D	3100 UD
Benzo[k]fluoranthene	3900	800	1700		2600 UD	110 U	950	2400 D	2300 UD
Benzoic Acid	--	--	--		14000 UD	620 U	580 U	12000 UD	13000 UD
Benzyl Alcohol	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Bis(2-chloroethoxy)methane	--	--	--		4700 UD	210 U	190 U	3900 UD	4200 UD
Bis(2-chloroethyl) ether	--	--	--		3900 UD	170 U	160 U	3200 UD	3500 UD
Bis(2-ethylhexyl) phthalate	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Butylbenzyl phthalate	--	--	--		4300 UD	190 U	49 J	3600 UD	3900 UD
Carbazole	--	--	--		4300 UD	190 U	470	1400 JD	3900 UD
Chrysene	3900	1000	1000		2600 UD	110 U	2000	**5900 D**	2300 UD
Dibenzo[a,h]anthracene	330	330	1000000		2600 UD	110 U	250	**700 JD**	2300 UD
Dibenzofuran	59000	7000	210000		4300 UD	190 U	160 J	3600 UD	3900 UD
Diethyl phthalate	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Dimethyl phthalate	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Di-n-butyl phthalate	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Di-n-octyl phthalate	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Fluoranthene	100000	100000	1000000		2600 UD	110 U	3900	12000 D	2300 UD
Fluorene	100000	30000	386000		4300 UD	190 U	280	1200 JD	3900 UD
Hexachlorobenzene	1200	330	3200		2600 UD	110 U	110 U	2200 UD	2300 UD
Hexachlorobutadiene	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD
Hexachlorocyclopentadiene	--	--	--		12000 UD	550 U	510 U	10000 UD	11000 UD
Hexachloroethane	--	--	--		3500 UD	150 U	140 U	2900 UD	3100 UD
Indeno[1,2,3-cd]pyrene	500	500	8200		3500 UD	150 U	**1100**	**3300 D**	3100 UD
Isophorone	--	--	--		3900 UD	170 U	160 U	3200 UD	3500 UD
Naphthalene	100000	12000	12000		18000 D	190 U	110 J	3400 JD	52000 D
Nitrobenzene	--	--	--		3900 UD	170 U	160 U	3200 UD	3500 UD
n-Nitrosodi-n-propylamine	--	--	--		4300 UD	190 U	180 U	3600 UD	3900 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-2/2R 12/16/2013 14 - 15	MW-2/2R 12/16/2013 23 - 24	MW-6/6R 12/30/2013 0 - 2	MW-6/6R 1/17/2014 9 - 11	MW-6/6R 1/17/2014 11 - 12
n-Nitrosodiphenylamine	--	--	--		3500 UD	150 U	140 U	2900 UD	3100 UD
Pentachlorophenol	6700	800	800		3500 UD	150 U	140 U	2900 UD	3100 UD
Phenanthrene	100000	100000	1000000		1400 JD	110 U	2500	11000 D	2900 D
Phenol	100000	330	330		4300 UD	190 U	180 U	3600 UD	3900 UD
Pyrene	100000	100000	1000000		2600 UD	110 U	3000	9700 D	2300 UD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-6/6R 1/17/2014 15 - 17	MW-6/6R DUP 1/17/2014 15 - 17	MW-7/7R 12/19/2013 0 - 2	MW-7/7R 1/14/2014 2 - 4	MW-14 12/19/2013 0 - 2
1,1'-Biphenyl	--	--	--		9100 UD	8600 UD	8800 UD	10000 UD	820 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2,2'-oxybis (1-chloropropane)	--	--	--		4800 UD	4500 UD	4600 UD	5200 UD	430 UD
2,4,5-Trichlorophenol	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2,4,6-Trichlorophenol	--	--	--		2400 UD	2300 UD	2300 UD	2600 UD	220 UD
2,4-Dichlorophenol	--	--	--		3600 UD	3400 UD	3400 UD	3900 UD	320 UD
2,4-Dimethylphenol	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2,4-Dinitrophenol	--	--	--		19000 UD	18000 UD	18000 UD	21000 UD	1700 UD
2,4-Dinitrotoluene	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2,6-Dinitrotoluene	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2-Chloronaphthalene	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2-Chlorophenol	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2-Methylnaphthalene	--	--	--		5500 D	5300 D	4600 UD	5200 UD	430 UD
2-Methylphenol	100000	330	330		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2-Nitroaniline	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
2-Nitrophenol	--	--	--		8600 UD	8200 UD	8300 UD	9400 UD	780 UD
3&4-Methylphenol	100000	330	330		5700 UD	5400 UD	5500 UD	6300 UD	520 UD
3,3'-Dichlorobenzidine	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
3-Nitroaniline	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
4,6-Dinitro-2-methylphenol	--	--	--		10000 UD	9800 UD	10000 UD	11000 UD	940 UD
4-Bromophenyl phenyl ether	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
4-Chloro-3-methylphenol	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
4-Chloroaniline	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
4-Chlorophenyl phenyl ether	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
4-Nitroaniline	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
4-Nitrophenol	--	--	--		5600 UD	5300 UD	5400 UD	6100 UD	500 UD
Acenaphthene	100000	20000	98000		3200 UD	3000 UD	1700 JD	3500 UD	83 JVD
Acenaphthylene	100000	100000	107000		3200 UD	3000 UD	3100 UD	3500 UD	290 UD
Acetophenone	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Anthracene	100000	100000	1000000		2400 UD	2300 UD	1500 JD	2600 UD	170 JVD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-6/6R 1/17/2014 15 - 17	MW-6/6R DUP 1/17/2014 15 - 17	MW-7/7R 12/19/2013 0 - 2	MW-7/7R 1/14/2014 2 - 4	MW-14 12/19/2013 0 - 2
Benzo[a]anthracene	1000	1000	1000		2400 UD	750 JD	**3200 D**	**1200 JD**	340 JVD
Benzo[a]pyrene	1000	1000	22000		3200 UD	3000 UD	**2800 JD**	3500 UD	300 JVD
Benzo[b]fluoranthene	1000	1000	1700		2400 UD	760 JD	**3600 D**	**1300 JD**	360 JVD
Benzo[g,h,i]perylene	100000	100000	1000000		3200 UD	3000 UD	1700 JD	3500 UD	160 JVD
Benzo[k]fluoranthene	3900	800	1700		2400 UD	2300 UD	1200 JD	2600 UD	160 JVD
Benzoic Acid	--	--	--		13000 UD	12000 UD	12000 UD	14000 UD	1200 UD
Benzyl Alcohol	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Bis(2-chloroethoxy)methane	--	--	--		4300 UD	4100 UD	4200 UD	4700 UD	390 UD
Bis(2-chloroethyl) ether	--	--	--		3600 UD	3400 UD	3400 UD	3900 UD	320 UD
Bis(2-ethylhexyl) phthalate	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	230 JD
Butylbenzyl phthalate	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Carbazole	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	80 JVD
Chrysene	3900	1000	1000		2400 UD	2300 UD	3200 D	1200 JD	360 D
Dibenzo[a,h]anthracene	330	330	1000000		2400 UD	2300 UD	2300 UD	2600 UD	220 UJVD
Dibenzofuran	59000	7000	210000		4000 UD	3800 UD	3800 UD	4400 UD	360 UJVD
Diethyl phthalate	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Dimethyl phthalate	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Di-n-butyl phthalate	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Di-n-octyl phthalate	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Fluoranthene	100000	100000	1000000		950 JD	1400 JD	7300 D	2400 JD	780 JVD
Fluorene	100000	30000	386000		4000 UD	3800 UD	1100 JD	4400 UD	360 UJVD
Hexachlorobenzene	1200	330	3200		2400 UD	2300 UD	2300 UD	2600 UD	220 UD
Hexachlorobutadiene	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Hexachlorocyclopentadiene	--	--	--		11000 UD	11000 UD	11000 UD	12000 UD	1000 UD
Hexachloroethane	--	--	--		3200 UD	3000 UD	3100 UD	3500 UD	290 UD
Indeno[1,2,3-cd]pyrene	500	500	8200		3200 UD	3000 UD	**1700 JD**	3500 UD	160 JVD
Isophorone	--	--	--		3600 UD	3400 UD	3400 UD	3900 UD	320 UD
Naphthalene	100000	12000	12000		16000 D	16000 D	3800 UD	4400 UD	360 UJVD
Nitrobenzene	--	--	--		3600 UD	3400 UD	3400 UD	3900 UD	320 UD
n-Nitrosodi-n-propylamine	--	--	--		4000 UD	3800 UD	3800 UD	4400 UD	360 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-6/6R	MW-6/6R DUP	MW-7/7R	MW-7/7R	MW-14
				Sample Date:	1/17/2014	1/17/2014	12/19/2013	1/14/2014	12/19/2013
				Sample Depth (ft bls):	15 - 17	15 - 17	0 - 2	2 - 4	0 - 2
n-Nitrosodiphenylamine	--	--	--		3200 UD	3000 UD	3100 UD	3500 UD	290 UD
Pentachlorophenol	6700	800	800		3200 UD	3000 UD	3100 UD	3500 UD	290 UD
Phenanthrene	100000	100000	1000000		2400 D	2200 JD	7200 D	2200 JD	810 JVD
Phenol	100000	330	330		4000 UD	3800 UD	3800 UD	4400 UD	360 UD
Pyrene	100000	100000	1000000		940 JD	1300 JD	6500 D	2200 JD	620 JVD

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-14 DUP 12/19/2013 0 - 2	MW-14 1/17/2014 7 - 9	MW-14 1/17/2014 10 - 12	MW-15 1/20/2014 0 - 2	MW-15 1/20/2014 6 - 8
1,1'-Biphenyl	--	--	--		430 U	890 UD	440 U	4400 UD	490 U
1,2,4,5-Tetrachlorobenzene	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2,2'-oxybis (1-chloropropane)	--	--	--		230 U	470 UD	230 U	2300 UD	260 U
2,4,5-Trichlorophenol	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2,4,6-Trichlorophenol	--	--	--		110 U	230 UD	120 U	1200 UD	130 U
2,4-Dichlorophenol	--	--	--		170 U	350 UD	170 U	1800 UD	190 U
2,4-Dimethylphenol	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2,4-Dinitrophenol	--	--	--		910 U	1900 UD	930 U	9400 UD	1000 U
2,4-Dinitrotoluene	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2,6-Dinitrotoluene	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2-Chloronaphthalene	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2-Chlorophenol	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2-Methylnaphthalene	--	--	--		150 J	220 JD	230 U	2300 UD	260 U
2-Methylphenol	100000	330	330		190 U	390 UD	190 U	2000 UD	220 U
2-Nitroaniline	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
2-Nitrophenol	--	--	--		410 U	840 UD	420 U	4200 UD	460 U
3&4-Methylphenol	100000	330	330		270 U	560 UD	280 U	2800 UD	310 U
3,3'-Dichlorobenzidine	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
3-Nitroaniline	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
4,6-Dinitro-2-methylphenol	--	--	--		490 U	1000 UD	500 U	5100 UD	560 U
4-Bromophenyl phenyl ether	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
4-Chloro-3-methylphenol	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
4-Chloroaniline	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
4-Chlorophenyl phenyl ether	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
4-Nitroaniline	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
4-Nitrophenol	--	--	--		260 U	540 UD	270 U	2700 UD	300 U
Acenaphthene	100000	20000	98000		320 JV	670 D	160 U	2000 D	48 J
Acenaphthylene	100000	100000	107000		130 J	400 D	160 U	6400 D	45 J
Acetophenone	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Anthracene	100000	100000	1000000		830 JV	1300 D	120 U	11000 D	96 J

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-14 DUP 12/19/2013 0 - 2	MW-14 1/17/2014 7 - 9	MW-14 1/17/2014 10 - 12	MW-15 1/20/2014 0 - 2	MW-15 1/20/2014 6 - 8
Benzo[a]anthracene	1000	1000	1000		**1900 JV**	**4000 D**	120 U	**34000 D**	**1200**
Benzo[a]pyrene	1000	1000	22000		**1900 JV**	**3800 D**	160 U	**35000 D**	**1400**
Benzo[b]fluoranthene	1000	1000	1700		**1900 JV**	**4900 D**	120 U	**44000 D**	**1700**
Benzo[g,h,i]perylene	100000	100000	1000000		1300 JV	2100 D	160 U	21000 D	990
Benzo[k]fluoranthene	3900	800	1700		840 JV	2000 D	120 U	**17000 D**	710
Benzoic Acid	--	--	--		610 U	1300 UD	630 U	6300 UD	700 U
Benzyl Alcohol	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Bis(2-chloroethoxy)methane	--	--	--		200 U	420 UD	210 U	2100 UD	230 U
Bis(2-chloroethyl) ether	--	--	--		170 U	350 UD	170 U	1800 UD	190 U
Bis(2-ethylhexyl) phthalate	--	--	--		93 J	390 UD	190 U	2000 UD	220 U
Butylbenzyl phthalate	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Carbazole	--	--	--		310 JV	550 D	190 U	2700 D	220 U
Chrysene	3900	1000	1000		1800 JV	**4400 D**	120 U	**36000 D**	1400
Dibenzo[a,h]anthracene	330	330	1000000		**360 JV**	**630 D**	120 U	**5300 D**	330
Dibenzofuran	59000	7000	210000		330 JV	490 D	190 U	1300 JD	220 U
Diethyl phthalate	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Dimethyl phthalate	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Di-n-butyl phthalate	--	--	--		37 J	390 UD	190 U	2000 UD	220 U
Di-n-octyl phthalate	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Fluoranthene	100000	100000	1000000		3800 JV	9400 D	120 U	72000 D	1600
Fluorene	100000	30000	386000		290 JV	520 D	190 U	1600 JD	220 U
Hexachlorobenzene	1200	330	3200		110 U	230 UD	120 U	1200 UD	130 U
Hexachlorobutadiene	--	--	--		190 U	390 UD	190 U	2000 UD	220 U
Hexachlorocyclopentadiene	--	--	--		540 U	1100 UD	560 U	5600 UD	620 U
Hexachloroethane	--	--	--		150 U	310 UD	160 U	1600 UD	170 U
Indeno[1,2,3-cd]pyrene	500	500	8200		**1100 JV**	**2100 D**	160 U	**22000 D**	**930**
Isophorone	--	--	--		170 U	350 UD	170 U	1800 UD	190 U
Naphthalene	100000	12000	12000		370 JV	380 JD	190 U	1200 JD	79 J
Nitrobenzene	--	--	--		170 U	350 UD	170 U	1800 UD	190 U
n-Nitrosodi-n-propylamine	--	--	--		190 U	390 UD	190 U	2000 UD	220 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	MW-14 DUP 12/19/2013 0 - 2	MW-14 1/17/2014 7 - 9	MW-14 1/17/2014 10 - 12	MW-15 1/20/2014 0 - 2	MW-15 1/20/2014 6 - 8
n-Nitrosodiphenylamine	--	--	--		150 U	310 UD	160 U	1600 UD	170 U
Pentachlorophenol	6700	800	800		150 U	310 UD	160 U	1600 UD	170 U
Phenanthrene	100000	100000	1000000		3900 JV	7300 D	120 U	35000 D	450
Phenol	100000	330	330		190 U	390 UD	190 U	2000 UD	220 U
Pyrene	100000	100000	1000000		3500 JV	8200 D	120 U	73000 D	1700

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-15 1/20/2014 10 - 12	MW-16 1/7/2014 0 - 2	MW-16 1/7/2014 5 - 7	MW-16 1/7/2014 10 - 12	MW-16 1/7/2014 25 - 26.5	MW-17 1/2/2014 0 - 2
1,1'-Biphenyl	--	--	--		460 U	430 U	9200 UD	1500 JD	430 U	440 U
1,2,4,5-Tetrachlorobenzene	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		240 U	230 U	4900 UD	2500 UD	230 U	230 U
2,4,5-Trichlorophenol	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2,4,6-Trichlorophenol	--	--	--		120 U	110 U	2400 UD	1200 UD	110 U	120 U
2,4-Dichlorophenol	--	--	--		180 U	170 U	3600 UD	1800 UD	170 U	170 U
2,4-Dimethylphenol	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2,4-Dinitrophenol	--	--	--		970 U	920 U	19000 UD	9900 UD	910 U	920 U
2,4-Dinitrotoluene	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2,6-Dinitrotoluene	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2-Chloronaphthalene	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2-Chlorophenol	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2-Methylnaphthalene	--	--	--		240 U	230 U	1300 JD	6300 D	230 U	79 J
2-Methylphenol	100000	330	330		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2-Nitroaniline	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
2-Nitrophenol	--	--	--		440 U	410 U	8800 UD	4400 UD	410 U	420 U
3&4-Methylphenol	100000	330	330		290 U	270 U	5800 UD	3000 UD	270 U	280 U
3,3'-Dichlorobenzidine	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
3-Nitroaniline	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
4,6-Dinitro-2-methylphenol	--	--	--		520 U	500 U	10000 UD	5400 UD	500 U	500 U
4-Bromophenyl phenyl ether	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
4-Chloro-3-methylphenol	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
4-Chloroaniline	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
4-Chlorophenyl phenyl ether	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
4-Nitroaniline	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
4-Nitrophenol	--	--	--		280 U	270 U	5700 UD	2900 UD	270 U	270 U
Acenaphthene	100000	20000	98000		160 U	160	1400 JD	7300 D	150 U	200
Acenaphthylene	100000	100000	107000		160 U	250	3200 UD	4200 D	150 U	160
Acetophenone	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Anthracene	100000	100000	1000000		120 U	510	2000 JD	18000 D	110 U	420

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-15	MW-16	MW-16	MW-16	MW-16	MW-17
				Sample Date:	1/20/2014	1/7/2014	1/7/2014	1/7/2014	1/7/2014	1/2/2014
				Sample Depth (ft bls):	10 - 12	0 - 2	5 - 7	10 - 12	25 - 26.5	0 - 2
Benzo[a]anthracene	1000	1000	1000		120 U	**2000**	**3100 D**	**23000 D**	110 U	**1800**
Benzo[a]pyrene	1000	1000	22000		160 U	**2000**	**2800 JD**	**18000 D**	150 U	**1900**
Benzo[b]fluoranthene	1000	1000	1700		120 U	**2900**	**3300 D**	**20000 D**	110 U	**2300**
Benzo[g,h,i]perylene	100000	100000	1000000		160 U	1200	1900 JD	8000 D	150 U	1300
Benzo[k]fluoranthene	3900	800	1700		120 U	1000	1400 JD	**8700 D**	110 U	870
Benzoic Acid	--	--	--		650 U	620 U	13000 UD	6700 UD	620 U	620 U
Benzyl Alcohol	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	200 U	4400 UD	2200 UD	200 U	210 U
Bis(2-chloroethyl) ether	--	--	--		180 U	170 U	3600 UD	1800 UD	170 U	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Butylbenzyl phthalate	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Carbazole	--	--	--		200 U	300	4000 UD	6000 D	190 U	180 J
Chrysene	3900	1000	1000		120 U	2300	3200 D	**20000 D**	110 U	2000
Dibenzo[a,h]anthracene	330	330	1000000		120 U	320	2400 UD	**2300 D**	110 U	330
Dibenzofuran	59000	7000	210000		200 U	94 J	4000 UD	8300 D	190 U	110 J
Diethyl phthalate	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Dimethyl phthalate	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Di-n-butyl phthalate	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Di-n-octyl phthalate	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Fluoranthene	100000	100000	1000000		120 U	4000	8700 D	48000 D	110 U	3100
Fluorene	100000	30000	386000		200 U	130 J	1700 JD	10000 D	190 U	120 J
Hexachlorobenzene	1200	330	3200		120 U	110 U	2400 UD	1200 UD	110 U	120 U
Hexachlorobutadiene	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Hexachlorocyclopentadiene	--	--	--		580 U	550 U	12000 UD	5900 UD	550 U	550 U
Hexachloroethane	--	--	--		160 U	150 U	3200 UD	1600 UD	150 U	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		160 U	**1300**	**2000 JD**	**9000 D**	150 U	**1400**
Isophorone	--	--	--		180 U	170 U	3600 UD	1800 UD	170 U	170 U
Naphthalene	100000	12000	12000		200 U	110 J	4000 UD	15000 D	190 U	110 J
Nitrobenzene	--	--	--		180 U	170 U	3600 UD	1800 UD	170 U	170 U
n-Nitrosodi-n-propylamine	--	--	--		200 U	190 U	4000 UD	2000 UD	190 U	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-15 1/20/2014 10 - 12	MW-16 1/7/2014 0 - 2	MW-16 1/7/2014 5 - 7	MW-16 1/7/2014 10 - 12	MW-16 1/7/2014 25 - 26.5	MW-17 1/2/2014 0 - 2
n-Nitrosodiphenylamine	--	--	--		160 U	150 U	3200 UD	1600 UD	150 U	150 U
Pentachlorophenol	6700	800	800		160 U	150 U	3200 UD	1600 UD	150 U	150 U
Phenanthrene	100000	100000	1000000		120 U	2300	10000 D	57000 D	110 U	2000
Phenol	100000	330	330		200 U	190 U	4000 UD	2000 UD	190 U	190 U
Pyrene	100000	100000	1000000		120 U	3600	6900 D	39000 D	110 U	3100

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-17 1/2/2014 5 - 7	MW-17 1/2/2014 12 - 13	MW-17 1/2/2014 23 - 24	MW-18 1/6/2014 0 - 2	MW-18 1/6/2014 8 - 10	MW-18 1/6/2014 12 - 14
1,1'-Biphenyl	--	--	--		460 U	500 U	430 U	420 U	460 U	530 U
1,2,4,5-Tetrachlorobenzene	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2,2'-oxybis (1-chloropropane)	--	--	--		240 U	260 U	220 U	220 U	240 U	280 U
2,4,5-Trichlorophenol	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2,4,6-Trichlorophenol	--	--	--		120 U	130 U	110 U	110 U	120 U	140 U
2,4-Dichlorophenol	--	--	--		180 U	200 U	170 U	170 U	180 U	210 U
2,4-Dimethylphenol	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2,4-Dinitrophenol	--	--	--		960 U	1100 U	900 U	890 U	980 U	1100 U
2,4-Dinitrotoluene	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2,6-Dinitrotoluene	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2-Chloronaphthalene	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2-Chlorophenol	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2-Methylnaphthalene	--	--	--		240 U	260 U	220 U	220 U	240 U	280 U
2-Methylphenol	100000	330	330		200 U	220 U	190 U	190 U	200 U	230 U
2-Nitroaniline	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
2-Nitrophenol	--	--	--		430 U	480 U	400 U	400 U	440 U	500 U
3&4-Methylphenol	100000	330	330		290 U	320 U	270 U	270 U	290 U	330 U
3,3'-Dichlorobenzidine	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
3-Nitroaniline	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
4,6-Dinitro-2-methylphenol	--	--	--		520 U	580 U	490 U	480 U	530 U	600 U
4-Bromophenyl phenyl ether	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
4-Chloro-3-methylphenol	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
4-Chloroaniline	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
4-Chlorophenyl phenyl ether	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
4-Nitroaniline	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
4-Nitrophenol	--	--	--		280 U	310 U	260 U	260 U	280 U	320 U
Acenaphthene	100000	20000	98000		87 J	180 U	150 U	170	160 U	180 U
Acenaphthylene	100000	100000	107000		160 U	180 U	150 U	150 U	160 U	180 U
Acetophenone	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Anthracene	100000	100000	1000000		160	130 U	110 U	470	120 U	140 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18
				Sample Date:	1/2/2014	1/2/2014	1/2/2014	1/6/2014	1/6/2014	1/6/2014
				Sample Depth (ft bls):	5 - 7	12 - 13	23 - 24	0 - 2	8 - 10	12 - 14
Benzo[a]anthracene	1000	1000	1000		770	130 U	110 U	840	120 U	140 U
Benzo[a]pyrene	1000	1000	22000		980	180 U	150 U	630	160 U	180 U
Benzo[b]fluoranthene	1000	1000	1700		**1100**	130 U	110 U	720	120 U	140 U
Benzo[g,h,i]perylene	100000	100000	1000000		780	180 U	150 U	400	160 U	180 U
Benzo[k]fluoranthene	3900	800	1700		360	130 U	110 U	270	120 U	140 U
Benzoic Acid	--	--	--		650 U	720 U	610 U	600 U	660 U	750 U
Benzyl Alcohol	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	240 U	200 U	200 U	220 U	250 U
Bis(2-chloroethyl) ether	--	--	--		180 U	200 U	170 U	170 U	180 U	210 U
Bis(2-ethylhexyl) phthalate	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Butylbenzyl phthalate	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Carbazole	--	--	--		75 J	220 U	190 U	210	200 U	230 U
Chrysene	3900	1000	1000		830	130 U	110 U	770	120 U	140 U
Dibenzo[a,h]anthracene	330	330	1000000		170	130 U	110 U	100 J	120 U	140 U
Dibenzofuran	59000	7000	210000		200 U	220 U	190 U	100 J	200 U	230 U
Diethyl phthalate	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Dimethyl phthalate	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Di-n-butyl phthalate	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Di-n-octyl phthalate	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Fluoranthene	100000	100000	1000000		1100	130 U	110 U	1600	120 U	140 U
Fluorene	100000	30000	386000		200 U	220 U	190 U	170 J	200 U	230 U
Hexachlorobenzene	1200	330	3200		120 U	130 U	110 U	110 U	120 U	140 U
Hexachlorobutadiene	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U
Hexachlorocyclopentadiene	--	--	--		580 U	630 U	540 U	530 U	580 U	670 U
Hexachloroethane	--	--	--		160 U	180 U	150 U	150 U	160 U	180 U
Indeno[1,2,3-cd]pyrene	500	500	8200		**770**	180 U	150 U	330	160 U	180 U
Isophorone	--	--	--		180 U	200 U	170 U	170 U	180 U	210 U
Naphthalene	100000	12000	12000		200 U	220 U	190 U	190 U	200 U	230 U
Nitrobenzene	--	--	--		180 U	200 U	170 U	170 U	180 U	210 U
n-Nitrosodi-n-propylamine	--	--	--		200 U	220 U	190 U	190 U	200 U	230 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18
				Sample Date:	1/2/2014	1/2/2014	1/2/2014	1/6/2014	1/6/2014	1/6/2014
				Sample Depth (ft bls):	5 - 7	12 - 13	23 - 24	0 - 2	8 - 10	12 - 14
n-Nitrosodiphenylamine	--	--	--		160 U	180 U	150 U	150 U	160 U	180 U
Pentachlorophenol	6700	800	800		160 U	180 U	150 U	150 U	160 U	180 U
Phenanthrene	100000	100000	1000000		740	130 U	110 U	1600	120 U	140 U
Phenol	100000	330	330		200 U	220 U	190 U	190 U	200 U	230 U
Pyrene	100000	100000	1000000		1300	130 U	110 U	1300	120 U	140 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

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D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-18 1/6/2014 20 - 22	MW-19 1/14/2014 0 - 2	MW-19 1/14/2014 4 - 6	MW-20 12/19/2013 0 - 2	MW-20 1/15/2014 7 - 9
1,1'-Biphenyl	--	--	--		430 U	890 UD	9900 UD	860 UD	430 U
1,2,4,5-Tetrachlorobenzene	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2,2'-oxybis (1-chloropropane)	--	--	--		230 U	470 UD	5200 UD	450 UD	220 U
2,4,5-Trichlorophenol	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2,4,6-Trichlorophenol	--	--	--		110 U	230 UD	2600 UD	220 UD	110 U
2,4-Dichlorophenol	--	--	--		170 U	350 UD	3900 UD	340 UD	170 U
2,4-Dimethylphenol	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2,4-Dinitrophenol	--	--	--		910 U	1900 UD	21000 UD	1800 UD	900 U
2,4-Dinitrotoluene	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2,6-Dinitrotoluene	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2-Chloronaphthalene	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2-Chlorophenol	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2-Methylnaphthalene	--	--	--		230 U	170 JD	7400 D	150 JD	220 U
2-Methylphenol	100000	330	330		190 U	390 UD	4300 UD	380 UD	190 U
2-Nitroaniline	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
2-Nitrophenol	--	--	--		410 U	840 UD	9300 UD	810 UD	400 U
3&4-Methylphenol	100000	330	330		270 U	560 UD	6200 UD	540 UD	270 U
3,3'-Dichlorobenzidine	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
3-Nitroaniline	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
4,6-Dinitro-2-methylphenol	--	--	--		490 U	1000 UD	11000 UD	980 UD	480 U
4-Bromophenyl phenyl ether	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
4-Chloro-3-methylphenol	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
4-Chloroaniline	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
4-Chlorophenyl phenyl ether	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
4-Nitroaniline	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
4-Nitrophenol	--	--	--		260 U	550 UD	6000 UD	530 UD	260 U
Acenaphthene	100000	20000	98000		150 U	1100 D	3500 UD	330 D	150 U
Acenaphthylene	100000	100000	107000		150 U	180 JD	3500 UD	710 D	150 U
Acetophenone	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Anthracene	100000	100000	1000000		110 U	1900 D	2600 UD	1300 D	110 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-18 1/6/2014 20 - 22	MW-19 1/14/2014 0 - 2	MW-19 1/14/2014 4 - 6	MW-20 12/19/2013 0 - 2	MW-20 1/15/2014 7 - 9
Benzo[a]anthracene	1000	1000	1000		110 U	**5000 D**	2600 UD	**4400 D**	110 U
Benzo[a]pyrene	1000	1000	22000		150 U	**4100 D**	3500 UD	**4200 D**	150 U
Benzo[b]fluoranthene	1000	1000	1700		110 U	**5000 D**	2600 UD	**5900 D**	110 U
Benzo[g,h,i]perylene	100000	100000	1000000		150 U	2400 D	3500 UD	2800 D	150 U
Benzo[k]fluoranthene	3900	800	1700		110 U	1600 D	2600 UD	2000 D	110 U
Benzoic Acid	--	--	--		620 U	1300 UD	14000 UD	1200 UD	600 U
Benzyl Alcohol	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Bis(2-chloroethoxy)methane	--	--	--		200 U	420 UD	4700 UD	410 UD	200 U
Bis(2-chloroethyl) ether	--	--	--		170 U	350 UD	3900 UD	340 UD	170 U
Bis(2-ethylhexyl) phthalate	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Butylbenzyl phthalate	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Carbazole	--	--	--		190 U	570 D	4300 UD	290 JD	190 U
Chrysene	3900	1000	1000		110 U	**5300 D**	2600 UD	**5000 D**	110 U
Dibenzo[a,h]anthracene	330	330	1000000		110 U	**660 D**	2600 UD	**710 D**	110 U
Dibenzofuran	59000	7000	210000		190 U	490 D	4300 UD	230 JD	190 U
Diethyl phthalate	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Dimethyl phthalate	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Di-n-butyl phthalate	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Di-n-octyl phthalate	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Fluoranthene	100000	100000	1000000		110 U	10000 D	1800 JD	8600 D	110 U
Fluorene	100000	30000	386000		190 U	900 D	4300 UD	240 JD	190 U
Hexachlorobenzene	1200	330	3200		110 U	230 UD	2600 UD	220 UD	110 U
Hexachlorobutadiene	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U
Hexachlorocyclopentadiene	--	--	--		540 U	1100 UD	12000 UD	1100 UD	540 U
Hexachloroethane	--	--	--		150 U	310 UD	3500 UD	300 UD	150 U
Indeno[1,2,3-cd]pyrene	500	500	8200		150 U	**2100 D**	3500 UD	**2700 D**	150 U
Isophorone	--	--	--		170 U	350 UD	3900 UD	340 UD	170 U
Naphthalene	100000	12000	12000		190 U	360 JD	9600 D	410 D	190 U
Nitrobenzene	--	--	--		170 U	350 UD	3900 UD	340 UD	170 U
n-Nitrosodi-n-propylamine	--	--	--		190 U	390 UD	4300 UD	380 UD	190 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-18 1/6/2014 20 - 22	MW-19 1/14/2014 0 - 2	MW-19 1/14/2014 4 - 6	MW-20 12/19/2013 0 - 2	MW-20 1/15/2014 7 - 9
n-Nitrosodiphenylamine	--	--	--		150 U	310 UD	3500 UD	300 UD	150 U
Pentachlorophenol	6700	800	800		150 U	310 UD	3500 UD	300 UD	150 U
Phenanthrene	100000	100000	1000000		110 U	9600 D	2800 D	4100 D	110 U
Phenol	100000	330	330		190 U	390 UD	4300 UD	380 UD	190 U
Pyrene	100000	100000	1000000		110 U	11000 D	1500 JD	8000 D	110 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-20	MW-20 DUP	MW-20	MW-21	MW-21
				Sample Date:	1/15/2014	1/15/2014	1/15/2014	1/6/2014	1/6/2014
				Sample Depth (ft bls):	12 - 14	12 - 14	18 - 19	0 - 2	5 - 7
1,1'-Biphenyl	--	--	--		8900 UD	8900 UD	8500 UD	420 U	850 UD
1,2,4,5-Tetrachlorobenzene	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2,2'-oxybis (1-chloropropane)	--	--	--		4700 UD	4700 UD	4400 UD	220 U	450 UD
2,4,5-Trichlorophenol	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2,4,6-Trichlorophenol	--	--	--		2300 UD	2300 UD	2200 UD	110 U	220 UD
2,4-Dichlorophenol	--	--	--		3500 UD	3500 UD	3300 UD	170 U	340 UD
2,4-Dimethylphenol	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2,4-Dinitrophenol	--	--	--		19000 UD	19000 UD	18000 UD	890 U	1800 UD
2,4-Dinitrotoluene	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2,6-Dinitrotoluene	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2-Chloronaphthalene	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2-Chlorophenol	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2-Methylnaphthalene	--	--	--		4700 UD	4700 UD	4400 UD	220 U	450 UD
2-Methylphenol	100000	330	330		3900 UD	3900 UD	3700 UD	180 U	370 UD
2-Nitroaniline	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
2-Nitrophenol	--	--	--		8400 UD	8400 UD	8000 UD	400 U	800 UD
3&4-Methylphenol	100000	330	330		5600 UD	5600 UD	5300 UD	270 U	540 UD
3,3'-Dichlorobenzidine	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
3-Nitroaniline	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
4,6-Dinitro-2-methylphenol	--	--	--		10000 UD	10000 UD	9600 UD	480 U	970 UD
4-Bromophenyl phenyl ether	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
4-Chloro-3-methylphenol	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
4-Chloroaniline	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
4-Chlorophenyl phenyl ether	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
4-Nitroaniline	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
4-Nitrophenol	--	--	--		5400 UD	5500 UD	5200 UD	260 U	520 UD
Acenaphthene	100000	20000	98000		3100 UD	3100 UD	3000 UD	65 J	300 UD
Acenaphthylene	100000	100000	107000		3100 UD	3100 UD	3000 UD	56 J	300 UD
Acetophenone	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Anthracene	100000	100000	1000000		2300 UD	2300 UD	2200 UD	150	87 JD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-20	MW-20 DUP	MW-20	MW-21	MW-21
				Sample Date:	1/15/2014	1/15/2014	1/15/2014	1/6/2014	1/6/2014
				Sample Depth (ft bls):	12 - 14	12 - 14	18 - 19	0 - 2	5 - 7
Benzo[a]anthracene	1000	1000	1000		2300 UD	2300 UD	2200 UD	**1300**	430 D
Benzo[a]pyrene	1000	1000	22000		3100 UD	3100 UD	3000 UD	**1800**	640 D
Benzo[b]fluoranthene	1000	1000	1700		2300 UD	2300 UD	2200 UD	**1800**	690 D
Benzo[g,h,i]perylene	100000	100000	1000000		3100 UD	3100 UD	3000 UD	1500	470 D
Benzo[k]fluoranthene	3900	800	1700		2300 UD	2300 UD	2200 UD	560	290 D
Benzoic Acid	--	--	--		13000 UD	13000 UD	12000 UD	600 U	1200 UD
Benzyl Alcohol	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Bis(2-chloroethoxy)methane	--	--	--		4200 UD	4200 UD	4000 UD	200 U	400 UD
Bis(2-chloroethyl) ether	--	--	--		3500 UD	3500 UD	3300 UD	170 U	340 UD
Bis(2-ethylhexyl) phthalate	--	--	--		3900 UD	3900 UD	3700 UD	390	270 JD
Butylbenzyl phthalate	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Carbazole	--	--	--		3900 UD	3900 UD	3700 UD	66 J	370 UD
Chrysene	3900	1000	1000		2300 UD	2300 UD	2200 UD	1700	510 D
Dibenzo[a,h]anthracene	330	330	1000000		2300 UD	2300 UD	2200 UD	320	120 JD
Dibenzofuran	59000	7000	210000		3900 UD	3900 UD	3700 UD	180 U	370 UD
Diethyl phthalate	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Dimethyl phthalate	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Di-n-butyl phthalate	--	--	--		3900 UD	3900 UD	3700 UD	64 J	370 UD
Di-n-octyl phthalate	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Fluoranthene	100000	100000	1000000		2300 UD	2300 UD	2200 UD	1400	690 D
Fluorene	100000	30000	386000		3900 UD	3900 UD	3700 UD	180 U	370 UD
Hexachlorobenzene	1200	330	3200		2300 UD	2300 UD	2200 UD	110 U	220 UD
Hexachlorobutadiene	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD
Hexachlorocyclopentadiene	--	--	--		11000 UD	11000 UD	11000 UD	530 U	1100 UD
Hexachloroethane	--	--	--		3100 UD	3100 UD	3000 UD	150 U	300 UD
Indeno[1,2,3-cd]pyrene	500	500	8200		3100 UD	3100 UD	3000 UD	**1300**	450 D
Isophorone	--	--	--		3500 UD	3500 UD	3300 UD	170 U	340 UD
Naphthalene	100000	12000	12000		3900 UD	3900 UD	3700 UD	80 J	370 UD
Nitrobenzene	--	--	--		3500 UD	3500 UD	3300 UD	170 U	340 UD
n-Nitrosodi-n-propylamine	--	--	--		3900 UD	3900 UD	3700 UD	180 U	370 UD

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-20 1/15/2014 12 - 14	MW-20 DUP 1/15/2014 12 - 14	MW-20 1/15/2014 18 - 19	MW-21 1/6/2014 0 - 2	MW-21 1/6/2014 5 - 7
n-Nitrosodiphenylamine	--	--	--		3100 UD	3100 UD	3000 UD	150 U	300 UD
Pentachlorophenol	6700	800	800		3100 UD	3100 UD	3000 UD	150 U	300 UD
Phenanthrene	100000	100000	1000000		2300 UD	2300 UD	2200 UD	670	450 D
Phenol	100000	330	330		3900 UD	3900 UD	3700 UD	180 U	370 UD
Pyrene	100000	100000	1000000		2300 UD	2300 UD	2200 UD	2400	620 D

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

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of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-21	MW-21	MW-22	MW-22	MW-22
				Sample Date:	1/6/2014	1/6/2014	12/19/2013	1/16/2014	1/16/2014
				Sample Depth (ft bls):	7 - 8	18 - 20	0 - 2	7 - 9	12 - 14
1,1'-Biphenyl	--	--	--		460 U	420 U	830 UD	430 U	490 U
1,2,4,5-Tetrachlorobenzene	--	--	--		200 U	180 U	370 UD	190 U	220 U
2,2'-oxybis (1-chloropropane)	--	--	--		240 U	220 U	440 UD	230 U	260 U
2,4,5-Trichlorophenol	--	--	--		200 U	180 U	370 UD	190 U	220 U
2,4,6-Trichlorophenol	--	--	--		120 U	110 U	220 UD	110 U	130 U
2,4-Dichlorophenol	--	--	--		180 U	160 U	330 UD	170 U	190 U
2,4-Dimethylphenol	--	--	--		200 U	180 U	370 UD	190 U	220 U
2,4-Dinitrophenol	--	--	--		980 U	880 U	1800 UD	910 U	1000 U
2,4-Dinitrotoluene	--	--	--		200 U	180 U	370 UD	190 U	220 U
2,6-Dinitrotoluene	--	--	--		200 U	180 U	370 UD	190 U	220 U
2-Chloronaphthalene	--	--	--		200 U	180 U	370 UD	190 U	220 U
2-Chlorophenol	--	--	--		200 U	180 U	370 UD	190 U	220 U
2-Methylnaphthalene	--	--	--		240 U	220 U	440 UD	230 U	260 U
2-Methylphenol	100000	330	330		200 U	180 U	370 UD	190 U	220 U
2-Nitroaniline	--	--	--		200 U	180 U	370 UD	190 U	220 U
2-Nitrophenol	--	--	--		440 U	400 U	790 UD	410 U	470 U
3&4-Methylphenol	100000	330	330		290 U	260 U	530 UD	270 U	310 U
3,3'-Dichlorobenzidine	--	--	--		200 U	180 U	370 UD	190 U	220 U
3-Nitroaniline	--	--	--		200 U	180 U	370 UD	190 U	220 U
4,6-Dinitro-2-methylphenol	--	--	--		530 U	480 U	950 UD	490 U	560 U
4-Bromophenyl phenyl ether	--	--	--		200 U	180 U	370 UD	190 U	220 U
4-Chloro-3-methylphenol	--	--	--		200 U	180 U	370 UD	190 U	220 U
4-Chloroaniline	--	--	--		200 U	180 U	370 UD	190 U	220 U
4-Chlorophenyl phenyl ether	--	--	--		200 U	180 U	370 UD	190 U	220 U
4-Nitroaniline	--	--	--		200 U	180 U	370 UD	190 U	220 U
4-Nitrophenol	--	--	--		280 U	260 U	510 UD	260 U	300 U
Acenaphthene	100000	20000	98000		160 U	150 U	200 JD	150 U	170 U
Acenaphthylene	100000	100000	107000		160 U	150 U	280 JD	150 U	170 U
Acetophenone	--	--	--		200 U	180 U	370 UD	190 U	220 U
Anthracene	100000	100000	1000000		120 U	110 U	610 D	110 U	130 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	MW-21 1/6/2014 7 - 8	MW-21 1/6/2014 18 - 20	MW-22 12/19/2013 0 - 2	MW-22 1/16/2014 7 - 9	MW-22 1/16/2014 12 - 14
Benzo[a]anthracene	1000	1000	1000		120 U	110 U	**1800 D**	110 U	130 U
Benzo[a]pyrene	1000	1000	22000		160 U	150 U	**1800 D**	150 U	170 U
Benzo[b]fluoranthene	1000	1000	1700		120 U	110 U	**2000 D**	110 U	130 U
Benzo[g,h,i]perylene	100000	100000	1000000		160 U	150 U	1300 D	150 U	170 U
Benzo[k]fluoranthene	3900	800	1700		120 U	110 U	910 D	110 U	130 U
Benzoic Acid	--	--	--		660 U	590 U	1200 UD	610 U	700 U
Benzyl Alcohol	--	--	--		200 U	180 U	370 UD	190 U	220 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	200 U	400 UD	200 U	230 U
Bis(2-chloroethyl) ether	--	--	--		180 U	160 U	330 UD	170 U	190 U
Bis(2-ethylhexyl) phthalate	--	--	--		200 U	180 U	370 UD	190 U	220 U
Butylbenzyl phthalate	--	--	--		200 U	180 U	370 UD	190 U	220 U
Carbazole	--	--	--		200 U	180 U	240 JD	190 U	220 U
Chrysene	3900	1000	1000		120 U	110 U	2000 D	110 U	130 U
Dibenzo[a,h]anthracene	330	330	1000000		120 U	110 U	300 D	110 U	130 U
Dibenzofuran	59000	7000	210000		200 U	180 U	160 JD	190 U	220 U
Diethyl phthalate	--	--	--		200 U	180 U	370 UD	190 U	220 U
Dimethyl phthalate	--	--	--		200 U	180 U	370 UD	190 U	220 U
Di-n-butyl phthalate	--	--	--		200 U	180 U	370 UD	190 U	220 U
Di-n-octyl phthalate	--	--	--		200 U	180 U	370 UD	190 U	220 U
Fluoranthene	100000	100000	1000000		120 U	110 U	3800 D	110 U	130 U
Fluorene	100000	30000	386000		200 U	180 U	190 JD	190 U	220 U
Hexachlorobenzene	1200	330	3200		120 U	110 U	220 UD	110 U	130 U
Hexachlorobutadiene	--	--	--		200 U	180 U	370 UD	190 U	220 U
Hexachlorocyclopentadiene	--	--	--		580 U	530 U	1000 UD	540 U	620 U
Hexachloroethane	--	--	--		160 U	150 U	290 UD	150 U	170 U
Indeno[1,2,3-cd]pyrene	500	500	8200		160 U	150 U	**1100 D**	150 U	170 U
Isophorone	--	--	--		180 U	160 U	330 UD	170 U	190 U
Naphthalene	100000	12000	12000		200 U	180 U	180 JD	190 U	220 U
Nitrobenzene	--	--	--		180 U	160 U	330 UD	170 U	190 U
n-Nitrosodi-n-propylamine	--	--	--		200 U	180 U	370 UD	190 U	220 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-21 1/6/2014 7 - 8	MW-21 1/6/2014 18 - 20	MW-22 12/19/2013 0 - 2	MW-22 1/16/2014 7 - 9	MW-22 1/16/2014 12 - 14
n-Nitrosodiphenylamine	--	--	--		160 U	150 U	290 UD	150 U	170 U
Pentachlorophenol	6700	800	800		160 U	150 U	290 UD	150 U	170 U
Phenanthrene	100000	100000	1000000		120 U	110 U	2600 D	110 U	130 U
Phenol	100000	330	330		200 U	180 U	370 UD	190 U	220 U
Pyrene	100000	100000	1000000		120 U	110 U	3600 D	110 U	130 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-22 1/16/2014 18 - 20	MW-23 12/31/2013 0 - 2	MW-23 12/31/2013 5 - 7	MW-23 12/31/2013 10 - 12	MW-23 12/31/2013 18 - 19
1,1'-Biphenyl	--	--	--		470 U	450 U	430 U	9300 UD	410 U
1,2,4,5-Tetrachlorobenzene	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2,2'-oxybis (1-chloropropane)	--	--	--		250 U	240 U	230 U	4900 UD	220 U
2,4,5-Trichlorophenol	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2,4,6-Trichlorophenol	--	--	--		120 U	120 U	110 U	2400 UD	110 U
2,4-Dichlorophenol	--	--	--		180 U	180 U	170 U	3700 UD	160 U
2,4-Dimethylphenol	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2,4-Dinitrophenol	--	--	--		980 U	950 U	910 U	20000 UD	860 U
2,4-Dinitrotoluene	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2,6-Dinitrotoluene	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2-Chloronaphthalene	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2-Chlorophenol	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2-Methylnaphthalene	--	--	--		250 U	88 J	230 U	1500 JD	220 U
2-Methylphenol	100000	330	330		200 U	200 U	190 U	4100 UD	180 U
2-Nitroaniline	--	--	--		200 U	200 U	190 U	4100 UD	180 U
2-Nitrophenol	--	--	--		440 U	430 U	410 U	8800 UD	390 U
3&4-Methylphenol	100000	330	330		300 U	280 U	270 U	5900 UD	260 U
3,3'-Dichlorobenzidine	--	--	--		200 U	200 U	190 U	4100 UD	180 U
3-Nitroaniline	--	--	--		200 U	200 U	190 U	4100 UD	180 U
4,6-Dinitro-2-methylphenol	--	--	--		530 U	510 U	490 U	11000 UD	470 U
4-Bromophenyl phenyl ether	--	--	--		200 U	200 U	190 U	4100 UD	180 U
4-Chloro-3-methylphenol	--	--	--		200 U	200 U	190 U	4100 UD	180 U
4-Chloroaniline	--	--	--		200 U	200 U	190 U	4100 UD	180 U
4-Chlorophenyl phenyl ether	--	--	--		200 U	200 U	190 U	4100 UD	180 U
4-Nitroaniline	--	--	--		200 U	200 U	190 U	4100 UD	180 U
4-Nitrophenol	--	--	--		290 U	280 U	260 U	5700 UD	250 U
Acenaphthene	100000	20000	98000		160 U	110 J	96 J	3300 UD	140 U
Acenaphthylene	100000	100000	107000		160 U	43 J	42 J	3300 UD	140 U
Acetophenone	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Anthracene	100000	100000	1000000		120 U	320	230	2400 UD	110 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-22 1/16/2014 18 - 20	MW-23 12/31/2013 0 - 2	MW-23 12/31/2013 5 - 7	MW-23 12/31/2013 10 - 12	MW-23 12/31/2013 18 - 19
Benzo[a]anthracene	1000	1000	1000		120 U	860	660	2400 UD	110 U
Benzo[a]pyrene	1000	1000	22000		160 U	730	660	3300 UD	140 U
Benzo[b]fluoranthene	1000	1000	1700		120 U	**1100**	790	2400 UD	110 U
Benzo[g,h,i]perylene	100000	100000	1000000		160 U	480	380	3300 UD	140 U
Benzo[k]fluoranthene	3900	800	1700		120 U	400	310	2400 UD	110 U
Benzoic Acid	--	--	--		660 U	640 U	610 U	13000 UD	580 U
Benzyl Alcohol	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Bis(2-chloroethoxy)methane	--	--	--		220 U	210 U	200 U	4400 UD	190 U
Bis(2-chloroethyl) ether	--	--	--		180 U	180 U	170 U	3700 UD	160 U
Bis(2-ethylhexyl) phthalate	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Butylbenzyl phthalate	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Carbazole	--	--	--		200 U	130 J	78 J	4100 UD	180 U
Chrysene	3900	1000	1000		120 U	1000	720	2400 UD	110 U
Dibenzo[a,h]anthracene	330	330	1000000		120 U	140	100 J	2400 UD	110 U
Dibenzofuran	59000	7000	210000		200 U	98 J	190 U	4100 UD	180 U
Diethyl phthalate	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Dimethyl phthalate	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Di-n-butyl phthalate	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Di-n-octyl phthalate	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Fluoranthene	100000	100000	1000000		120 U	1600	1300	2400 UD	110 U
Fluorene	100000	30000	386000		200 U	120 J	78 J	4100 UD	180 U
Hexachlorobenzene	1200	330	3200		120 U	120 U	110 U	2400 UD	110 U
Hexachlorobutadiene	--	--	--		200 U	200 U	190 U	4100 UD	180 U
Hexachlorocyclopentadiene	--	--	--		590 U	570 U	540 U	12000 UD	520 U
Hexachloroethane	--	--	--		160 U	160 U	150 U	3300 UD	140 U
Indeno[1,2,3-cd]pyrene	500	500	8200		70 J	490	380	3300 UD	140 U
Isophorone	--	--	--		180 U	180 U	170 U	3700 UD	160 U
Naphthalene	100000	12000	12000		200 U	81 J	85 J	6200 D	180 U
Nitrobenzene	--	--	--		180 U	180 U	170 U	3700 UD	160 U
n-Nitrosodi-n-propylamine	--	--	--		200 U	200 U	190 U	4100 UD	180 U

Table 4. Summary of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-22 1/16/2014 18 - 20	MW-23 12/31/2013 0 - 2	MW-23 12/31/2013 5 - 7	MW-23 12/31/2013 10 - 12	MW-23 12/31/2013 18 - 19
n-Nitrosodiphenylamine	--	--	--		160 U	160 U	150 U	3300 UD	140 U
Pentachlorophenol	6700	800	800		160 U	160 U	150 U	3300 UD	140 U
Phenanthrene	100000	100000	1000000		120 U	1500	1200	2400 UD	110 U
Phenol	100000	330	330		200 U	200 U	190 U	4100 UD	180 U
Pyrene	100000	100000	1000000		120 U	1300	1200	2400 UD	110 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-5	B-5	B-5	B-5	B-6	B-6	B-6
				Sample Date:	12/31/2013	12/31/2013	12/31/2013	12/31/2013	12/31/2013	1/17/2014	1/17/2014
				Sample Depth (ft bls):	0 - 2	3 - 5	10 - 12	15 - 16	0 - 2	7 - 9	12 - 14
Aluminum	--	--	--		4300	4400	9200	7000	7100	4200	6300
Antimony	--	--	--		4.8 U	3.2 J	4.7 U	4.2 U	4.4 U	4.4 U	4.6 U
Arsenic	16	13	16		**29**	15	2.8	1.9	3	11	5.1
Barium	400	350	820		110	100	11	77	140	82	38
Beryllium	72	7.2	47		0.55	0.5 J	0.38 J	0.25 J	0.26 J	0.2 J	0.11 J
Cadmium	4.3	2.5	7.5		0.96 U	1.1	0.95 U	0.84 U	0.88 U	0.88 U	0.92 U
Calcium	--	--	--		30000 JV	3600	400	800	9300	5400	1000
Chromium	180	30	--		9	25	13	15	18	8.8	14
Cobalt	--	--	--		8 JV	6.2	4.6	5.7	7.3	2.9	4.5
Copper	270	50	1720		30	50	13	15	25	19	11
Iron	--	--	--		14000 JV	12000	13000	15000	15000	16000	17000
Lead	400	63	450		23 JV	200	8.3	4.2	66	87	4.9
Magnesium	--	--	--		4100 JV	1700	2900	2900	3700	1800	2700
Manganese	2000	1600	2000		330 JV	120	100	250	290	120	210
Mercury	0.81	0.18	0.73		0.16	0.29	0.09 U	0.08 U	0.27	0.1	0.09 U
Nickel	310	30	130		17 JV	16	14	10	14	7.9	11
Potassium	--	--	--		450 JV	440	670	2900	2600	890	1300
Selenium	180	3.9	4		1.9 U	0.72 J	1.9 U	1.7 U	1.8 U	1.1 J	1.8 U
Silver	180	2	8.3		0.96 U	1 U	0.95 U	0.84 U	0.88 U	0.88 U	0.28 J
Sodium	--	--	--		610	640	250	120 J	520	530	230
Thallium	--	--	--		1.9 UJV	2.1 U	1.9 U	1.7 U	1.8 U	1.8 U	1.8 U
Vanadium	--	--	--		14	17	16	23	30	12	15
Zinc	10000	109	2480		100	850	110	47	140	37	33

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-6 1/17/2014 16 - 18	B-7 12/30/2013 0 - 2	B-7 12/30/2013 5 - 7	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11
Aluminum	--	--	--		7700	7100	8000	12000	6700	7900	6300
Antimony	--	--	--		4.4 U	4.7 U	3.9 J	4.3 U	4.4 U	4.5 U	5 U
Arsenic	16	13	16		5.4	5.2	4.8	2.5	3.9	4	2.8
Barium	400	350	820		77	90	**530**	88	**530**	110	41
Beryllium	72	7.2	47		0.16 J	0.33 J	0.33 J	0.32 J	0.31 J	0.33 J	0.25 J
Cadmium	4.3	2.5	7.5		0.88 U	0.56 J	0.27 J	0.86 U	0.89 U	0.9 U	0.99 U
Calcium	--	--	--		7700	6400	5900	2000	2100	17000	2700
Chromium	180	30	--		28	14	57	49	13	14	11
Cobalt	--	--	--		5.4	5.3	16	9.8	4.9	5	4.4
Copper	270	50	1720		31	40	70	24	24	24	14
Iron	--	--	--		19000	14000	18000	20000	12000	13000	13000
Lead	400	63	450		27	83	**950**	9.7	85	59	19
Magnesium	--	--	--		3600	2500	2800	4600	2400	2600	2400
Manganese	2000	1600	2000		220	200	210	380	87	150	110
Mercury	0.81	0.18	0.73		0.02 J	0.07 J	0.1	0.07 U	0.13	0.02 J	0.09 U
Nickel	310	30	130		14	12	18	25	12	13	12
Potassium	--	--	--		2200	900	790	3800	750	930	550
Selenium	180	3.9	4		1.8 U	1.9 U	1.9 U	1.7 U	1.8 U	1.8 U	2 U
Silver	180	2	8.3		0.2 J	0.94 U	0.97 U	0.86 U	0.89 U	0.9 U	0.99 U
Sodium	--	--	--		430	720	620	120 J	190	330	180 J
Thallium	--	--	--		1.8 U	1.9 U	1.9 U	1.7 U	1.8 U	1.8 U	2 U
Vanadium	--	--	--		28	16	17	33	17	16	13
Zinc	10000	109	2480		50	760	860	49	120	110	59

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U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-9	B-9	B-9	B-9	B-10	B-10	B-10
				Sample Date:	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/20/2013	12/20/2013	12/20/2013
				Sample Depth (ft bls):	0 - 2	5 - 7	7 - 9	19 - 20	0 - 2	5 - 7	10 - 12
Aluminum	--	--	--		6000	7500	8000	9200	6900	5500	8400
Antimony	--	--	--		4.3 U	4.4 U	4.8 U	4.4 U	4.6 U	4.7 U	5 U
Arsenic	16	13	16		2.8	4.6	4.7	1.9	4.8	5.2	3.8
Barium	400	350	820		62	72	67	92	70	56	20
Beryllium	72	7.2	47		0.24 J	0.29 J	0.32 J	0.43 J	0.24 J	0.23 J	0.22 J
Cadmium	4.3	2.5	7.5		0.86 U	0.88 U	0.89 J	0.8 J	0.5 J	0.37 J	0.32 J
Calcium	--	--	--		17000	9800	2000	1800	15000	31000	2000
Chromium	180	30	--		11	14	20	30	15	11	14
Cobalt	--	--	--		3.9	4.9	5.4	7.2	5.1	3.9	4.4
Copper	270	50	1720		14	23	30	47	30	17	11
Iron	--	--	--		10000	13000	15000	22000	14000	9700	12000
Lead	400	63	450		37	56	58	5.2	74	61	14
Magnesium	--	--	--		2400	3000	2400	3500	3500	3200	2400
Manganese	2000	1600	2000		140	240	140	270	170	180	140
Mercury	0.81	0.18	0.73		0.09 U	0.03 J	0.06 J	0.08 U	0.09	0.09 U	0.1 U
Nickel	310	30	130		9.3	12	14	15	14	8.9	12
Potassium	--	--	--		980	1000	790	4400	600	580	540
Selenium	180	3.9	4		1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.9 U	2 U
Silver	180	2	8.3		0.28 J	0.88 U	0.96 U	0.88 U	0.91 U	0.93 U	1 U
Sodium	--	--	--		560	850	600	120 J	100 J	500	140 J
Thallium	--	--	--		1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.9 U	2 U
Vanadium	--	--	--		12	14	17	40	26	14	17
Zinc	10000	109	2480		61	110	110	67	120	95	35

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-10 12/20/2013 17.5 - 18	B-11 1/2/2014 0 - 2	B-11 1/6/2014 8 - 10	B-11 1/6/2014 11 - 13	B-11 1/6/2014 15 - 17	B-12 12/19/2013 0 - 2	B-12 1/15/2014 7 - 9	B-12 1/15/2014 12 - 14
Aluminum	--	--	--		5200	6600	7400	7800	5700	3400	3500	5000
Antimony	--	--	--		4.3 U	1.2 J	5.2 U	4.8 U	4.4 U	4 U	0.98 J	4.6 U
Arsenic	16	13	16		2.8	4.8	6.9	1.1	3.3	1.6	4.6	2.3
Barium	400	350	820		63	170	150	17	42	30	130	81
Beryllium	72	7.2	47		0.33 J	3.8	3.4	0.28 J	0.26 J	0.18 J	0.41	0.29 J
Cadmium	4.3	2.5	7.5		0.51 J	0.89 U	1 U	0.96 U	0.89 U	0.23 J	0.81 U	0.92 U
Calcium	--	--	--		1100	6800	19000	690	770	3500	14000	2000
Chromium	180	30	--		14	45	47	11	11	7.2	16	12
Cobalt	--	--	--		5.6	23	23	3.8	6.5	3.3	3.5	5.6
Copper	270	50	1720		18	**480**	**390**	7.3	17	9.9	24	13
Iron	--	--	--		17000	25000	26000	10000	16000	7700	12000	12000
Lead	400	63	450		5.4	**790**	**550**	4.5 J	5.8	19	67	35
Magnesium	--	--	--		2300	2400	2900	2100	2000	1700	1500	2100
Manganese	2000	1600	2000		170	270	340	67	290	220	180	160
Mercury	0.81	0.18	0.73		0.07 U	0.37	0.51	0.09 U	0.08 U	0.08 U	0.1	0.05 J
Nickel	310	30	130		10	56	54	10	13	7.2	8.4	11
Potassium	--	--	--		1600	860	940	500	690	620	640	680
Selenium	180	3.9	4		1.7 U	1.8 U	2.1 U	1.9 U	1.8 U	1.6 U	1.6 U	1.8 U
Silver	180	2	8.3		0.86 U	0.18 J	1 U	0.96 U	0.89 U	0.81 U	0.81 UV	0.92 U
Sodium	--	--	--		71 J	500	730	150 J	80 J	160	180	59 J
Thallium	--	--	--		1.7 U	1.8 U	2.1 U	1.9 U	1.8 U	1.6 U	1.6 U	1.8 U
Vanadium	--	--	--		22	17	20	13	14	9.3	11	11
Zinc	10000	109	2480		51	4100	4400	25	36	26	150	130

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-12 1/15/2014 21 - 22.5	B-13 12/19/2013 0 - 2	B-13 1/15/2014 7 - 9	B-13 1/15/2014 10 - 12	B-13 1/15/2014 16 - 18	B-14 12/19/2013 0 - 2	B-14 1/15/2014 7 - 9
Aluminum	--	--	--		14000	3400	7500	5600	6600	6200	7500
Antimony	--	--	--		4.6 U	4.3 U	4.5 U	4.9 U	4.5 U	1.2 J	4.4 U
Arsenic	16	13	16		0.61 J	**18**	3.6	2.9	2.4	16	3.3
Barium	400	350	820		140	160	30	27	48 JV	280	35
Beryllium	72	7.2	47		0.17 J	0.33 J	0.38 J	0.26 J	0.33 J	0.42 J	0.31 J
Cadmium	4.3	2.5	7.5		0.92 U	1.1	0.9 U	0.98 U	0.9 UJV	1.1	0.88 U
Calcium	--	--	--		930	9200	1200	690	770 JV	11000	850
Chromium	180	30	--		13	8.9	11	8.9	16 JV	14	12
Cobalt	--	--	--		20	5.3	5.7	4.6	7	5.1	5.4
Copper	270	50	1720		71	61	13	9.8	16 JV	79	12
Iron	--	--	--		180000	15000	16000	13000	15000	13000	14000
Lead	400	63	450		6.1	360	18	7.2	5	**490**	53
Magnesium	--	--	--		6000	940	2900	2400	2600	2000	2200
Manganese	2000	1600	2000		**2500**	170	360	210	410	320	240
Mercury	0.81	0.18	0.73		0.08 U	**2.5**	0.09 U	0.09 U	0.08 U	0.81	0.3
Nickel	310	30	130		10	11	15	10	13	13	11
Potassium	--	--	--		10000	550	670	590	1200 JV	840	500
Selenium	180	3.9	4		1.8 U	2.1	1.8 U	2 U	1.8 U	1.3 J	1.8 U
Silver	180	2	8.3		0.92 UV	0.86 U	0.9 U	0.98 U	0.9 UJV	0.88 U	0.88 UV
Sodium	--	--	--		79 J	330	48 J	34 J	54 J	440	56 J
Thallium	--	--	--		1.8 U	1.7 U	1.8 U	2 U	1.8 UJV	1.8 U	1.8 U
Vanadium	--	--	--		120	13	14	11	21 JV	16	15
Zinc	10000	109	2480		220	410	38	30	31	490	50

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-14 1/15/2014 10 - 12	B-14 1/15/2014 17 - 18.5	B-15 12/31/2013 0 - 2	B-15 1/10/2014 5 - 7	B-15 1/10/2014 7 - 9	B-15 1/10/2014 10 - 11	B-16 12/19/2013 0 - 2
Aluminum	--	--	--		7400	6500	7100	7200	8000	7600	3300
Antimony	--	--	--		4.8 U	4.5 U	4.5 U	4.6 U	2 J	1.2 J	4 U
Arsenic	16	13	16		3.2	3.9	4.7	6.6 JV	4.8	4.9	3.4
Barium	400	350	820		17	50	99	64	76	64	110
Beryllium	72	7.2	47		0.35 J	0.3 J	0.33 J	0.38 J	0.35 J	0.32 J	0.24 J
Cadmium	4.3	2.5	7.5		0.96 U	0.89 U	0.91 U	0.92 U	0.94 U	0.98 U	0.34 J
Calcium	--	--	--		500	1100	7100	2000	7800	8200	3800
Chromium	180	30	--		9.7	15	12	14	16	15	8
Cobalt	--	--	--		5.2	7.2	4.7	7 JV	6.5	5.2	3.6
Copper	270	50	1720		10	21	33	24 JV	19	25	18
Iron	--	--	--		14000	17000	13000	17000	20000	13000	8300
Lead	400	63	450		5.2	5.1	140	44	52	79	41
Magnesium	--	--	--		2600	2400	2200	2600	2500	2600	1800
Manganese	2000	1600	2000		290	250	180	180 JV	320	110	230
Mercury	0.81	0.18	0.73		0.08 U	0.08 U	0.13	0.04 J	0.02 J	0.06 J	0.07 U
Nickel	310	30	130		12	14	12	14	15	13	9.3
Potassium	--	--	--		620	1300	820	980 JV	720	660	520
Selenium	180	3.9	4		1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	2 U	0.38 J
Silver	180	2	8.3		0.96 U	0.89 U	0.91 U	0.92 U	0.94 U	0.98 U	0.81 U
Sodium	--	--	--		43 J	100 J	200	71 J	72 J	72 J	110 J
Thallium	--	--	--		1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	2 U	1.6 U
Vanadium	--	--	--		12	35	15	21 JV	18	15	12
Zinc	10000	109	2480		29	35	150	150 JV	120	110	58

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: Sample Date: Sample Depth (ft bls):	B-16 1/16/2014 7 - 9	B-16 1/16/2014 10 - 12	B-16 1/16/2014 18 - 20	B-17 1/20/2014 0 - 2	B-17 1/20/2014 7 - 9	B-18 12/18/2013 0 - 2	B-18 12/18/2013 6 - 8
Aluminum	--	--	--		8000	9200	5900	7100	5700	7400	6400
Antimony	--	--	--		4.3 U	4.6 U	4.5 U	4.2 U	4.4 U	4.2 U	4.3 U
Arsenic	16	13	16		4.1	4	2.6	6	3.3	3.7	2.3
Barium	400	350	820		45	18	52	220	88	54	39
Beryllium	72	7.2	47		0.34 J	0.39 J	0.3 J	0.31 J	0.29 J	0.28 J	0.27 J
Cadmium	4.3	2.5	7.5		0.87 U	0.92 U	0.91 U	0.52 J	0.89 U	3.9	0.47 J
Calcium	--	--	--		880	690	1100	27000	11000	3500	4200
Chromium	180	30	--		11	12	15	16	12	17	13
Cobalt	--	--	--		4.5	6.1	6.7	5.9	6.6	6.1	4.6
Copper	270	50	1720		13	12	18	**480**	94	**1700**	110
Iron	--	--	--		15000	17000	16000	11000	14000	27000	11000
Lead	400	63	450		40	6.5	3.7 J	180	57	280	36
Magnesium	--	--	--		2000	3100	2300	2400	2300	2000	2700
Manganese	2000	1600	2000		250	380	500	220	210	410	240
Mercury	0.81	0.18	0.73		0.12	0.1 U	0.08 U	0.07 J	0.05 J	0.02 J	0.09 U
Nickel	310	30	130		11	14	11	14	18	220	14
Potassium	--	--	--		520	740	1800	1500	1100	1100	830
Selenium	180	3.9	4		1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
Silver	180	2	8.3		0.87 U	0.92 U	0.91 U	0.36 J	0.28 J	0.83 U	0.86 U
Sodium	--	--	--		120 J	44 J	80 J	830	420	140 J	200
Thallium	--	--	--		1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
Vanadium	--	--	--		14	14	21	16	15	19	18
Zinc	10000	109	2480		100	35	34	610	150	2000	89

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-18 12/18/2013 8 - 10	B-19 12/17/2013 0 - 2	B-19 12/17/2013 6 - 8	B-19 12/17/2013 8 - 10	B-20 12/17/2013 0 - 2	B-20 12/17/2013 5 - 7	B-20 12/17/2013 7 - 8
Aluminum	--	--	--		5800	6100	6200	4900	7300	5200	5300
Antimony	--	--	--		4.6 U	1.1 J	4.2 U	4.4 U	4.4 U	4.1 U	4.3 U
Arsenic	16	13	16		1.8	5.1	2.6	2.1	3.2	2.4	3.3
Barium	400	350	820		33	89	44	50	86	41	120
Beryllium	72	7.2	47		0.26 J	0.32 J	0.18 J	0.18 J	0.27 J	0.19 J	0.22 J
Cadmium	4.3	2.5	7.5		0.38 J	0.22 J	0.84 U	0.88 U	0.96	1	0.86 U
Calcium	--	--	--		2500	20000	2000	7200	13000	13000	16000
Chromium	180	30	--		11	12	13	10	14	11	11
Cobalt	--	--	--		4.2	5.4	4.3	13	5	4.4	4.6
Copper	270	50	1720		19	140	19	75	54	110	87
Iron	--	--	--		10000	10000	19000	11000	12000	11000	39000
Lead	400	63	450		8.8	120	31	47	77	35	20
Magnesium	--	--	--		2800	2200	2300	5900	2400	7800	5300
Manganese	2000	1600	2000		180	240	190	180	270	220	430
Mercury	0.81	0.18	0.73		0.09 U	0.13 JV	0.08 U	0.08 U	0.04 J	0.07 U	0.08 U
Nickel	310	30	130		11	13	9.7	11	11	11	10
Potassium	--	--	--		650	1200	810	930	960	960	1100
Selenium	180	3.9	4		1.8 U	1.7 U	1.7 U	1.8 U	1.7 U	1.6 U	1.7 U
Silver	180	2	8.3		0.92 U	0.41 J	0.84 U	0.88 U	0.87 U	0.82 U	0.86 U
Sodium	--	--	--		200	1300	140 J	220	250	110 J	250
Thallium	--	--	--		1.8 U	1.7 U	1.7 U	1.8 U	1.7 U	1.6 U	1.7 U
Vanadium	--	--	--		16	17	19	16	18	15	15
Zinc	10000	109	2480		31	450	36	62	560	340	130

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-21 12/17/2013 0 - 2	B-21 12/17/2013 5 - 7	B-21 12/17/2013 7 - 8	B-22 1/13/2014 0 - 2	B-22 DUP 1/13/2014 0 - 2	B-22 1/13/2014 4 - 6	B-23 1/13/2014 0 - 2
Aluminum	--	--	--		6600	7000	7300	7000	7100	7300	5700
Antimony	--	--	--		1.9 J	4.6 U	4.8 U	4.8 U	4.8 U	5.1 U	1.7 J
Arsenic	16	13	16		5.1	4.2	4.6	5	7	3.2	6.7
Barium	400	350	820		110	43	82	70	89	29	69
Beryllium	72	7.2	47		0.28 J	0.3 J	0.3 J	0.33 J	0.32 J	0.28 J	0.28 J
Cadmium	4.3	2.5	7.5		0.44 J	0.91 U	0.96 U	0.95 U	0.96 U	1 U	1.1 U
Calcium	--	--	--		27000	2900	20000	7400	11000	1700	6600
Chromium	180	30	--		11	12	11	13	14	11	11
Cobalt	--	--	--		4	4.7	6.4	5.3	5.5	3.9	8.1
Copper	270	50	1720		34	36	29	33 JV	99 JV	10	42
Iron	--	--	--		10000	14000	13000	12000	13000	11000	14000
Lead	400	63	450		270	26	35	70	120	24	86
Magnesium	--	--	--		3600	2400	3100	2200	2300	2100	2200
Manganese	2000	1600	2000		200	130	220	140	170	90	140
Mercury	0.81	0.18	0.73		0.16	0.09 U	**3.2**	0.04 JV	0.13 JV	0.1 U	0.25
Nickel	310	30	130		8.5	12	11	12	13	10	12
Potassium	--	--	--		1000	720	660	800	780	550	560
Selenium	180	3.9	4		1.7 U	1.8 U	1.9 U	1.9 U	1.9 U	2 U	2.2 U
Silver	180	2	8.3		0.22 J	0.91 U	0.96 U	0.95 U	0.96 U	1 U	1.1 U
Sodium	--	--	--		850	160 J	200	94 J	100 J	120 J	180 J
Thallium	--	--	--		1.7 U	1.8 U	1.9 U	1.9 U	1.9 U	2 U	2.2 U
Vanadium	--	--	--		16	13	13	16	18	14	19
Zinc	10000	109	2480		390	120	120	110	120	47	150

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-23 1/13/2014 2 - 4	B-24 1/14/2014 0 - 2	B-24 1/14/2014 2 - 4	B-25 1/14/2014 0 - 2	B-25 1/14/2014 2 - 4	B-26 1/14/2014 0 - 2	B-26 1/14/2014 4 - 6
Aluminum	--	--	--		6800	4000	7300	7300	6800	7200	7200
Antimony	--	--	--		5.1 U	4.7 U	4.6 U	1 J	5 U	4.7 U	4.8 U
Arsenic	16	13	16		5.2	5.8	2.5	3.7	3.4	4.3	3.9
Barium	400	350	820		38	40	16	57	66	68	53
Beryllium	72	7.2	47		0.28 J	0.22 J	0.26 J	0.34 J	0.33 J	0.37 J	0.33 J
Cadmium	4.3	2.5	7.5		1 U	0.94 U	0.91 U	0.92 U	1 U	0.94 U	0.97 U
Calcium	--	--	--		2100	25000	580	12000	2700	2400	5800
Chromium	180	30	--		12	7.2	11	12	11	13	12
Cobalt	--	--	--		5.4	3	3	5.4	4.9	5.4	4.9
Copper	270	50	1720		24	22	7	22	23	20	22
Iron	--	--	--		11000	6500	12000	15000	13000	14000	13000
Lead	400	63	450		42	46	4.4 J	56	46	36	36
Magnesium	--	--	--		2200	1800	2100	2400	2300	2300	2300
Manganese	2000	1600	2000		92	75	72	290	130	180	130
Mercury	0.81	0.18	0.73		0.11	0.08 U	0.09 U	0.08 U	0.1 U	0.06 J	0.05 J
Nickel	310	30	130		12	7.7	9.1	12	12	12	12
Potassium	--	--	--		540	580	540	840	650	780	720
Selenium	180	3.9	4		2 U	0.3 J	1.8 U	1.8 U	2 U	1.9 U	1.9 U
Silver	180	2	8.3		1 U	0.94 U	0.91 U	0.92 U	1 UV	0.94 U	0.97 U
Sodium	--	--	--		210	360	260	150 J	140 J	320	260
Thallium	--	--	--		2 U	1.9 U	1.8 U	1.8 U	2 U	1.9 U	1.9 U
Vanadium	--	--	--		21	12	16	15	13	16	14
Zinc	10000	109	2480		100	65	34	100	97	88	110

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5	MW-1/1R 12/16/2013 6 - 8	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2
Aluminum	--	--	--		9100	7500	3000	3800	6500	4400	6800
Antimony	--	--	--		5 U	5.1 U	3 J	2 J	4.8 U	4.9 U	4.3 U
Arsenic	16	13	16		4.7	4.4	7.3 JV	8.9	2.5	1.1	4.3
Barium	400	350	820		58	52	200	160	18	38	130
Beryllium	72	7.2	47		0.4 J	0.34 J	0.11 J	0.22 J	0.15 J	0.2 J	0.29 J
Cadmium	4.3	2.5	7.5		1 U	1 U	1.9 JV	1.1 U	0.96 U	0.98 U	0.85 U
Calcium	--	--	--		2400	3100	110000	11000	940	740	18000
Chromium	180	30	--		14	13	17	11	12	11	13
Cobalt	--	--	--		6	4.9	12 JV	8.3	3.2	4.2	4.9
Copper	270	50	1720		27	18	38 JV	170	8.7	17	25
Iron	--	--	--		14000	13000	22000 JV	18000	13000	12000	13000
Lead	400	63	450		56	48	340	330	12	4.1 J	120
Magnesium	--	--	--		2600	2300	12000	2100	2500	2200	2400
Manganese	2000	1600	2000		120	120	200	150	94	180	140
Mercury	0.81	0.18	0.73		0.04 J	0.05 J	**5.2**	0.31	0.02 J	0.1 U	0.06 J
Nickel	310	30	130		14	12	11 JV	18	11	10	11
Potassium	--	--	--		920	670	400	460	760	1300	860
Selenium	180	3.9	4		2 U	2 U	0.34 J	2.2 U	1.9 U	2 U	1.7 U
Silver	180	2	8.3		1 UV	1 UV	0.88 U	1.1 U	0.96 U	0.98 U	0.85 U
Sodium	--	--	--		340	240	390	670	510	320	200
Thallium	--	--	--		2 U	2 U	1.8 U	2.2 U	1.9 U	2 U	1.7 U
Vanadium	--	--	--		18	16	11	13	14	17	12
Zinc	10000	109	2480		86	76	540	480	69	40	180

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mg/kg - Milligrams per kilogram
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NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-2/2R DUP 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8	MW-2/2R 12/16/2013 14 - 15	MW-2/2R 12/16/2013 23 - 24	MW-6/6R 12/30/2013 0 - 2	MW-6/6R 1/17/2014 9 - 11
Aluminum	--	--	--		7400	7800	8300	6100	7600	5800
Antimony	--	--	--		4.2 U	4.5 U	5 U	4.4 U	4.1 U	0.85 J
Arsenic	16	13	16		3.6	5.2	2.3	1.7	3.4	14
Barium	400	350	820		160	120	34	61	110	140
Beryllium	72	7.2	47		0.29 J	0.33 J	0.25 J	0.34 J	0.28 J	0.3 J
Cadmium	4.3	2.5	7.5		0.84 U	0.89 U	1 U	0.88 U	0.83 U	0.87 U
Calcium	--	--	--		28000	16000	470	2400	16000	31000
Chromium	180	30	--		12	26	15	15	20	14
Cobalt	--	--	--		4.2	5.6	5.8	7.1	6.4	4.3
Copper	270	50	1720		20	28	14	18	42	60
Iron	--	--	--		11000	16000	13000	16000	19000	18000
Lead	400	63	450		91	99	5.5	4.1 J	63	140
Magnesium	--	--	--		2700	3300	2900	2900	3800	3200
Manganese	2000	1600	2000		140	190	120	520	300	200
Mercury	0.81	0.18	0.73		0.04 J	0.05 J	0.1 U	0.1 U	0.13	0.21
Nickel	310	30	130		9.4	13	15	12	17	11
Potassium	--	--	--		870	890	640	2000	2000	920
Selenium	180	3.9	4		1.7 U	1.8 U	2 U	1.8 U	1.6 U	0.66 J
Silver	180	2	8.3		0.84 U	0.89 U	1 U	0.88 U	0.83 U	0.87 U
Sodium	--	--	--		300	440	190 J	140 J	320	500
Thallium	--	--	--		1.7 U	1.8 U	2 U	1.8 U	1.6 U	1.7 U
Vanadium	--	--	--		12	26	15	20	30	17
Zinc	10000	109	2480		120	150	33	32	240	160

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-6/6R 1/17/2014 11 - 12	MW-6/6R 1/17/2014 15 - 17	MW-6/6R DUP 1/17/2014 15 - 17	MW-7/7R 12/19/2013 0 - 2	MW-7/7R 1/14/2014 2 - 4	MW-14 12/19/2013 0 - 2
Aluminum	--	--	--		6800	7200	7000	6300	6600	6600
Antimony	--	--	--		4.6 U	4.7 U	4.5 U	4.4 U	5.1 U	4.2 U
Arsenic	16	13	16		12	12	10	4.8	7	3.3
Barium	400	350	820		35	63	82	67	220	55
Beryllium	72	7.2	47		0.22 J	0.19 J	0.18 J	0.28 J	0.34 J	0.29 J
Cadmium	4.3	2.5	7.5		0.91 U	0.94 U	0.9 U	0.43 J	1 U	0.45 J
Calcium	--	--	--		1400	2500	4100	19000	20000	12000
Chromium	180	30	--		11	16	16	15	17	14
Cobalt	--	--	--		3.6	5.6	5.6	6.4	4.5	6.7
Copper	270	50	1720		19	16 JV	27 JV	18	28	19
Iron	--	--	--		24000	24000	23000	12000	12000	15000
Lead	400	63	450		7	11 JV	29 JV	45	100	120
Magnesium	--	--	--		2400	2800	2600	2400	3200	4700
Manganese	2000	1600	2000		120	440	590	110	120	340
Mercury	0.81	0.18	0.73		0.09 U	0.08 U	0.1 U	0.04 J	0.16	0.08
Nickel	310	30	130		10	12	12	11	12	12
Potassium	--	--	--		750	1200	1500	840	880	1000
Selenium	180	3.9	4		1.8 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U
Silver	180	2	8.3		0.91 U	0.29 J	0.3 J	0.89 U	1 U	0.84 U
Sodium	--	--	--		220	350	250	540	410	250
Thallium	--	--	--		1.8 U	1.9 U	1.8 U	1.8 U	2 U	1.7 U
Vanadium	--	--	--		15	19	22	14	15	17
Zinc	10000	109	2480		38	43 JV	76 JV	83	190	54

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-14 DUP	MW-14	MW-14	MW-15	MW-15	MW-15	MW-16
				Sample Date:	12/19/2013	1/17/2014	1/17/2014	1/20/2014	1/20/2014	1/20/2014	1/7/2014
				Sample Depth (ft bls):	0 - 2	7 - 9	10 - 12	0 - 2	6 - 8	10 - 12	0 - 2
Aluminum	--	--	--		5400	5800	7500	7100	9400	7600	7000
Antimony	--	--	--		4.4 U	1.5 J	4.6 U	4.5 U	1 J	4.6 U	4.4 U
Arsenic	16	13	16		6.6	8.7	5.9	4.7	8.5	4.3	5.1
Barium	400	350	820		190	**430**	99	99	110	55	110
Beryllium	72	7.2	47		0.25 J	0.34 J	0.3 J	0.33 J	0.48 J	0.24 J	0.28 J
Cadmium	4.3	2.5	7.5		0.6 J	0.17 J	0.92 U	0.91 U	1 U	0.93 U	0.8 J
Calcium	--	--	--		11000	9600	840	7100	4200	810	9600
Chromium	180	30	--		12	12	5	12	18	12	18
Cobalt	--	--	--		5.4	5.6	6.6	4.7	7.1	4.9	6.6
Copper	270	50	1720		32	37	14	33	40	11	44
Iron	--	--	--		12000	15000	16000	13000	20000	21000	25000
Lead	400	63	450		200	180	4.6	140	330	4.7	64
Magnesium	--	--	--		2500	2600	2100	2200	3400	2500	2500
Manganese	2000	1600	2000		220	330	370	180	430	300	210
Mercury	0.81	0.18	0.73		0.38	0.71	0.09 U	0.13	**1.6**	0.08 U	0.09
Nickel	310	30	130		14	12	5.1	12	16	6.3	38
Potassium	--	--	--		1000	840	3100	820	1400	2800	700
Selenium	180	3.9	4		0.4 J	1.8 U	1.8 U	1.8 U	2 U	1.8 U	1.8 U
Silver	180	2	8.3		0.87 U	0.92 U	0.92 U	0.91 U	0.28 J	0.93 U	0.88 U
Sodium	--	--	--		340	140 J	95 J	200	170 J	270	87 J
Thallium	--	--	--		1.7 U	1.8 U	1.8 U	1.8 U	2 U	1.8 U	1.8 U
Vanadium	--	--	--		17	14	19	15	22	22	15
Zinc	10000	109	2480		210	290	70	150	140	61	140

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	MW-16	MW-16	MW-16	MW-17	MW-17	MW-17	MW-17	MW-18
				Sample Date:	1/7/2014	1/7/2014	1/7/2014	1/2/2014	1/2/2014	1/2/2014	1/2/2014	1/6/2014
				Sample Depth (ft bls):	5 - 7	10 - 12	25 - 26.5	0 - 2	5 - 7	12 - 13	23 - 24	0 - 2
Aluminum	--	--	--		6900	5400	4600	7400	6500	10000	9600	4400
Antimony	--	--	--		4.7 U	4.9 U	4.6 U	4.4 U	4.6 U	5.3 U	4.5 U	4.3 U
Arsenic	16	13	16		5.9	3.5	0.4 J	8.4	6.6	1.5	3.1	1.2
Barium	400	350	820		83	59	33	170	160	13	140	31
Beryllium	72	7.2	47		0.26 J	0.24 J	0.27 J	5.1	2.1	0.36 J	0.2 J	0.3 J
Cadmium	4.3	2.5	7.5		0.54 J	0.98 U	0.91 U	0.21 J	0.11 J	1 U	0.91 U	0.87 U
Calcium	--	--	--		3500	3500	1200	7400	10000	760	3100	1200
Chromium	180	30	--		14	9.8	15	99	39	13	8.9	9.4
Cobalt	--	--	--		5.3	3.8	6.1	41	13	4.4	11	3.9
Copper	270	50	1720		30	31	14	**770**	210	18	37	37
Iron	--	--	--		14000	9900	12000	42000	19000	14000	42000	8000
Lead	400	63	450		110	25	3.4 J	$\boxed{\textbf{790}}$	280	9.6	2.7 J	29
Magnesium	--	--	--		2200	1600	1800	2900	2200	2400	4400	1300
Manganese	2000	1600	2000		190	400	270	410	220	98	600	180
Mercury	0.81	0.18	0.73		0.095 J	0.1 U	0.08 U	$\boxed{\textbf{1.2}}$	0.43	0.1	0.09 U	0.14
Nickel	310	30	130		13	10	9.2	92	30	12	8.8	7.9
Potassium	--	--	--		700	510	940	940	730	590	3500	550
Selenium	180	3.9	4		1.9 U	2 U	1.8 U	1.8 U	1.8 U	2.1 U	1.8 U	1.7 U
Silver	180	2	8.3		0.94 U	0.98 U	0.91 U	0.23 J	0.92 U	1 U	0.91 U	0.87 U
Sodium	--	--	--		180 J	240	150 J	490	470	320	210	250
Thallium	--	--	--		1.9 U	2 U	1.8 U	1.8 U	1.8 U	2.1 U	1.8 U	1.7 U
Vanadium	--	--	--		16	11	17	20	19	16	89	14
Zinc	10000	109	2480		110	55	26	$\boxed{7900}$	1800	41	93	70

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Table 5. Summary of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-18 1/6/2014 8 - 10	MW-18 1/6/2014 12 - 14	MW-18 1/6/2014 20 - 22	MW-19 1/14/2014 0 - 2	MW-19 1/14/2014 4 - 6	MW-20 12/19/2013 0 - 2	MW-20 1/15/2014 7 - 9	MW-20 1/15/2014 12 - 14
Aluminum	--	--	--		6800	7700	6300	7300	7400	5200	8500	5200
Antimony	--	--	--		4.7 U	5.4 U	4.3 U	4.7 U	5.2 U	4.4 U	4.4 U	4.6 U
Arsenic	16	13	16		1.6	2.7	1.4	4.2	3.8	12	6.8	1.2
Barium	400	350	820		36	42	68	60	100	260	140	41
Beryllium	72	7.2	47		0.31 J	0.37 J	0.52	0.38 J	0.34 J	0.24 J	0.37 J	0.26 J
Cadmium	4.3	2.5	7.5		0.95 U	1.1 U	0.86 U	0.94 U	1 U	1.8	0.89 U	0.91 U
Calcium	--	--	--		650	820	2200	8100 JV	2800	14000	1200	1000
Chromium	180	30	--		11	12	26	13	13	17	11	12
Cobalt	--	--	--		6	6.6	6.6	5.3	5.2	5.7	5.5	4.7
Copper	270	50	1720		13	14	13	17	14	95	15	12
Iron	--	--	--		14000	18000	18000	14000	14000	32000	15000	11000
Lead	400	63	450		5.4	6	3.6 J	36	51	**1000**	56	4 J
Magnesium	--	--	--		2700	2700	2600	2900	2400	1800	2600	1800
Manganese	2000	1600	2000		120	130	310	140	120	320	360	350
Mercury	0.81	0.18	0.73		0.09 U	0.1 U	0.08 U	0.04 JV	0.08 U	**4.5**	0.49	0.1 U
Nickel	310	30	130		15	16	17	12	12	12	13	8.7
Potassium	--	--	--		630	750	2100	1000	790	680	710	940
Selenium	180	3.9	4		1.9 U	2.2 U	1.7 U	1.9 U	2.1 U	0.82 J	1.8 U	1.8 U
Silver	180	2	8.3		0.95 U	1.1 U	0.86 U	0.94 U	1 U	0.88 U	0.89 U	0.91 UV
Sodium	--	--	--		64 J	67 J	540	220	120 J	330	350	290
Thallium	--	--	--		1.9 U	2.2 U	1.7 U	1.9 U	2.1 U	1.8 U	1.8 U	1.8 U
Vanadium	--	--	--		13	16	21	17	14	15	16	18
Zinc	10000	109	2480		36	40	38	74	83	760	38	22

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-20 DUP 1/15/2014 12 - 14	MW-20 1/15/2014 18 - 19	MW-21 1/6/2014 0 - 2	MW-21 1/6/2014 5 - 7	MW-21 1/6/2014 7 - 8	MW-21 1/6/2014 18 - 20	MW-22 12/19/2013 0 - 2
Aluminum	--	--	--		5500	4900	7600	6800	9600	5500	5300
Antimony	--	--	--		4.7 U	4.3 U	4.3 U	4.4 U	4.7 U	4.3 U	0.97 J
Arsenic	16	13	16		1.3	5.3	5.2	5	3	2.2	9.1
Barium	400	350	820		42	33	160	170	91	44	230
Beryllium	72	7.2	47		0.27 J	0.26 J	1.3	1.5 JV	0.42 J	0.35 J	0.26 J
Cadmium	4.3	2.5	7.5		0.94 U	0.86 U	0.26 J	0.29 J	0.93 U	0.85 U	1.2
Calcium	--	--	--		1000	740	4400	12000	10000	1800	21000
Chromium	180	30	--		12	6.6	30	28 JV	17	27	14
Cobalt	--	--	--		5	4	11	11 JV	6.6	8.9	5.7
Copper	270	50	1720		12	9.2	180	180 JV	38	24	51
Iron	--	--	--		11000	19000	23000	19000	15000	22000	13000
Lead	400	63	450		5.3	3.6 J	**440**	**530**	67	8	**460**
Magnesium	--	--	--		1900	1500	2500	3000 JV	3300	3100	2400
Manganese	2000	1600	2000		350	230	220	210	210	370	380
Mercury	0.81	0.18	0.73		0.02 J	0.08 U	0.49	0.38	0.05 J	0.09 U	**2.8**
Nickel	310	30	130		9.4	4.3	31	27 JV	16	17	12
Potassium	--	--	--		1100	2200	710	760	1400	1500	790
Selenium	180	3.9	4		1.9 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	0.67 J
Silver	180	2	8.3		0.94 UV	0.86 U	0.28 J	0.21 JV	0.93 U	0.85 U	0.86 U
Sodium	--	--	--		320	180	810	800	470	340	430
Thallium	--	--	--		1.9 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U
Vanadium	--	--	--		16	18	42	45	23	28	14
Zinc	10000	109	2480		24	50	1100	1000 JV	180	44	640

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Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	MW-22	MW-22	MW-22	MW-23	MW-23	MW-23	MW-23
				Sample Date:	1/16/2014	1/16/2014	1/16/2014	12/31/2013	12/31/2013	12/31/2013	12/31/2013
				Sample Depth (ft bls):	7 - 9	12 - 14	18 - 20	0 - 2	5 - 7	10 - 12	18 - 19
Aluminum	--	--	--		7300	7100	6000	6000	5400	7700	4100
Antimony	--	--	--		4.4 U	5.1 U	4.8 U	1.4 J	4.3 U	4.8 U	4.1 U
Arsenic	16	13	16		3.2	3.7	2.2	16	3.8	3.4	1
Barium	400	350	820		31	34	68	150	43	13	40
Beryllium	72	7.2	47		0.29 J	0.27 J	0.26 J	0.41 J	0.21 J	0.29 J	0.16 J
Cadmium	4.3	2.5	7.5		0.88 UJV	1 U	0.95 U	0.97	0.86 U	0.97 U	0.82 U
Calcium	--	--	--		1000	800	980	82000	4200	780	1600
Chromium	180	30	--		10	12	16	12	10	11	16
Cobalt	--	--	--		5.4	5.8	6.7	5.2	3.7	5.4	4.2
Copper	270	50	1720		12	12	17	36	22	12	22
Iron	--	--	--		15000	15000	16000	17000	17000	15000	9600
Lead	400	63	450		19 JV	5.6	7.7	70	200	6	4.5
Magnesium	--	--	--		2600	2700	2300	2700	1900	2800	1600
Manganese	2000	1600	2000		330	350	380	140	93	150	94
Mercury	0.81	0.18	0.73		0.09 U	0.1 U	0.08 U	0.12	0.08 J	0.09 U	0.08 U
Nickel	310	30	130		12	13	10	12	9.5	13	8.8
Potassium	--	--	--		630	790	1500	880	750	640	680
Selenium	180	3.9	4		1.8 U	2 U	1.9 U	1.8 U	1.7 U	1.9 U	1.6 U
Silver	180	2	8.3		0.88 U	0.23 J	0.95 U	0.92 U	0.86 U	0.97 U	0.82 U
Sodium	--	--	--		51 J	72 J	82 J	360	290	110 J	100 J
Thallium	--	--	--		1.8 U	2 U	1.9 U	1.8 U	1.7 U	1.9 U	1.6 U
Vanadium	--	--	--		12	14	21	15	13	16	10
Zinc	10000	109	2480		42 JV	33	34	600	140	65	23

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
V - Value altered or qualifier added during data validation
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2	B-9 12/16/2013 5 - 7
Aroclor-1016	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1221	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1232	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1242	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1248	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1254	--	--	--		18.1 J	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1260	--	--	--		12.1 J	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1262	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Aroclor-1268	--	--	--		37.0 U	38.6 U	41.2 U	36.4 U	36.5 U
Total PCBs	1000	100	3200		30.2	0	0	0	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-9	B-9	B-15	B-16	B-16
				Sample Date:	12/16/2013	12/16/2013	12/31/2013	12/19/2013	1/16/2014
				Sample Depth (ft bls):	7 - 9	19 - 20	0 - 2	0 - 2	7 - 9
Aroclor-1016	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1221	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1232	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1242	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1248	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1254	--	--	--		39.8 U	33.0 U	23.4 J	33.8 U	37.3 U
Aroclor-1260	--	--	--		18.3 J	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1262	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Aroclor-1268	--	--	--		39.8 U	33.0 U	38.3 U	33.8 U	37.3 U
Total PCBs	1000	100	3200		18.3	0	23.4	0	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-16	B-16	B-22	B-22 DUP	B-22	B-25
				Sample Date:	1/16/2014	1/16/2014	1/13/2014	1/13/2014	1/13/2014	1/14/2014
				Sample Depth (ft bls):	10 - 12	18 - 20	0 - 2	0 - 2	4 - 6	0 - 2
Aroclor-1016	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1221	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1232	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1242	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1248	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1254	--	--	--		39.6 U	38.8 U	17.5 J	18.0 J	40.6 U	38.4 U
Aroclor-1260	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1262	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Aroclor-1268	--	--	--		39.6 U	38.8 U	38.7 U	38.4 U	40.6 U	38.4 U
Total PCBs	1000	100	3200		0	0	17.5	18	0	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-25 1/14/2014 2 - 4	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5
Aroclor-1016	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1221	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1232	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1242	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1248	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1254	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1260	--	--	--		40.7 U	40.3 U	44.5 U	44.9	46.1 U
Aroclor-1262	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Aroclor-1268	--	--	--		40.7 U	40.3 U	44.5 U	38.7 U	46.1 U
Total PCBs	1000	100	3200		0	0	0	44.9	0

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-1/1R	MW-1/1R	MW-2/2R	MW-2/2R	MW-2/2R
				Sample Date:	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013
				Sample Depth (ft bls):	6 - 8	24 - 25	0 - 2	6 - 8	14 - 15
Aroclor-1016	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1221	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1232	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1242	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1248	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1254	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1260	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1262	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Aroclor-1268	--	--	--		39.7 U	40.5 U	35.8 U	37.0 U	41.8 U
Total PCBs	1000	100	3200		0	0	0	0	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	MW-2/2R	MW-7/7R	MW-7/7R	MW-15	MW-15
				Sample Date:	12/16/2013	12/19/2013	1/14/2014	1/20/2014	1/20/2014
				Sample Depth (ft bls):	23 - 24	0 - 2	2 - 4	0 - 2	6 - 8
Aroclor-1016	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Aroclor-1221	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Aroclor-1232	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Aroclor-1242	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Aroclor-1248	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Aroclor-1254	--	--	--		37.1 U	21.4 J	42.7 U	23.4 J	41.5 U
Aroclor-1260	--	--	--		37.1 U	9.00 J	42.7 U	38.3 U	41.5 U
Aroclor-1262	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Aroclor-1268	--	--	--		37.1 U	36.2 U	42.7 U	38.3 U	41.5 U
Total PCBs	1000	100	3200		0	30.4	0	23.4	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-15 1/20/2014 10 - 12	MW-18 1/6/2014 0 - 2	MW-18 1/6/2014 8 - 10	MW-18 1/6/2014 12 - 14	MW-18 1/6/2014 20 - 22	MW-20 12/19/2013 0 - 2
Aroclor-1016	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1221	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1232	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1242	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1248	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1254	--	--	--		39.9 U	9.03 J	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1260	--	--	--		39.9 U	9.83 J	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1262	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Aroclor-1268	--	--	--		39.9 U	36.1 U	39.0 U	46.2 U	36.6 U	36.9 U
Total PCBs	1000	100	3200		0	18.86	0	0	0	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 6. Summary of Polychlorinated Biphenyls in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-20 / 1/15/2014 / 7 - 9	MW-20 / 1/15/2014 / 12 - 14	MW-20 DUP / 1/15/2014 / 12 - 14	MW-20 / 1/15/2014 / 18 - 19
Aroclor-1016	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1221	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1232	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1242	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1248	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1254	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1260	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1262	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Aroclor-1268	--	--	--		37.7 U	38.2 U	39.3 U	36.3 U
Total PCBs	1000	100	3200		0	0	0	0

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Table 7. Summary of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2	B-9 12/16/2013 5 - 7	B-9 12/16/2013 7 - 9	B-9 12/16/2013 19 - 20
4,4'-DDD	13000	3.3	14000		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
4,4'-DDE	8900	3.3	17000		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
4,4'-DDT	7900	3.3	136000		3.35 U	3.38 U	3.76 U	3.27 U	3.30 U	3.64 U	3.16 U
Aldrin	97	5	190		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
alpha-BHC	480	20	20		0.745 U	0.751 U	0.836 U	0.728 U	0.734 U	0.810 U	0.702 U
alpha-Chlordane	4200	94	2900		2.24 U	2.25 U	2.51 U	2.18 U	2.20 U	2.43 U	2.10 U
beta-BHC	360	36	90		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
Chlordane	--	--	--		14.5 U	14.6 U	16.3 U	14.2 U	14.3 U	15.8 U	13.7 U
delta-BHC	100000	40	250		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
Dieldrin	200	5	100		1.12 U	1.13 U	1.25 U	1.09 U	1.10 U	1.21 U	1.05 U
Endosulfan I	24000	2400	102000		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
Endosulfan II	24000	2400	102000		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
Endosulfan sulfate	24000	2400	1000000		0.745 U	0.751 U	0.836 U	0.728 U	0.734 U	0.810 U	0.702 U
Endrin ketone	--	--	--		1.79 U	1.80 U	2.01 U	1.75 U	1.76 U	1.94 U	1.68 U
Endrin	11000	14	60		0.745 U	0.751 U	0.836 U	0.728 U	0.734 U	0.810 U	0.702 U
gamma-BHC (Lindane)	1300	100	100		0.745 U	0.751 U	0.836 U	0.728 U	0.734 U	0.810 U	0.702 U
gamma-Chlordane	--	--	--		2.24 U	2.25 U	2.51 U	2.18 U	2.20 U	2.43 U	2.10 U
Heptachlor epoxide	--	--	--		3.35 U	3.38 U	3.76 U	3.27 U	3.30 U	3.64 U	3.16 U
Heptachlor	2100	42	380		0.894 U	0.901 U	1.00 U	0.873 U	0.881 U	0.972 U	0.842 U
Methoxychlor	--	--	--		3.35 U	3.38 U	3.76 U	3.27 U	3.30 U	3.64 U	3.16 U
Toxaphene	--	--	--		33.5 U	33.8 U	37.6 U	32.7 U	33.0 U	36.4 U	31.6 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - A secondary analysis after dilution due to exceedance of the calibration range in the original sample.
R - Sample results rejected by validator
UJ - Analyte was not detected. The associated reported quantitation limit is an estimate
NJ - Detection is tentative in identification and estimated in value
P - The RPD between the results for the two columns exceeds the method-specified criteria
I - The lower value for the two columns has been reported due to obvious interference

Table 7. Summary of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	B-15 12/31/2013 0 - 2	B-16 12/19/2013 0 - 2	B-16 1/16/2014 7 - 9	B-16 1/16/2014 10 - 12	B-16 1/16/2014 18 - 20	B-22 1/13/2014 0 - 2	B-22 DUP 1/13/2014 0 - 2
4,4'-DDD	13000	3.3	14000		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
4,4'-DDE	8900	3.3	17000		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
4,4'-DDT	7900	3.3	136000		3.47 U	3.09 U	3.24 U	3.55 U	3.35 U	3.45 U	3.43 U
Aldrin	97	5	190		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
alpha-BHC	480	20	20		0.772 U	0.687 U	0.720 U	0.788 U	0.744 U	0.767 U	0.762 U
alpha-Chlordane	4200	94	2900		2.31 U	2.06 U	2.16 U	2.36 U	2.23 U	2.30 U	2.29 U
beta-BHC	360	36	90		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
Chlordane	--	--	--		15.0 U	13.4 U	14.0 U	15.4 U	14.5 U	15.0 U	14.9 U
delta-BHC	100000	40	250		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
Dieldrin	200	5	100		1.16 U	1.03 U	1.08 U	1.18 U	1.12 U	1.15 U	1.14 U
Endosulfan I	24000	2400	102000		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
Endosulfan II	24000	2400	102000		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
Endosulfan sulfate	24000	2400	1000000		0.772 U	0.687 U	0.720 U	0.788 U	0.744 U	0.767 U	0.762 U
Endrin ketone	--	--	--		1.85 U	1.65 U	1.73 U	1.89 U	1.78 U	1.84 U	1.83 U
Endrin	11000	14	60		0.772 U	0.687 U	0.720 U	0.788 U	0.744 U	0.767 U	0.762 U
gamma-BHC (Lindane)	1300	100	100		0.772 U	0.687 U	0.720 U	0.788 U	0.744 U	0.767 U	0.762 U
gamma-Chlordane	--	--	--		2.31 U	2.06 U	2.16 U	2.36 U	2.23 U	2.30 U	2.29 U
Heptachlor epoxide	--	--	--		3.47 U	3.09 U	3.24 U	3.55 U	3.35 U	3.45 U	3.43 U
Heptachlor	2100	42	380		0.926 U	0.824 U	0.863 U	0.946 U	0.892 U	0.921 U	0.915 U
Methoxychlor	--	--	--		3.47 U	3.09 U	3.24 U	3.55 U	3.35 U	3.45 U	3.43 U
Toxaphene	--	--	--		34.7 U	30.9 U	32.4 U	35.5 U	33.5 U	34.5 U	34.3 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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Table 7. Summary of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-22 1/13/2014 4 - 6	B-25 1/14/2014 0 - 2	B-25 1/14/2014 2 - 4	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5
4,4'-DDD	13000	3.3	14000		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
4,4'-DDE	8900	3.3	17000		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
4,4'-DDT	7900	3.3	136000		3.69 U	390 D	250 D	3.56 U	198 D	3.39 U	4.03 U
Aldrin	97	5	190		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
alpha-BHC	480	20	20		0.821 U	$\boxed{\text{23.5 PID}}$	16.0 UD	0.792 U	17.4 UD	0.752 U	0.896 U
alpha-Chlordane	4200	94	2900		2.46 U	46.4 UD	48.0 UD	2.38 U	52.4 UD	2.26 U	2.69 U
beta-BHC	360	36	90		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
Chlordane	--	--	--		16.0 U	301 UD	312 UD	15.4 U	340 UD	14.7 U	17.5 U
delta-BHC	100000	40	250		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
Dieldrin	200	5	100		1.23 U	23.2 UD	24.0 UD	1.19 U	26.2 UD	1.13 U	1.34 U
Endosulfan I	24000	2400	102000		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
Endosulfan II	24000	2400	102000		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
Endosulfan sulfate	24000	2400	1000000		0.821 U	15.4 UD	16.0 UD	0.792 U	17.4 UD	0.752 U	0.896 U
Endrin ketone	--	--	--		1.97 U	37.1 UD	38.4 UD	1.90 U	41.9 UD	1.81 U	2.15 U
Endrin	11000	14	60		0.821 U	15.4 UD	16.0 UD	0.792 U	17.4 UD	0.752 U	0.896 U
gamma-BHC (Lindane)	1300	100	100		0.821 U	57.8 PID	16.0 UD	0.792 U	17.4 UD	0.752 U	0.896 U
gamma-Chlordane	--	--	--		2.46 U	46.4 UD	48.0 UD	2.38 U	52.4 UD	2.26 U	2.69 U
Heptachlor epoxide	--	--	--		3.69 U	69.5 UD	72.0 UD	3.56 U	78.5 UD	3.39 U	4.03 U
Heptachlor	2100	42	380		0.985 U	18.5 UD	19.2 UD	0.950 U	20.9 UD	0.903 U	1.08 U
Methoxychlor	--	--	--		3.69 U	69.5 UD	72.0 UD	3.56 U	78.5 UD	3.39 U	4.03 U
Toxaphene	--	--	--		36.9 U	695 UD	720 UD	35.6 U	785 UD	33.9 U	40.3 U

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U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
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Table 7. Summary of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-1/1R 12/16/2013 6 - 8	MW-1/1R 12/16/2013 24 - 25	MW-2/2R 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8	MW-2/2R 12/16/2013 14 - 15	MW-2/2R 12/16/2013 23 - 24	MW-7/7R 12/19/2013 0 - 2
4,4'-DDD	13000	3.3	14000		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
4,4'-DDE	8900	3.3	17000		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
4,4'-DDT	7900	3.3	136000		18.4 UD	3.64 U	3.17 U	3.31 U	18.9 UD	3.32 U	3.35 U
Aldrin	97	5	190		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
alpha-BHC	480	20	20		4.08 UD	0.810 U	0.704 U	0.735 U	4.21 UD	0.737 U	0.745 U
alpha-Chlordane	4200	94	2900		12.2 UD	2.43 U	2.11 U	2.20 U	12.6 UD	2.21 U	2.24 U
beta-BHC	360	36	90		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
Chlordane	--	--	--		79.7 UD	15.8 U	13.7 U	14.3 U	82.0 UD	14.4 U	14.5 U
delta-BHC	100000	40	250		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
Dieldrin	200	5	100		6.13 UD	1.21 U	1.06 U	1.10 U	6.31 UD	1.10 U	1.12 U
Endosulfan I	24000	2400	102000		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
Endosulfan II	24000	2400	102000		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
Endosulfan sulfate	24000	2400	1000000		4.08 UD	0.810 U	0.704 U	0.735 U	4.21 UD	0.737 U	0.745 U
Endrin ketone	--	--	--		9.80 UD	1.94 U	1.69 U	1.76 U	10.1 UD	1.77 U	1.79 U
Endrin	11000	14	60		4.08 UD	0.810 U	0.704 U	0.735 U	4.21 UD	0.737 U	0.745 U
gamma-BHC (Lindane)	1300	100	100		4.08 UD	0.810 U	0.704 U	0.735 U	4.21 UD	0.737 U	0.745 U
gamma-Chlordane	--	--	--		12.2 UD	2.43 U	2.11 U	2.20 U	12.6 UD	2.21 U	2.24 U
Heptachlor epoxide	--	--	--		18.4 UD	3.64 U	3.17 U	3.31 U	18.9 UD	3.32 U	3.35 U
Heptachlor	2100	42	380		4.90 UD	0.972 U	0.845 U	0.882 U	5.05 UD	0.884 U	0.894 U
Methoxychlor	--	--	--		18.4 UD	3.64 U	3.17 U	3.31 U	18.9 UD	3.32 U	3.35 U
Toxaphene	--	--	--		184 UD	36.4 U	31.7 U	33.1 U	189 UD	33.2 U	33.5 U

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ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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Bold data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
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Table 7. Summary of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-7/7R 1/14/2014 2 - 4	MW-15 1/20/2014 0 - 2	MW-15 1/20/2014 6 - 8	MW-15 1/20/2014 10 - 12	MW-18 1/6/2014 0 - 2	MW-18 1/6/2014 8 - 10	MW-18 1/6/2014 12 - 14	MW-18 1/6/2014 20 - 22
4,4'-DDD	13000	3.3	14000		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
4,4'-DDE	8900	3.3	17000		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
4,4'-DDT	7900	3.3	136000		3.93 U	3.47 U	19.1 UD	3.64 U	3.30 U	3.53 U	4.13 U	3.29 U
Aldrin	97	5	190		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
alpha-BHC	480	20	20		0.873 U	0.772 U	4.26 UD	0.809 U	0.734 U	0.785 U	0.918 U	0.732 U
alpha-Chlordane	4200	94	2900		2.62 U	2.31 U	12.8 UD	2.43 U	2.20 U	2.36 U	2.76 U	2.20 U
beta-BHC	360	36	90		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
Chlordane	--	--	--		17.0 U	15.0 U	83.0 UD	15.8 U	14.3 U	15.3 U	17.9 U	14.3 U
delta-BHC	100000	40	250		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
Dieldrin	200	5	100		1.31 U	1.16 U	6.38 UD	1.21 U	1.10 U	1.18 U	1.38 U	1.10 U
Endosulfan I	24000	2400	102000		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
Endosulfan II	24000	2400	102000		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
Endosulfan sulfate	24000	2400	1000000		0.873 U	0.772 U	4.26 UD	0.809 U	0.734 U	0.785 U	0.918 U	0.732 U
Endrin ketone	--	--	--		2.09 U	1.85 U	10.2 UD	1.94 U	1.76 U	1.88 U	2.20 U	1.76 U
Endrin	11000	14	60		0.873 U	0.772 U	4.26 UD	0.809 U	0.734 U	0.785 U	0.918 U	0.732 U
gamma-BHC (Lindane)	1300	100	100		0.873 U	0.772 U	4.26 UD	0.809 U	0.734 U	0.785 U	0.918 U	0.732 U
gamma-Chlordane	--	--	--		2.62 U	2.31 U	12.8 UD	2.43 U	2.20 U	2.36 U	2.76 U	2.20 U
Heptachlor epoxide	--	--	--		3.93 U	3.47 U	19.1 UD	3.64 U	3.30 U	3.53 U	4.13 U	3.29 U
Heptachlor	2100	42	380		1.05 U	0.926 U	5.11 UD	0.971 U	0.881 U	0.942 U	1.10 U	0.878 U
Methoxychlor	--	--	--		3.93 U	3.47 U	19.1 UD	3.64 U	3.30 U	3.53 U	4.13 U	3.29 U
Toxaphene	--	--	--		39.3 U	34.7 U	191 UD	36.4 U	33.0 U	35.3 U	41.3 U	32.9 U

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Table 7. Summary of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-20 12/19/2013 0 - 2	MW-20 1/15/2014 7 - 9	MW-20 1/15/2014 12 - 14	MW-20 DUP 1/15/2014 12 - 14	MW-20 1/15/2014 18 - 19
4,4'-DDD	13000	3.3	14000		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
4,4'-DDE	8900	3.3	17000		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
4,4'-DDT	7900	3.3	136000		3.38 U	3.23 U	3.44 U	3.50 U	3.34 U
Aldrin	97	5	190		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
alpha-BHC	480	20	20		0.752 U	0.717 U	0.766 U	0.779 U	0.743 U
alpha-Chlordane	4200	94	2900		2.26 U	2.15 U	2.30 U	2.34 U	2.23 U
beta-BHC	360	36	90		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
Chlordane	--	--	--		14.7 U	14.0 U	14.9 U	15.2 U	14.5 U
delta-BHC	100000	40	250		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
Dieldrin	200	5	100		1.13 U	1.08 U	1.15 U	1.17 U	1.11 U
Endosulfan I	24000	2400	102000		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
Endosulfan II	24000	2400	102000		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
Endosulfan sulfate	24000	2400	1000000		0.752 U	0.717 U	0.766 U	0.779 U	0.743 U
Endrin ketone	--	--	--		1.80 U	1.72 U	1.84 U	1.87 U	1.78 U
Endrin	11000	14	60		0.752 U	0.717 U	0.766 U	0.779 U	0.743 U
gamma-BHC (Lindane)	1300	100	100		0.752 U	0.717 U	0.766 U	0.779 U	0.743 U
gamma-Chlordane	--	--	--		2.26 U	2.15 U	2.30 U	2.34 U	2.23 U
Heptachlor epoxide	--	--	--		3.38 U	3.23 U	3.44 U	3.50 U	3.34 U
Heptachlor	2100	42	380		0.903 U	0.861 U	0.919 U	0.935 U	0.892 U
Methoxychlor	--	--	--		3.38 U	3.23 U	3.44 U	3.50 U	3.34 U
Toxaphene	--	--	--		33.8 U	32.3 U	34.4 U	35.0 U	33.4 U

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DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
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Table 8. Summary of General Chemistry in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/L)	NYSDEC AWQSGVs (mg/L)	Sample Designation: / Sample Date:	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-5 1/30/2014	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-11 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014
CHLORIDE	250		**290**	190	**950**	230	**12000**	**5900**	**1800**	**1700**
Total Dissolved Solids	--		1200	530	2200	900	24000	11000	3800	3800

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

mg/L -Milligrams per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 8. Summary of General Chemistry in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/L)	NYSDEC AWQSGVs (mg/L)	Sample Designation: / Sample Date:	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014
CHLORIDE	250		66	**1100**	**3000**	140
Total Dissolved Solids	--		270	2800	5600	490

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
mg/L -Milligrams per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
1,1,1-Trichloroethane	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
1,1,2,2-Tetrachloroethane	5		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
1,1,2-Trichloroethane	1		1 U	1 U	1.5 U	1.5 U	1 U	1.5 U	1 U
1,1-Dichloroethane	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
1,1-Dichloroethene	5		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
1,2,3-Trichlorobenzene	5		5 U	5 U	2.5 U	2.5 U	5 U	2.5 U	5 U
1,2,4-Trichlorobenzene	5		5 U	5 U	2.5 U	2.5 U	5 U	2.5 U	5 U
1,2-Dibromoethane	--		2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
1,2-Dichloroethane	0.6		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
1,2-Dichloropropane	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
1,4-Dichlorobenzene	3		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
1,4-Dioxane	--		130 U	130 U	250 U	250 U	130 U	250 U	130 U
2-Butanone (MEK)	50		10 U	10 U	5 U	5 U	10 U	5 U	10 U
2-Hexanone	50		5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	--		5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50		10 U	10 U	2.4 J	1.5 J	10 U	5 U	10 U
Benzene	1		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Bromochloromethane	5		5 U	5 U	2.5 U	2.5 U	5 U	2.5 U	5 U
Bromodichloromethane	50		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Bromoform	50		4 U	4 U	2 U	2 U	4 U	2 U	4 U
Bromomethane	5		2 U	2 U	2.5 U	2.5 U	2 U	2.5 U	2 U
Carbon disulfide	60		2 U	2 U	5 U	5 U	2 U	5 U	2 U
Carbon tetrachloride	5		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Chlorobenzene	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
Chloroethane	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
Chloroform	7		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
Chloromethane	--		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
cis-1,2-Dichloroethene	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
cis-1,3-Dichloropropene	5		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Cyclohexane	--		5 U	5 U	NA	NA	1.2 J	NA	5 U
Dibromochloromethane	50		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
Dibromochloropropane	--		10 U	10 U	2.5 U	2.5 U	10 U	2.5 U	10 U
Dichlorodifluoromethane	5		5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
Freon 113	--		5 U	5 U	2.5 U	2.5 U	5 U	2.5 U	5 U
Isopropylbenzene	5		**11.6**	**9.9**	0.92 J	2.4 J	4.2	2.5 U	2 U
m+p-Xylene	5		1 U	1 U	2.5 U	2.5 U	0.77 J	2.5 U	1 U
Methyl acetate	--		5 U	5 U	NA	NA	5 U	NA	5 U
Methylcyclohexane	--		5 U	5 U	NA	NA	3.8 J	NA	5 U
Methylene chloride	5		2 U	2 U	2.5 U	2.5 U	2 U	2.5 U	2 U
MTBE	10		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
o-Xylene	5		1 U	1 U	2.5 U	2.5 U	0.24 J	2.5 U	1 U
Styrene	5		5 U	5 U	2.5 U	2.5 U	5 U	2.5 U	5 U
Tetrachloroethene	5		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Toluene	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
trans-1,2-Dichloroethene	5		1 U	1 U	2.5 U	2.5 U	1 U	2.5 U	1 U
trans-1,3-Dichloropropene	--		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Trichloroethene	5		1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U
Trichlorofluoromethane	5		5 U	5 U	2.5 U	2.5 U	5 U	2.5 U	5 U
Vinyl chloride	2		1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5		1 U	1 U	2.5 U	2.5 U	1.01 J	2.5 U	1 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-14 1/30/2014	MW-15 1/30/2014	MW-16 1/29/2014
1,1,1-Trichloroethane	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
1,1,2,2-Tetrachloroethane	5		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
1,1,2-Trichloroethane	1		6 UD	1.5 U	1 U	1.5 U	1 U	1.5 U	1.5 U	3.8 UD
1,1-Dichloroethane	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
1,1-Dichloroethene	5		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
1,2,3-Trichlorobenzene	5		10 UD	2.5 U	5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 UD
1,2,4-Trichlorobenzene	5		10 UD	2.5 U	5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 UD
1,2-Dibromoethane	--		8 UD	2 U	2 U	2 U	2 U	2 U	2 U	5 UD
1,2-Dichlorobenzene	3		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
1,2-Dichloroethane	0.6		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
1,2-Dichloropropane	1		4 UD	1 U	1 U	1 U	1 U	1 U	1 U	2.5 UD
1,3-Dichlorobenzene	3		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
1,4-Dichlorobenzene	3		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
1,4-Dioxane	--		1000 UD	250 U	130 U	250 U	130 U	250 U	250 U	620 UD
2-Butanone (MEK)	50		42 D	5 U	10 U	5 U	10 U	5 U	5 U	12 UD
2-Hexanone	50		20 UD	5 U	5 U	5 U	5 U	5 U	5 U	12 UD
4-Methyl-2-pentanone (MIBK)	--		20 UD	5 U	5 U	5 U	5 U	5 U	5 U	12 UD
Acetone	50		20 UD	5 U	10 U	5 U	10 U	15	5.6	12 UD
Benzene	1		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Bromochloromethane	5		10 UD	2.5 U	5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 UD
Bromodichloromethane	50		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Bromoform	50		8 UD	2 U	4 U	2 U	4 U	2 U	2 U	5 UD
Bromomethane	5		10 UD	2.5 U	2 U	2.5 U	2 U	2.5 U	2.5 U	6.2 UD
Carbon disulfide	60		20 UD	5 U	2 U	5 U	0.47 J	5 U	5 U	12 UD
Carbon tetrachloride	5		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Chlorobenzene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
Chloroethane	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
Chloroform	7		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
Chloromethane	--		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
cis-1,2-Dichloroethene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
cis-1,3-Dichloropropene	5		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Cyclohexane	--		NA	NA	5 U	NA	5 U	NA	NA	NA
Dibromochloromethane	50		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-14 1/30/2014	MW-15 1/30/2014	MW-16 1/29/2014
Dibromochloropropane	--		10 UD	2.5 U	10 U	2.5 U	10 U	2.5 U	2.5 U	6.2 UD
Dichlorodifluoromethane	5		20 UD	5 U	5 U	5 U	5 U	5 U	5 U	12 UD
Ethylbenzene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
Freon 113	--		10 UD	2.5 U	5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 UD
Isopropylbenzene	5		**6 JD**	2.5 U	2 U	2.5 U	2 U	2.5 U	1.6 J	6.2 UJVD
m+p-Xylene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	**6.3 D**
Methyl acetate	--		NA	NA	5 U	NA	5 U	NA	NA	NA
Methylcyclohexane	--		NA	NA	5 U	NA	5 U	NA	NA	NA
Methylene chloride	5		10 UD	2.5 U	2 U	2.5 U	2 U	2.5 U	2.5 U	6.2 UD
MTBE	10		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
o-Xylene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	**6.2 D**
Styrene	5		10 UD	2.5 U	5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 UD
Tetrachloroethene	5		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Toluene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
trans-1,2-Dichloroethene	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	6.2 UD
trans-1,3-Dichloropropene	--		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Trichloroethene	5		2 UD	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	1.2 UD
Trichlorofluoromethane	5		10 UD	2.5 U	5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 UD
Vinyl chloride	2		4 UD	1 U	1 U	1 U	1 U	1 U	1 U	2.5 UD
Xylenes (total)	5		10 UD	2.5 U	1 U	2.5 U	1 U	2.5 U	2.5 U	**12.5 D**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
 - - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-16 DUP 1/29/2014	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014	MW-24 1/21/2015	MW-25 1/21/2015
1,1,1-Trichloroethane	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,1,2,2-Tetrachloroethane	5		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
1,1,2-Trichloroethane	1		3.8 UD	1.5 U	3.8 UD	1.5 U	1.5 U	1.5 U	3.8 UD
1,1-Dichloroethane	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,1-Dichloroethene	5		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
1,2,3-Trichlorobenzene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,2,4-Trichlorobenzene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,2-Dibromoethane	--		5 UD	2 U	5 UD	2 U	2 U	2.0 U	5.0 UD
1,2-Dichlorobenzene	3		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,2-Dichloroethane	0.6		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
1,2-Dichloropropane	1		2.5 UD	1 U	2.5 UD	1 U	1 U	1.0 U	2.5 UD
1,3-Dichlorobenzene	3		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,4-Dichlorobenzene	3		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
1,4-Dioxane	--		620 UD	250 U	620 UD	250 U	250 U	250 U	620 UD
2-Butanone (MEK)	50		12 UD	5 U	12 UD	5 U	5 U	5.0 U	12 UD
2-Hexanone	50		12 UD	5 U	12 UD	5 U	5 U	5.0 U	12 UD
4-Methyl-2-pentanone (MIBK)	--		12 UD	5 U	12 UD	5 U	5 U	5.0 U	12 UD
Acetone	50		12 UD	1.9 J	12 UD	**190 E**	2.2 J	5.0 U	12 UD
Benzene	1		0.45 JD	0.5 U	1.2 UD	0.38 J	0.5 U	**1.1**	1.2 UD
Bromochloromethane	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Bromodichloromethane	50		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
Bromoform	50		5 UD	2 U	5 UD	2 U	2 U	2.0 U	5.0 UD
Bromomethane	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Carbon disulfide	60		12 UD	5 U	12 UD	5 U	5 U	5.0 U	12 UD
Carbon tetrachloride	5		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
Chlorobenzene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Chloroethane	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Chloroform	7		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Chloromethane	--		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
cis-1,2-Dichloroethene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
cis-1,3-Dichloropropene	5		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
Cyclohexane	--		NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	50		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-16 DUP 1/29/2014	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014	MW-24 1/21/2015	MW-25 1/21/2015
Dibromochloropropane	--		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Dichlorodifluoromethane	5		12 UD	5 U	12 UD	5 U	5 U	5.0 U	12 UD
Ethylbenzene	5		2.9 JD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Freon 113	--		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Isopropylbenzene	5		**20 JVD**	**6.8**	**21 D**	2.5 U	**8**	**22**	**12 D**
m+p-Xylene	5		**10 D**	2.5 U	6.2 UD	2.5 U	2.5 U	0.74 J	6.2 UD
Methyl acetate	--		NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	--		NA	NA	NA	NA	NA	NA	NA
Methylene chloride	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
MTBE	10		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
o-Xylene	5		**6.7 D**	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Styrene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Tetrachloroethene	5		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
Toluene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	0.77 J	6.2 UD
trans-1,2-Dichloroethene	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
trans-1,3-Dichloropropene	--		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
Trichloroethene	5		1.2 UD	0.5 U	1.2 UD	0.5 U	0.5 U	0.50 U	1.2 UD
Trichlorofluoromethane	5		6.2 UD	2.5 U	6.2 UD	2.5 U	2.5 U	2.5 U	6.2 UD
Vinyl chloride	2		2.5 UD	1 U	2.5 UD	1 U	1 U	1.0 U	2.5 UD
Xylenes (total)	5		**16.70 D**	2.5 U	6.2 UD	2.5 U	2.5 U	0.74 J	6.2 UD

NYSDEC - New York State Department of Environmental Conservation
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Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-27 1/21/2015	MW-28 1/21/2015	MW-34 1/22/2015	MW-36 1/22/2015	MW-36 DUP 1/22/2015	MW-37 1/22/2015	MW-38 1/22/2015
1,1,1-Trichloroethane	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	1		6.0 UD	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,3-Trichlorobenzene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	--		8.0 UD	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	3		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	1		4.0 UD	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane	--		1000 UD	250 U	250 U	250 U	250 U	250 U	250 U
2-Butanone (MEK)	50		8.8 JD	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	50		20 UD	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (MIBK)	--		20 UD	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50		19 JD	5.0 U	2.8 J	5.0 U	5.0 U	5.0 U	4.4 J
Benzene	1		2.0 UD	0.50 U	0.64	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	50		8.0 UD	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon disulfide	60		20 UD	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	5		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	5		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane	--		NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	50		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Table 9. Summary of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: / Sample Date:	MW-27 1/21/2015	MW-28 1/21/2015	MW-34 1/22/2015	MW-36 1/22/2015	MW-36 DUP 1/22/2015	MW-37 1/22/2015	MW-38 1/22/2015
Dibromochloropropane	--		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Dichlorodifluoromethane	5		20 UD	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5		10 UD	2.5 U	**5.9**	2.5 U	2.5 U	2.5 U	2.5 U
Freon 113	--		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene	5		**14 D**	2.5 U	**45**	**32**	**32**	**42**	**14**
m+p-Xylene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	0.85 J	2.5 U
Methyl acetate	--		NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	--		NA	NA	NA	NA	NA	NA	NA
Methylene chloride	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MTBE	10		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
o-Xylene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	0.85 J	2.5 U
Styrene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethene	5		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	--		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	5		2.0 UD	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane	5		10 UD	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2		4.0 UD	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	5		10 UD	2.5 U	2.5 U	2.5 U	2.25 U	1.7 J	2.5 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
 - - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
1,1'-Biphenyl	--		1.1 U	1.1 U	2 U	2 U	1.1 U	2 U	1 U
1,2,4,5-Tetrachlorobenzene	--		2.2 U	2.2 U	10 U	10 U	2.1 U	10 U	2 U
2,2'-oxybis (1-chloropropane)	5		NA	NA	2 U	2 U	NA	2 U	NA
2,2'-oxybis (2-chloropropane)	--		2.2 U	2.2 U	NA	NA	2.1 U	NA	2 U
2,3,4,6-Tetrachlorophenol	--		5.4 U	5.4 U	NA	NA	5.3 U	NA	5 U
2,4,5-Trichlorophenol	--		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
2,4,6-Trichlorophenol	--		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
2,4-Dichlorophenol	5		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
2,4-Dimethylphenol	50		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
2,4-Dinitrophenol	10		22 U	22 U	20 U	20 U	21 U	20 U	20 U
2,4-Dinitrotoluene	5		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
2,6-Dinitrotoluene	5		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
2-Chloronaphthalene	10		2.2 U	2.2 U	0.2 U	0.2 U	2.1 U	0.2 U	2 U
2-Chlorophenol	--		5.4 U	5.4 U	2 U	2 U	5.3 U	2 U	5 U
2-Methylnaphthalene	--		1.1 U	1.1 U	0.2 U	0.2 U	1.1 U	0.2 U	1 U
2-Methylphenol	--		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
2-Nitroaniline	5		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
2-Nitrophenol	--		5.4 U	5.4 U	10 U	10 U	5.3 U	10 U	5 U
3&4-Methylphenol	--		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
3,3'-Dichlorobenzidine	5		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
3-Nitroaniline	5		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
4,6-Dinitro-2-methylphenol	--		22 U	22 U	10 U	10 U	21 U	10 U	20 U
4-Bromophenyl phenyl ether	--		2.2 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U
4-Chloro-3-methylphenol	--		5.4 U	5.4 U	2 U	2 U	5.3 U	2 U	5 U
4-Chloroaniline	5		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
4-Chlorophenyl phenyl ether	--		2.2 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U
4-Nitroaniline	5		5.4 U	5.4 U	5 U	5 U	5.3 U	5 U	5 U
4-Nitrophenol	--		11 U	11 U	10 U	10 U	11 U	10 U	10 U
Acenaphthene	20		1.1 U	1.1 U	0.11 J	0.23	1.1 U	0.08 J	1 U
Acenaphthylene	20		1.1 U	1.1 U	0.2 U	0.2 U	1.1 U	0.2 U	1 U
Acetophenone	--		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Anthracene	50		1.1 U	1.1 U	0.09 J	0.1 J	1.1 U	0.17 J	1 U

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
Atrazine	--		5.4 U	5.4 U	NA	NA	5.3 U	NA	5 U
Benzaldehyde	--		5.4 U	5.4 U	NA	NA	5.3 U	NA	5 U
Benzo[a]anthracene	0.002		1.1 U	1.1 U	**0.33**	0.2 U	1.1 U	**0.42**	1 U
Benzo[a]pyrene	0		1.1 U	1.1 U	**0.31**	0.2 U	1.1 U	**0.45**	1 U
Benzo[b]fluoranthene	0.002		1.1 U	1.1 U	**0.41**	0.2 U	1.1 U	**0.54**	1 U
Benzo[g,h,i]perylene	--		1.1 U	1.1 U	0.24	0.2 U	1.1 U	0.32	1 U
Benzo[k]fluoranthene	0.002		1.1 U	1.1 U	**0.28**	0.2 U	1.1 U	**0.3**	1 U
Benzoic Acid	--		NA	NA	50 U	50 U	NA	50 U	NA
Benzyl Alcohol	--		NA	NA	2 U	2 U	NA	2 U	NA
Bis(2-chloroethoxy)methane	5		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Bis(2-chloroethyl) ether	--		2.2 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U
Bis(2-ethylhexyl) phthalate	5		2.2 U	2.2 U	3 U	3 U	2.1 U	3 U	2 U
Butylbenzyl phthalate	50		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Caprolactam	--		2.2 U	2.2 U	NA	NA	2.1 U	NA	2 U
Carbazole	--		1.1 U	1.1 U	2 U	2 U	1.1 U	2 U	1 U
Chrysene	0.002		1.1 U	1.1 U	**0.33**	0.2 U	1.1 U	**0.36**	1 U
Dibenzo[a,h]anthracene	--		1.1 U	1.1 U	0.2 U	0.2 U	1.1 U	0.17 J	1 U
Dibenzofuran	--		5.4 U	5.4 U	2 U	2 U	5.3 U	2 U	5 U
Diethyl phthalate	50		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Dimethyl phthalate	50		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Di-n-butyl phthalate	50		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Di-n-octyl phthalate	--		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Fluoranthene	50		1.1 U	1.1 U	0.44	0.11 J	1.1 U	0.71	1 U
Fluorene	50		1.1 U	1.1 U	0.1 J	0.38	1.1 U	0.07 J	1 U
Hexachlorobenzene	0.04		1.1 U	1.1 U	0.8 U	0.8 U	1.1 U	0.8 U	1 U
Hexachlorobutadiene	0.5		1.1 U	1.1 U	0.5 U	0.5 U	1.1 U	0.5 U	1 U
Hexachlorocyclopentadiene	5		11 U	11 U	20 U	20 U	11 U	20 U	10 U
Hexachloroethane	5		2.2 U	2.2 U	0.8 U	0.8 U	2.1 U	0.8 U	2 U
Indeno[1,2,3-cd]pyrene	0.002		1.1 U	1.1 U	**0.18 J**	0.2 U	1.1 U	**0.38**	1 U
Isophorone	50		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Naphthalene	10		1.1 U	1.1 U	0.45	0.43	0.7 J	0.2 U	1 U
Nitrobenzene	0.4		2.2 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
n-Nitrosodi-n-propylamine	--		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
n-Nitrosodiphenylamine	50		5.4 U	5.4 U	2 U	2 U	5.3 U	2 U	5 U
Pentachlorophenol	1		11 U	11 U	0.8 U	0.8 U	11 U	0.8 U	10 U
Phenanthrene	50		1.1 U	1.1 U	0.23	0.66	1.1 U	0.5	1 U
Phenol	1		2.2 U	2.2 U	5 U	5 U	2.1 U	5 U	2 U
Pyrene	50		1.1 U	1.1 U	0.72	0.18 J	1.1 U	0.61	1 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-15 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014
1,1'-Biphenyl	--		46 UD	2 U	1.1 U	2 U	1 U	2.6 U	2 U	2 U
1,2,4,5-Tetrachlorobenzene	--		230 UD	10 U	2.1 U	10 U	2.1 U	13 U	10 U	10 U
2,2'-oxybis (1-chloropropane)	5		46 UD	2 U	NA	2 U	NA	2.6 U	2 U	2 U
2,2'-oxybis (2-chloropropane)	--		NA	NA	2.1 U	NA	2.1 U	NA	NA	NA
2,3,4,6-Tetrachlorophenol	--		NA	NA	5.3 U	NA	5.2 U	NA	NA	NA
2,4,5-Trichlorophenol	--		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
2,4,6-Trichlorophenol	--		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
2,4-Dichlorophenol	5		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
2,4-Dimethylphenol	50		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
2,4-Dinitrophenol	10		460 UD	20 U	21 U	20 U	21 U	26 U	20 U	20 U
2,4-Dinitrotoluene	5		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
2,6-Dinitrotoluene	5		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
2-Chloronaphthalene	10		4.6 UD	0.2 U	2.1 U	0.2 U	2.1 U	0.52 UD	0.2 U	0.2 U
2-Chlorophenol	--		46 UD	2 U	5.3 U	2 U	5.2 U	2.6 U	2 U	2 U
2-Methylnaphthalene	--		39 D	0.2 U	1.1 U	0.2 U	1 U	0.56 D	0.36	0.45
2-Methylphenol	--		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
2-Nitroaniline	5		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
2-Nitrophenol	--		230 UD	10 U	5.3 U	10 U	5.2 U	13 U	10 U	10 U
3&4-Methylphenol	--		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
3,3'-Dichlorobenzidine	5		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
3-Nitroaniline	5		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
4,6-Dinitro-2-methylphenol	--		230 UD	10 U	21 U	10 U	21 U	13 U	10 U	10 U
4-Bromophenyl phenyl ether	--		46 UD	2 U	2.1 U	2 U	2.1 U	2.6 U	2 U	2 U
4-Chloro-3-methylphenol	--		46 UD	2 U	5.3 U	2 U	5.2 U	2.6 U	2 U	2 U
4-Chloroaniline	5		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
4-Chlorophenyl phenyl ether	--		46 UD	2 U	2.1 U	2 U	2.1 U	2.6 U	2 U	2 U
4-Nitroaniline	5		120 UD	5 U	5.3 U	5 U	5.2 U	6.5 U	5 U	5 U
4-Nitrophenol	--		230 UD	10 U	11 U	10 U	10 U	13 U	10 U	10 U
Acenaphthene	20		13 D	0.2 U	1.1 U	0.2 U	1 U	2.1 D	0.2 U	0.2 U
Acenaphthylene	20		4.6 UD	0.2 U	1.1 U	0.2 U	1 U	0.42 JD	0.2 U	0.2 U
Acetophenone	--		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Anthracene	50		12 D	0.2 U	1.1 U	0.2 U	1 U	0.93 D	0.14 J	0.16 J

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-15 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014
Atrazine	--		NA	NA	5.3 U	NA	5.2 U	NA	NA	NA
Benzaldehyde	--		NA	NA	5.3 U	NA	5.2 U	NA	NA	NA
Benzo[a]anthracene	0.002		**18 D**	0.2 U	1.1 U	0.2 U	1 U	**2.2 D**	**0.08 J**	**0.1 J**
Benzo[a]pyrene	0		**14 D**	0.2 U	1.1 U	0.2 U	1 U	**1.7 D**	0.2 U	0.2 U
Benzo[b]fluoranthene	0.002		**16 D**	0.2 U	1.1 U	0.2 U	1 U	**2.6 D**	0.2 U	0.2 U
Benzo[g,h,i]perylene	--		8.5 D	0.2 U	1.1 U	0.2 U	1 U	1.5 D	0.2 U	0.2 U
Benzo[k]fluoranthene	0.002		**9.2 D**	0.2 U	1.1 U	0.2 U	1 U	**1.4 D**	0.2 U	0.2 U
Benzoic Acid	--		1200 UD	50 U	NA	50 U	NA	65 U	50 U	50 U
Benzyl Alcohol	--		46 UD	2 U	NA	2 U	NA	2.6 U	2 U	2 U
Bis(2-chloroethoxy)methane	5		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Bis(2-chloroethyl) ether	--		46 UD	2 U	2.1 U	2 U	2.1 U	2.6 U	2 U	2 U
Bis(2-ethylhexyl) phthalate	5		**29 JD**	3 U	2.1 U	3 U	1.7 J	3.9 U	3 U	3 U
Butylbenzyl phthalate	50		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Caprolactam	--		NA	NA	2.1 U	NA	2.1 U	NA	NA	NA
Carbazole	--		46 UD	2 U	1.1 U	2 U	1 U	2.6 U	2 U	2 U
Chrysene	0.002		**16 D**	0.2 U	1.1 U	0.2 U	1 U	**2.2 D**	**0.07 J**	**0.09 J**
Dibenzo[a,h]anthracene	--		4.4 JD	0.2 U	1.1 U	0.2 U	1 U	0.39 JD	0.2 U	0.2 U
Dibenzofuran	--		46 UD	2 U	5.3 U	2 U	5.2 U	2.6 U	2 U	2 U
Diethyl phthalate	50		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Dimethyl phthalate	50		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Di-n-butyl phthalate	50		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Di-n-octyl phthalate	--		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Fluoranthene	50		**55 D**	0.2 U	1.1 U	0.2 U	1 U	5.6 D	0.42	0.48
Fluorene	50		14 D	0.2 U	1.1 U	0.2 U	1 U	1.2 D	0.2	0.13 J
Hexachlorobenzene	0.04		19 UD	0.8 U	1.1 U	0.8 U	1 U	2.1 UD	0.8 U	0.8 U
Hexachlorobutadiene	0.5		12 UD	0.5 U	1.1 U	0.5 U	1 U	1.3 UD	0.5 U	0.5 U
Hexachlorocyclopentadiene	5		460 UD	20 U	11 U	20 U	10 U	26 U	20 U	20 U
Hexachloroethane	5		19 UD	0.8 U	2.1 U	0.8 U	2.1 U	2.1 UD	0.8 U	0.8 U
Indeno[1,2,3-cd]pyrene	0.002		**9.5 D**	0.2 U	1.1 U	0.2 U	1 U	**1.3 D**	0.2 U	0.2 U
Isophorone	50		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Naphthalene	10		**76 D**	0.14 J	1.1 U	0.1 J	1 U	0.91 D	4.8	5.6
Nitrobenzene	0.4		46 UD	2 U	2.1 U	2 U	2.1 U	2.6 U	2 U	2 U

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: / Sample Date:	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-15 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014
n-Nitrosodi-n-propylamine	--		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
n-Nitrosodiphenylamine	50		46 UD	2 U	5.3 U	2 U	5.2 U	2.6 U	2 U	2 U
Pentachlorophenol	1		19 UD	0.8 U	11 U	0.8 U	10 U	2.1 UD	0.8 U	0.8 U
Phenanthrene	50		**51 D**	0.2 U	1.1 U	0.2 U	1 U	6.5 D	0.55	0.6
Phenol	1		120 UD	5 U	2.1 U	5 U	2.1 U	6.5 U	5 U	5 U
Pyrene	50		48 D	0.2 U	1.1 U	0.2 U	1 U	4.4 D	0.29	0.35

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: / Sample Date:	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014
1,1'-Biphenyl	--		2 U	2 U	2 U	2 U
1,2,4,5-Tetrachlorobenzene	--		10 U	10 U	10 U	10 U
2,2'-oxybis (1-chloropropane)	5		2 U	2 U	2 U	2 U
2,2'-oxybis (2-chloropropane)	--		NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol	--		NA	NA	NA	NA
2,4,5-Trichlorophenol	--		5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	--		5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5		5 U	5 U	5 U	5 U
2,4-Dimethylphenol	50		5 U	5 U	5 U	5 U
2,4-Dinitrophenol	10		20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	5		5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5		5 U	5 U	5 U	5 U
2-Chloronaphthalene	10		0.2 U	0.2 U	0.2 U	0.2 U
2-Chlorophenol	--		2 U	2 U	2 U	2 U
2-Methylnaphthalene	--		0.2 U	0.2 U	0.08 J	0.21
2-Methylphenol	--		5 U	5 U	5 U	5 U
2-Nitroaniline	5		5 U	5 U	5 U	5 U
2-Nitrophenol	--		10 U	10 U	10 U	10 U
3&4-Methylphenol	--		5 U	5 U	5 U	5 U
3,3'-Dichlorobenzidine	5		5 U	5 U	5 U	5 U
3-Nitroaniline	5		5 U	5 U	5 U	5 U
4,6-Dinitro-2-methylphenol	--		10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	--		2 U	2 U	2 U	2 U
4-Chloro-3-methylphenol	--		2 U	2 U	2 U	2 U
4-Chloroaniline	5		5 U	5 U	5 U	5 U
4-Chlorophenyl phenyl ether	--		2 U	2 U	2 U	2 U
4-Nitroaniline	5		5 U	5 U	5 U	5 U
4-Nitrophenol	--		10 U	10 U	10 U	10 U
Acenaphthene	20		2.2	0.12 J	0.07 J	0.26
Acenaphthylene	20		0.47	0.2 U	0.2 U	0.2 U
Acetophenone	--		5 U	5 U	5 U	5 U
Anthracene	50		0.14 J	0.2 U	0.2 U	0.09 J

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014
Atrazine	--		NA	NA	NA	NA
Benzaldehyde	--		NA	NA	NA	NA
Benzo[a]anthracene	0.002		0.2 U	0.2 U	0.2 U	**0.08 J**
Benzo[a]pyrene	0		0.2 U	0.2 U	0.2 U	0.2 U
Benzo[b]fluoranthene	0.002		0.2 U	0.2 U	0.2 U	0.2 U
Benzo[g,h,i]perylene	--		0.2 U	0.2 U	0.2 U	0.2 U
Benzo[k]fluoranthene	0.002		0.2 U	0.2 U	0.2 U	0.2 U
Benzoic Acid	--		50 U	50 U	12 J	50 U
Benzyl Alcohol	--		2 U	2 U	2 U	2 U
Bis(2-chloroethoxy)methane	5		5 U	5 U	5 U	5 U
Bis(2-chloroethyl) ether	--		2 U	2 U	2 U	2 U
Bis(2-ethylhexyl) phthalate	5		1 J	3 U	1.2 J	3 U
Butylbenzyl phthalate	50		5 U	5 U	5 U	5 U
Caprolactam	--		NA	NA	NA	NA
Carbazole	--		2 U	2 U	2 U	2 U
Chrysene	0.002		0.2 U	0.2 U	0.2 U	**0.07 J**
Dibenzo[a,h]anthracene	--		0.2 U	0.2 U	0.2 U	0.2 U
Dibenzofuran	--		1.1 J	2 U	2 U	2 U
Diethyl phthalate	50		5 U	5 U	5 U	5 U
Dimethyl phthalate	50		5 U	5 U	5 U	5 U
Di-n-butyl phthalate	50		5 U	5 U	5 U	5 U
Di-n-octyl phthalate	--		5 U	5 U	5 U	5 U
Fluoranthene	50		0.07 J	0.16 J	0.06 J	0.24
Fluorene	50		2.7	0.14 J	0.2 U	0.17 J
Hexachlorobenzene	0.04		0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobutadiene	0.5		0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	5		20 U	20 U	20 U	20 U
Hexachloroethane	5		0.8 U	0.8 U	0.8 U	0.8 U
Indeno[1,2,3-cd]pyrene	0.002		0.2 U	0.2 U	0.2 U	0.2 U
Isophorone	50		5 U	5 U	5 U	5 U
Naphthalene	10		0.84	0.5	0.22	0.78
Nitrobenzene	0.4		2 U	2 U	2 U	2 U

Table 10. Summary of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014
n-Nitrosodi-n-propylamine	--		5 U	5 U	5 U	5 U
n-Nitrosodiphenylamine	50		2 U	2 U	2 U	2 U
Pentachlorophenol	1		0.8 U	0.8 U	0.8 U	0.8 U
Phenanthrene	50		0.22	0.39	0.1 J	0.55
Phenol	1		5 U	5 U	5 U	5 U
Pyrene	50		0.07 J	0.12 J	0.2 U	0.2

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DUP - Duplicate
- - No NYSDEC AWQSGV available
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NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 11. Summary of Metals in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
Aluminum	--		200 U	200 U	116	41.1	200 U	196	200 U
Antimony	3		6 U	6 U	0.3 J	0.14 J	6 U	4 U	6 U
Arsenic	25		3 U	3 U	4.27	16.11	14.8	1.55 J	3 U
Barium	1000		200 U	200 U	318.9	174.4	200 U	119.9	200 U
Beryllium	3		1 U	1 U	0.5 U	0.5 U	1 U	2 U	1 U
Cadmium	5		3 U	3 U	0.2 U	0.2 U	3 U	0.8 U	3 U
Calcium	--		291000	299000	148000	75800	30300	190000	282000
Chromium	50		10 U	10 U	3.19	0.64 J	10 U	1.52 J	10 U
Cobalt	--		50 U	50 U	0.96	0.12 J	50 U	0.51 J	50 U
Copper	200		10 U	10 U	0.82 J	0.1 J	10 U	2.68 J	10 U
Iron	300		**23700**	**24900**	**30700**	**22100**	**7800**	**5190**	**1590**
Lead	25		15 UD	15 UD	1.03	2.9	3 U	2.58 J	3 U
Magnesium	--		190000	197000	28600	8650	5000 U	16000	24500
Manganese	300		**1280**	**1270**	**6028**	**7530**	**2470**	**1378**	**620**
Mercury	0.7		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100		50 UD	50 UD	2.2	0.28 J	10 U	2.06	10 U
Potassium	--		56100	57800	19200	9500	10000 U	10800	14900
Selenium	10		10 U	10 U	0.35 J	0.32 J	10 U	7.13 J	10 U
Silver	50		10 U	10 U	0.4 U	0.4 U	10 U	1.6 U	10 U
Sodium	20000		**1620000 D**	**1640000 D**	**225000**	**88300**	10000 U	**706000**	**725000 D**
Thallium	0.5		10 UD	10 UD	0.5 U	0.5 U	2 U	2 U	2 U
Vanadium	--		50 U	50 U	0.88 J	0.22 J	50 U	1.43 J	50 U
Zinc	2000		35.6	53	8.91 J	8.02 J	20 U	5.03 J	20 U

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DUP - Duplicate
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D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 11. Summary of Metals in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: / Sample Date:	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-15 1/30/2014	MW-16 1/29/2014
Aluminum	--		3560	200 U	200 U	200 U	1850	1350	60.5
Antimony	3		0.83 J	**3.25**	60 UD	1.8	6 U	1.89	0.89 J
Arsenic	25		19.9	1.99	30 UD	0.55	3 U	5.75	1.28
Barium	1000		73.13	21.25	200 U	137	200 U	110	212.2
Beryllium	3		0.21 J	10 U	1 U	10 U	1 U	0.11 J	0.5 U
Cadmium	5		**13.74**	0.21	30 UD	0.2 U	3 U	0.09 J	0.2 U
Calcium	--		143000	259000	162000	250000	89400	128000	518000
Chromium	50		8.67	0.86 J	50 UD	1.39	10 U	5.31	1.68
Cobalt	--		4.7	0.5 U	500 UD	0.1 J	50 U	1.35	0.3 J
Copper	200		38.96	2.1	50 UD	0.51 J	10 U	21.42	0.23 J
Iron	300		**17100**	59.7	**490**	62	**1290**	**2550**	**48400**
Lead	25		**31.99**	0.43 J	30 UD	0.98 J	3 U	**26.78**	0.34 J
Magnesium	--		20200	397000	488000	410000	142000	16100	78200
Manganese	300		**564**	3.85	101 D	**411.3**	168	97.46	**5378**
Mercury	0.7		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100		15.38	0.93	100 UD	0.21 J	10 U	3.39	0.37 J
Potassium	--		19200	264000	160000	97000	48700	30600	49300
Selenium	10		2.18 J	1.13 J	100 UD	0.43 J	10 U	2.95 J	0.31 J
Silver	50		0.4 U	0.29 J	50 UD	0.23 J	10 U	0.4 U	0.31 J
Sodium	20000		**174000**	**7700000**	**3850000 D**	**3280000**	**1300000 D**	**358000**	**816000**
Thallium	0.5		0.08 J	0.5 U	20 UD	0.5 U	2 U	0.03 J	0.5 U
Vanadium	--		8.61	1.4 J	250 UD	2.56 J	50 U	8.2	1.36 J
Zinc	2000		493	28.69	200 UD	79.35	47	51.63	1.63 J

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AWQSGVs - Ambient Water-Quality Standards and Guidance Values

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D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.

Table 11. Summary of Metals in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-16 DUP 1/29/2014	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014
Aluminum	--		94.5	177	1120	2330	313
Antimony	3		0.73 J	0.15 J	0.5 J	8 U	1.43 J
Arsenic	25		1.29	20.53	1.95	5.96	13.53
Barium	1000		197.5	83.07	479.3	**1018**	103.9
Beryllium	3		0.5 U	0.5 U	0.5 U	4 U	5 U
Cadmium	5		0.2 U	0.2 U	0.2 U	1.6 U	2 U
Calcium	--		466000	39600	413000	331000	81700
Chromium	50		1.78	0.91 J	2.67	5.64 J	2.08 J
Cobalt	--		0.33 J	1.25	2.45	3.04 J	5 U
Copper	200		0.24 J	10.5	6.77	16.99	5.16 J
Iron	300		**43300**	**12300**	**16200**	**71000**	**17300**
Lead	25		0.54 J	0.85 J	7.7	6.44 J	9.81 J
Magnesium	--		71900	9720	65900	81400	9760
Manganese	300		**4874**	**2012**	**3694**	**3012**	**11040**
Mercury	0.7		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100		0.4 J	1.16	2.9	7.98	2.39 J
Potassium	--		46600	3580	20100	25100	9030
Selenium	10		0.35 J	5 U	9.68	4.55 J	3.13 J
Silver	50		0.29 J	0.4 U	0.4 U	3.2 U	4 U
Sodium	20000		**755000**	**38400**	**446000**	**1790000**	**35000**
Thallium	0.5		0.5 U	0.5 U	0.5 U	4 U	5 U
Vanadium	--		1.81 J	0.84 J	3.85 J	5.72 J	1.6 J
Zinc	2000		1.86 J	4.47 J	20.15	27.06 J	65.32 J

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of the calibration range in the original sample.

Table 12. Summary of Polychlorinated Biphenyls in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-4 3/20/2013	MW-5 3/20/2013	MW-7/7R 1/30/2014	MW-10 3/20/2013	MW-11 3/20/2013
Aroclor-1016	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1221	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1232	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1242	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1248	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1254	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1260	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1262	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Aroclor-1268	--		0.53 U	0.5 U	0.53 U	0.5 U	0.125 U	0.54 U	0.52 U
Total PCBs	0.09		0	0	0	0	0	0	0

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AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory
PCBs - Polychlorinated Biphenyls

Table 12. Summary of Polychlorinated Biphenyls in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-18 1/30/2014	MW-20 1/30/2014	MW-22 1/30/2014
Aroclor-1016	--		0.083 U	0.083 U	0.083 U
Aroclor-1221	--		0.083 U	0.083 U	0.083 U
Aroclor-1232	--		0.083 U	0.083 U	0.083 U
Aroclor-1242	--		0.083 U	0.083 U	0.083 U
Aroclor-1248	--		0.083 U	0.083 U	0.083 U
Aroclor-1254	--		0.083 U	0.083 U	0.083 U
Aroclor-1260	--		0.083 U	0.083 U	0.083 U
Aroclor-1262	--		0.083 U	0.083 U	0.083 U
Aroclor-1268	--		0.083 U	0.083 U	0.083 U
Total PCBs	0.09		0	0	0

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

µg/L -Micrograms per liter

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

NA - Compound was not analyzed by laboratory

PCBs - Polychlorinated Biphenyls

Table 13. Summary of Pesticides in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: / Sample Date:	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-4 3/20/2013	MW-5 3/20/2013	MW-7/7R 1/30/2014	MW-10 3/20/2013	MW-11 3/20/2013	MW-18 1/30/2014
4,4'-DDD	0.3		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
4,4'-DDE	0.2		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
4,4'-DDT	0.2		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
Aldrin	0		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
alpha-BHC	--		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
alpha-Chlordane	--		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
beta-BHC	--		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
Chlordane	0.05		NA	NA	NA	NA	0.222 U	NA	NA	0.200 U
delta-BHC	--		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
Dieldrin	0.004		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
Endosulfan I	--		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
Endosulfan II	--		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
Endosulfan sulfate	--		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
Endrin aldehyde	5		0.011 U	0.01 U	0.011 U	0.01 U	NA	0.011 U	0.01 U	NA
Endrin ketone	--		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
Endrin	0		0.011 U	0.01 U	0.011 U	0.01 U	0.044 U	0.011 U	0.01 U	0.040 U
gamma-BHC (Lindane)	--		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
gamma-Chlordane	0		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
Heptachlor epoxide	0.03		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
Heptachlor	0.04		0.011 U	0.01 U	0.011 U	0.01 U	0.022 U	0.011 U	0.01 U	0.020 U
Methoxychlor	35		0.021 U	0.02 U	0.021 U	0.02 U	0.222 U	0.022 U	0.021 U	0.200 U
Toxaphene	0.06		0.26 U	0.25 U	0.26 U	0.25 U	0.222 U	0.27 U	0.26 U	0.200 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory

Table 13. Summary of Pesticides in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	Sample Designation: / Sample Date:	MW-20 1/30/2014	MW-22 1/30/2014
4,4'-DDD	0.3		0.040 U	0.040 U
4,4'-DDE	0.2		0.040 U	0.040 U
4,4'-DDT	0.2		0.014 J	0.040 U
Aldrin	0		0.020 U	0.020 U
alpha-BHC	--		0.020 U	0.020 U
alpha-Chlordane	--		0.020 U	0.020 U
beta-BHC	--		0.020 U	0.020 U
Chlordane	0.05		0.200 U	0.200 U
delta-BHC	--		0.020 U	0.020 U
Dieldrin	0.004		0.040 U	0.040 U
Endosulfan I	--		0.020 U	0.020 U
Endosulfan II	--		0.040 U	0.040 U
Endosulfan sulfate	--		0.040 U	0.040 U
Endrin aldehyde	5		NA	NA
Endrin ketone	--		0.040 U	0.040 U
Endrin	0		0.040 U	0.040 U
gamma-BHC (Lindane)	--		0.020 U	0.020 U
gamma-Chlordane	0		0.020 U	0.020 U
Heptachlor epoxide	0.03		0.020 U	0.020 U
Heptachlor	0.04		0.020 U	0.020 U
Methoxychlor	35		0.200 U	0.200 U
Toxaphene	0.06		0.200 U	0.200 U

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
U - Compound was analyzed for but not detected
DUP - Duplicate
- - No NYSDEC AWQSGV available
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
NA - Compound was not analyzed by laboratory

Table 14. Summary of LNAPL Fingerprinting Analysis, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Tank ID	Flash point (°F)	Density (g/ml)	Viscosity (cS)	Cyanide Reactivity (mg/kg)	Sulfide Reactivity (mg/kg)	Corrosivity (pH)	Fingerprinting analysis
CT-1[1]	NA	NA	NA	NA	NA	NA	diesel/fuel oil
CT-4[1]	NA	NA	NA	NA	NA	NA	mineral spirits
CT-8	198	0.81	NA[2]	<1.5	<50	7.0	diesel/fuel oil (degraded)
GT-1	NA	NA	NA	NA	NA	NA	aqueous
GT-2	111	0.76	1.2	<1.5	<50	4.3	mineral spirits
GT-6	164	0.78	NA[2]	<1.5	<50	3.3	40/60 mixture (mineral spirits/linseed oil)
GT-8	>230	0.97	358	<1.5	<50	3.6	linseed oil
GT-10	134	0.75	NA[2]	<1.5	<50	3.9	70/30 mixture (mineral spirits/linseed oil)
GT-11	NA	NA	NA	NA	NA	NA	aqueous sample
MW-3[1]	169	NA	NA	NA	NA	NA	severly degraded diesel/No. 2 fuel oil
MW-6R	115	0.78	1.2	<1.5	<50	6.8	mineral spirits
MW-8	NA	NA	NA	NA	NA	NA	mineral spirits
MW-9	NA	NA	NA	NA	NA	NA	mineral spirits with traces of degraded #2 fuel oil
MW-12	110	0.78	1.2	<1.5	<50	5.9	mineral spirits
MW-13	NA	NA	NA	NA	NA	NA	mineral spirits
MW-17	114	0.79	1.2	<1.5	<50	6.4	mineral spirits
MW-23	123	0.78	2.5	<1.5	<50	6.7	mineral spirits

Notes:
LNAPL - light non-aqueous phase liquid
°F - degrees Fahrenheit
g/ml - grams per milliliter
cS - centistokes
mg/kg - milligrams per kilogram
NA - not anlayzed
1 - due to sample depletion at the laboratory only fingerprinting analysis could be performed
2 - analysis not performed due to difficult matricies
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Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/m^3)	Sample Designation: / Sample Date:	OUTSIDE AIR 5/3/2007	SV-1 (AA) 5/3/2007	SV-1 (SS) 5/3/2007	SV-2 (AA) 5/3/2007	SV-2 (SS) 5/3/2007	SV-3 (AA) 5/3/2007	SV-3 (SS) 5/3/2007	SV-4 (SS) 5/3/2007
1,1,1-Trichloroethane		2.72 U	2.72 U	5.92 U	2.72 U	2.72 U	2.72 U	2.72 U	2.72 U
1,1,2,2-Tetrachloroethane		3.43 U	3.43 U	7.44 U	3.43 U	3.43 U	3.43 U	3.43 U	3.43 U
1,1,2-Trichloroethane		2.72 U	2.72 U	5.92 U	2.72 U	2.72 U	2.72 U	2.72 U	2.72 U
1,1-Dichloroethane		2.02 U	2.02 U	4.39 U	2.02 U	2.02 U	2.02 U	2.02 U	2.02 U
1,1-Dichloroethene		1.98 U	1.98 U	4.3 U	1.98 U	1.98 U	1.98 U	1.98 U	1.98 U
1,2,4-Trichlorbenzene		3.71 U	3.71 U	8.04 U	3.71 U	**6.07**	3.71 U	3.71 U	3.71 U
1,2,4-Trimethylbenzene		2.46 U	**4.35**	**13.2**	**2.57**	**6.97**	**3.93**	**7.07**	**8.22**
1,2-Dibromoethane		3.84 U	3.84 U	8.33 U	3.84 U	3.84 U	3.84 U	3.84 U	3.84 U
1,2-Dichlorobenzene		3 U	3 U	6.52 U	3 U	3 U	3 U	3 U	3 U
1,2-Dichloroethane		2.02 U	2.02 U	4.39 U	2.02 U	2.02 U	2.02 U	2.02 U	2.02 U
1,2-Dichloropropane		2.31 U	2.31 U	5.01 U	2.31 U	2.31 U	2.31 U	2.31 U	2.31 U
1,3,5-Trimethybenzene		2.46 U	2.46 U	5.33 U	2.46 U	2.46 U	2.46 U	2.46 U	2.46 U
1,3-Butadiene		1.1 U	1.1 U	2.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,3-Dichlorobenzene		3 U	3 U	6.52 U	3 U	3 U	3 U	3 U	3 U
1,4-Dichlorobenzene		3 U	3 U	6.52 U	3 U	3 U	3 U	3 U	3 U
1,4-Dioxane		3.6 U	3.6 U	7.81 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
2,2,4-Trimethylpentane		2.33 U	2.33 U	5.06 U	2.33 U	2.33 U	2.33 U	2.33 U	2.33 U
2-Butanone		1.47 U	**5.42**	3.2 U	**5.23**	1.47 U	**19.6**	**3.42**	**3.23**
2-Hexanone		2.05 U	2.05 U	4.44 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
3-Chloropropene		1.56 U	1.56 U	3.39 U	1.56 U	1.56 U	1.56 U	1.56 U	1.56 U
4-Ethyltoluene		2.46 U	2.46 U	5.33 U	2.46 U	2.46 U	2.46 U	2.46 U	2.46 U
4-Methyl-2-pentanone		2.05 U	2.05 U	4.44 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
Acetone		**22.3**	**13.5**	**28.9**	**16.7**	**15.1**	**30**	**24.3**	**29.2**
Benzene		1.6 U	1.6 U	3.46 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Benzyl chloride		2.59 U	2.59 U	5.61 U	2.59 U	2.59 U	2.59 U	2.59 U	2.59 U
Bromodichloromethane		3.35 U	3.35 U	7.26 U	3.35 U	3.35 U	3.35 U	3.35 U	3.35 U
Bromoform		5.16 U	5.16 U	11.2 U	5.16 U	5.16 U	5.16 U	5.16 U	5.16 U
Bromomethane		1.94 U	1.94 U	4.21 U	1.94 U	1.94 U	1.94 U	1.94 U	1.94 U
Carbon disulfide		**3.54**	**5.15**	**6.77**	**3.78**	**23.3**	**3.82**	**10.2**	**7.36**
Carbon tetrachloride		3.14 U	3.14 U	6.82 U	3.14 U	3.14 U	3.14 U	3.14 U	3.14 U
Chlorobenzene		2.3 U	2.3 U	4.99 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Chloroethane		1.32 U	1.32 U	2.86 U	1.32 U	1.32 U	1.32 U	1.32 U	1.32 U
Chloroform		2.44 U	2.44 U	5.29 U	2.44 U	2.44 U	2.44 U	2.44 U	2.44 U
Chloromethane		**1.21**	**1.09**	2.24 U	**1.19**	1.03 U	1.03 U	1.03 U	1.03 U
cis-1,2-Dichloroethene		1.98 U	1.98 U	4.3 U	1.98 U	1.98 U	1.98 U	1.98 U	1.98 U
cis-1,3-Dichloropropene		2.27 U	2.27 U	4.92 U	2.27 U	2.27 U	2.27 U	2.27 U	2.27 U
Cyclohexane		1.72 U	1.72 U	3.73 U	1.72 U	1.72 U	1.72 U	1.72 U	1.72 U
Dibromochloromethane		4.26 U	4.26 U	9.24 U	4.26 U	4.26 U	4.26 U	4.26 U	4.26 U
Dichlorodifluoromethane		4.94 U	4.94 U	10.7 U	4.94 U	4.94 U	4.94 U	4.94 U	4.94 U
Ethanol		**4.03**	**6.57**	**92.4**	**5.49**	**15.6**	**9.91**	**13.7**	**91.1**

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m^3)	Sample Designation: / Sample Date:	OUTSIDE AIR 5/3/2007	SV-1 (AA) 5/3/2007	SV-1 (SS) 5/3/2007	SV-2 (AA) 5/3/2007	SV-2 (SS) 5/3/2007	SV-3 (AA) 5/3/2007	SV-3 (SS) 5/3/2007	SV-4 (SS) 5/3/2007
Ethyl Acetate		1.8 U	1.8 U	3.91 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Ethylbenzene		2.17 U	2.17 U	4.71 U	2.17 U	**2.8**	2.17 U	**2.78**	**2.64**
Freon-113		3.83 U	3.83 U	8.31 U	3.83 U	3.83 U	3.83 U	3.83 U	3.83 U
Freon-114		3.49 U	3.49 U	7.58 U	3.49 U	3.49 U	3.49 U	3.49 U	3.49 U
Hexachlorobutadiene		5.33 U	5.33 U	11.6 U	5.33 U	5.33 U	5.33 U	5.33 U	5.33 U
m+p-Xylene		4.34 U	**6.27**	**14.9**	4.34 U	**10.2**	**6.69**	**9.97**	**9.64**
Isopropanol		1.23 U	1.23 U	**8.68**	**1.3**	**10.6**	1.23 U	**9.15**	**3.98**
Methyl tert butyl ether		1.8 U	1.8 U	**26.8**	1.8 U	**39.5**	1.8 U	**37.8**	**13.7**
Methylene chloride		**101 D**	**14.4**	**16.3**	**65.6**	**8.55**	**28**	**69.2**	**36.3**
n-Heptane		2.05 U	2.05 U	4.44 U	2.05 U	**3.87**	**2.34**	**3.07**	2.05 U
n-Hexane		3.52 U	3.52 U	7.64 U	3.52 U	3.52 U	3.52 U	3.52 U	3.52 U
o-Xylene		2.17 U	**2.4**	**6.38**	2.17 U	**4.42**	**2.58**	**4.48**	**4.41**
Propylene		1.72 U	1.72 U	3.73 U	1.72 U	**5.04**	1.72 U	1.72 U	1.72 U
Styrene		2.13 U	2.13 U	4.62 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
tert-Butyl alcohol		NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene		3.39 U	3.39 U	7.35 U	3.39 U	3.39 U	3.39 U	3.39 U	3.39 U
Tetrahydrofuran		1.47 U	1.47 U	3.2 U	1.47 U	**2.61**	1.47 U	**2.89**	**3.3**
Toluene		**2.33**	**8.29**	**11.1**	**7.5**	**10.3**	**17.1**	**12.8**	**6.9**
trans-1,2-Dichloroethene		1.98 U	1.98 U	4.3 U	1.98 U	1.98 U	1.98 U	1.98 U	1.98 U
trans-1,3-Dichloropropene		2.27 U	2.27 U	4.92 U	2.27 U	2.27 U	2.27 U	2.27 U	2.27 U
Trichloroethene		2.68 U	2.68 U	5.82 U	2.68 U	2.68 U	2.68 U	2.68 U	2.68 U
Trichlorofluoromethane		2.81 U	2.81 U	6.09 U	2.81 U	2.81 U	2.81 U	2.81 U	2.81 U
Vinyl acetate		1.76 U	1.76 U	3.82 U	1.76 U	1.76 U	1.76 U	1.76 U	1.76 U
Vinyl bromide		2.18 U	2.18 U	4.74 U	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U
Vinyl chloride		1.28 U	1.28 U	2.77 U	1.28 U	1.28 U	1.28 U	1.28 U	1.28 U

μg/m^3 - Micrograms per cubic meter
U - Indicates that the compound was analyzed for but not detected
D - Sample required re-analysis on dilution for compound that exceeded calibration on initial analysis
ND - Sample was analyzed for but not detected, reporting limits were not available
NA - Compound was not tested for by laboratory
Bold data indicates that parameter was detected

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m^3)	**Sample Designation:** / **Sample Date:**	SS-1 3/16/2009 Sub-Slab	SV-1 3/16/2009 Indoor	SV-2 3/16/2009 Indoor	SS-2 3/17/2009 Sub-Slab	Ambient 3/16/2009 Outside	C241108A-BA-4542-20100318 3/18/2010 Property D
1,1,1-Trichloroethane		0.59 U	1.2 U	1.2 U	**3.4**	0.59 U	ND
1,1,2,2-Tetrachloroethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,1,2-Trichloroethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,1-Dichloroethane		0.59 U	1.2 U	1.2 U	**1.5**	0.59 U	ND
1,1-Dichloroethene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,2,4-Trichlorbenzene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,2,4-Trimethylbenzene		**5.6**	**4.6**	**4**	**11**	**2.6**	**5.6**
1,2-Dibromoethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	ND
1,2-Dichloroethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,2-Dichloropropane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,3,5-Trimethybenzene		**1.7**	**1.6**	**1.4**	**3.6**	**0.88**	**2.1**
1,3-Butadiene		**1**	1.2 U	1.2 U	0.76 U	**0.96**	NA
1,3-Dichlorobenzene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	**2.6**
1,4-Dioxane		0.59 U	1.2 U	1.2 U	**1**	0.59 U	ND
2,2,4-Trimethylpentane		NA	NA	NA	NA	NA	**2.5**
2-Butanone		**7.5**	**6.4**	**6.7**	**20**	**3.7**	**4**
2-Hexanone		0.59 U	1.2 U	1.2 U	**3.7**	0.59 U	NA
3-Chloropropene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	NA
4-Ethyltoluene		**1.8**	**1.6**	**1.4**	**3**	**0.91**	NA
4-Methyl-2-pentanone		**0.91**	1.2 U	1.2 U	**3.2**	**1**	**0.86**
Acetone		**41**	**45**	**33**	**230**	**27**	NA
Benzene		**7.1**	**6.2**	**6.2**	**1.7**	**5.1**	**2.8**
Benzyl chloride		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Bromodichloromethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Bromoform		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Bromomethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Carbon disulfide		**3.9**	**5.5**	**3.6**	**13**	0.59 U	NA
Carbon tetrachloride		**0.52**	**0.51**	**0.55**	**0.28**	**0.49**	**0.46**
Chlorobenzene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Chloroethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Chloroform		**3.7**	**3.4**	**3.7**	**11**	0.59 U	**0.72**
Chloromethane		**0.8**	1.2 U	1.2 U	0.76 U	**0.75**	**1.1**
cis-1,2-Dichloroethene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
cis-1,3-Dichloropropene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Cyclohexane		**2.9**	**2.5**	**2.5**	0.76 U	**1.3**	**1.5**
Dibromochloromethane		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Dichlorodifluoromethane		**3.1**	**2.6**	**2.6**	**3.4**	**3.1**	**2.7**
Ethanol		**1400**	**2600**	**2500**	**23**	**77**	**40**

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/m³)	Sample Designation: Sample Date:	SS-1 3/16/2009 Sub-Slab	SV-1 3/16/2009 Indoor	SV-2 3/16/2009 Indoor	SS-2 3/17/2009 Sub-Slab	Ambient 3/16/2009 Outside	C241108A-BA-4542-20100318 3/18/2010 Property D
Ethyl Acetate		**26**	**53**	**37**	**0.98**	**1.7**	NA
Ethylbenzene		**3.3**	**2.8**	**2.7**	**3.2**	**2.9**	**2.7**
Freon-113		NA	NA	NA	NA	NA	ND
Freon-114		NA	NA	NA	NA	NA	ND
Hexachlorobutadiene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
m+p-Xylene		**11**	**9.2**	**8.8**	**11**	**9.4**	**9.6**
Isopropanol		**15**	**13**	**14**	**4**	**9.3**	NA
Methyl tert butyl ether		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Methylene chloride		**2.4**	**2.5**	**2.6**	**2**	**1.8**	**4.2**
n-Heptane		**4.3**	**3.9**	**4.1**	**2.5**	**2.3**	NA
n-Hexane		**8.7**	**7.2**	**7.1**	**1.7**	**4.3**	**4.6**
o-Xylene		**3.9**	**3.3**	**3.1**	**4**	**2.9**	**3.3**
Propylene		**7.3**	**16**	**5.3**	**2.2**	**6.7**	NA
Styrene		**0.77**	1.2 U	1.2 U	0.76 U	**1**	**0.47**
tert-Butyl alcohol		NA	NA	NA	NA	NA	**12**
Tetrachloroethene		**6.1**	**5.2**	**7.3**	**8.9**	**12**	**6**
Tetrahydrofuran		**0.84**	1.2 U	1.2 U	0.76 U	0.59 U	NA
Toluene		**24**	**19**	**19**	**8.8**	**20**	**18**
trans-1,2-Dichloroethene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
trans-1,3-Dichloropropene		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND
Trichloroethene		**1.8**	**1.7**	**1.8**	**0.54**	**2.5**	**0.52**
Trichlorofluoromethane		**1.8**	**1.5**	**1.5**	**1.7**	**1.7**	**2.1**
Vinyl acetate		5.9 U	12 U	12 U	7.6 U	5.9 U	NA
Vinyl bromide		NA	NA	NA	NA	NA	NA
Vinyl chloride		0.59 U	1.2 U	1.2 U	0.76 U	0.59 U	ND

µg/m³ - Micrograms per cubic meter
U - Indicates that the compound was analyzed for but not detected
D - Sample required re-analysis on dilution for compound that exceeded calibration on initial analysis
ND - Sample was analyzed for but not detected, reporting limits were not available
NA - Compound was not tested for by laboratory
Bold data indicates that parameter was detected

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m^3)	Sample Designation: / Sample Date:	C241108A-IA-4524-20100318 3/18/2010 Property B	C241108A-IA-4528-20100318 3/18/2010 Property C	C241108A-IA-4542-20100318 3/18/2010 Property D
1,1,1-Trichloroethane		ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND
1,1-Dichloroethane		ND	ND	ND
1,1-Dichloroethene		ND	ND	ND
1,2,4-Trichlorbenzene		ND	ND	ND
1,2,4-Trimethylbenzene		**4.6**	**21**	**5**
1,2-Dibromoethane		ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND
1,2-Dichloroethane		ND	ND	ND
1,2-Dichloropropane		ND	ND	ND
1,3,5-Trimethybenzene		ND	**6.3**	**1.6**
1,3-Butadiene		NA	NA	NA
1,3-Dichlorobenzene		ND	ND	ND
1,4-Dichlorobenzene		ND	**2.8**	**3.1**
1,4-Dioxane		ND	ND	ND
2,2,4-Trimethylpentane		ND	**22**	**3.5**
2-Butanone		**120**	**7**	**5.2**
2-Hexanone		NA	NA	NA
3-Chloropropene		NA	NA	NA
4-Ethyltoluene		NA	NA	NA
4-Methyl-2-pentanone		ND	**2.1**	**1.8**
Acetone		NA	NA	NA
Benzene		**3.2**	**19**	**4.1**
Benzyl chloride		ND	ND	ND
Bromodichloromethane		ND	ND	ND
Bromoform		ND	ND	ND
Bromomethane		ND	ND	ND
Carbon disulfide		NA	NA	NA
Carbon tetrachloride		ND	**0.58**	**0.46**
Chlorobenzene		ND	ND	ND
Chloroethane		ND	ND	ND
Chloroform		ND	**3.4**	**1.1**
Chloromethane		ND	ND	**1.4**
cis-1,2-Dichloroethene		ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND
Cyclohexane		ND	**8.1**	**2.2**
Dibromochloromethane		ND	ND	ND
Dichlorodifluoromethane		ND	**2.4**	**2.9**
Ethanol		**170**	**960**	**200**

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in $\mu g/m^3$)	Sample Designation: / Sample Date:	C241108A-IA-4524-20100318 3/18/2010 Property B	C241108A-IA-4528-20100318 3/18/2010 Property C	C241108A-IA-4542-20100318 3/18/2010 Property D
Ethyl Acetate		NA	NA	NA
Ethylbenzene		**6.7**	**15**	**4.4**
Freon-113		ND	**0.62**	ND
Freon-114		ND	ND	ND
Hexachlorobutadiene		ND	ND	ND
m+p-Xylene		**23**	**54**	**15**
Isopropanol		NA	NA	NA
Methyl tert butyl ether		ND	ND	ND
Methylene chloride		**4000**	**8.2**	**4.4**
n-Heptane		NA	NA	NA
n-Hexane		ND	**24**	**5.9**
o-Xylene		**5.2**	**17**	**4.2**
Propylene		NA	NA	NA
Styrene		**12**	**2.2**	**0.87**
tert-Butyl alcohol		ND	ND	ND
Tetrachloroethene		ND	**5.5**	**5.7**
Tetrahydrofuran		NA	NA	NA
Toluene		**790**	**120**	**29**
trans-1,2-Dichloroethene		ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND
Trichloroethene		ND	**0.45**	**0.55**
Trichlorofluoromethane		ND	**2.3**	**2.6**
Vinyl acetate		NA	NA	NA
Vinyl bromide		NA	NA	NA
Vinyl chloride		ND	ND	ND

$\mu g/m^3$ - Micrograms per cubic meter
U - Indicates that the compound was analyzed for but not detected
D - Sample required re-analysis on dilution for compound that exceeded calibration on initial analysis
ND - Sample was analyzed for but not detected, reporting limits were not available
NA - Compound was not tested for by laboratory
Bold data indicates that parameter was detected

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/m^3)	Sample Designation: Sample Date:	C241108A-IA-537-20100318 3/18/2010 Property A	C241108A-OA-4542-20100318 3/18/2010 Property D	C241108A-OA-537-20100318 3/18/2010 Property A
1,1,1-Trichloroethane		ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND
1,1-Dichloroethane		ND	ND	ND
1,1-Dichloroethene		ND	ND	ND
1,2,4-Trichlorbenzene		ND	ND	ND
1,2,4-Trimethylbenzene		**6.5**	**5.4**	ND
1,2-Dibromoethane		ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND
1,2-Dichloroethane		ND	ND	ND
1,2-Dichloropropane		ND	ND	ND
1,3,5-Trimethybenzene		**1.9**	**1.7**	ND
1,3-Butadiene		NA	NA	NA
1,3-Dichlorobenzene		ND	ND	ND
1,4-Dichlorobenzene		**1.4**	**2.9**	ND
1,4-Dioxane		ND	ND	ND
2,2,4-Trimethylpentane		**7.9**	**3.2**	**2.5**
2-Butanone		**4.3**	**3.9**	**3.8**
2-Hexanone		NA	NA	NA
3-Chloropropene		NA	NA	NA
4-Ethyltoluene		NA	NA	NA
4-Methyl-2-pentanone		**3.1**	**1.2**	**1.2**
Acetone		NA	NA	NA
Benzene		**6.4**	**3.8**	**2.9**
Benzyl chloride		ND	ND	ND
Bromodichloromethane		ND	ND	ND
Bromoform		ND	ND	ND
Bromomethane		ND	ND	ND
Carbon disulfide		NA	NA	NA
Carbon tetrachloride		**0.41**	**0.43**	**0.42**
Chlorobenzene		ND	ND	ND
Chloroethane		ND	ND	ND
Chloroform		**0.49**	**0.46**	**0.4**
Chloromethane		**1.3**	**1.3**	**1.2**
cis-1,2-Dichloroethene		ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND
Cyclohexane		**3**	**2**	**1.9**
Dibromochloromethane		ND	ND	ND
Dichlorodifluoromethane		**2.5**	**2.7**	**2.6**
Ethanol		**76**	**87**	**62**

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m³)	Sample Designation: / Sample Date:	C241108A-IA-537-20100318 3/18/2010 Property A	C241108A-OA-4542-20100318 3/18/2010 Property D	C241108A-OA-537-20100318 3/18/2010 Property A
Ethyl Acetate		NA	NA	NA
Ethylbenzene		**5.3**	**4.3**	**2.4**
Freon-113		ND	ND	ND
Freon-114		ND	ND	ND
Hexachlorobutadiene		ND	ND	ND
m+p-Xylene		**19**	**15**	**6.2**
Isopropanol		NA	NA	NA
Methyl tert butyl ether		ND	ND	ND
Methylene chloride		**4.2**	**3.8**	**5.6**
n-Heptane		NA	NA	NA
n-Hexane		**8.6**	**5.1**	**4.2**
o-Xylene		**5.9**	**4.2**	**1.4**
Propylene		NA	NA	NA
Styrene		**0.82**	**0.73**	ND
tert-Butyl alcohol		ND	ND	ND
Tetrachloroethene		**3.3**	**6**	**4.3**
Tetrahydrofuran		NA	NA	NA
Toluene		**52**	**27**	**20**
trans-1,2-Dichloroethene		ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND
Trichloroethene		**0.27**	**0.53**	**0.43**
Trichlorofluoromethane		**2**	**2.1**	**2**
Vinyl acetate		NA	NA	NA
Vinyl bromide		NA	NA	NA
Vinyl chloride		ND	ND	ND

μg/m³ - Micrograms per cubic meter
U - Indicates that the compound was analyzed for but not detected
D - Sample required re-analysis on dilution for compound that exceeded calibration on initial analysis
ND - Sample was analyzed for but not detected, reporting limits were not available
NA - Compound was not tested for by laboratory
Bold data indicates that parameter was detected

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m^3)	Sample Designation:	C241108A-SSA-4524-20100318	C241108A-SSA-4528-20100318	C241108A-SSA-4542-20100318
	Sample Date:	3/18/2010	3/18/2010	3/18/2010
		Property B	Property C	Property D
1,1,1-Trichloroethane		ND	**1.5**	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND
1,1-Dichloroethane		ND	ND	ND
1,1-Dichloroethene		ND	ND	**0.49**
1,2,4-Trichlorbenzene		ND	ND	ND
1,2,4-Trimethylbenzene		**14**	**26**	**29**
1,2-Dibromoethane		ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND
1,2-Dichloroethane		ND	ND	ND
1,2-Dichloropropane		ND	ND	ND
1,3,5-Trimethybenzene		ND	**7.1**	**7.8**
1,3-Butadiene		NA	NA	NA
1,3-Dichlorobenzene		ND	ND	ND
1,4-Dichlorobenzene		ND	**4.4**	**7.6**
1,4-Dioxane		ND	ND	ND
2,2,4-Trimethylpentane		ND	**10**	**1.6**
2-Butanone		ND	**13**	**4**
2-Hexanone		NA	NA	NA
3-Chloropropene		NA	NA	NA
4-Ethyltoluene		NA	NA	NA
4-Methyl-2-pentanone		ND	**1.9**	ND
Acetone		NA	NA	NA
Benzene		**3.7**	**10**	**4.9**
Benzyl chloride		ND	ND	ND
Bromodichloromethane		ND	ND	ND
Bromoform		ND	ND	ND
Bromomethane		ND	ND	ND
Carbon disulfide		NA	NA	NA
Carbon tetrachloride		ND	**0.46**	**1.5**
Chlorobenzene		ND	ND	ND
Chloroethane		ND	ND	ND
Chloroform		ND	**2.4**	**13**
Chloromethane		ND	ND	**0.85**
cis-1,2-Dichloroethene		ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND
Cyclohexane		ND	**6.7**	**6.4**
Dibromochloromethane		ND	ND	ND
Dichlorodifluoromethane		ND	ND	**2.6**
Ethanol		**19**	**630**	**3.9**

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/m³)	Sample Designation: Sample Date:	C241108A-SSA-4524-20100318 3/18/2010 Property B	C241108A-SSA-4528-20100318 3/18/2010 Property C	C241108A-SSA-4542-20100318 3/18/2010 Property D
Ethyl Acetate		NA	NA	NA
Ethylbenzene		**10**	**19**	**21**
Freon-113		ND	ND	ND
Freon-114		ND	ND	ND
Hexachlorobutadiene		ND	ND	ND
m+p-Xylene		**43**	**72**	**79**
Isopropanol		NA	NA	NA
Methyl tert butyl ether		ND	ND	ND
Methylene chloride		**330**	**3.6**	**0.84**
n-Heptane		NA	NA	NA
n-Hexane		**12**	**12**	**6.1**
o-Xylene		**13**	**23**	**26**
Propylene		NA	NA	NA
Styrene		ND	**2.5**	**2.1**
tert-Butyl alcohol		ND	ND	**4.2**
Tetrachloroethene		**5.6**	**8.9**	**3.5**
Tetrahydrofuran		NA	NA	NA
Toluene		**84**	**97**	**66**
trans-1,2-Dichloroethene		ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND
Trichloroethene		ND	**0.31**	**12**
Trichlorofluoromethane		ND	**1.2**	**1.9**
Vinyl acetate		NA	NA	NA
Vinyl bromide		NA	NA	NA
Vinyl chloride		ND	ND	ND

µg/m³ - Micrograms per cubic meter
U - Indicates that the compound was analyzed for but not detected
D - Sample required re-analysis on dilution for compound that exceeded calibration on initial analysis
ND - Sample was analyzed for but not detected, reporting limits were not available
NA - Compound was not tested for by laboratory
Bold data indicates that parameter was detected

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m^3)	**Sample Designation:** C241108A-SSA-537-20100318 / **Sample Date:** 3/18/2010 / Property A
1,1,1-Trichloroethane	ND
1,1,2,2-Tetrachloroethane	ND
1,1,2-Trichloroethane	ND
1,1-Dichloroethane	ND
1,1-Dichloroethene	ND
1,2,4-Trichlorbenzene	ND
1,2,4-Trimethylbenzene	**20**
1,2-Dibromoethane	ND
1,2-Dichlorobenzene	ND
1,2-Dichloroethane	ND
1,2-Dichloropropane	ND
1,3,5-Trimethybenzene	**5**
1,3-Butadiene	NA
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	**4.8**
1,4-Dioxane	ND
2,2,4-Trimethylpentane	**1.1**
2-Butanone	**3.9**
2-Hexanone	NA
3-Chloropropene	NA
4-Ethyltoluene	NA
4-Methyl-2-pentanone	ND
Acetone	NA
Benzene	**2.7**
Benzyl chloride	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon disulfide	NA
Carbon tetrachloride	**0.28**
Chlorobenzene	ND
Chloroethane	ND
Chloroform	**0.86**
Chloromethane	ND
cis-1,2-Dichloroethene	ND
cis-1,3-Dichloropropene	ND
Cyclohexane	**3.8**
Dibromochloromethane	ND
Dichlorodifluoromethane	**2.4**
Ethanol	**6.7**

Table 15. Summary of Soil Vapor Sampling, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/m³)	Sample Designation: Sample Date:	C241108A-SSA-537-20100318 3/18/2010 Property A
Ethyl Acetate		NA
Ethylbenzene		**13**
Freon-113		ND
Freon-114		ND
Hexachlorobutadiene		ND
m+p-Xylene		**54**
Isopropanol		NA
Methyl tert butyl ether		ND
Methylene chloride		**1.1**
n-Heptane		NA
n-Hexane		**4**
o-Xylene		**17**
Propylene		NA
Styrene		**1.2**
tert-Butyl alcohol		**1.4**
Tetrachloroethene		**3.2**
Tetrahydrofuran		NA
Toluene		**44**
trans-1,2-Dichloroethene		ND
trans-1,3-Dichloropropene		ND
Trichloroethene		ND
Trichlorofluoromethane		**1.9**
Vinyl acetate		NA
Vinyl bromide		NA
Vinyl chloride		ND

μg/m³ - Micrograms per cubic meter
U - Indicates that the compound was analyzed for but not detected
D - Sample required re-analysis on dilution for compound that exceeded calibration on initial analysis
ND - Sample was analyzed for but not detected, reporting limits were not available
NA - Compound was not tested for by laboratory
Bold data indicates that parameter was detected

Table 16. Summary of UST Inventory, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Tank ID	Reported Capacity (g)	DTP (ft)	DTW (ft)	DTB (ft)	LNAPL Thickness (ft)	Estimated LNAPL Volume[1] (g)	Comments
CT-1	20000	4.48	4.82	10	0.34	680	Sample collected for fingerprinting
CT-2	20000	ND	8.39	10.72	0	0	Only water was detected
CT-3	20000	ND	6.61	10.55	0	0	Only water was detected
CT-4	20000	5.35	5.4	8.6	0.05	116	Sample collected for fingerprinting
CT-5	20000	ND	7.15	10.7	0	0	Only water was detected
CT-6	20000	ND	5.5	NA	0	0	Only water was detected
CT-7	20000	NA	NA	NA	NA	NA	Could not access UST through vault
CT-8	10000	NA	NA	NA	0	0	Appears to be a pipe vault not a UST
CT-9	10000	ND	2.91	10.5	0	0	Only water was detected
GT-1	20000	8.25	8.25	10	0	0	Sample collected for fingerprinting (determined to be aqueous)
GT-2	NA	5.2	ND	10	4.8	NA	Sample collected for fingerprinting
GT-3	NA	ND	ND	10	0	0	UST empty
GT-4	NA	ND	ND	10	0	0	UST empty
GT-5	NA	ND	ND	10	0	0	UST empty
GT-6	NA	7.2	ND	10	2.8	NA	Sample collected for fingerprinting
GT-7	NA	ND	7.62	10.08	0	0	Only water was detected
GT-8	NA	6.5	ND	10	3.5	NA	Sample collected for fingerprinting
GT-9	NA	ND	6.21	10.21	0	0	Only water was detected
GT-10	NA	7.45	ND	10	2.55	NA	Sample collected for fingerprinting
GT-11	NA	10.00	ND	10.01	0.01	NA	Sample collected for fingerprinting (determined to be aqueous)

Notes:
UST - underground storage tank
DTP - depth to product
DTW - depth to water
DTB - depth to tank bottom
ft - feet
g - Gallons
LNAPL - Light non-aqueous phase liquid
ND - Non detected
NA - not available
1 - Based on reported capacity (where available)

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-5	B-6	B-6	B-6	B-7
				Sample Date:	12/31/2013	1/17/2014	1/17/2014	1/17/2014	12/30/2013
				Sample Depth (ft bls):	10 - 12	7 - 9	12 - 14	16 - 18	0 - 2
2-Butanone (MEK)	120	100000	120		--	--	--	--	--
Acetone	50	100000	50		--	--	--	--	**1200 D**
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		**8900 D**	--	**11000 D**	**26000 D**	--
Isopropylbenzene	--	--	2300*		11000 D	--	38000 D	76000 D	--
Methylene chloride	50	100000	50		--	--	--	--	--
Xylenes (total)	260	100000	1600		**11800 D**	**840 JD**	**32000 D**	**77000 D**	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-7 12/30/2013 5 - 7	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-9 12/16/2013 0 - 2
2-Butanone (MEK)	120	100000	120		--	--	--	--	--
Acetone	50	100000	50		**240 D**	**--**	**90**	**90**	**86**
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		--	--	--	--	--
Isopropylbenzene	--	--	2300*		--	9900 D	--	--	--
Methylene chloride	50	100000	50		--	--	--	--	--
Xylenes (total)	260	100000	1600		--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-10	B-11	B-13	B-15	B-19
				Sample Date:	12/20/2013	1/6/2014	1/15/2014	1/10/2014	12/17/2013
				Sample Depth (ft bls):	10 - 12	11 - 13	16 - 18	7 - 9	8 - 10
2-Butanone (MEK)	120	100000	120		--	--	**1900 JD**	--	--
Acetone	50	100000	50		--	--	**4800 JD**	--	--
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		**5800 D**	--	--	--	--
Isopropylbenzene	--	--	2300*		9200 D	3200 D	6000 D	3200 D	--
Methylene chloride	50	100000	50		--	--	--	--	--
Xylenes (total)	260	100000	1600		**22000 D**	--	--	--	**1100 JD**

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-21	B-21	B-22	B-22 DUP	B-22
				Sample Date:	12/17/2013	12/17/2013	1/13/2014	1/13/2014	1/13/2014
				Sample Depth (ft bls):	5 - 7	7 - 8	0 - 2	0 - 2	4 - 6
2-Butanone (MEK)	120	100000	120		--	--	--	--	--
Acetone	50	100000	50		--	--	**130**	**80**	**--**
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		--	--	--	--	--
Isopropylbenzene	--	--	2300*		--	2700 D	--	--	17000 D
Methylene chloride	50	100000	50		**300 JD**	**1400 JD**	--	--	--
Xylenes (total)	260	100000	1600		**2300 D**	**660 JD**	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	Sample Designation:	B-23	B-23	B-24	B-24	B-25
				Sample Date:	1/13/2014	1/13/2014	1/14/2014	1/14/2014	1/14/2014
				Sample Depth (ft bls):	0 - 2	2 - 4	0 - 2	2 - 4	0 - 2
2-Butanone (MEK)	120	100000	120		**220 JD**	**660 JD**	--	--	--
Acetone	50	100000	50		**240 JD**	--	--	--	--
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		--	--	--	--	--
Isopropylbenzene	--	--	2300*		--	4600 D	--	5800 D	7200 D
Methylene chloride	50	100000	50		--	--	--	--	--
Xylenes (total)	260	100000	1600		--	--	**320 D**	**--**	**--**

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
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V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in μg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:**	B-25	B-26	B-26	B-27	MW-1/1R
				Sample Date:	1/14/2014	1/14/2014	1/14/2014	1/14/2014	12/16/2013
				Sample Depth (ft bls):	2 - 4	0 - 2	4 - 6	4 - 6	6 - 8
2-Butanone (MEK)	120	100000	120		--	--	--	--	--
Acetone	50	100000	50		--	--	--	--	--
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		--	--	--	--	--
Isopropylbenzene	--	--	2300*		5600 D	8100 D	5600 D	9500 D	3400 D
Methylene chloride	50	100000	50		--	--	--	--	--
Xylenes (total)	260	100000	1600		**--**	**--**	**--**	**--**	**--**

J - Estimated value
DUP - Duplicate sample
μg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8	MW-2/2R 12/16/2013 14 - 15
2-Butanone (MEK)	120	100000	120		--	--	--	--
Acetone	50	100000	50		**78**	**120**	**88**	--
Benzene	60	4800	60		--	--	--	**130 D**
Ethylbenzene	1000	41000	1000		--	--	--	**1200 D**
Isopropylbenzene	--	--	2300*		--	--	--	3500 D
Methylene chloride	50	100000	50		--	--	--	--
Xylenes (total)	260	100000	1600		--	--	--	**2100 D**

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-6/6R 1/17/2014 9 - 11	MW-6/6R 1/17/2014 11 - 12	MW-6/6R 1/17/2014 15 - 17	MW-6/6R DUP 1/17/2014 15 - 17
2-Butanone (MEK)	120	100000	120		--	--	--	--
Acetone	50	100000	50		**410 JD**	--	--	--
Benzene	60	4800	60		--	--	--	--
Ethylbenzene	1000	41000	1000		**1700 D**	**31000 D**	**21000 JVD**	**10000 JVD**
Isopropylbenzene	--	--	2300*		5200 D	78000 D	57000 JVD	30000 JVD
Methylene chloride	50	100000	50		--	--	--	--
Xylenes (total)	260	100000	1600		**2900 D**	**60000 D**	**38000 JVD**	**18000 JVD**

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
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Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	MW-17 1/2/2014 12 - 13	MW-19 1/14/2014 4 - 6	MW-20 1/15/2014 12 - 14	MW-20 DUP 1/15/2014 12 - 14	MW-20 1/15/2014 18 - 19
2-Butanone (MEK)	120	100000	120		--	--	--	**2100 JD**	**1700 JD**
Acetone	50	100000	50		**94 D**	--	--	**4500 JD**	**4600 JD**
Benzene	60	4800	60		--	--	--	--	--
Ethylbenzene	1000	41000	1000		--	**3300 D**	--	--	--
Isopropylbenzene	--	--	2300*		--	17000 D	4100 D	5500 D	3700 D
Methylene chloride	50	100000	50		--	--	--	--	--
Xylenes (total)	260	100000	1600		--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 17. Summary of Exceedances of Volatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Protection of Groundwater	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	MW-23 12/31/2013 5 - 7	MW-23 12/31/2013 10 - 12
2-Butanone (MEK)	120	100000	120		--	--
Acetone	50	100000	50		**110 D**	--
Benzene	60	4800	60		--	--
Ethylbenzene	1000	41000	1000		--	**9400 D**
Isopropylbenzene	--	--	2300*		--	14000 D
Methylene chloride	50	100000	50		--	--
Xylenes (total)	260	100000	1600		--	**8800 JD**

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
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Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
Boxed data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
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Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	B-5 12/31/2013 3 - 5	B-6 1/17/2014 7 - 9	B-6 1/17/2014 12 - 14	B-6 1/17/2014 16 - 18	B-7 12/30/2013 0 - 2	B-7 12/30/2013 5 - 7	B-8 12/30/2013 0 - 2
Benzo[a]anthracene	1000	1000		**18000 D**	--	--	--	**4600 D**	**7900 D**	**2500**
Benzo[a]pyrene	1000	1000		**14000 D**	**1200 JD**	--	--	**4300 D**	**7300 D**	**2500**
Benzo[b]fluoranthene	1000	1000		**17000 D**	**1600 D**	--	--	**5400 D**	**9300 D**	**3200**
Benzo[k]fluoranthene	800	3900		**7500 D**	--	--	--	**2200 D**	**4000 D**	**1200**
Chrysene	1000	3900		**18000 D**	--	--	--	**4900 D**	**8400 D**	**2600**
Dibenzo[a,h]anthracene	330	330		**2100 D**	--	--	--	**680 D**	**1200 D**	**410**
Dibenzofuran	7000	59000		--	--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		**6900 D**	**1200 JD**	--	--	**2500 D**	**4500 D**	**1600**
Naphthalene	12000	100000		--	--	**39000 D**	**52000 D**	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-8 12/30/2013 5 - 7	B-8 12/30/2013 9 - 11	B-9 12/16/2013 0 - 2	B-9 12/16/2013 5 - 7	B-9 12/16/2013 7 - 9	B-10 12/20/2013 0 - 2
Benzo[a]anthracene	1000	1000		**1600**	**2400 JD**	**1600 D**	**3000**	**3600 D**	**3000 D**
Benzo[a]pyrene	1000	1000		**1600**	**2300 JD**	**2300 D**	**2900**	**3700 D**	**2600 D**
Benzo[b]fluoranthene	1000	1000		**2100**	**2900 D**	**2600**	**3800**	**4400 D**	**3200 D**
Benzo[k]fluoranthene	800	3900		--	**1200 JD**	--	**1400**	**1700 D**	**1100 D**
Chrysene	1000	3900		**1700**	**2600 D**	**1500**	**3000**	**3900 D**	**3200 D**
Dibenzo[a,h]anthracene	330	330		--	--	--	**550**	**420 D**	**400 D**
Dibenzofuran	7000	59000		--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		**1100**	**1600 JD**	**870 D**	**1600**	**2600 D**	**1500 D**
Naphthalene	12000	100000		--	--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
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D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
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V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-10 12/20/2013 5 - 7	B-10 12/20/2013 10 - 12	B-11 1/2/2014 0 - 2	B-11 1/6/2014 8 - 10	B-14 12/19/2013 0 - 2	B-14 1/15/2014 7 - 9	B-15 12/31/2013 0 - 2
Benzo[a]anthracene	1000	1000		**1600**	--	--	--	**2200**	**1900**	**34000 D**
Benzo[a]pyrene	1000	1000		**1300**	--	--	--	**2100**	**1800**	**35000 D**
Benzo[b]fluoranthene	1000	1000		**1600**	--	**1200**	**1100**	**2400**	**2200**	**44000 D**
Benzo[k]fluoranthene	800	3900		--	--	--	--	**910**	**830**	**17000 D**
Chrysene	1000	3900		**1400**	--	--	**1200**	**2300**	**1900**	**36000 D**
Dibenzo[a,h]anthracene	330	330		--	--	--	--	**370**	--	**5300 D**
Dibenzofuran	7000	59000		--	--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		**800**	--	**780**	**580**	**1300**	**1200**	**22000 D**
Naphthalene	12000	100000		--	**21000 D**	--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
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V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation:	B-15	B-17	B-22	B-22 DUP	B-22	B-24	B-26
			Sample Date:	1/10/2014	1/20/2014	1/13/2014	1/13/2014	1/13/2014	1/14/2014	1/14/2014
			Sample Depth (ft bls):	7 - 9	0 - 2	0 - 2	0 - 2	4 - 6	0 - 2	0 - 2
Benzo[a]anthracene	1000	1000		**5300**	**5600 D**	**1500**	**2100**	**1300 JD**	**1800**	**2600 D**
Benzo[a]pyrene	1000	1000		**5000**	**4900 D**	**1500**	**2300**	--	**1800**	**2100 JD**
Benzo[b]fluoranthene	1000	1000		**6200**	**7200 D**	**1900**	**2800**	**1200 JD**	**2000**	**2800 D**
Benzo[k]fluoranthene	800	3900		**2200**	**2800 D**	--	**1200 JV**	--	--	**1000 JD**
Chrysene	1000	3900		**5700**	**4900 D**	**1700**	**2400**	**1300 JD**	**1900**	**2600 D**
Dibenzo[a,h]anthracene	330	330		**760**	**840 D**	--	**360**	--	--	--
Dibenzofuran	7000	59000		--	--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		**3600**	**2900 D**	**960**	**1400**	--	**940**	**1200 JD**
Naphthalene	12000	100000		--	--	--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
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V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-26 1/14/2014 4 - 6	B-27 1/14/2014 0 - 2	B-27 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5	MW-2/2R 12/16/2013 0 - 2
Benzo[a]anthracene	1000	1000		**1100 JD**	**1700 JD**	**3200 D**	**1500**	**1600**	**2400 D**
Benzo[a]pyrene	1000	1000		--	**1700 JD**	**3000 JD**	**1500**	**1400**	**2400 D**
Benzo[b]fluoranthene	1000	1000		**1200 JD**	**2100 JD**	**3700 D**	**1800**	**1700**	**4100**
Benzo[k]fluoranthene	800	3900		--	--	**1300 JD**	--	--	**1000 D**
Chrysene	1000	3900		--	**1700 JD**	**3400 D**	**1700**	**1700**	**3200 D**
Dibenzo[a,h]anthracene	330	330		--	--	--	--	--	**520**
Dibenzofuran	7000	59000		--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		--	**1000 JD**	**1700 JD**	**990**	**860**	**1600**
Naphthalene	12000	100000		--	--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):	MW-2/2R DUP 12/16/2013 0 - 2	MW-2/2R 12/16/2013 6 - 8	MW-2/2R 12/16/2013 14 - 15	MW-6/6R 12/30/2013 0 - 2	MW-6/6R 1/17/2014 9 - 11	MW-6/6R 1/17/2014 11 - 12
Benzo[a]anthracene	1000	1000		**3500**	**4100**	--	**2000**	**5700 D**	--
Benzo[a]pyrene	1000	1000		**2900**	**3100**	--	**1700**	**4900 D**	--
Benzo[b]fluoranthene	1000	1000		**3600 D**	**3900**	--	**2200**	**6500 D**	--
Benzo[k]fluoranthene	800	3900		**1400 D**	**1600**	--	**950**	**2400 D**	--
Chrysene	1000	3900		**3500**	**4000**	--	**2000**	**5900 D**	--
Dibenzo[a,h]anthracene	330	330		**540**	**490**	--	--	**700 JD**	--
Dibenzofuran	7000	59000		--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		**2100**	**1700**	--	**1100**	**3300 D**	--
Naphthalene	12000	100000		--	--	**18000 D**	--	--	**52000 D**

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375
Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375
Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or
linear range of the instrument
V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	MW-6/6R	MW-6/6R DUP	MW-7/7R	MW-7/7R	MW-14 DUP	MW-14
			Sample Date:	1/17/2014	1/17/2014	12/19/2013	1/14/2014	12/19/2013	1/17/2014
			Sample Depth (ft bls):	15 - 17	15 - 17	0 - 2	2 - 4	0 - 2	7 - 9
Benzo[a]anthracene	1000	1000		--	--	**3200 D**	**1200 JD**	**1900 JV**	**4000 D**
Benzo[a]pyrene	1000	1000		--	--	**2800 JD**	--	**1900 JV**	**3800 D**
Benzo[b]fluoranthene	1000	1000		--	--	**3600 D**	**1300 JD**	**1900 JV**	**4900 D**
Benzo[k]fluoranthene	800	3900		--	--	**1200 JD**	--	**840 JV**	**2000 D**
Chrysene	1000	3900		--	--	**3200 D**	**1200 JD**	**1800 JV**	**4400 D**
Dibenzo[a,h]anthracene	330	330		--	--	--	--	**360 JV**	**630 D**
Dibenzofuran	7000	59000		--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		--	--	**1700 JD**	--	**1100 JV**	**2100 D**
Naphthalene	12000	100000		**16000 D**	**16000 D**	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-15 1/20/2014 0 - 2	MW-15 1/20/2014 6 - 8	MW-16 1/7/2014 0 - 2	MW-16 1/7/2014 5 - 7	MW-16 1/7/2014 10 - 12	MW-17 1/2/2014 0 - 2	MW-17 1/2/2014 5 - 7
Benzo[a]anthracene	1000	1000		**34000 D**	**1200**	**2000**	**3100 D**	**23000 D**	**1800**	--
Benzo[a]pyrene	1000	1000		**35000 D**	**1400**	**2000**	**2800 JD**	**18000 D**	**1900**	--
Benzo[b]fluoranthene	1000	1000		**44000 D**	**1700**	**2900**	**3300 D**	**20000 D**	**2300**	**1100**
Benzo[k]fluoranthene	800	3900		**17000 D**	--	**1000**	**1400 JD**	**8700 D**	**870**	--
Chrysene	1000	3900		**36000 D**	**1400**	**2300**	**3200 D**	**20000 D**	**2000**	--
Dibenzo[a,h]anthracene	330	330		**5300 D**	--	--	--	**2300 D**	--	--
Dibenzofuran	7000	59000		--	--	--	--	**8300 D**	--	--
Indeno[1,2,3-cd]pyrene	500	500		**22000 D**	**930**	**1300**	**2000 JD**	**9000 D**	**1400**	**770**
Naphthalene	12000	100000		--	--	--	--	**15000 D**	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation

Table 18. Summary of Exceedances of Semivolatile Organic Compounds in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):	MW-19 1/14/2014 0 - 2	MW-20 12/19/2013 0 - 2	MW-21 1/6/2014 0 - 2	MW-22 12/19/2013 0 - 2	MW-23 12/31/2013 0 - 2
Benzo[a]anthracene	1000	1000		**5000 D**	**4400 D**	**1300**	**1800 D**	--
Benzo[a]pyrene	1000	1000		**4100 D**	**4200 D**	**1800**	**1800 D**	--
Benzo[b]fluoranthene	1000	1000		**5000 D**	**5900 D**	**1800**	**2000 D**	**1100**
Benzo[k]fluoranthene	800	3900		**1600 D**	**2000 D**	--	**910 D**	--
Chrysene	1000	3900		**5300 D**	**5000 D**	**1700**	**2000 D**	--
Dibenzo[a,h]anthracene	330	330		**660 D**	**710 D**	--	--	--
Dibenzofuran	7000	59000		--	--	--	--	--
Indeno[1,2,3-cd]pyrene	500	500		**2100 D**	**2700 D**	**1300**	**1100 D**	--
Naphthalene	12000	100000		--	--	--	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation:	B-5	B-5	B-5	B-6	B-6	B-7	B-7
			Sample Date:	12/31/2013	12/31/2013	12/31/2013	12/31/2013	1/17/2014	12/30/2013	12/30/2013
			Sample Depth (ft bls):	0 - 2	3 - 5	10 - 12	0 - 2	7 - 9	0 - 2	5 - 7
Arsenic	13	16		**29**	**15**	--	--	--	--	--
Barium	350	400		--	--	--	--	--	--	**530**
Cadmium	2.5	4.3		--	--	--	--	--	--	--
Chromium	30	180		--	--	--	--	--	--	**57**
Copper	50	270		--	--	--	--	--	--	**70**
Lead	63	400		--	**200**	--	**66**	**87**	**83**	**950**
Manganese	1600	2000		--	--	--	--	--	--	--
Mercury	0.18	0.81		--	**0.29**	--	**0.27**	--	--	--
Nickel	30	310		--	--	--	--	--	--	--
Zinc	109	10000		--	**850**	**110**	**140**	--	**760**	**860**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-7 12/30/2013 14 - 15	B-8 12/30/2013 0 - 2	B-8 12/30/2013 5 - 7	B-9 12/16/2013 5 - 7	B-9 12/16/2013 7 - 9	B-10 12/20/2013 0 - 2	B-11 1/2/2014 0 - 2	B-11 1/6/2014 8 - 10
Arsenic	13	16		--	--	--	--	--	--	--	--
Barium	350	400		--	**530**	--	--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	--	--	--	--
Chromium	30	180		**49**	--	--	--	--	--	**45**	**47**
Copper	50	270		--	--	--	--	--	--	**480**	**390**
Lead	63	400		--	**85**	--	--	--	**74**	**790**	**550**
Manganese	1600	2000		--	--	--	--	--	--	--	--
Mercury	0.18	0.81		--	--	--	--	--	--	**0.37**	**0.51**
Nickel	30	310		--	--	--	--	--	--	**56**	**54**
Zinc	109	10000		--	**120**	**110**	**110**	**110**	**120**	**4100**	**4400**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: Sample Date: Sample Depth (ft bls):	B-12 1/15/2014 7 - 9	B-12 1/15/2014 12 - 14	B-12 1/15/2014 21 - 22.5	B-13 12/19/2013 0 - 2	B-14 12/19/2013 0 - 2	B-14 1/15/2014 7 - 9	B-15 12/31/2013 0 - 2	B-15 1/10/2014 5 - 7
Arsenic	13	16		--	--	--	**18**	**16**	--	--	--
Barium	350	400		--	--	--	--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	--	--	--	--
Chromium	30	180		--	--	--	--	--	--	--	--
Copper	50	270		--	--	**71**	**61**	**79**	--	--	--
Lead	63	400		**67**	--	--	**360**	**490**	--	**140**	--
Manganese	1600	2000		--	--	**2500**	--	--	--	--	--
Mercury	0.18	0.81		--	--	--	**2.5**	**0.81**	**0.3**	--	--
Nickel	30	310		--	--	--	--	--	--	--	--
Zinc	109	10000		**150**	**130**	**220**	**410**	**490**	--	**150**	**150 JV**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation:	B-15	B-15	B-17	B-17	B-18	B-18	B-19	B-19
			Sample Date:	1/10/2014	1/10/2014	1/20/2014	1/20/2014	12/18/2013	12/18/2013	12/17/2013	12/17/2013
			Sample Depth (ft bls):	7 - 9	10 - 11	0 - 2	7 - 9	0 - 2	6 - 8	0 - 2	8 - 10
Arsenic	13	16		--	--	--	--	--	--	--	--
Barium	350	400		--	--	--	--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	**3.9**	--	--	--
Chromium	30	180		--	--	--	--	--	--	--	--
Copper	50	270		--	--	**480**	**94**	**1700**	**110**	**140**	**75**
Lead	63	400		--	**79**	**180**	--	**280**	--	**120**	--
Manganese	1600	2000		--	--	--	--	--	--	--	--
Mercury	0.18	0.81		--	--	--	--	--	--	--	--
Nickel	30	310		--	--	--	--	**220**	--	--	--
Zinc	109	10000		**120**	**110**	**610**	**150**	**2000**	--	**450**	--

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-20 12/17/2013 0 - 2	B-20 12/17/2013 5 - 7	B-20 12/17/2013 7 - 8	B-21 12/17/2013 0 - 2	B-21 12/17/2013 5 - 7	B-21 12/17/2013 7 - 8	B-22 1/13/2014 0 - 2
Arsenic	13	16		--	--	--	--	--	--	--
Barium	350	400		--	--	--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	--	--	--
Chromium	30	180		--	--	--	--	--	--	--
Copper	50	270		**54**	**110**	**87**	--	--	--	--
Lead	63	400		**77**	--	--	**270**	--	--	**70**
Manganese	1600	2000		--	--	--	--	--	--	--
Mercury	0.18	0.81		--	--	--	--	--	**3.2**	--
Nickel	30	310		--	--	--	--	--	--	--
Zinc	109	10000		**560**	**340**	**130**	**390**	**120**	**120**	**110**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-22 DUP 1/13/2014 0 - 2	B-23 1/13/2014 0 - 2	B-26 1/14/2014 4 - 6	MW-1/1R 12/16/2013 0 - 2	MW-1/1R 12/16/2013 3 - 5	MW-2/2R 12/16/2013 0 - 2	MW-2/2R DUP 12/16/2013 0 - 2
Arsenic	13	16		--	--	--	--	--	--	--
Barium	350	400		--	--	--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	--	--	--
Chromium	30	180		--	--	--	--	--	--	--
Copper	50	270		**99 JV**	--	--	--	**170**	--	--
Lead	63	400		**120**	**86**	--	**340**	**330**	**120**	**91**
Manganese	1600	2000		--	--	--	--	--	--	--
Mercury	0.18	0.81		--	**0.25**	--	**5.2**	**0.31**	--	--
Nickel	30	310		--	--	--	--	--	--	--
Zinc	109	10000		**120**	**150**	**110**	**540**	**480**	**180**	**120**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	MW-2/2R	MW-6/6R	MW-6/6R	MW-7/7R	MW-14	MW-14 DUP	MW-14
			Sample Date:	12/16/2013	12/30/2013	1/17/2014	1/14/2014	12/19/2013	12/19/2013	1/17/2014
			Sample Depth (ft bls):	6 - 8	0 - 2	9 - 11	2 - 4	0 - 2	0 - 2	7 - 9
Arsenic	13	16		--	--	**14**	--	--	--	--
Barium	350	400		--	--	--	--	--	--	**430**
Cadmium	2.5	4.3		--	--	--	--	--	--	--
Chromium	30	180		--	--	--	--	--	--	--
Copper	50	270		--	--	**60**	--	--	--	--
Lead	63	400		**99**	--	**140**	**100**	**120**	**200**	**180**
Manganese	1600	2000		--	--	--	--	--	--	--
Mercury	0.18	0.81		--	--	**0.21**	--	--	**0.38**	**0.71**
Nickel	30	310		--	--	--	--	--	--	--
Zinc	109	10000		**150**	**240**	**160**	**190**	--	**210**	**290**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation:	MW-15	MW-15	MW-16	MW-16	MW-17	MW-17	MW-20	MW-20	MW-21
			Sample Date:	1/20/2014	1/20/2014	1/7/2014	1/7/2014	1/2/2014	1/2/2014	12/19/2013	1/15/2014	1/6/2014
			Sample Depth (ft bls):	0 - 2	6 - 8	0 - 2	5 - 7	0 - 2	5 - 7	0 - 2	7 - 9	0 - 2
Arsenic	13	16		--	--	--	--	--	--	--	--	--
Barium	350	400		--	--	--	--	--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	--	--	--	--	--
Chromium	30	180		--	--	--	--	**99**	**39**	--	--	--
Copper	50	270		--	--	--	--	**770**	**210**	**95**	--	**180**
Lead	63	400		**140**	**330**	**64**	**110**	**790**	**280**	**1000**	--	**440**
Manganese	1600	2000		--	--	--	--	--	--	--	--	--
Mercury	0.18	0.81		--	**1.6**	--	--	**1.2**	**0.43**	**4.5**	**0.49**	**0.49**
Nickel	30	310		--	--	**38**	--	**92**	--	--	--	**31**
Zinc	109	10000		**150**	**140**	**140**	**110**	**7900**	**1800**	**760**	--	**1100**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 19. Summary of Exceedances of Metals in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	MW-21 1/6/2014 5 - 7	MW-21 1/6/2014 7 - 8	MW-22 12/19/2013 0 - 2	MW-23 12/31/2013 0 - 2	MW-23 12/31/2013 5 - 7
Arsenic	13	16		--	--	--	**16**	--
Barium	350	400		--	--	--	--	--
Cadmium	2.5	4.3		--	--	--	--	--
Chromium	30	180		--	--	--	--	--
Copper	50	270		**180 JV**	--	**51**	--	--
Lead	63	400		**530**	**67**	**460**	**70**	**200**
Manganese	1600	2000		--	--	--	--	--
Mercury	0.18	0.81		**0.38**	--	**2.8**	--	--
Nickel	30	310		--	--	--	--	--
Zinc	109	10000		**1000 JV**	**180**	**640**	**600**	**140**

J - Estimated value
DUP - Duplicate sample
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 20. Summary of Exceedances of Pesticides in Soil, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Unrestricted Use	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	B-25 / 1/14/2014 / 0 - 2	B-25 / 1/14/2014 / 2 - 4	B-27 / 1/14/2014 / 4 - 6
4,4'-DDT	3.3	7900		**390 D**	**250 D**	**198 D**
alpha-BHC	20	480		**23.5 PID**	--	--

J - Estimated value
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards
NA - Compound was not analyzed by laboratory
D - A secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation
R - Sample results rejected by validator
NJ - Detection is tentative in identification and estimated in value
P - The RPD between the results for the two columns exceeds the method-specified criteria
I - The lower value for the two columns has been reported due to obvious interference

Table 21. Summary of General Chemistry in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/L)	NYSDEC AWQSGVs (mg/L)	**Sample Designation:** / **Sample Date:**	MW-2/2R 1/30/2014	MW-5 1/30/2014	MW-10 1/30/2014	MW-11 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014	MW-20 1/30/2014	MW-21 1/30/2014
CHLORIDE	250		**290**	**950**	**12000**	**5900**	**1800**	**1700**	**1100**	**3000**

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

mg/L -Milligrams per liter

DUP - Duplicate

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Table 22. Summary of Exceedances of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-7/7R 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014	MW-18 1/30/2014
Acetone	50		--	--	--	--	--	--
Benzene	1		--	--	--	--	--	--
Ethylbenzene	5		--	--	--	--	--	--
Isopropylbenzene	5		**11.6**	**9.9**	**6 JD**	--	**20 JVD**	**6.8**
m+p-Xylene	5		--	--	--	**6.3 D**	**10 D**	--
o-Xylene	5		--	--	--	**6.2 D**	**6.7 D**	--
Xylenes (total)	5		--	--	--	**12.5 D**	**16.70 D**	--

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 22. Summary of Exceedances of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014	MW-24 1/21/2015	MW-25 1/21/2015	MW-27 1/21/2015	MW-34 1/22/2015	MW-36 1/22/2015
Acetone	50		--	**190 E**	--	--	--	--	--	--
Benzene	1		--	--	--	**1.1**	--	--	--	--
Ethylbenzene	5		--	--	--	--	--	--	**5.9**	--
Isopropylbenzene	5		**21 D**	--	**8**	**22**	**12 D**	**14 D**	**45**	**32**
m+p-Xylene	5		--	--	--	--	--	--	--	--
o-Xylene	5		--	--	--	--	--	--	--	--
Xylenes (total)	5		--	--	--	--	--	--	--	--

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 22. Summary of Exceedances of Volatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-36 DUP 1/22/2015	MW-37 1/22/2015	MW-38 1/22/2015
Acetone	50		--	--	--
Benzene	1		--	--	--
Ethylbenzene	5		--	--	--
Isopropylbenzene	5		**32**	**42**	**14**
m+p-Xylene	5		--	--	--
o-Xylene	5		--	--	--
Xylenes (total)	5		--	--	--

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.
V - Value altered or qualifier added during data validation

Table 23. Summary of Exceedances of Semivolatile Organic Compounds in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-2/2R 1/30/2014	MW-5 1/30/2014	MW-7/7R 1/30/2014	MW-15 1/30/2014	MW-16 1/29/2014	MW-16 DUP 1/29/2014	MW-22 1/30/2014
Benzo[a]anthracene	0.002		**0.33**	**0.42**	**18 D**	**2.2 D**	**0.08 J**	**0.1 J**	**0.08 J**
Benzo[a]pyrene	0		**0.31**	**0.45**	**14 D**	**1.7 D**	--	--	--
Benzo[b]fluoranthene	0.002		**0.41**	**0.54**	**16 D**	**2.6 D**	--	--	--
Benzo[k]fluoranthene	0.002		**0.28**	**0.3**	**9.2 D**	**1.4 D**	--	--	--
Bis(2-ethylhexyl) phthalate	5		--	--	**29 JD**	--	--	--	--
Chrysene	0.002		**0.33**	**0.36**	**16 D**	**2.2 D**	**0.07 J**	**0.09 J**	**0.07 J**
Fluoranthene	50		--	--	**55 D**	--	--	--	--
Indeno[1,2,3-cd]pyrene	0.002		**0.18 J**	**0.38**	**9.5 D**	**1.3 D**	--	--	--
Naphthalene	10		--	--	**76 D**	--	--	--	--
Phenanthrene	50		--	--	**51 D**	--	--	--	--

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 24. Summary of Exceedances of Metals in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** **Sample Date:**	MW-1/1R 3/20/2013	MW-1/1R DUP 3/20/2013	MW-2/2R 1/30/2014	MW-4 1/30/2014	MW-4 3/20/2013	MW-5 1/30/2014	MW-5 3/20/2013
Antimony	3		--	--	--	--	--	--	--
Barium	1000		--	--	--	--	--	--	--
Cadmium	5		--	--	--	--	--	--	--
Iron	300		**23700**	**24900**	**30700**	**22100**	**7800**	**5190**	**1590**
Lead	25		--	--	--	--	--	--	--
Manganese	300		**1280**	**1270**	**6028**	**7530**	**2470**	**1378**	**620**
Sodium	20000		**1620000 D**	**1640000 D**	**225000**	**88300**	--	**706000**	**725000 D**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 24. Summary of Exceedances of Metals in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-7/7R 1/30/2014	MW-10 1/30/2014	MW-10 3/20/2013	MW-11 1/30/2014	MW-11 3/20/2013	MW-15 1/30/2014	MW-16 1/29/2014
Antimony	3		--	**3.25**	--	--	--	--	--
Barium	1000		--	--	--	--	--	--	--
Cadmium	5		**13.74**	--	--	--	--	--	--
Iron	300		**17100**	--	**490**	--	**1290**	**2550**	**48400**
Lead	25		**31.99**	--	--	--	--	**26.78**	--
Manganese	300		**564**	--	--	**411.3**	--	--	**5378**
Sodium	20000		**174000**	**7700000**	**3850000 D**	**3280000**	**1300000 D**	**358000**	**816000**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 24. Summary of Exceedances of Metals in Groundwater, Former Paragon Paint Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/L)	NYSDEC AWQSGVs (µg/L)	**Sample Designation:** / **Sample Date:**	MW-16 DUP 1/29/2014	MW-18 1/30/2014	MW-20 1/30/2014	MW-21 1/30/2014	MW-22 1/30/2014
Antimony	3		--	--	--	--	--
Barium	1000		--	--	--	**1018**	--
Cadmium	5		--	--	--	--	--
Iron	300		**43300**	**12300**	**16200**	**71000**	**17300**
Lead	25		--	--	--	--	--
Manganese	300		**4874**	**2012**	**3694**	**3012**	**11040**
Sodium	20000		**755000**	**38400**	**446000**	**1790000**	**35000**

NYSDEC - New York State Department of Environmental Conservation
AWQSGVs - Ambient Water-Quality Standards and Guidance Values
µg/L -Micrograms per liter
J - Estimated Value
DUP - Duplicate
Bold data indicates that parameter was detected above the NYSDEC AWQSGVs
D - a secondary analysis after dilution due to exceedance
of the calibration range in the original sample.

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT 1 NORTH 2/17/2015 3 - 4	CT 1 SOUTH 2/17/2015 3 - 4	CT 2-5 NORTH 1/30/2015 3 - 4	CT 2-5 SOUTH 1/30/2015 3 - 4	CT-3/4 NORTH 1/21/2015 5 - 6
1,1,1-Trichloroethane	680	100000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
1,1,2,2-Tetrachloroethane	--	--		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
1,1,2-Trichloroethane	--	--		4.5 UD	1.7 U	1.9 U	1.8 U	1.8 U
1,1-Dichloroethane	270	26000		4.5 UD	1.7 U	1.9 U	1.8 U	1.8 U
1,1-Dichloroethene	330	100000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
1,2,3-Trichlorobenzene	--	--		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
1,2,4-Trichlorobenzene	--	--		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
1,2-Dibromoethane	--	--		12 UD	4.6 U	5.2 U	4.7 U	5.0 U
1,2-Dichlorobenzene	1100	100000		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
1,2-Dichloroethane	20	3100		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
1,2-Dichloropropane	--	--		10 UD	4.0 U	4.5 U	4.1 U	4.3 U
1,3,5-Trimethylbenzene	8400	52000		2.0 JD	0.31 J	1.3 J	5.9 U	6.2 U
1,3-Dichlorobenzene	2400	49000		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
1,4-Dichlorobenzene	1800	13000		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
1,4-Dioxane	100	13000		300 UD	110 U	130 U	120 U	120 U
2-Butanone (MEK)	120	100000		10 JD	3.3 J	7.5 J	7.8 J	3.2 J
2-Hexanone	--	--		30 UD	11 U	13 U	12 U	12 U
4-Methyl-2-pentanone (MIBK)	--	--		30 UD	11 U	13 U	12 U	12 U
Acetone	50	100000		**59 D**	23	**140**	48	9.9 J
Benzene	60	4800		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Bromochloromethane	--	--		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
Bromodichloromethane	--	--		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Bromoform	--	--		12 UD	4.6 U	5.2 U	4.7 U	5.0 U
Bromomethane	--	--		6.0 UD	2.3 U	2.6 U	2.3 U	2.5 U
Carbon disulfide	--	--		30 UD	11 U	13 U	12 U	12 U
Carbon tetrachloride	760	2400		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Chlorobenzene	1100	100000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Chloroethane	--	--		6.0 UD	2.3 U	2.6 U	2.3 U	2.5 U
Chloroform	370	49000		4.5 UD	1.7 U	1.9 U	1.8 U	1.8 U
Chloromethane	--	--		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
cis-1,2-Dichloroethene	250	100000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
cis-1,3-Dichloropropene	--	--		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Dibromochloromethane	--	--		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Dibromochloropropane	--	--		15 UD	5.7 U	6.4 U	5.9 U	6.2 U

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT 1 NORTH 2/17/2015 3 - 4	CT 1 SOUTH 2/17/2015 3 - 4	CT 2-5 NORTH 1/30/2015 3 - 4	CT 2-5 SOUTH 1/30/2015 3 - 4	CT-3/4 NORTH 1/21/2015 5 - 6
Dichlorodifluoromethane	--	--		30 UD	11 U	13 U	12 U	12 U
Ethylbenzene	1000	41000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Freon 113	--	--		60 UD	23 U	26 U	23 U	25 U
Isopropylbenzene	2300*	--		4.8 D	1.1 U	1.3 U	0.34 J	1.2 U
m+p-Xylene	--	--		1.6 JD	0.35 J	0.26 J	2.3 U	2.5 U
Methylene chloride	50	100000		30 UD	11 U	13 U	12 U	12 U
MTBE	930	100000		6.0 UD	2.3 U	2.6 U	2.3 U	2.5 U
n-Propylbenzene	3900	100000		2.8 JD	1.1 U	1.3 U	0.32 J	1.2 U
o-Xylene	--	--		6.0 UD	2.3 U	0.51 J	2.3 U	2.5 U
sec-Butylbenzene	11000	100000		6.5 D	1.1 U	0.36 J	3.2	1.2 U
Styrene	--	--		6.0 UD	2.3 U	2.6 U	2.3 U	2.5 U
tert-Butylbenzene	5900	100000		4.8 JD	5.7 U	0.50 J	1.7 J	6.2 U
Tetrachloroethene	1300	19000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Toluene	700	100000		4.5 UD	0.24 J	1.9 U	1.8 U	1.8 U
trans-1,2-Dichloroethene	190	100000		4.5 UD	1.7 U	1.9 U	1.8 U	1.8 U
trans-1,3-Dichloropropene	--	--		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Trichloroethene	470	21000		3.0 UD	1.1 U	1.3 U	1.2 U	1.2 U
Trichlorofluoromethane	--	--		15 UD	5.7 U	6.4 U	5.9 U	6.2 U
Vinyl chloride	20	900		6.0 UD	2.3 U	2.6 U	2.3 U	2.5 U
Xylenes (total)	1600	100000		1.6 JD	0.35 J	0.77 J	2.3 U	2.5 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT-3/4 SOUTH 1/21/2015 5 - 6	CT 6/7 NORTH 3/11/2015 3 - 4	CT 6/7 SOUTH 3/11/2015 3 - 4	CT 8 NORTH 2/24/2015 3 - 4	CT 8 SOUTH 2/24/2015 3 - 4
1,1,1-Trichloroethane	680	100000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
1,1,2,2-Tetrachloroethane	--	--		1.2 U	68 UD	1.2 U	1.4 U	55 UD
1,1,2-Trichloroethane	--	--		1.8 U	100 UD	1.8 U	2.1 U	82 UD
1,1-Dichloroethane	270	26000		1.8 U	100 UD	1.8 U	2.1 U	82 UD
1,1-Dichloroethene	330	100000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
1,2,3-Trichlorobenzene	--	--		6.0 U	340 UD	6.0 U	7.1 U	270 UD
1,2,4-Trichlorobenzene	--	--		6.0 U	340 UD	6.0 U	7.1 U	270 UD
1,2-Dibromoethane	--	--		4.8 U	270 UD	4.8 U	5.7 U	220 UD
1,2-Dichlorobenzene	1100	100000		6.0 U	340 UD	6.0 U	7.1 U	270 UD
1,2-Dichloroethane	20	3100		1.2 U	68 UD	1.2 U	1.4 U	55 UD
1,2-Dichloropropane	--	--		4.2 U	240 UD	4.2 U	5.0 U	190 UD
1,3,5-Trimethylbenzene	8400	52000		2.7 J	1300 D	6.0 U	7.1 U	180 JD
1,3-Dichlorobenzene	2400	49000		6.0 U	340 UD	6.0 U	7.1 U	270 UD
1,4-Dichlorobenzene	1800	13000		6.0 U	340 UD	6.0 U	7.1 U	270 UD
1,4-Dioxane	100	13000		120 U	6800 UD	120 U	140 U	5500 UD
2-Butanone (MEK)	120	100000		3.6 J	680 UD	12 U	19	**140 JD**
2-Hexanone	--	--		12 U	680 UD	12 U	14 U	550 UD
4-Methyl-2-pentanone (MIBK)	--	--		12 U	680 UD	12 U	14 U	550 UD
Acetone	50	100000		7.4 J	**210 JD**	12 U	**140**	**300 JD**
Benzene	60	4800		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Bromochloromethane	--	--		6.0 U	340 UD	6.0 U	7.1 U	270 UD
Bromodichloromethane	--	--		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Bromoform	--	--		4.8 U	270 UD	4.8 U	5.7 U	220 UD
Bromomethane	--	--		2.4 U	140 UD	2.4 U	2.8 U	110 UD
Carbon disulfide	--	--		12 U	680 UD	12 U	14 U	550 UD
Carbon tetrachloride	760	2400		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Chlorobenzene	1100	100000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Chloroethane	--	--		2.4 U	140 UD	2.4 U	2.8 U	110 UD
Chloroform	370	49000		1.8 U	100 UD	1.8 U	2.1 U	82 UD
Chloromethane	--	--		6.0 U	340 UD	6.0 U	7.1 U	270 UD
cis-1,2-Dichloroethene	250	100000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
cis-1,3-Dichloropropene	--	--		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Dibromochloromethane	--	--		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Dibromochloropropane	--	--		6.0 U	340 UD	6.0 U	7.1 U	270 UD

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	CT-3/4 SOUTH 1/21/2015 5 - 6	CT 6/7 NORTH 3/11/2015 3 - 4	CT 6/7 SOUTH 3/11/2015 3 - 4	CT 8 NORTH 2/24/2015 3 - 4	CT 8 SOUTH 2/24/2015 3 - 4
Dichlorodifluoromethane	--	--		12 U	680 UD	12 U	14 U	550 UD
Ethylbenzene	1000	41000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Freon 113	--	--		24 U	1400 UD	24 U	28 U	1100 UD
Isopropylbenzene	2300*	--		0.46 J	1400 D	1.2 U	0.82 J	140 D
m+p-Xylene	--	--		2.4 U	310 D	2.4 U	0.30 J	38 JD
Methylene chloride	50	100000		12 U	680 UD	12 U	14 U	550 UD
MTBE	930	100000		2.4 U	140 UD	2.4 U	2.8 U	110 UD
n-Propylbenzene	3900	100000		0.43 J	2700 D	1.2 U	1.4 U	350 D
o-Xylene	--	--		0.59 J	190 D	2.4 U	2.8 U	13 JD
sec-Butylbenzene	11000	100000		0.41 J	1300 D	1.2 U	3.5	730 D
Styrene	--	--		2.4 U	140 UD	2.4 U	2.8 U	110 UD
tert-Butylbenzene	5900	100000		6.0 U	340 UD	6.0 U	6.3 J	120 JD
Tetrachloroethene	1300	19000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Toluene	700	100000		1.8 U	64 JD	1.8 U	2.1 U	82 UD
trans-1,2-Dichloroethene	190	100000		1.8 U	100 UD	1.8 U	2.1 U	82 UD
trans-1,3-Dichloropropene	--	--		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Trichloroethene	470	21000		1.2 U	68 UD	1.2 U	1.4 U	55 UD
Trichlorofluoromethane	--	--		6.0 U	340 UD	6.0 U	7.1 U	270 UD
Vinyl chloride	20	900		2.4 U	140 UD	2.4 U	2.8 U	110 UD
Xylenes (total)	1600	100000		0.59 J	500 D	2.4 U	0.30 J	51 JD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT-550 NORTH 3/18/2015 3 - 4	CT-550 SOUTH 3/18/2015 3 - 4	CT-9 NORTH 2/5/2015 3 - 4	CT-9 SOUTH 2/5/2015 3 - 4	CT 6/7 EAST 1 3/11/2015 3 - 4
1,1,1-Trichloroethane	680	100000		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
1,1,2,2-Tetrachloroethane	--	--		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
1,1,2-Trichloroethane	--	--		1.8 U	2.0 U	1.9 U	1.8 U	410 UD
1,1-Dichloroethane	270	26000		1.8 U	2.0 U	1.9 U	1.8 U	410 UD
1,1-Dichloroethene	330	100000		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
1,2,3-Trichlorobenzene	--	--		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
1,2,4-Trichlorobenzene	--	--		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
1,2-Dibromoethane	--	--		4.9 U	5.4 U	5.1 U	4.7 U	1100 UD
1,2-Dichlorobenzene	1100	100000		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
1,2-Dichloroethane	20	3100		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
1,2-Dichloropropane	--	--		4.3 U	4.7 U	4.5 U	4.1 U	960 UD
1,3,5-Trimethylbenzene	8400	52000		5.7 J	6.7 U	6.4 U	5.9 U	1400 UD
1,3-Dichlorobenzene	2400	49000		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
1,4-Dichlorobenzene	1800	13000		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
1,4-Dioxane	100	13000		120 U	130 U	130 U	120 U	27000 UD
2-Butanone (MEK)	120	100000		2.2 J	13 U	13 U	4.0 J	2700 UD
2-Hexanone	--	--		12 U	13 U	13 U	12 U	2700 UD
4-Methyl-2-pentanone (MIBK)	--	--		12 U	13 U	13 U	12 U	2700 UD
Acetone	50	100000		17	2.1 J	7.5 J	41	2700 UD
Benzene	60	4800		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Bromochloromethane	--	--		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
Bromodichloromethane	--	--		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Bromoform	--	--		4.9 U	5.4 U	5.1 U	4.7 U	1100 UD
Bromomethane	--	--		2.5 U	2.7 U	2.6 U	2.4 U	550 UD
Carbon disulfide	--	--		12 U	13 U	13 U	12 U	2700 UD
Carbon tetrachloride	760	2400		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Chlorobenzene	1100	100000		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Chloroethane	--	--		2.5 U	2.7 U	2.6 U	2.4 U	550 UD
Chloroform	370	49000		1.8 U	2.0 U	1.9 U	1.8 U	410 UD
Chloromethane	--	--		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
cis-1,2-Dichloroethene	250	100000		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
cis-1,3-Dichloropropene	--	--		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Dibromochloromethane	--	--		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Dibromochloropropane	--	--		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT-550 NORTH 3/18/2015 3 - 4	CT-550 SOUTH 3/18/2015 3 - 4	CT-9 NORTH 2/5/2015 3 - 4	CT-9 SOUTH 2/5/2015 3 - 4	CT 6/7 EAST 1 3/11/2015 3 - 4
Dichlorodifluoromethane	--	--		12 U	13 U	13 U	12 U	2700 UD
Ethylbenzene	1000	41000		0.62 J	1.3 U	1.3 U	1.2 U	270 UD
Freon 113	--	--		25 U	27 U	26 U	24 U	5500 UD
Isopropylbenzene	2300*	--		1.1 J	1.3 U	0.26 J	1.2 U	690 D
m+p-Xylene	--	--		1.8 J	2.7 U	2.6 U	2.4 U	93 JD
Methylene chloride	50	100000		12 U	13 U	13 U	12 U	2700 UD
MTBE	930	100000		2.5 U	2.7 U	2.6 U	2.4 U	550 UD
n-Propylbenzene	3900	100000		2.5	1.3 U	0.61 J	1.2 U	1200 D
o-Xylene	--	--		0.70 J	2.7 U	2.6 U	2.4 U	550 UD
sec-Butylbenzene	11000	100000		2.6	1.3 U	1.2 J	1.2 U	630 D
Styrene	--	--		2.5 U	2.7 U	2.6 U	2.4 U	550 UD
tert-Butylbenzene	5900	100000		0.95 J	6.7 U	6.4 U	5.9 U	1400 UD
Tetrachloroethene	1300	19000		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Toluene	700	100000		0.33 J	2.0 U	1.9 U	1.8 U	55 JD
trans-1,2-Dichloroethene	190	100000		1.8 U	2.0 U	1.9 U	1.8 U	410 UD
trans-1,3-Dichloropropene	--	--		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Trichloroethene	470	21000		1.2 U	1.3 U	1.3 U	1.2 U	270 UD
Trichlorofluoromethane	--	--		6.2 U	6.7 U	6.4 U	5.9 U	1400 UD
Vinyl chloride	20	900		2.5 U	2.7 U	2.6 U	2.4 U	550 UD
Xylenes (total)	1600	100000		2.5 J	2.7 U	2.6 U	2.4 U	93 JD

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT 6/7 EAST 2 3/11/2015 3 - 4	CT 6/7 EAST 3 3/11/2015 3 - 4
1,1,1-Trichloroethane	680	100000		130 UD	1.3 U
1,1,2,2-Tetrachloroethane	--	--		130 UD	1.3 U
1,1,2-Trichloroethane	--	--		200 UD	1.9 U
1,1-Dichloroethane	270	26000		200 UD	1.9 U
1,1-Dichloroethene	330	100000		130 UD	1.3 U
1,2,3-Trichlorobenzene	--	--		660 UD	6.3 U
1,2,4-Trichlorobenzene	--	--		660 UD	6.3 U
1,2-Dibromoethane	--	--		530 UD	5.1 U
1,2-Dichlorobenzene	1100	100000		660 UD	6.3 U
1,2-Dichloroethane	20	3100		130 UD	1.3 U
1,2-Dichloropropane	--	--		470 UD	4.4 U
1,3,5-Trimethylbenzene	8400	52000		2800 D	6.3 U
1,3-Dichlorobenzene	2400	49000		660 UD	6.3 U
1,4-Dichlorobenzene	1800	13000		660 UD	6.3 U
1,4-Dioxane	100	13000		13000 UD	130 U
2-Butanone (MEK)	120	100000		**280 JD**	13 U
2-Hexanone	--	--		1300 UD	13 U
4-Methyl-2-pentanone (MIBK)	--	--		1300 UD	13 U
Acetone	50	100000		**540 JD**	13 U
Benzene	60	4800		130 UD	1.3 U
Bromochloromethane	--	--		660 UD	6.3 U
Bromodichloromethane	--	--		130 UD	1.3 U
Bromoform	--	--		530 UD	5.1 U
Bromomethane	--	--		270 UD	2.5 U
Carbon disulfide	--	--		1300 UD	13 U
Carbon tetrachloride	760	2400		130 UD	1.3 U
Chlorobenzene	1100	100000		130 UD	1.3 U
Chloroethane	--	--		270 UD	2.5 U
Chloroform	370	49000		200 UD	1.9 U
Chloromethane	--	--		660 UD	6.3 U
cis-1,2-Dichloroethene	250	100000		130 UD	1.3 U
cis-1,3-Dichloropropene	--	--		130 UD	1.3 U
Dibromochloromethane	--	--		130 UD	1.3 U
Dibromochloropropane	--	--		660 UD	6.3 U

Table 25. Summary of Volatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	CT 6/7 EAST 2 / 3/11/2015 / 3 - 4	CT 6/7 EAST 3 / 3/11/2015 / 3 - 4
Dichlorodifluoromethane	--	--		1300 UD	13 U
Ethylbenzene	1000	41000		130 D	1.3 U
Freon 113	--	--		2700 UD	25 U
Isopropylbenzene	2300*	--		220 D	1.3 U
m+p-Xylene	--	--		770 D	2.5 U
Methylene chloride	50	100000		1300 UD	13 U
MTBE	930	100000		270 UD	2.5 U
n-Propylbenzene	3900	100000		720 D	1.3 U
o-Xylene	--	--		630 D	2.5 U
sec-Butylbenzene	11000	100000		750 D	1.3 U
Styrene	--	--		270 UD	2.5 U
tert-Butylbenzene	5900	100000		660 UD	6.3 U
Tetrachloroethene	1300	19000		130 UD	1.3 U
Toluene	700	100000		140 JD	1.9 U
trans-1,2-Dichloroethene	190	100000		200 UD	1.9 U
trans-1,3-Dichloropropene	--	--		130 UD	1.3 U
Trichloroethene	470	21000		130 UD	1.3 U
Trichlorofluoromethane	--	--		660 UD	6.3 U
Vinyl chloride	20	900		270 UD	2.5 U
Xylenes (total)	1600	100000		1400 D	2.5 U

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards
* NYSDEC CP-51, Supplemental Soil Cleanup Objectives, Protection of Groundwater

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation:	CT 1 NORTH	CT 1 SOUTH	CT 2-5 NORTH	CT 2-5 SOUTH	CT-3/4 NORTH
			Sample Date:	2/17/2015	2/17/2015	1/30/2015	1/30/2015	1/21/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	5 - 6
1,1'-Biphenyl	--	--		9000 UD	4200 UD	490 U	440 U	460 U
1,2,4,5-Tetrachlorobenzene	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2,2'-oxybis (1-chloropropane)	--	--		4700 UD	2200 UD	260 U	230 U	240 U
2,4,5-Trichlorophenol	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2,4,6-Trichlorophenol	--	--		2400 UD	1100 UD	130 U	110 U	120 U
2,4-Dichlorophenol	--	--		3500 UD	1700 UD	190 U	170 U	180 U
2,4-Dimethylphenol	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2,4-Dinitrophenol	--	--		19000 UD	8900 UD	1000 U	920 U	980 U
2,4-Dinitrotoluene	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2,6-Dinitrotoluene	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2-Chloronaphthalene	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2-Chlorophenol	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2-Methylnaphthalene	--	--		3300 JD	2200 UD	95 J	71 J	120 J
2-Methylphenol	330	100000		3900 UD	1800 UD	210 U	190 U	200 U
2-Nitroaniline	--	--		3900 UD	1800 UD	210 U	190 U	200 U
2-Nitrophenol	--	--		8500 UD	4000 UD	460 U	410 U	440 U
3&4-Methylphenol	330	100000		5700 UD	2700 UD	310 U	280 U	290 U
3,3'-Dichlorobenzidine	--	--		3900 UD	1800 UD	210 U	190 U	200 U
3-Nitroaniline	--	--		3900 UD	1800 UD	210 U	190 U	200 U
4,6-Dinitro-2-methylphenol	--	--		10000 UD	4800 UD	560 U	500 U	530 U
4-Bromophenyl phenyl ether	--	--		3900 UD	1800 UD	210 U	190 U	200 U
4-Chloro-3-methylphenol	--	--		3900 UD	1800 UD	210 U	190 U	200 U
4-Chloroaniline	--	--		3900 UD	1800 UD	210 U	190 U	200 U
4-Chlorophenyl phenyl ether	--	--		3900 UD	1800 UD	210 U	190 U	200 U
4-Nitroaniline	--	--		3900 UD	1800 UD	210 U	190 U	200 U
4-Nitrophenol	--	--		5500 UD	2600 UD	300 U	270 U	280 U
Acenaphthene	98000	100000		2100 JD	830 JD	350	160	510
Acenaphthylene	107000	100000		3200 UD	430 JD	750	240	360
Acetophenone	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Anthracene	1000000	100000		4300 D	2100 D	970	460	1400
Benzo[a]anthracene	1000	1000		**9200 D**	**4800 D**	**2700**	1000	**3400**

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT 1 NORTH	CT 1 SOUTH	CT 2-5 NORTH	CT 2-5 SOUTH	CT-3/4 NORTH
			Sample Date:	2/17/2015	2/17/2015	1/30/2015	1/30/2015	1/21/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	5 - 6
Benzo[a]pyrene	22000	1000		8100 D	4200 D	3200	1000	3100
Benzo[b]fluoranthene	1700	1000		**11000 D**	**5600 D**	**4200**	1300	**3900**
Benzo[g,h,i]perylene	1000000	100000		4800 D	2500 D	2300	720	2000
Benzo[k]fluoranthene	1700	3900		**3700 D**	**2000 D**	1600	530	1200
Benzoic Acid	--	--		13000 UD	6000 UD	690 U	620 U	660 U
Benzyl Alcohol	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Bis(2-chloroethoxy)methane	--	--		4200 UD	2000 UD	230 U	210 U	220 U
Bis(2-chloroethyl) ether	--	--		3500 UD	1700 UD	190 U	170 U	180 U
Bis(2-ethylhexyl) phthalate	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Butylbenzyl phthalate	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Carbazole	--	--		2100 JD	910 JD	510	150 J	730
Chrysene	1000	3900		**9000 D**	**4800 D**	**3000**	1000	**3100**
Dibenzo[a,h]anthracene	1000000	330		1100 JD	560 JD	540	170	480
Dibenzofuran	210000	59000		1500 JD	1800 UD	230	210	330
Diethyl phthalate	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Dimethyl phthalate	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Di-n-butyl phthalate	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Di-n-octyl phthalate	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Fluoranthene	1000000	100000		21000 D	11000 D	4800	2200	8300 D
Fluorene	386000	100000		2200 JD	920 JD	300	220	460
Hexachlorobenzene	3200	1200		2400 UD	1100 UD	130 U	110 U	120 U
Hexachlorobutadiene	--	--		3900 UD	1800 UD	210 U	190 U	200 U
Hexachlorocyclopentadiene	--	--		11000 UD	5300 UD	620 U	550 U	580 U
Hexachloroethane	--	--		3200 UD	1500 UD	170 U	150 U	160 U
Indeno[1,2,3-cd]pyrene	8200	500		5000 D	2500 D	2500	760	2100
Isophorone	--	--		3500 UD	1700 UD	190 U	170 U	180 U
Naphthalene	12000	100000		1300 JD	1800 UD	270	110 J	180 J
Nitrobenzene	--	--		3500 UD	1700 UD	190 U	170 U	180 U
n-Nitrosodi-n-propylamine	--	--		3900 UD	1800 UD	210 U	190 U	200 U
n-Nitrosodiphenylamine	--	--		3200 UD	1500 UD	170 U	150 U	160 U
Pentachlorophenol	800	6700		3200 UD	1500 UD	170 U	150 U	160 U

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT 1 NORTH	CT 1 SOUTH	CT 2-5 NORTH	CT 2-5 SOUTH	CT-3/4 NORTH
			Sample Date:	2/17/2015	2/17/2015	1/30/2015	1/30/2015	1/21/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	5 - 6
Phenanthrene	1000000	100000		18000 D	8900 D	3500	1800	6600
Phenol	330	100000		3900 UD	1800 UD	210 U	190 U	200 U
Pyrene	1000000	100000		18000 D	9300 D	4200	1900	6800

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** / **Sample Date:** / **Sample Depth (ft bls):**	CT-3/4 SOUTH 1/21/2015 5 - 6	CT 6/7 NORTH 3/11/2015 3 - 4	CT 6/7 SOUTH 3/11/2015 3 - 4	CT 8 NORTH 2/24/2015 3 - 4	CT 8 SOUTH 2/24/2015 3 - 4
1,1'-Biphenyl	--	--		460 U	80 J	440 U	130 J	2100 UD
1,2,4,5-Tetrachlorobenzene	--	--		200 U	220 U	200 U	230 U	910 UD
2,2'-oxybis (1-chloropropane)	--	--		240 U	270 U	230 U	280 U	1100 UD
2,4,5-Trichlorophenol	--	--		200 U	220 U	200 U	230 U	910 UD
2,4,6-Trichlorophenol	--	--		120 U	140 U	120 U	140 U	540 UD
2,4-Dichlorophenol	--	--		180 U	200 U	180 U	210 U	820 UD
2,4-Dimethylphenol	--	--		200 U	220 U	200 U	230 U	910 UD
2,4-Dinitrophenol	--	--		960 U	1100 U	940 U	1100 U	4400 UD
2,4-Dinitrotoluene	--	--		200 U	220 U	200 U	230 U	910 UD
2,6-Dinitrotoluene	--	--		200 U	220 U	200 U	230 U	910 UD
2-Chloronaphthalene	--	--		200 U	220 U	200 U	230 U	910 UD
2-Chlorophenol	--	--		200 U	220 U	200 U	230 U	910 UD
2-Methylnaphthalene	--	--		240 U	370	230 U	420	350 JD
2-Methylphenol	330	100000		200 U	220 U	200 U	230 U	910 UD
2-Nitroaniline	--	--		200 U	220 U	200 U	230 U	910 UD
2-Nitrophenol	--	--		430 U	490 U	420 U	500 U	2000 UD
3&4-Methylphenol	330	100000		290 U	320 U	280 U	330 U	1300 UD
3,3'-Dichlorobenzidine	--	--		200 U	220 U	200 U	230 U	910 UD
3-Nitroaniline	--	--		200 U	220 U	200 U	230 U	910 UD
4,6-Dinitro-2-methylphenol	--	--		520 U	580 U	510 U	600 U	2400 UD
4-Bromophenyl phenyl ether	--	--		200 U	220 U	200 U	230 U	910 UD
4-Chloro-3-methylphenol	--	--		200 U	220 U	200 U	230 U	910 UD
4-Chloroaniline	--	--		200 U	220 U	200 U	230 U	910 UD
4-Chlorophenyl phenyl ether	--	--		200 U	220 U	200 U	230 U	910 UD
4-Nitroaniline	--	--		200 U	220 U	200 U	230 U	910 UD
4-Nitrophenol	--	--		280 U	320 U	270 U	320 U	1300 UD
Acenaphthene	98000	100000		45 J	130 J	96 J	1100	810 D
Acenaphthylene	107000	100000		160 U	73 J	180	250	470 JD
Acetophenone	--	--		200 U	220 U	200 U	230 U	910 UD
Anthracene	1000000	100000		100 J	240	340	2300	1800 D
Benzo[a]anthracene	1000	1000		260	760	**2100**	**5100**	**5700 D**

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT-3/4 SOUTH	CT 6/7 NORTH	CT 6/7 SOUTH	CT 8 NORTH	CT 8 SOUTH
			Sample Date:	1/21/2015	3/11/2015	3/11/2015	2/24/2015	2/24/2015
			Sample Depth (ft bls):	5 - 6	3 - 4	3 - 4	3 - 4	3 - 4
Benzo[a]pyrene	22000	1000		240	730	2100	4800	5200 D
Benzo[b]fluoranthene	1700	1000		300	1000	**2800**	**6400**	**6800 D**
Benzo[g,h,i]perylene	1000000	100000		160	500	1400	2600	3000 D
Benzo[k]fluoranthene	1700	3900		120	420	1100	**2400**	**2600 D**
Benzoic Acid	--	--		650 U	730 U	630 U	750 U	2900 UD
Benzyl Alcohol	--	--		200 U	220 U	200 U	230 U	910 UD
Bis(2-chloroethoxy)methane	--	--		220 U	240 U	210 U	250 U	980 UD
Bis(2-chloroethyl) ether	--	--		180 U	200 U	180 U	210 U	820 UD
Bis(2-ethylhexyl) phthalate	--	--		200 U	220 U	71 J	230 U	910 UD
Butylbenzyl phthalate	--	--		200 U	220 U	200 U	230 U	910 UD
Carbazole	--	--		59 J	130 J	150 J	1100	640 JD
Chrysene	1000	3900		250	780	**2100**	**4800**	**5700 D**
Dibenzo[a,h]anthracene	1000000	330		120 U	130 J	420	700	910 D
Dibenzofuran	210000	59000		200 U	220 U	200 U	800	470 JD
Diethyl phthalate	--	--		200 U	220 U	200 U	230 U	910 UD
Dimethyl phthalate	--	--		200 U	220 U	200 U	230 U	910 UD
Di-n-butyl phthalate	--	--		200 U	220 U	200 U	230 U	910 UD
Di-n-octyl phthalate	--	--		200 U	220 U	200 U	230 U	910 UD
Fluoranthene	1000000	100000		600	1600	3400	9100 D	12000 D
Fluorene	386000	100000		200 U	120 J	57 J	1300	930 D
Hexachlorobenzene	3200	1200		120 U	140 U	120 U	140 U	540 UD
Hexachlorobutadiene	--	--		200 U	220 U	200 U	230 U	910 UD
Hexachlorocyclopentadiene	--	--		570 U	640 U	560 U	660 U	2600 UD
Hexachloroethane	--	--		160 U	180 U	160 U	180 U	720 UD
Indeno[1,2,3-cd]pyrene	8200	500		170	540	1500	3000	3400 D
Isophorone	--	--		180 U	200 U	180 U	210 U	820 UD
Naphthalene	12000	100000		200 U	1300	200 U	930	370 JD
Nitrobenzene	--	--		180 U	200 U	180 U	210 U	820 UD
n-Nitrosodi-n-propylamine	--	--		200 U	220 U	200 U	230 U	910 UD
n-Nitrosodiphenylamine	--	--		160 U	180 U	160 U	180 U	720 UD
Pentachlorophenol	800	6700		160 U	180 U	160 U	180 U	720 UD

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT-3/4 SOUTH 1/21/2015 5 - 6	CT 6/7 NORTH 3/11/2015 3 - 4	CT 6/7 SOUTH 3/11/2015 3 - 4	CT 8 NORTH 2/24/2015 3 - 4	CT 8 SOUTH 2/24/2015 3 - 4
Phenanthrene	1000000	100000		470	1100	1500	8700 D	8400 D
Phenol	330	100000		200 U	220 U	200 U	230 U	910 UD
Pyrene	1000000	100000		470	1300	3200	8400	11000 D

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT-550 NORTH	CT-550 SOUTH	CT-9 NORTH	CT-9 SOUTH	CT 6/7 EAST 1
			Sample Date:	3/18/2015	3/18/2015	2/5/2015	2/5/2015	3/11/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4
1,1'-Biphenyl	--	--		4600 UD	2500 UD	220 JD	440 U	510 U
1,2,4,5-Tetrachlorobenzene	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2,2'-oxybis (1-chloropropane)	--	--		2400 UD	1300 UD	510 UD	230 U	270 U
2,4,5-Trichlorophenol	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2,4,6-Trichlorophenol	--	--		1200 UD	670 UD	250 UD	120 U	130 U
2,4-Dichlorophenol	--	--		1800 UD	1000 UD	380 UD	170 U	200 U
2,4-Dimethylphenol	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2,4-Dinitrophenol	--	--		9600 UD	5300 UD	2000 UD	930 U	1100 U
2,4-Dinitrotoluene	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2,6-Dinitrotoluene	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2-Chloronaphthalene	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2-Chlorophenol	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2-Methylnaphthalene	--	--		1400 JD	1300 UD	660 D	230 U	210 J
2-Methylphenol	330	100000		2000 UD	1100 UD	420 UD	190 U	220 U
2-Nitroaniline	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
2-Nitrophenol	--	--		4300 UD	2400 UD	910 UD	420 U	480 U
3&4-Methylphenol	330	100000		2900 UD	1600 UD	610 UD	280 U	320 U
3,3'-Dichlorobenzidine	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
3-Nitroaniline	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
4,6-Dinitro-2-methylphenol	--	--		5200 UD	2900 UD	1100 UD	500 U	580 U
4-Bromophenyl phenyl ether	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
4-Chloro-3-methylphenol	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
4-Chloroaniline	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
4-Chlorophenyl phenyl ether	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
4-Nitroaniline	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
4-Nitrophenol	--	--		2800 UD	1600 UD	590 UD	270 U	310 U
Acenaphthene	98000	100000		4200 D	1500 D	2600 D	150 U	700
Acenaphthylene	107000	100000		1900 D	1100 D	860 D	150 U	520
Acetophenone	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Anthracene	1000000	100000		10000 D	4600 D	5000 D	120 U	1800
Benzo[a]anthracene	1000	1000		**15000 D**	**10000 D**	**12000 D**	120 U	**3300**

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT-550 NORTH	CT-550 SOUTH	CT-9 NORTH	CT-9 SOUTH	CT 6/7 EAST 1
			Sample Date:	3/18/2015	3/18/2015	2/5/2015	2/5/2015	3/11/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4
Benzo[a]pyrene	22000	1000		12000 D	8400 D	12000 D	150 U	3100
Benzo[b]fluoranthene	1700	1000		**14000 D**	**11000 D**	**15000 D**	120 U	**4000**
Benzo[g,h,i]perylene	1000000	100000		7100 D	5600 D	7600 D	150 U	2100
Benzo[k]fluoranthene	1700	3900		**5500 D**	**4200 D**	**5400 D**	120 U	1600
Benzoic Acid	--	--		6500 UD	3600 UD	1400 UD	620 U	730 U
Benzyl Alcohol	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Bis(2-chloroethoxy)methane	--	--		2200 UD	1200 UD	460 UD	210 U	240 U
Bis(2-chloroethyl) ether	--	--		1800 UD	1000 UD	380 UD	170 U	200 U
Bis(2-ethylhexyl) phthalate	--	--		2000 UD	1100 UD	420 UD	190 U	610
Butylbenzyl phthalate	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Carbazole	--	--		2300 D	1100 D	2700 D	190 U	780
Chrysene	1000	3900		**13000 D**	**9100 D**	**12000 D**	120 U	**3100**
Dibenzo[a,h]anthracene	1000000	330		1600 D	1400 D	2000 D	120 U	580
Dibenzofuran	210000	59000		3800 D	920 JD	1800 D	190 U	450
Diethyl phthalate	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Dimethyl phthalate	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Di-n-butyl phthalate	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Di-n-octyl phthalate	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Fluoranthene	1000000	100000		40000 D	25000 D	28000 D	120 U	5600
Fluorene	386000	100000		4800 D	1400 D	2300 D	190 U	670
Hexachlorobenzene	3200	1200		1200 UD	670 UD	250 UD	120 U	130 U
Hexachlorobutadiene	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
Hexachlorocyclopentadiene	--	--		5700 UD	3200 UD	1200 UD	550 U	640 U
Hexachloroethane	--	--		1600 UD	890 UD	340 UD	150 U	180 U
Indeno[1,2,3-cd]pyrene	8200	500		7600 D	5900 D	**8500 D**	150 U	2200
Isophorone	--	--		1800 UD	1000 UD	380 UD	170 U	200 U
Naphthalene	12000	100000		1800 JD	430 JD	1400 D	190 U	220 U
Nitrobenzene	--	--		1800 UD	1000 UD	380 UD	170 U	200 U
n-Nitrosodi-n-propylamine	--	--		2000 UD	1100 UD	420 UD	190 U	220 U
n-Nitrosodiphenylamine	--	--		1600 UD	890 UD	340 UD	150 U	180 U
Pentachlorophenol	800	6700		1600 UD	890 UD	340 UD	150 U	180 U

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT-550 NORTH	CT-550 SOUTH	CT-9 NORTH	CT-9 SOUTH	CT 6/7 EAST 1
			Sample Date:	3/18/2015	3/18/2015	2/5/2015	2/5/2015	3/11/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4
Phenanthrene	1000000	100000		46000 D	20000 D	25000 D	120 U	5500
Phenol	330	100000		2000 UD	1100 UD	420 UD	190 U	220 U
Pyrene	1000000	100000		33000 D	21000 D	25000 D	120 U	5700

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT 6/7 EAST 2 3/11/2015 3 - 4	CT 6/7 EAST 3 3/11/2015 3 - 4
1,1'-Biphenyl	--	--		800 JD	470 U
1,2,4,5-Tetrachlorobenzene	--	--		430 UD	210 U
2,2'-oxybis (1-chloropropane)	--	--		520 UD	250 U
2,4,5-Trichlorophenol	--	--		430 UD	210 U
2,4,6-Trichlorophenol	--	--		260 UD	120 U
2,4-Dichlorophenol	--	--		390 UD	190 U
2,4-Dimethylphenol	--	--		430 UD	210 U
2,4-Dinitrophenol	--	--		2100 UD	990 U
2,4-Dinitrotoluene	--	--		430 UD	210 U
2,6-Dinitrotoluene	--	--		430 UD	210 U
2-Chloronaphthalene	--	--		430 UD	210 U
2-Chlorophenol	--	--		430 UD	210 U
2-Methylnaphthalene	--	--		3200 D	140 J
2-Methylphenol	330	100000		430 UD	210 U
2-Nitroaniline	--	--		430 UD	210 U
2-Nitrophenol	--	--		930 UD	450 U
3&4-Methylphenol	330	100000		620 UD	300 U
3,3'-Dichlorobenzidine	--	--		430 UD	210 U
3-Nitroaniline	--	--		430 UD	210 U
4,6-Dinitro-2-methylphenol	--	--		1100 UD	540 U
4-Bromophenyl phenyl ether	--	--		430 UD	210 U
4-Chloro-3-methylphenol	--	--		430 UD	210 U
4-Chloroaniline	--	--		430 UD	210 U
4-Chlorophenyl phenyl ether	--	--		430 UD	210 U
4-Nitroaniline	--	--		430 UD	210 U
4-Nitrophenol	--	--		600 UD	290 U
Acenaphthene	98000	100000		860 D	550
Acenaphthylene	107000	100000		1700 D	140 J
Acetophenone	--	--		430 UD	210 U
Anthracene	1000000	100000		2700 D	1400
Benzo[a]anthracene	1000	1000		**9800 D**	**2700**

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	Sample Designation: / Sample Date: / Sample Depth (ft bls):	CT 6/7 EAST 2 / 3/11/2015 / 3 - 4	CT 6/7 EAST 3 / 3/11/2015 / 3 - 4
Benzo[a]pyrene	22000	1000		8800 D	2400
Benzo[b]fluoranthene	1700	1000		**11000 D**	**3000**
Benzo[g,h,i]perylene	1000000	100000		5600 D	1500
Benzo[k]fluoranthene	1700	3900		**5200 D**	1400
Benzoic Acid	--	--		1400 UD	670 U
Benzyl Alcohol	--	--		430 UD	210 U
Bis(2-chloroethoxy)methane	--	--		470 UD	220 U
Bis(2-chloroethyl) ether	--	--		390 UD	190 U
Bis(2-ethylhexyl) phthalate	--	--		430 UD	210 U
Butylbenzyl phthalate	--	--		430 UD	210 U
Carbazole	--	--		1000 D	840
Chrysene	1000	3900		**9500 D**	**2600**
Dibenzo[a,h]anthracene	1000000	330		1800 D	440
Dibenzofuran	210000	59000		400 JD	500
Diethyl phthalate	--	--		430 UD	210 U
Dimethyl phthalate	--	--		430 UD	210 U
Di-n-butyl phthalate	--	--		430 UD	210 U
Di-n-octyl phthalate	--	--		430 UD	210 U
Fluoranthene	1000000	100000		11000 D	5800
Fluorene	386000	100000		890 D	540
Hexachlorobenzene	3200	1200		260 UD	120 U
Hexachlorobutadiene	--	--		430 UD	210 U
Hexachlorocyclopentadiene	--	--		1200 UD	590 U
Hexachloroethane	--	--		340 UD	160 U
Indeno[1,2,3-cd]pyrene	8200	500		6200 D	1600
Isophorone	--	--		390 UD	190 U
Naphthalene	12000	100000		1500 D	360
Nitrobenzene	--	--		390 UD	190 U
n-Nitrosodi-n-propylamine	--	--		430 UD	210 U
n-Nitrosodiphenylamine	--	--		340 UD	160 U
Pentachlorophenol	800	6700		340 UD	160 U

Table 26. Summary of Semivolatile Organic Compounds in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in µg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT 6/7 EAST 2	CT 6/7 EAST 3
			Sample Date:	3/11/2015	3/11/2015
			Sample Depth (ft bls):	3 - 4	3 - 4
Phenanthrene	1000000	100000		7900 D	5200
Phenol	330	100000		430 UD	210 U
Pyrene	1000000	100000		11000 D	4800

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
D - A secondary analysis after dilution due to exceedance
of the calibration range in the original sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards

Table 27. Summary of Metals in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT 1 NORTH	CT 1 SOUTH	CT 2-5 NORTH	CT 2-5 SOUTH	CT-3/4 NORTH
			Sample Date:	2/17/2015	2/17/2015	1/30/2015	1/30/2015	1/21/2015
			Sample Depth (ft bls):	3 - 4	3 - 4	3 - 4	3 - 4	5 - 6
Aluminum	--	--		7100	7900	7400	5900	7900
Antimony	--	--		0.80 J	2.2 J	1.6 J	4.6 U	4.7 U
Arsenic	16	16		5.3	5.9	6	5.6	5.3
Barium	820	400		130	58	82	85	76
Beryllium	47	72		0.34 J	0.35 J	0.30 J	0.26 J	0.35 J
Cadmium	7.5	4.3		0.36 J	0.87 U	0.12 J	0.93 U	0.09 J
Calcium	--	--		3600	2700	3700	1500	1100
Chromium	--	180		14	16	13	11	14
Cobalt	--	--		6.1	5.7	5.3	5.7	5.3
Copper	1720	270		30	22	33	19	21
Iron	--	--		15000	18000	12000	12000	14000
Lead	450	400		79	54	79	45	72
Magnesium	--	--		2400	2300	2200	2000	2300
Manganese	2000	2000		180	140	110	99	140
Mercury	0.73	0.81		0.12	0.14	0.09	0.05 J	0.06 J
Nickel	130	310		14	15	13	13	13
Potassium	--	--		880	820	790	720	730
Selenium	4	180		0.61 J	0.51 J	0.38 J	1.8 U	1.9 U
Silver	8.3	180		0.91 U	0.87 U	1.0 U	0.93 U	0.95 U
Sodium	--	--		270	170	98 J	110 J	180 J
Thallium	--	--		1.8 U	1.7 U	2.0 U	1.8 U	1.9 U
Vanadium	--	--		16	16	16	12	15
Zinc	2480	10000		220	120	390	88	170

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC
Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC
Part 375 Restricted Residential Standards

Table 27. Summary of Metals in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT-3/4 SOUTH 1/21/2015 5 - 6	CT 6/7 NORTH 3/11/2015 3 - 4	CT 6/7 SOUTH 3/11/2015 3 - 4	CT 8 NORTH 2/24/2015 3 - 4	CT 8 SOUTH 2/24/2015 3 - 4
Aluminum	--	--		8200	8200	7800	9800	7400
Antimony	--	--		4.7 U	3.6 J	1.0 J	8.3	2.6 J
Arsenic	16	16		4	5.4	4.4	**49**	8
Barium	820	400		38	260	74	**1100**	140
Beryllium	47	72		0.37 J	0.35 J	0.32 J	0.50 J	0.33 J
Cadmium	7.5	4.3		0.94 U	1.1 U	0.90 U	1.1	0.08 J
Calcium	--	--		800	4600	1800	13000	3500
Chromium	--	180		17	22	13	130	14
Cobalt	--	--		5.6	19	6.2	53	5.2
Copper	1720	270		16	140	28	310	48
Iron	--	--		16000	16000	14000	69000	14000
Lead	450	400		4.5 J	260	72	**1400**	74
Magnesium	--	--		2600	2300	2300	4700	2400
Manganese	2000	2000		110	190	150	770	140
Mercury	0.73	0.81		0.08 U	0.19	0.14	**0.95**	0.12
Nickel	130	310		14	15	13	54	13
Potassium	--	--		990	740	880	980	790
Selenium	4	180		1.9 U	0.97 J	0.34 J	1.2 J	0.31 J
Silver	8.3	180		0.94 U	1.1 U	0.90 U	0.87 J	0.84 U
Sodium	--	--		280	290	380	370	220
Thallium	--	--		1.9 U	2.1 U	1.8 U	0.60 J	1.7 U
Vanadium	--	--		18	16	18	27	16
Zinc	2480	10000		47	420	300	**4500**	160

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Table 27. Summary of Metals in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:** **Sample Date:** **Sample Depth (ft bls):**	CT-550 NORTH 3/18/2015 3 - 4	CT-550 SOUTH 3/18/2015 3 - 4	CT-9 NORTH 2/5/2015 3 - 4	CT-9 SOUTH 2/5/2015 3 - 4	CT 6/7 EAST 1 3/11/2015 3 - 4
Aluminum	--	--		6900	6400	8600	6600	8700
Antimony	--	--		4.7 U	5.2 U	1.0 J	4.5 U	5.2 U
Arsenic	16	16		7.6	12	6.3	5.1	3.6
Barium	820	400		88	120	81	69	130
Beryllium	47	72		0.32 J	0.41 J	0.48 J	0.33 J	0.40 J
Cadmium	7.5	4.3		0.94 U	0.12 J	0.20 J	0.90 U	1.0 U
Calcium	--	--		11000	10000	2800	1100	1600
Chromium	--	180		18	37	15	15	14
Cobalt	--	--		5.2	5.9	6.2	4.4	5.3
Copper	1720	270		26	46	30	18	23
Iron	--	--		12000	15000	16000	16000	15000
Lead	450	400		87	180	81	3.2 J	62
Magnesium	--	--		4000	2400	2300	2300	2300
Manganese	2000	2000		200	180	110	130	220
Mercury	0.73	0.81		0.19	0.22	0.13	0.08 U	0.11
Nickel	130	310		14	15	15	11	14
Potassium	--	--		600	630	900	1500	700
Selenium	4	180		1.9 U	2.1 U	0.52 J	1.8 U	2.1 U
Silver	8.3	180		0.94 U	1.0 U	0.98 U	0.90 U	1.0 U
Sodium	--	--		180 J	200 J	170 J	150 J	160 J
Thallium	--	--		1.9 U	2.1 U	2.0 U	1.8 U	2.1 U
Vanadium	--	--		19	21	20	22	16
Zinc	2480	10000		150	420	190	31	180

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

Table 27. Summary of Metals in Courtyard UST Endpoint Samples, Former Paragon Paint and Manufacturing Facility, Long Island City, New York

Parameter (Concentrations in mg/kg)	NYSDEC Part 375 Protection of Groundwater	NYSDEC Part 375 Restricted Residential	**Sample Designation:**	CT 6/7 EAST 2	CT 6/7 EAST 3
			Sample Date:	3/11/2015	3/11/2015
			Sample Depth (ft bls):	3 - 4	3 - 4
Aluminum	--	--		7700	8800
Antimony	--	--		0.97 J	4.9 U
Arsenic	16	16		4.2	3.1
Barium	820	400		52	56
Beryllium	47	72		0.38 J	0.37 J
Cadmium	7.5	4.3		1.0 U	0.97 U
Calcium	--	--		2600	1700
Chromium	--	180		12	14
Cobalt	--	--		6.3	5.6
Copper	1720	270		24	20
Iron	--	--		11000	13000
Lead	450	400		47	45
Magnesium	--	--		1900	2400
Manganese	2000	2000		110	140
Mercury	0.73	0.81		0.18	0.08 J
Nickel	130	310		13	14
Potassium	--	--		560	800
Selenium	4	180		0.70 J	1.9 U
Silver	8.3	180		1.0 U	0.97 U
Sodium	--	--		93 J	94 J
Thallium	--	--		2.1 U	1.9 U
Vanadium	--	--		14	16
Zinc	2480	10000		98	100

J - Estimated value
U - Indicates that the compound was analyzed for but not detected
mg/kg - Milligrams per kilogram
ft bls - Feet below land surface
NYSDEC - New York State Department of Environmental Conservation
-- No NYSDEC Part 375 Standards available
Bold data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards
Shaded data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

TABLE 28. TRACK 1 UNRESTRICTED CLEANUP COST ESTIMATE

FORMER PARAGON PAINT & VARNISH FACTORY

VERNON 4540 REALTY

ENVIRONMENTAL REMEDIATION COST ESTIMATE - JUNE 2015

ITEM	Description	UNIT	QUANTITY	UNIT COST	TOTAL
	Demolition & Disposal				
1	Shed	LS	1	$ 50,000	$50,000
2	4-Story Paint Factory	LS	1	$ 500,000	$500,000
3	3-Story Brick Warehouse	LS	1	$ 300,000	$300,000
4	1-Story Brick Garage	LS	1	$ 100,000	$100,000
					$950,000
	UST Removal				
5	20,000 gallon UST	Tank	1	$ 24,375	$24,375
6	550 gallon UST	Tank	14	$ 5,000	$70,000
7	Cooking Pots	Tank	6	$ 5,000	$30,000
8	Non haz liquid disposal	Gallons	1,000	$ 0.60	$600
9	Non haz liquid disposal- Transport (Drums)	Drums	16	$ 135.00	$2,160
10	Backfill with Clean Fill	CY	1,000	$ 45	$45,000
					$127,135
	Soil Handling and Removal				
11	Soil Excavation	CY	24,625	$ 40	$985,000
12	Soil Transport & Disposal Cost assuming soil is Non Hazardous	Ton	29,550	$ 55	$1,625,250
13	Soil Transport & Disposal Cost assuming soil is Non Hazardous Petroleum	Ton	7,388	$ 75	$554,063
14	Soil Transport & Disposal Cost assuming soil is Hazardous	Ton	-	$ 130	$0
15	Procurement and Placement of Clean Backfill	CY	24,625	$ 45	$1,108,125
					$4,272,438
	Dewatering and Treatment				
16	Dewatering Water Container Rental and Disposal	Month	6	$ 30,000	$180,000
17	Dewater Vac Truck (and Operator)	Month	6	$ 70,000	$420,000
					$600,000
	Supplemental Remediation Costs				
18	Mobilization/Demobilization	Lump Sum	1	$ 150,000	$150,000
19	Community Air Monitoring Plan (CAMP) Implementation (during excavation and soil handling)	Month	6	$ 30,000	$180,000
20	Vapor, Dust, and Odor Suppression	Lump Sum	1	$ 50,000	$50,000
21	Air Handling Tent	LS	1	$ 300,000	$300,000
22	Post excavation end-point Sampling Analytical cost	Lump Sum	1	$ 75,500	$75,500
23	Engineering support and disposal coordination	Month	8	$ 15,000	$120,000
					$875,500
				soil handling, dewatering and remediation cost subtotal	**$6,825,073**
				20% cost contingency	**$1,365,014.50**
				5% fees, insurance and bonds	**$341,254**
	BCP Record Keeping				
24	Citizen Participation: Public Meeting, Fact Sheet Distribution, CPP development	Lump Sum	1	$ 20,000	$20,000
25	BCP weekly and monthly reporting requirements	month	8	$ 4,000	$32,000
26	Final Engineering Report	Lump Sum	1	$ 50,000	$50,000
					$102,000
				Total Remediation Costs	**$8,633,341**

Notes

1. Engineered cover systems and garage ventilation systems not included in remediation cost estimate.
2. Soil handling and removal costs subject to change pending actual remediation costs and excavation extents.
3. Soil handling and removal assumes excavation to the property line on all sides of the Site to the depths detailed in the RAWP.
4. CAMP implementation assumes one CAMP Technician and two CAMP monitoring stations operating 40 hours per week.
5. Excavation screening, end-point sampling, and disposal supervision assumes one part-time engineer/geologist onsite during excavation for field screening of excavated m end point soil sampling and waste disposal tracking.

TABLE 29. TRACK 4 RESTRICTED RESIDENTIAL CLEANUP COST ESTIMATE

FORMER PARAGON PAINT & VARNISH FACTORY

VERNON 4540 REALTY

ENVIRONMENTAL REMEDIATION COST ESTIMATE - JUNE 2015

ITEM	Description	UNIT	QUANTITY	UNIT COST		TOTAL
	UST Removal					
1	20,000 gallon UST	Tank	1	$	24,375	$24,375
2	550 gallon UST	Tank	14	$	5,000	$70,000
3	Cooking Pots	Tank	6	$	5,000	$30,000
4	Non haz liquid disposal	Gallons	1000	$	0.60	$600
5	Non haz liquid disposal- Transport (Drums)	Drums	16	$	135	$2,160
6	Backfill with RCA	CY	1,000	$	35	$35,000
						$127,135
	LNAPL Source Area					
7	Soil Excavation	CY	1,753	$	50	$87,657
8	Soil Transport & Disposal Cost assuming soil is Non Hazardous	Ton	767	$	55	$42,185
9	Soil Transport & Disposal Cost assuming soil is Non Hazardous Petroleum	Ton	767	$	75	$57,525
10	Soil Transport & Disposal Cost assuming soil is Hazardous	Ton	-	$	130	$0
11	Reuse of On-Site Fill	CY	584	$	10	$5,844
12	Importation and Placement of RCA for Excavation Area	CY	1,023	$	35	$35,793
						$229,005
	In-Situ Chemical Oxidation					
13	Injection Point Construction, Injection and Compliance Sampling	LS	1	$	50,000	$50,000
						$50,000
	Dewatering and Treatment					
14	Dewatering Water Container Rental and Disposal	Month	3	$	30,000	$90,000
15	Dewater Vac Truck (and Operator)	Month	3	$	70,000	$210,000
						$300,000
	Product Recovery					
16	Spill Buster Installation and Startup	Item	5	$	15,000	$75,000
						$75,000
	Sitewide Cap					
17	Demolition and Disposal of Existing Concrete in Courtyard	Ton	640	$	85	$54,385
18	Provision and Placement of RCA Cap	CY	853	$	35	$29,858
19	Provision and Placement of Demarcation Layer	SY	1,280	$	5	$6,398
						$90,641
	Supplemental Remediation Costs					
20	Mobilization/Demobilization	Lump Sum	1	$	100,000	$100,000
21	Community Air Monitoring Plan (CAMP) Implementation (during excavation and soil handling)	Month	3	$	30,000	$90,000
22	Air Handling Tent	Lump Sum	1	$	150,000	$150,000
23	Vapor, Dust, and Odor Suppression	Lump Sum	1	$	30,000	$30,000
24	Post excavation end-point Sampling Analytical cost	Lump Sum	1	$	25,000	$25,000
25	Engineering support and disposal coordination	Month	4	$	25,000	$100,000
						$495,000
	soil handling, dewatering and remediation cost subtotal					**$1,366,781**
	20% cost contingency					**$273,356.19**
	5% fees, insurance and bonds					**$68,339**
	BCP Record Keeping					
26	Citizen Participation: Public Meeting, Fact Sheet Distribution, CPP development	Lump Sum	1	$	20,000	$20,000
27	BCP weekly and monthly reporting requirements	month	4	$	4,000	$16,000
28	Final Engineering Report	Lump Sum	1	$	40,000	$40,000
29	Environmental Easement	Lump Sum	1	$	35,000	$35,000
30	Site Management Plan	Lump Sum	1	$	25,000	$25,000
21	Annual Groundwater Monitoring and Reporting	Year	1	$	32,000	$32,000
22	Annual Engineer Certification for SMP	Year	1	$	5,000	$5,000
23	Annual Brownfield Redevelopment Report	Year	1	$	10,000	$10,000
						$183,000
	Total Remediation Costs plus Engineering and Institutional Controls					**$1,891,476**

Notes
1. Engineered cover systems and garage ventilation systems not included in remediation cost estimate.
2. Soil handling and removal costs subject to change pending actual remediation costs and excavation extents.
3. Soil handling and removal assumes excavation to the property line on all sides of the Site to the depths detailed in the RAWP.
4. CAMP implementation assumes one CAMP Technician and two CAMP monitoring stations operating 40 hours per week.
5. Excavation screening, end-point sampling, and disposal supervision assumes one part-time engineer/geologist onsite during excavation for field screening of excavated materials, end point soil sampling and waste disposal tracking.
6. Environmental Easement and Site Management Plan Costs will be highly dependent upon legal review and editing.
7. Only one year of Annual cost items are shown in the table. Annual reports will be required for multiple years.

Table 30. Summary of Permits; Paragon Paint and Varnish Corp. Site, Queens, New York

Regulatory Agency	Permit
NYCDEP	Dewatering Permit (for temporary discharge during construction)
NYCDEP	Sewer Certification and Sewer Permit (for new building connection)
NYCDOB	Demolition Permit
NYCDOB	New Building (NB) Permit
NYCDOB	Fence Permit
NYCDOB	Foundation/Earthwork Permit
NYCDOB	Builder's Paving Plan
NYCDOB	Underground Plumbing Permit
NYCDOT	Sidewalk Opening Permit (for monitoring well installation)
NYCDPR	Building Plan Review (street trees)
NYSDEC	Long Island Well Permit (depending upon dewatering system design and flow rate)
USEPA	Underground Injection Control Program Form (for ISCO injections)

Note: This list only accounts for permits required from the street level and below. Permits for aboveground portions of the building are not listed.

NYCDEP - New York City Department of Environmental Protection

NYCDOB - New York City Department of Buildings

NYCDOT - New York City Department of Buildings

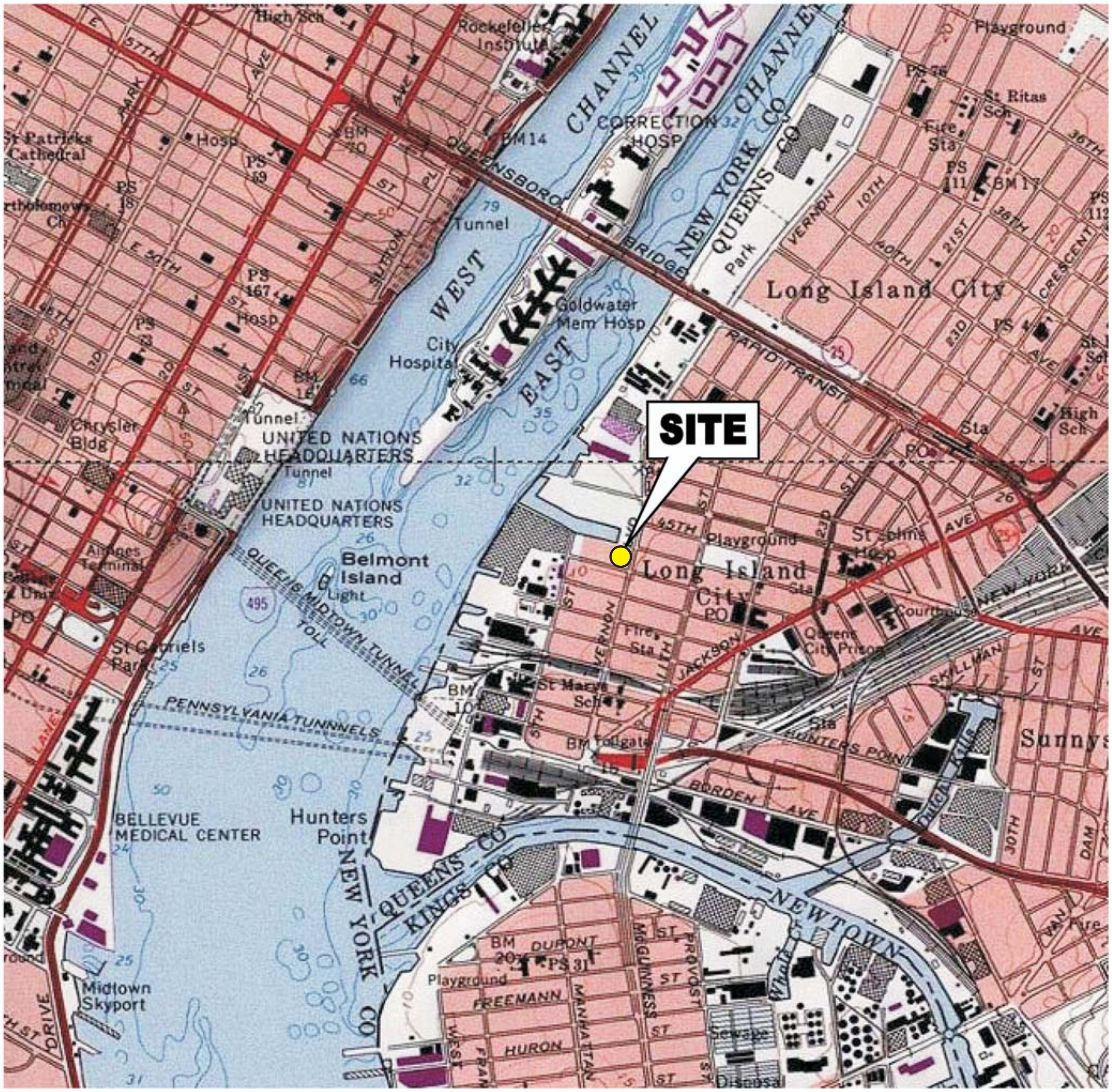
NYCDPR - New York City Department of Parks & Recreation

NYSDEC - New York State Department of Environmental Conservation

USEPA - United States Environmental Protection Agency

ISCO - In-situ Chemical Oxidation

FIGURES



QUADRANGLE LOCATION

N

0 2000'

SOURCE:
USGS; 1995, Central Park & Brooklyn
7.5 Minute Topographic Quadrangle

Title:

SITE LOCATION MAP

FORMER PARAGON PAINT AND VARNISH
COMPANY MANUFACTURING FACILITY
5-49 46TH AVENUE & 45-40 VERNON BOULEVARD
LONG ISLAND CITY, NEW YORK

Prepared for:

VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr.: R.M.	Project No.: 2051.0001Y000	
File: 2051.0001Y180.03.CDR		

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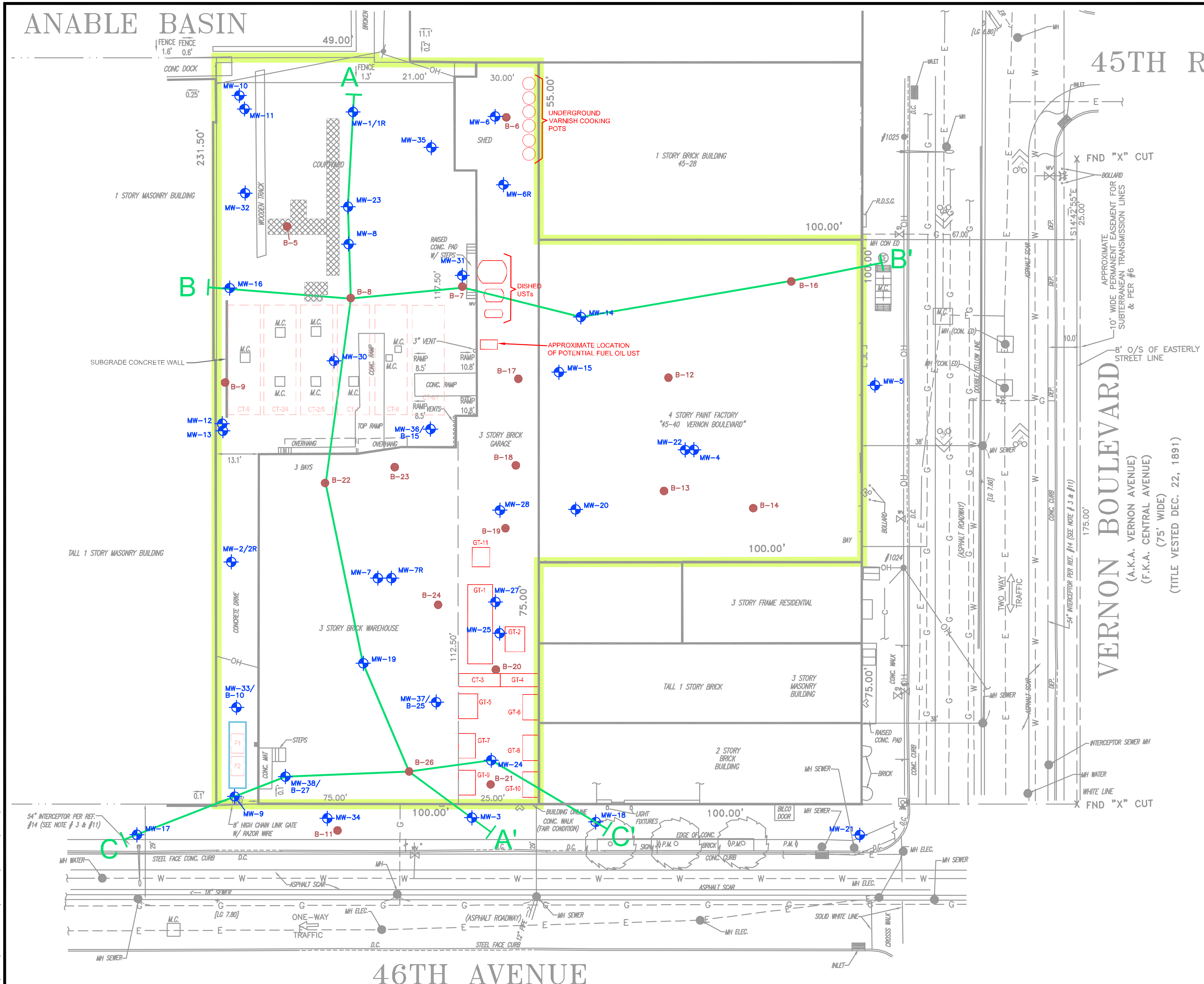

LEGEND

B-6	SOIL BORING LOCATION AND DESIGNATION
MW-5	MONITORING WELL LOCATION AND DESIGNATION
	PROPERTY BOUNDARY
	APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
	APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
	APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
	APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
	APPROXIMATE TEST PIT LOCATIONS
A ├──┤ A'	LINE OF GEOLOGIC CROSS SECTION
	CONCRETE VAULT

N

30' 0 30'

Title:

SITE PLAN

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	FIGURE
Prepared by: J.A.D.	Scale: AS SHOWN	2
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.02.DWG		

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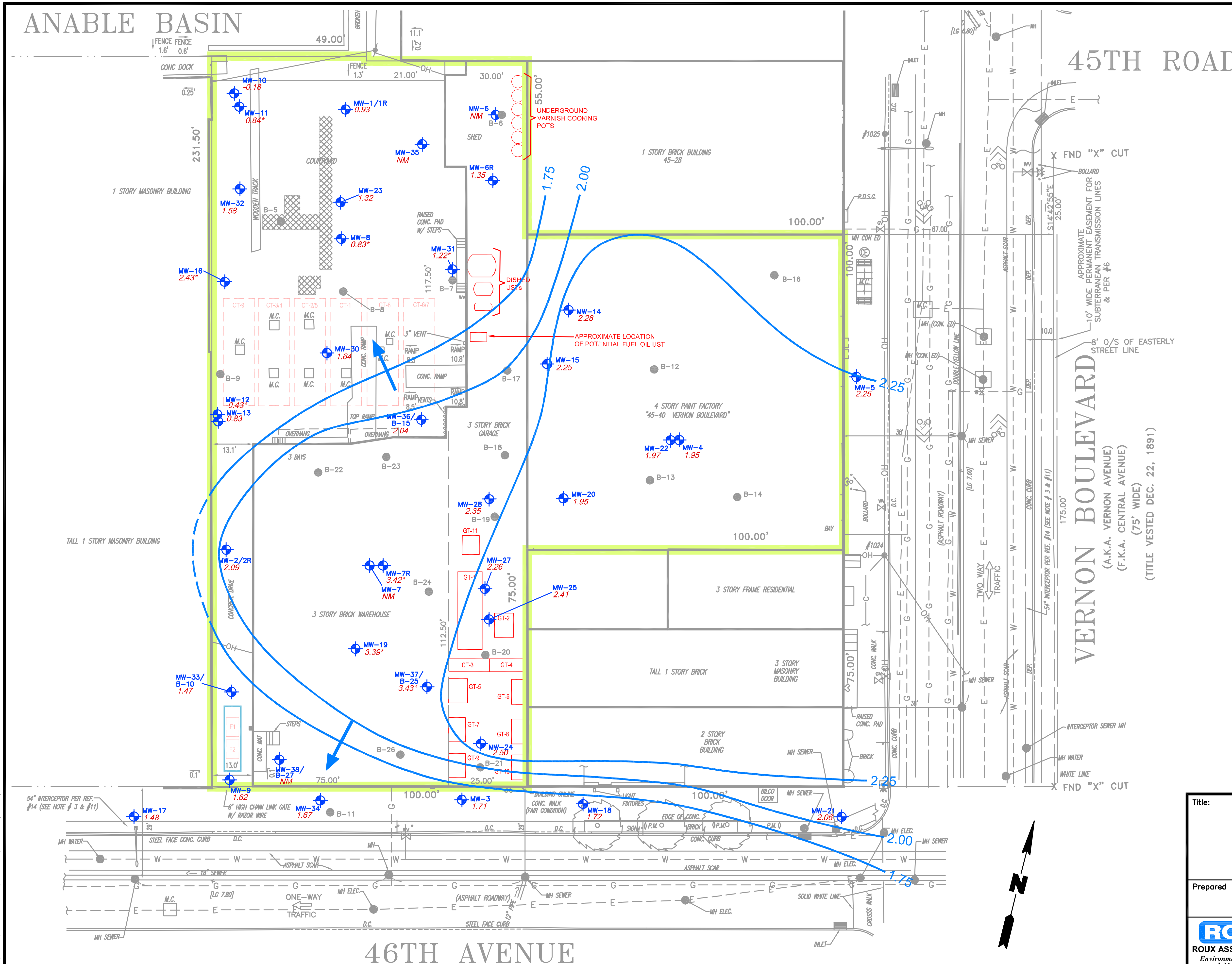

LEGEND

- MW-5 — MONITORING WELL LOCATION AND DESIGNATION
- B-6 — SOIL BORING LOCATION AND DESIGNATION
- 0.93 — CORRECTED GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- 0.83* — MEASUREMENT NOT USED IN CONTOURING
- NM — NOT MEASURED
- 2.0 — LINE OF EQUAL GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL) (DASHED WHERE INFERRED)
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK (UST)
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK (UST)REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- APPROXIMATE TEST PIT LOCATIONS
- CONCRETE VAULT

NOTE

GROUNDWATER ELEVATIONS WERE CORRECTED FOR THE PRESENCE OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) WHERE APPLICABLE.

30' 0 30'

Title:

GROUNDWATER ELEVATION AND CONTOUR MAP (INCOMING TIDE) JANUARY 9, 2015

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	FIGURE
Prepared by: J.A.D.	Scale: AS SHOWN	3
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.04.DWG		

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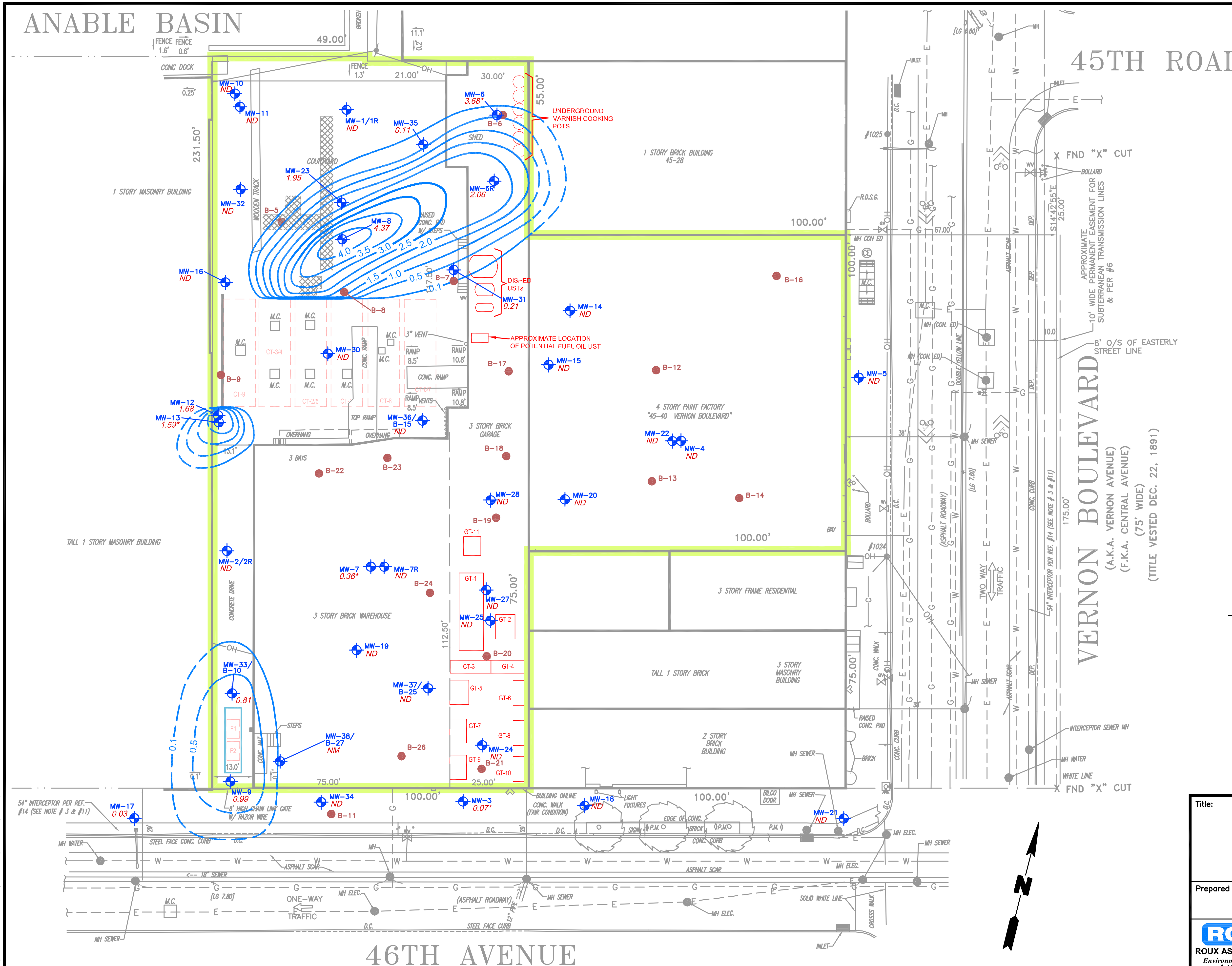

LEGEND

B-6	SOIL BORING LOCATION AND DESIGNATION
MW-5	MONITORING WELL LOCATION AND DESIGNATION
0.12	LNAPL THICKNESS (FEET)
3.68*	MEASUREMENT NOT USED IN CONTOURING
ND	LNAPL NOT DETECTED
NM	NOT MEASURED
0.5	APPROXIMATE LINE OF EQUAL LNAPL THICKNESS (FEET) (DASHED WHERE INFERRED)
	PROPERTY BOUNDARY
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
	APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK (UST)
	APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK (UST)
	APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
	APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
	APPROXIMATE TEST PIT LOCATIONS
	CONCRETE VAULT

NOTES

1. MW-6 AND MW-7 ARE ONE-INCH DIAMETER MONITORING WELLS AND WERE THEREFORE NOT USED TO GENERATE LNAPL CONTOURS.
2. ALTHOUGH MONITORING WELL MW-38 WAS NOT GAUGED DURING THE JANUARY 9, 2015 GAUGING EVENT LNAPL HAS NOT BEEN DETECTED IN MW-38 DURING SUBSEQUENT GAUGING EVENTS.

30' 0 30'

Title:

MEASURED OR APPARENT LNAPL THICKNESS JANUARY 9, 2015

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	FIGURE
Prepared by: J.A.D.	Scale: AS SHOWN	4
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.05.DWG		

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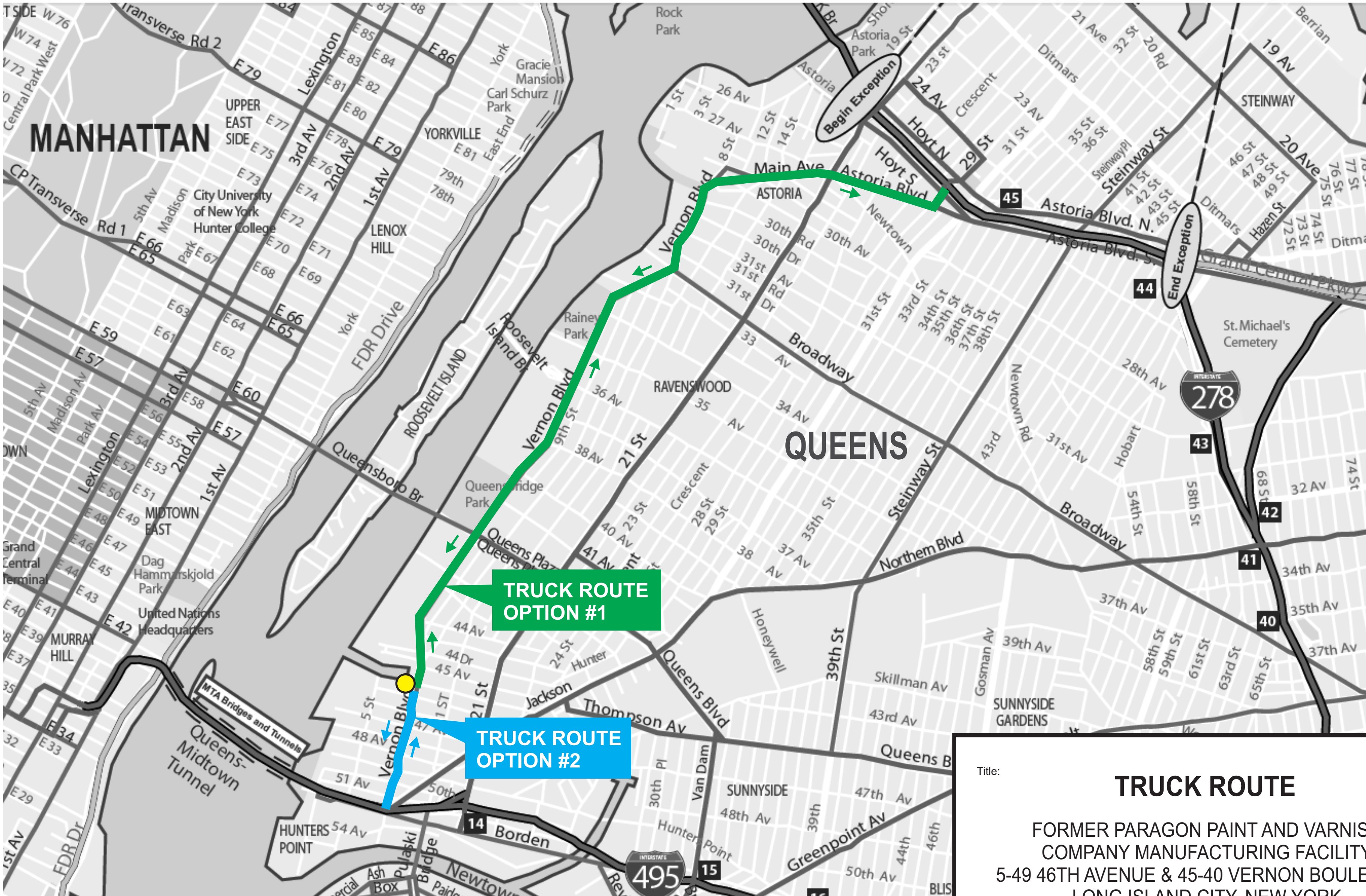


Source: 2011-2012 New York City D.O.T. Truck Route Map.

0 0.25 0.5 Mi.

Title:

TRUCK ROUTE

FORMER PARAGON PAINT AND VARNISH
COMPANY MANUFACTURING FACILITY
5-49 46TH AVENUE & 45-40 VERNON BOULEVARD
LONG ISLAND CITY, NEW YORK

Prepared for:

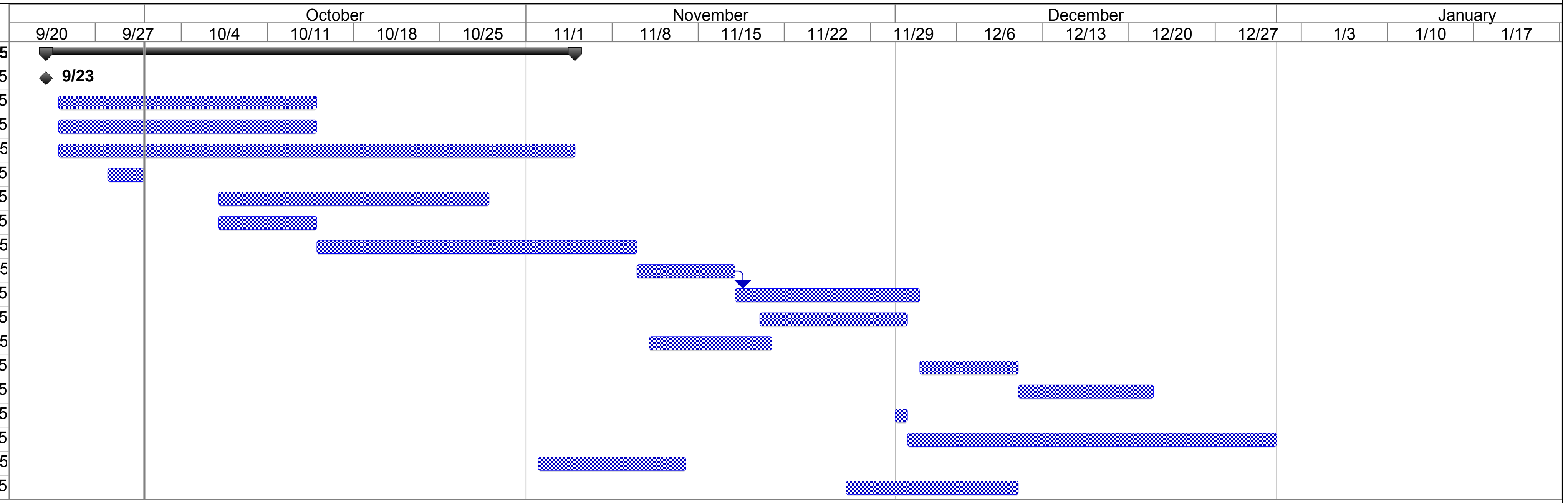
VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 31DEC14	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	5
Project Mgr.: R.M.	Project No.: 2051.0001Y000	
File: 2051.0001Y164.02.CDR		

Former Paragon Paint Manufacturing Facility, Long Island City, New York.

ID	Task Name	Duration	Start	Finish
1	**Pre-Project Submittals**	**31 days**	**Wed 9/23/15**	**Wed 11/4/15**
2	Project Award	0 days	Wed 9/23/15	Wed 9/23/15
3	Permits for Shoring	15 days	Thu 9/24/15	Wed 10/14/15
4	Permits for Tent	15 days	Thu 9/24/15	Wed 10/14/15
5	Permits for Discharge of Water	30 days	Thu 9/24/15	Wed 11/4/15
6	Mobilization to Site	3 days	Mon 9/28/15	Wed 9/30/15
7	Removal of Interior Tanks	16 days	Wed 10/7/15	Wed 10/28/15
8	Removal of Concrete Slab Foundation and Pots	6 days	Wed 10/7/15	Wed 10/14/15
9	Installation of Shoring System	18 days	Thu 10/15/15	Mon 11/9/15
10	Construction of Tent and TIGG Systems	6 days	Tue 11/10/15	Tue 11/17/15
11	Excavation inside Tent	11 days	Wed 11/18/15	Wed 12/2/15
12	Backfilling of Excavation inside Tent	8 days	Fri 11/20/15	Tue 12/1/15
13	Dewatering Excavation	8 days	Wed 11/11/15	Fri 11/20/15
14	Removal of Tent and TIGG Systems	6 days	Thu 12/3/15	Thu 12/10/15
15	Removal of Shoring System	7 days	Fri 12/11/15	Mon 12/21/15
16	Excavation of MW-12 Area	1 day	Tue 12/1/15	Tue 12/1/15
17	Demobilization /Project Closeout	22 days	Wed 12/2/15	Thu 12/31/15
18	In Situ Chemical Oxidation	10 days	Mon 11/2/15	Fri 11/13/15
19	Recovery Well Installation	10 days	Fri 11/27/15	Thu 12/10/15



Project: Former Paragon Paint Manufacturing Facility
Date: Thu 10/1/15

Task	Project Summary	Inactive Milestone	Manual Summary Rollup
Split	External Tasks	Inactive Summary	Manual Summary
Milestone	External Milestone	Manual Task	Start-only
Summary	Inactive Task	Duration-only	Finish-only

Title:
PROPOSED REMEDIAL CONSTRUCTION SCHEDULE

FORMER PARAGON PAINT AND VARNISH COMPANY MANUFACTURING FACILITY
5-49 46TH AVENUE & 45-40 VERNON BOULEVARD
LONG ISLAND CITY, NEW YORK

Prepared for:
VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	6
Project Mgr.: R.M.	Project No.: 2051.0001Y000	
File: 2051.0001Y180.03.CDR		

APPENDICES

(PROVIDED ON CD IN BOUND REPORT)

A. Redevelopment Plans
B. Citizen Participation Plan
C. Health and Safety Plan (Including Community Air Monitoring Plan)
D. Quality Assurance Project Plan
E. Professional Profiles
F. Product Recovery System Information
G. In-Situ Chemical Oxidation Data Sheets

APPENDIX A

Redevelopment Plans

SCAPE / LANDSCAPE ARCHITECTURE PLLC

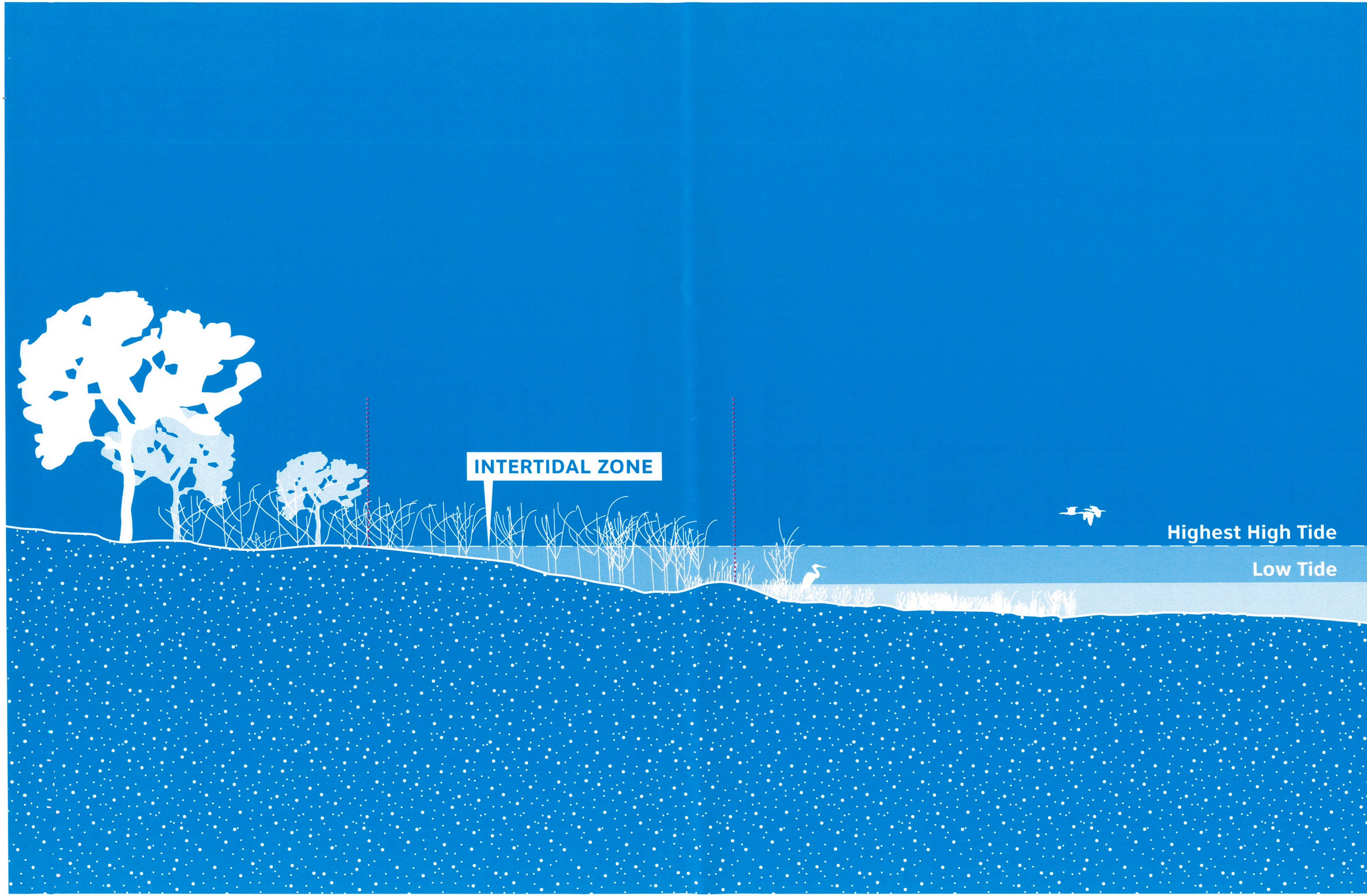
277 BROADWAY SUITE 1606 NEW YORK

PARAGON PAINT - 45 VERNON BLVD LONG ISLAND CITY

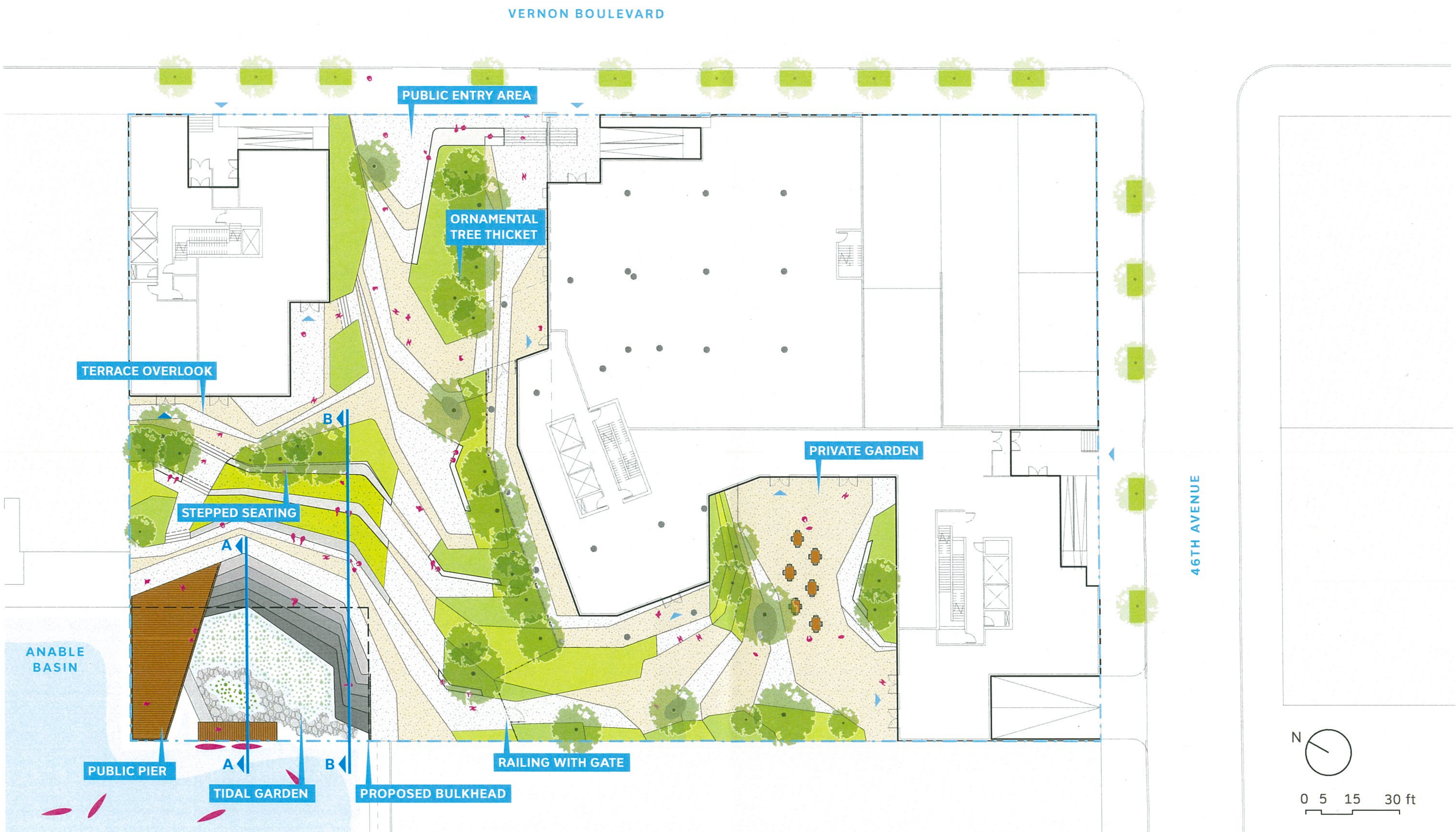
WATERFRONT PUBLIC ACCESS AREA & BULKHEAD

APRIL 07, 2015

THE INTERTIDAL PLAZA



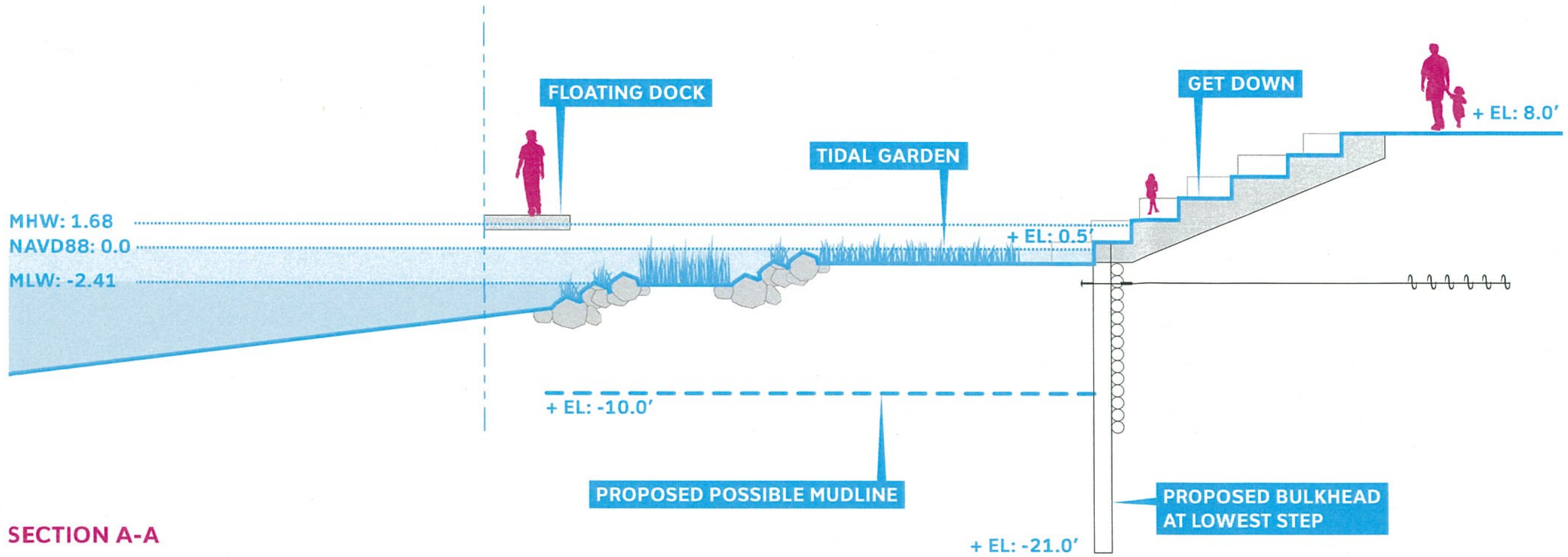
INTERTIDAL ZONE
Highest High Tide
Low Tide



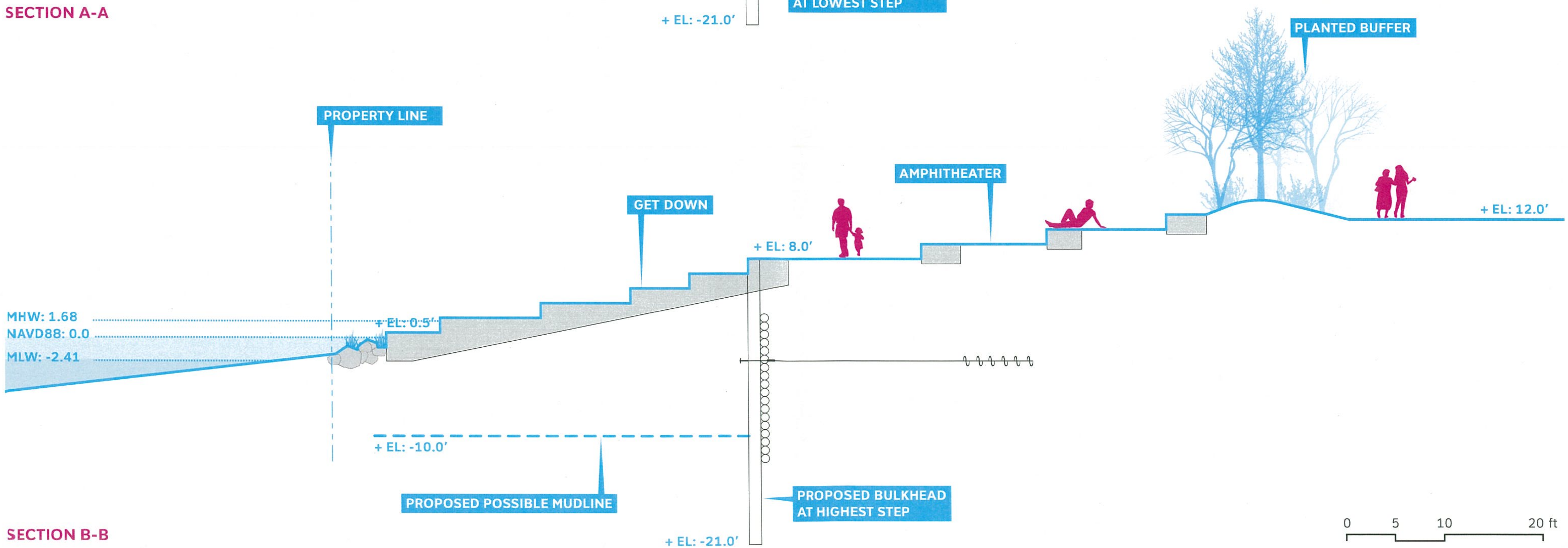
THE INTERTIDAL PLAZA SITE PLAN

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

SCAPE / LANDSCAPE ARCHITECTURE PLLC



SECTION A-A

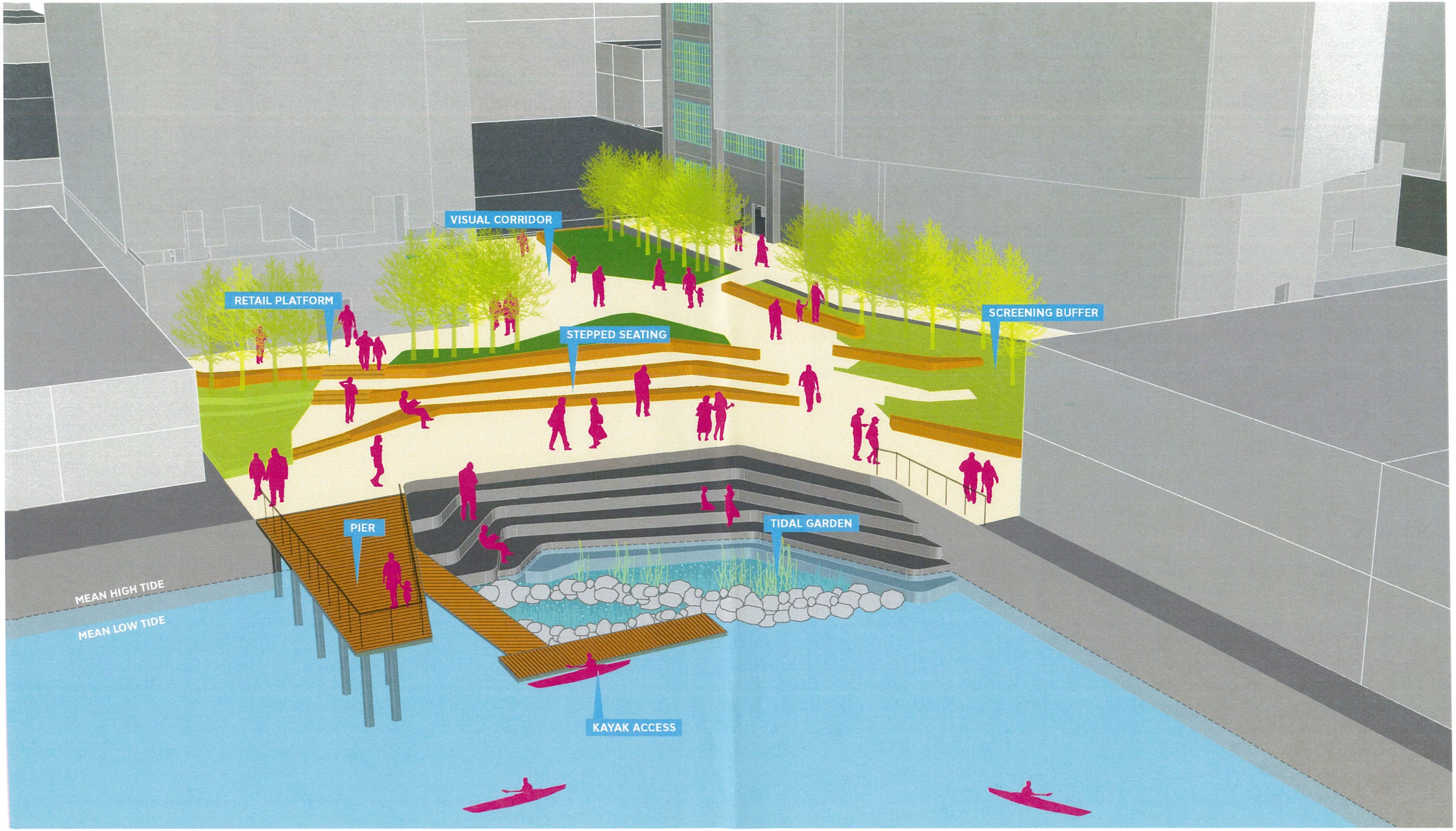


SECTION B-B

GET-DOWN AND TIDAL GARDEN SECTION

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

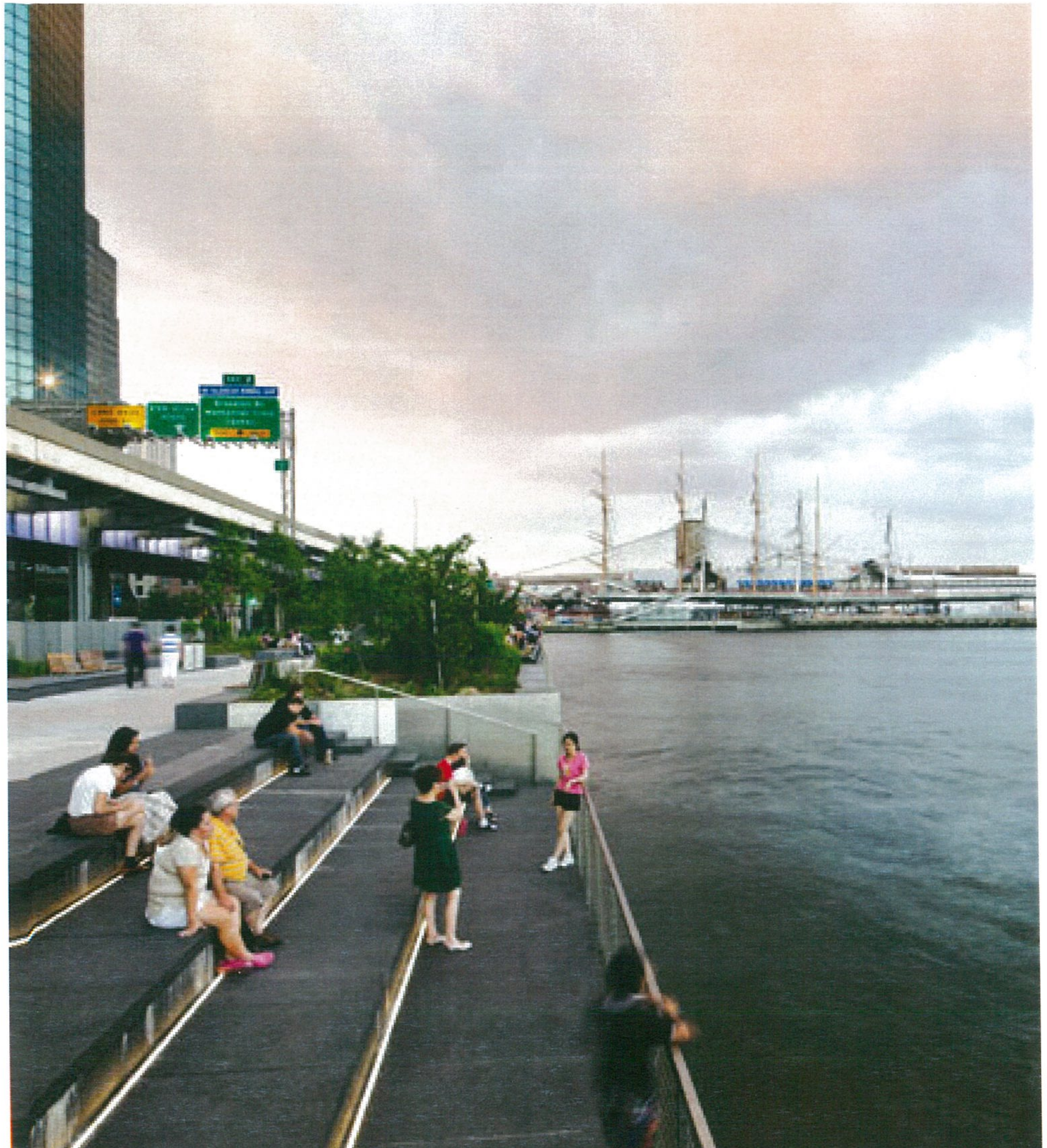
SCAPE / LANDSCAPE ARCHITECTURE PLLC



VIEW FROM ANABLE BASIN

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

SCAPE / LANDSCAPE ARCHITECTURE PLLC



EAST RIVER ESPLANADE BY SHOP ARCHITECTS/KEN SMITH LANDSCAPE ARCHITECTS

RIVERSIDE PARK SOUTH BY THOMAS BALSLEY ASSOCIATES

WATER STEPS

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

SCAPE / LANDSCAPE ARCHITECTURE PLLC

BROOKLYN BRIDGE PARK BY MVVA

TIDAL WETLANDS

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

SCAPE / LANDSCAPE ARCHITECTURE PLLC

ECOncrete

PRE-FABRICATED TIDAL POOLS

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

ECOncrete

MODULAR SEA WALL PANELS

PARAGON PAINT / WATERFRONT PUBLIC ACCESS AREA
APRIL 07, 2015

SCAPE / LANDSCAPE ARCHITECTURE PLLC

PROPOSED CONDITION

SHEET LIST - BSA PROPOSED CONDITION FILING SET	
Sheet Number	Sheet Name
G-000.00	PROPOSED CONDITIONS TITLE SHEET
G-001.00	PROPOSED CONDITIONS AREA SCHEDULE
G-002.00	PROPOSED CONDITIONS AREA SCHEDULE (CONT.)
G-003.00	PROPOSED CONDITIONS AREA SCHEDULE (CONT.)
A-000.00	SITE PLAN
A-100.00	CELLAR FLOOR PLAN
A-101.00	GROUND FLOOR PLAN
A-102.00	LEVEL 2 FLOOR PLAN
A-103.00	LEVEL 3 FLOOR PLAN
A-104.00	LEVEL 4 FLOOR PLAN
A-105.00	LEVEL 5 FLOOR PLAN
A-106.00	LEVELS 6-7 FLOOR PLANS
A-109.00	LEVELS 9-10 FLOOR PLANS
A-110.00	LEVELS 11-13 FLOOR PLANS
A-114.00	LEVELS 14-28 FLOOR PLANS
A-129.00	ROOF PLAN
A-200.00	OVERALL ELEVATIONS FROM VERNON BLVD
A-201.00	OVERALL ELEVATIONS FROM 46TH AVE.
A-202.00	46TH AVE, PARAGON AND ANABLE TOWER NORTH ELEVATION
A-205.00	46TH AVE, PARAGON AND ANABLE TOWER WEST ELEVATION
A-206.00	LOT 10 BUILDING ELEVATIONS
A-210.00	OVERALL N/S SECTION 1
A-211.00	OVERALL N/S SECTION 2
A-214.00	ANABLE TOWER SECTIONS

SEAL AND SIGNATURE

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233 BROADWAY 11TH FLOOR
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VERNON BLVD |
PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

PROPOSED CONDITIONS TITLE SHEET

JOB # | 110912
DATE | 03/06/2015
SCALE |
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G-000.00

BSA PROPOSED CONDITION FLOOR AREA SCHEDULE

CONSTRUCTION FLOOR NO.	BUILDING	USE	GROSS FA (sqft)	DEDUCTIONS (sqft)	ZONING FA (sqft)
46th Ave					
-1	46th Ave	BIKE PARKING	1167 SF	1167 SF	0 SF
-1	46th Ave	PARKING	10291 SF	10291 SF	0 SF
1	46th Ave	LOBBY	4046 SF	469 SF	3577 SF
1	46th Ave	RETAIL	2700 SF	0 SF	2700 SF
2	46th Ave	RESIDENTIAL	6150 SF	185 SF	5966 SF
3	46th Ave	RESIDENTIAL	6150 SF	185 SF	5966 SF
4	46th Ave	RESIDENTIAL	6150 SF	185 SF	5966 SF
5	46th Ave	RESIDENTIAL	4616 SF	138 SF	4478 SF
6	46th Ave	RESIDENTIAL	4616 SF	138 SF	4478 SF
7	46th Ave	RESIDENTIAL	4616 SF	138 SF	4478 SF
8	46th Ave	RESIDENTIAL	4616 SF	138 SF	4478 SF
			55119 SF	13034 SF	42085 SF
North Building					
1	North Building	AMENITY	722 SF	22 SF	701 SF
1	North Building	BIKE PARKING	350 SF	350 SF	0 SF
1	North Building	LOBBY	2028 SF	442 SF	1586 SF
1	North Building	RETAIL	2284 SF	0 SF	2284 SF
2	North Building	RESIDENTIAL	4559 SF	137 SF	4422 SF
3	North Building	RESIDENTIAL	4559 SF	137 SF	4422 SF
4	North Building	RESIDENTIAL	4559 SF	137 SF	4422 SF
5	North Building	RESIDENTIAL	4559 SF	137 SF	4422 SF
6	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
7	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
8	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
9	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
10	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
11	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
12	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
13	North Building	RESIDENTIAL	3897 SF	117 SF	3780 SF
			54799 SF	2297 SF	52502 SF
Paragon and Anable Tower					
1	Paragon and Anable Tower	AMENITY	2045 SF	61 SF	1984 SF
1	Paragon and Anable Tower	BIKE PARKING	1182 SF	1182 SF	0 SF
1	Paragon and Anable Tower	LOBBY	2381 SF	446 SF	1935 SF
1	Paragon and Anable Tower	RETAIL	7762 SF	0 SF	7762 SF
2	Paragon and Anable Tower	RESIDENTIAL	9939 SF	298 SF	9640 SF
3	Paragon and Anable Tower	RESIDENTIAL	12681 SF	380 SF	12301 SF
4	Paragon and Anable Tower	RESIDENTIAL	12674 SF	380 SF	12294 SF
5	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
6	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
7	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
8	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
9	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
10	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
11	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
12	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
13	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
14	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
15	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
16	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
17	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
18	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
19	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
20	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
21	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
22	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
23	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
24	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
25	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
26	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
27	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
28	Paragon and Anable Tower	RESIDENTIAL	6817 SF	204 SF	6612 SF
			212261 SF	7656 SF	204605 SF
Grand total			322179 SF	22987 SF	299192 SF

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VERNON BLVD | PROPOSED CONDITIONS AREA SCHEDULE

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB # | 110912
DATE | 03/06/2015
SCALE |
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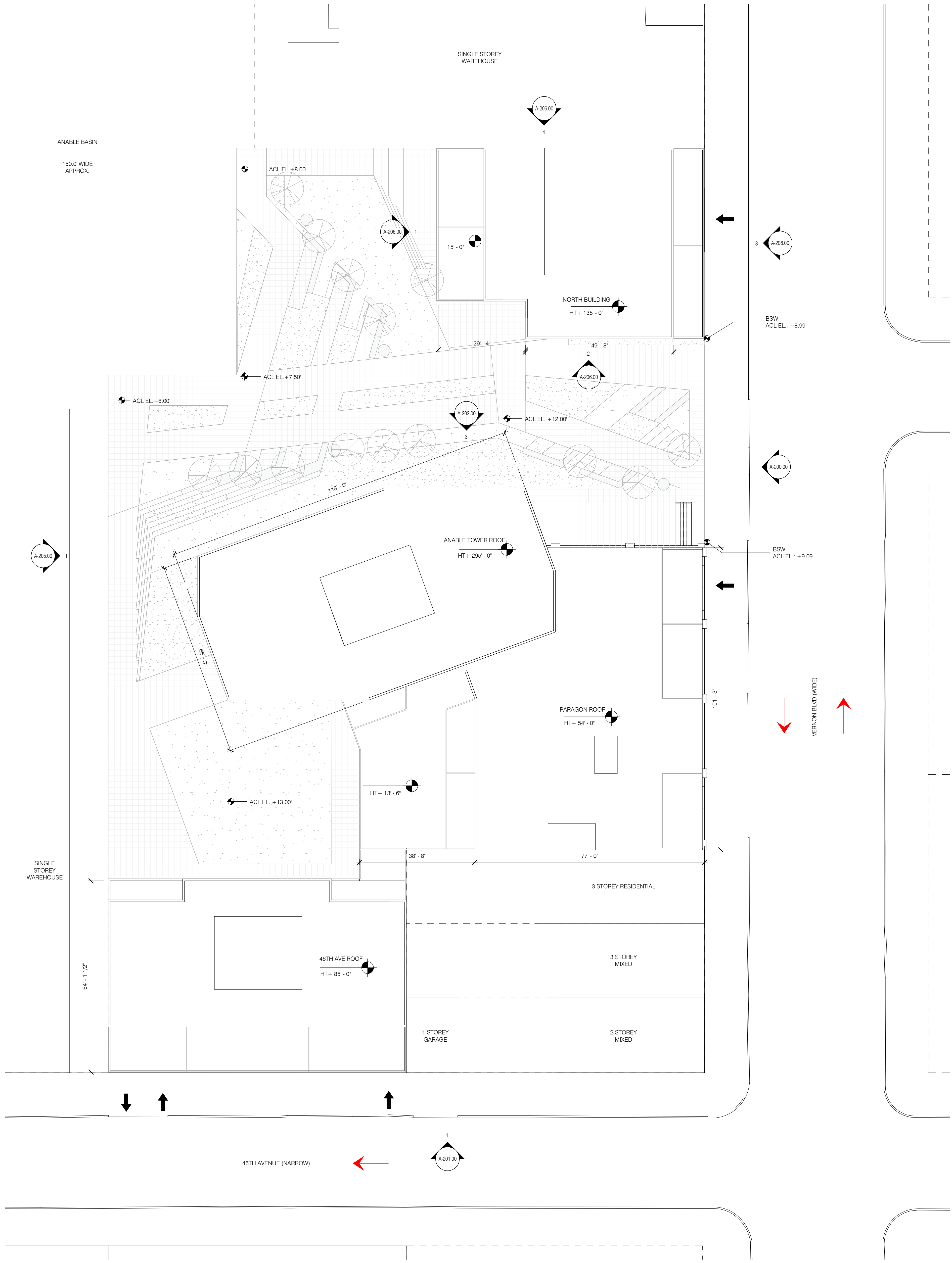

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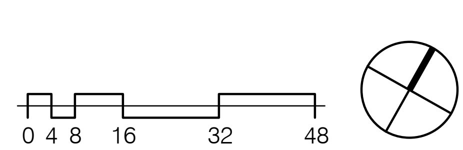

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VERNON BLVD | SITE PLAN

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB #| 110912
DATE| 03/04/2015
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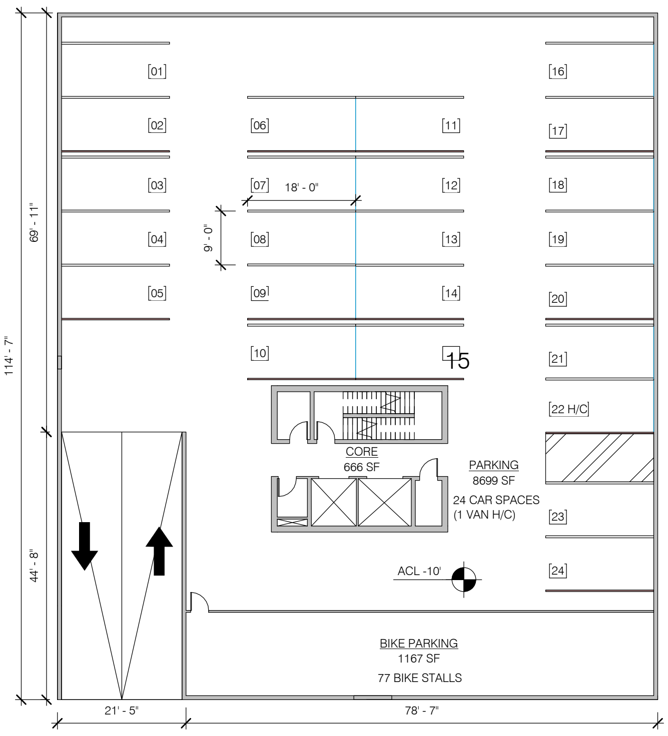

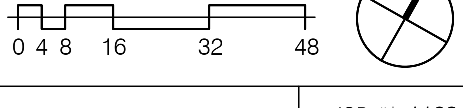

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VERNON BLVD | CELLAR FLOOR PLAN

PARAGON PAINT BUILDING
DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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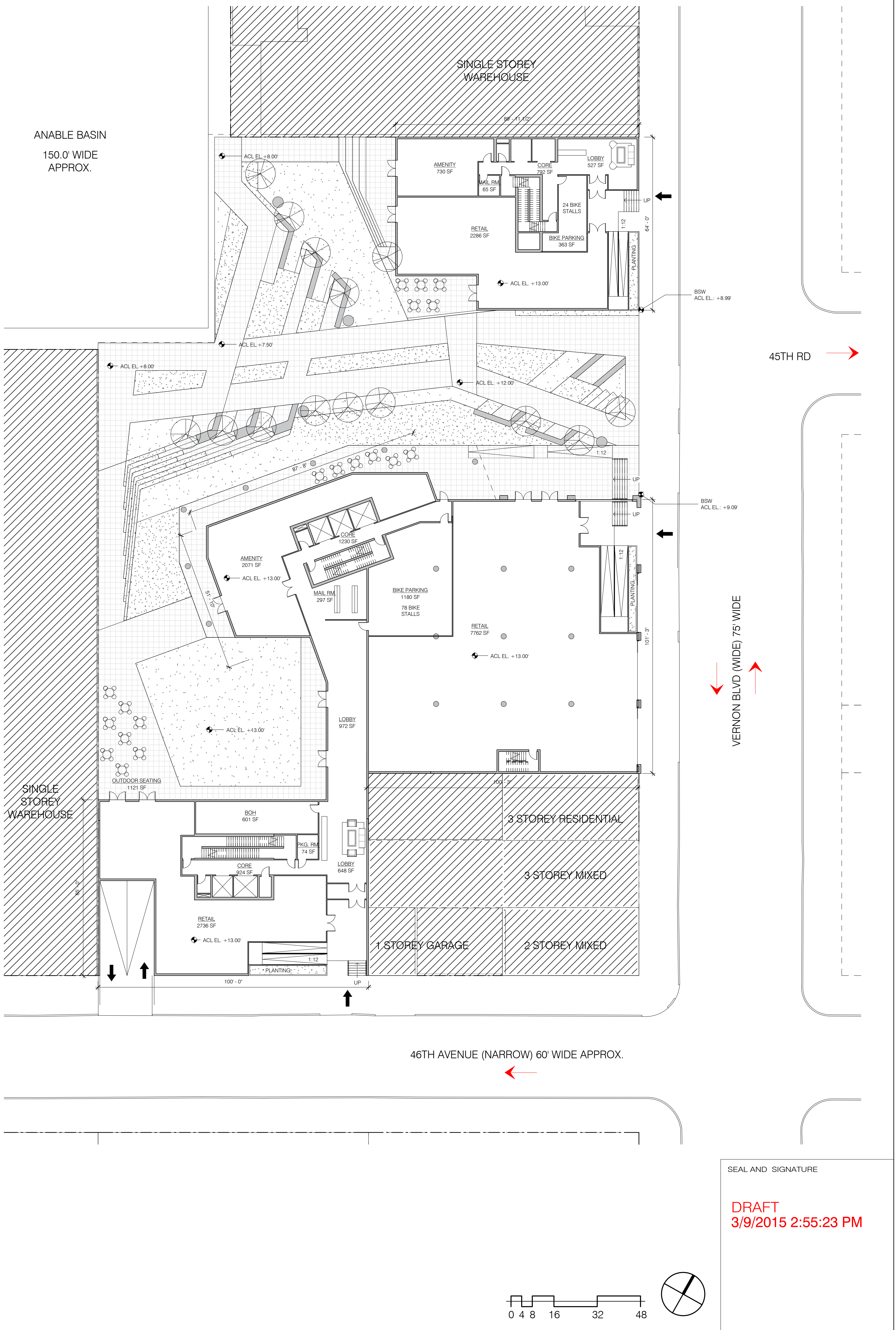

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VERNON BLVD | GROUND FLOOR PLAN

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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DATE | 03/04/2015
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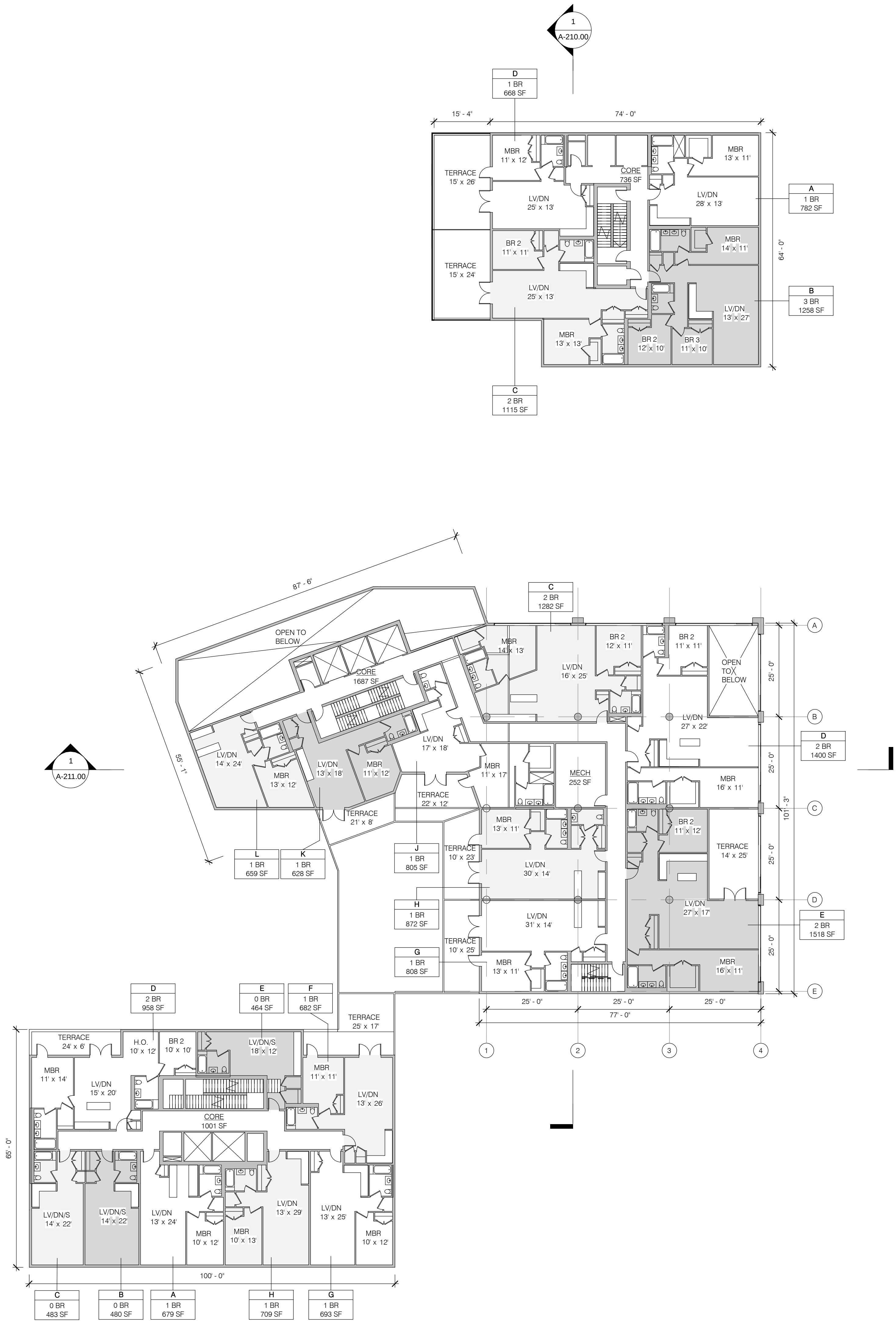

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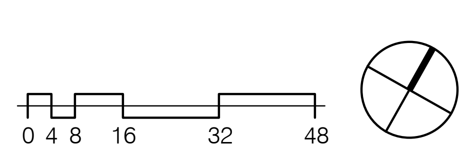

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VERNON BLVD | LEVEL 2 FLOOR PLAN

PARAGON PAINT BUILDING
DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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DATE | 03/04/2015
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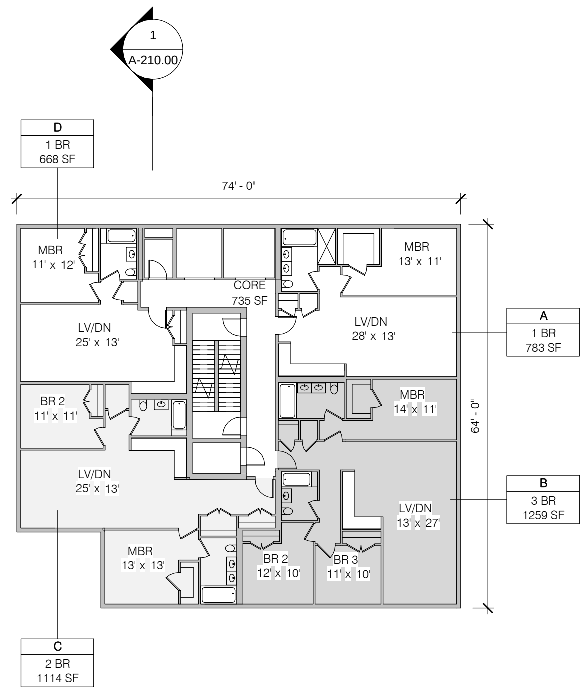

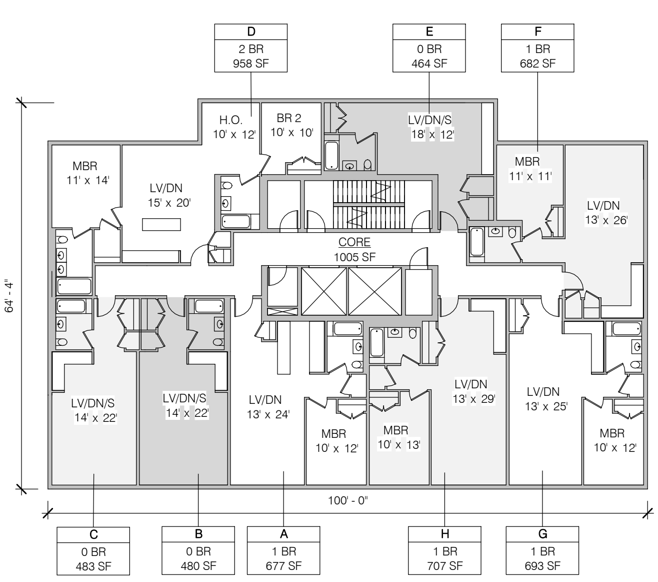

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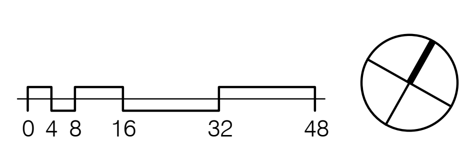

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VERNON BLVD | LEVEL 3 FLOOR PLAN

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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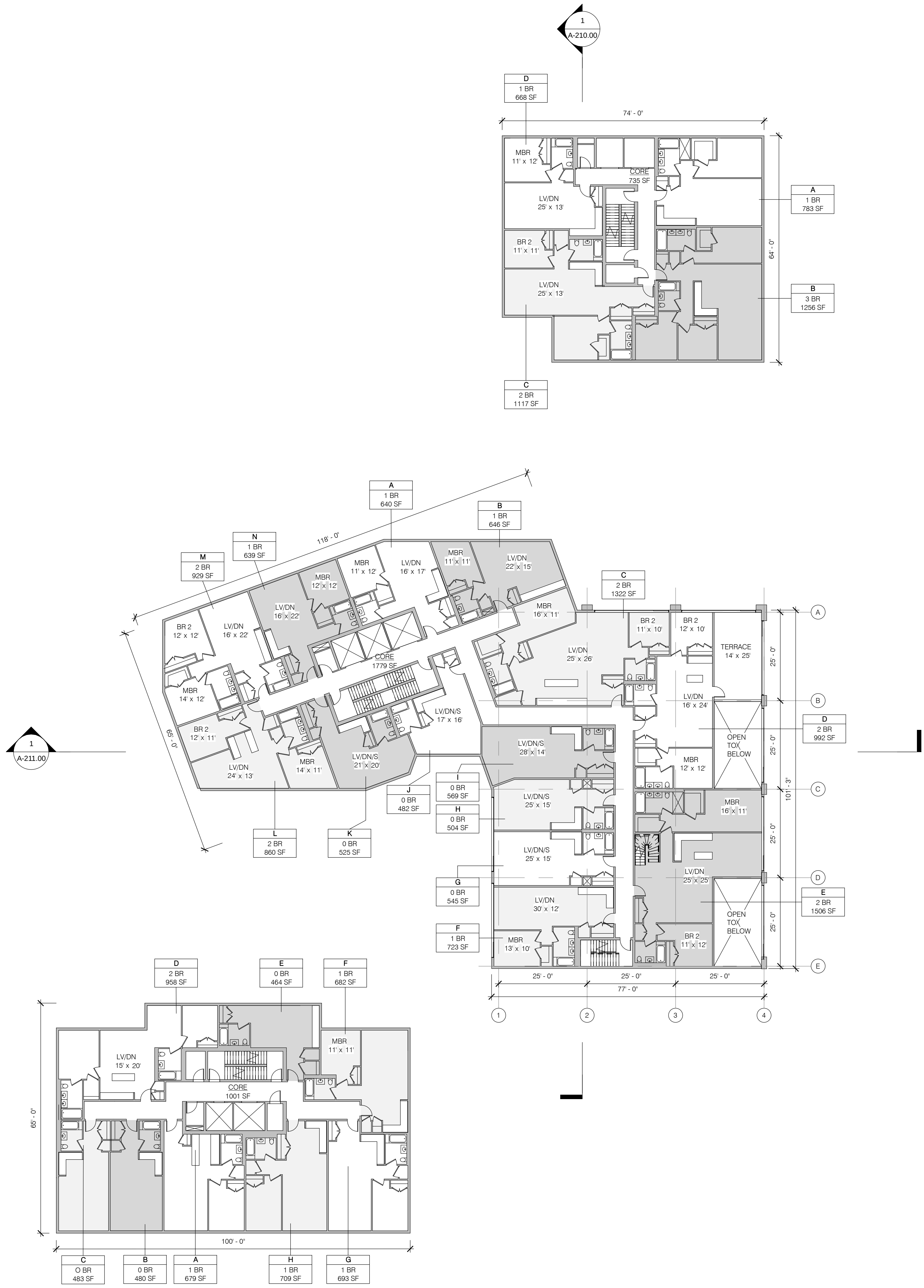

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VERNON BLVD | LEVEL 4 FLOOR PLAN
PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB #| 110912
DATE| 03/04/2015
SCALE| 1/32" = 1'-0"
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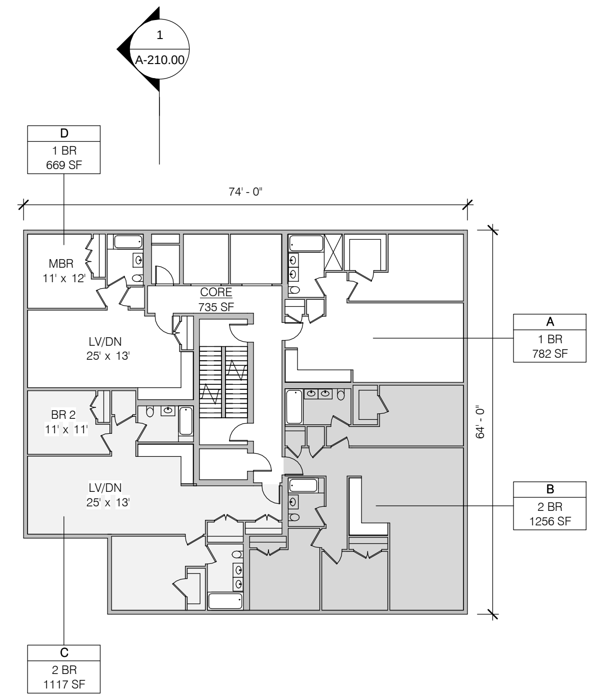

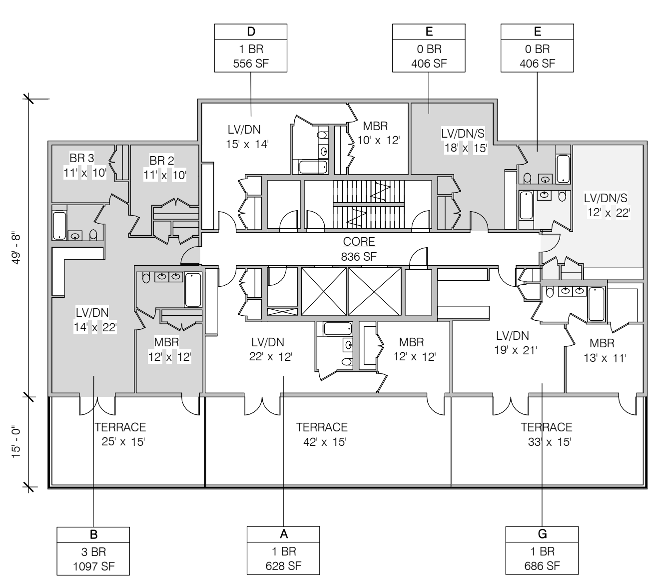

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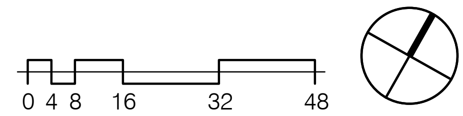

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VERNON BLVD | LEVEL 5 FLOOR PLAN

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB # | 110912
DATE | 03/04/2015
SCALE | 1/32" = 1'-0"
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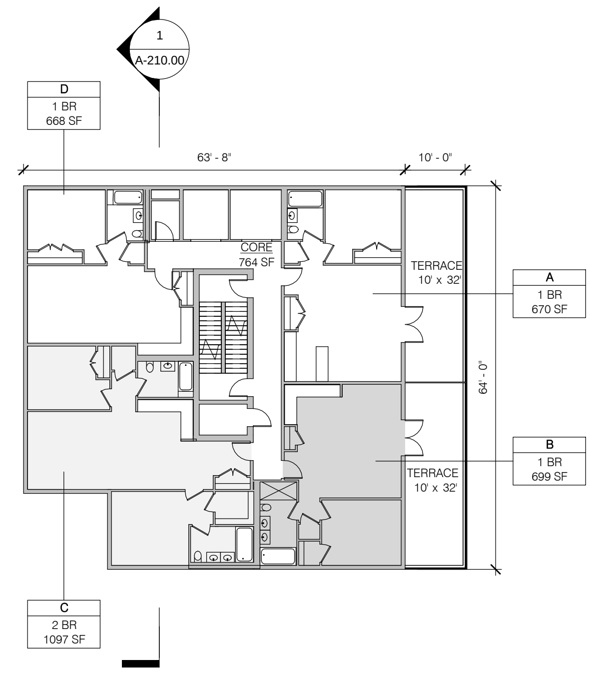

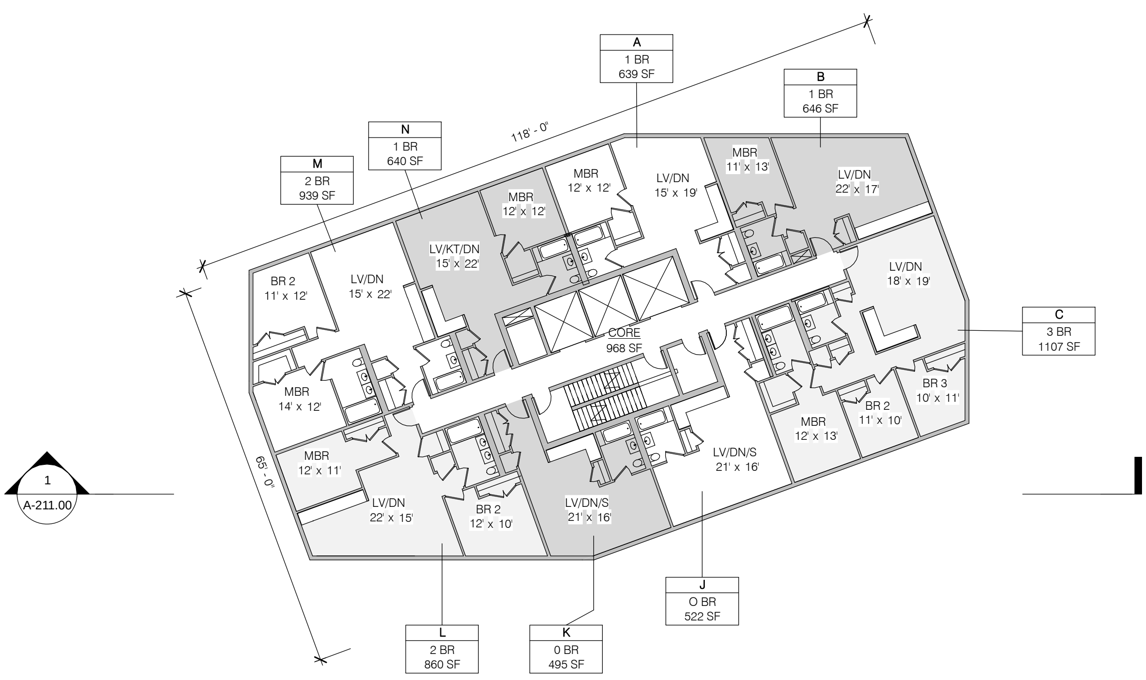

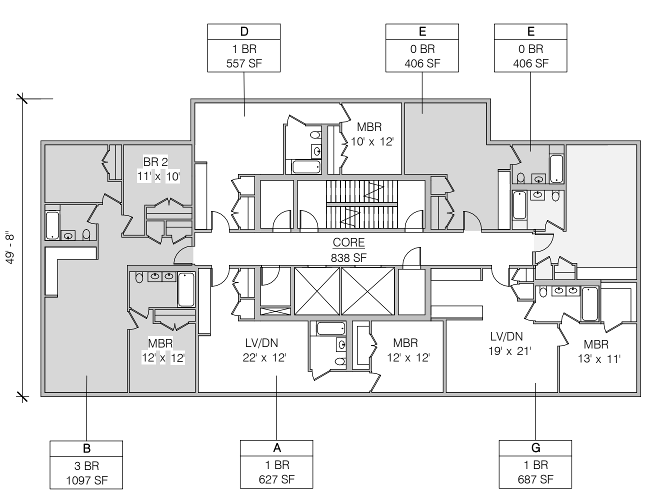

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VERNON BLVD | LEVELS 6-7 FLOOR PLANS

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB #| 110912
DATE| 03/04/2015
SCALE| 1/32" = 1'-0"
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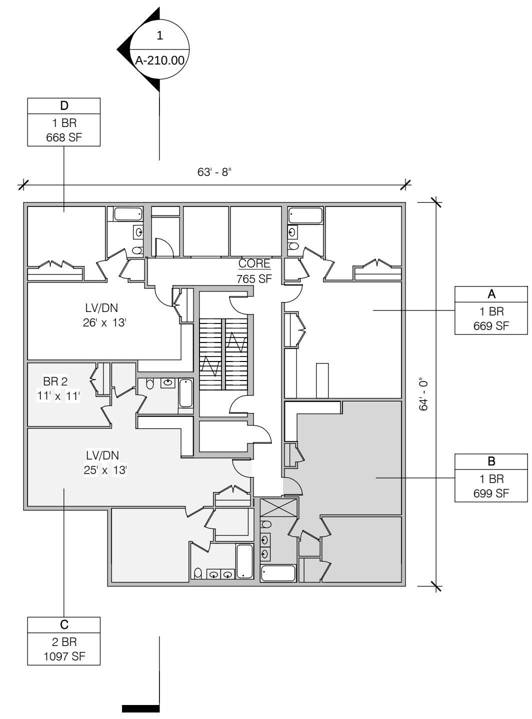

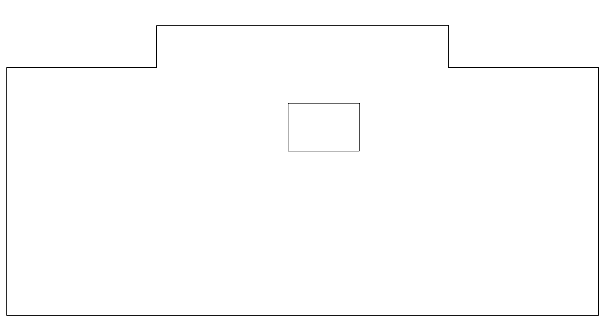

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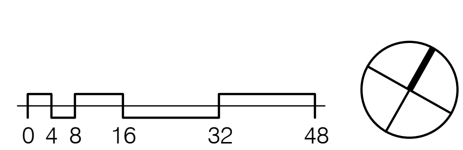

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VERNON BLVD | LEVELS 9-10 FLOOR PLANS

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB #| 110912
DATE| 03/04/2015
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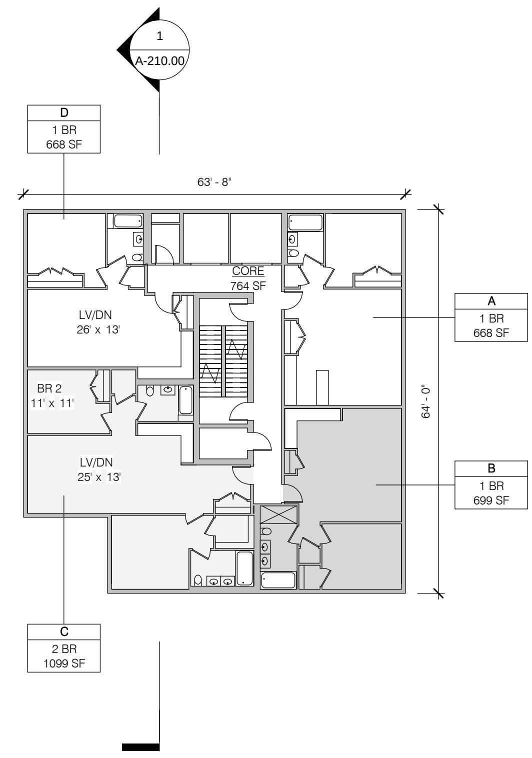

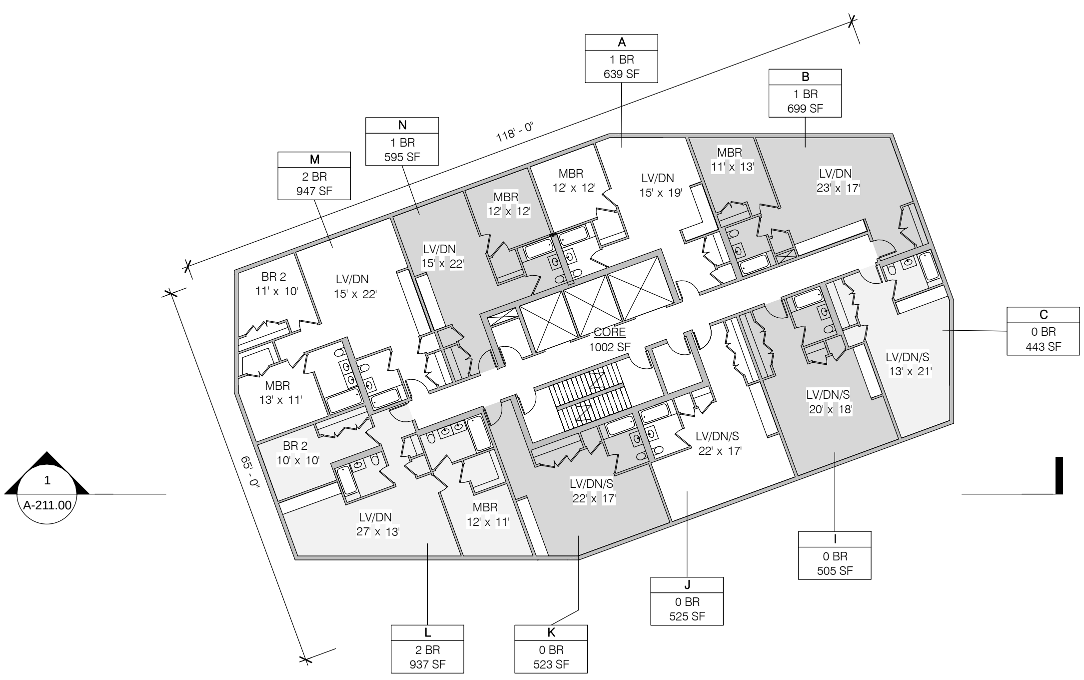

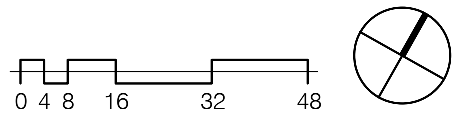

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VERNON BLVD | LEVELS 11-13 FLOOR PLANS

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB #| 110912
DATE| 03/04/2015
SCALE| 1/32" = 1'-0"
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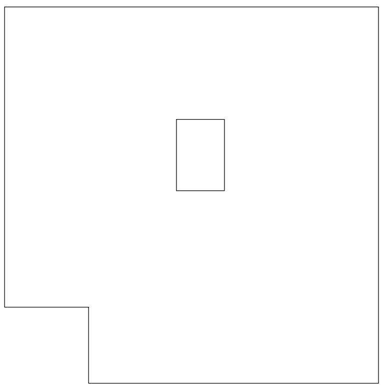

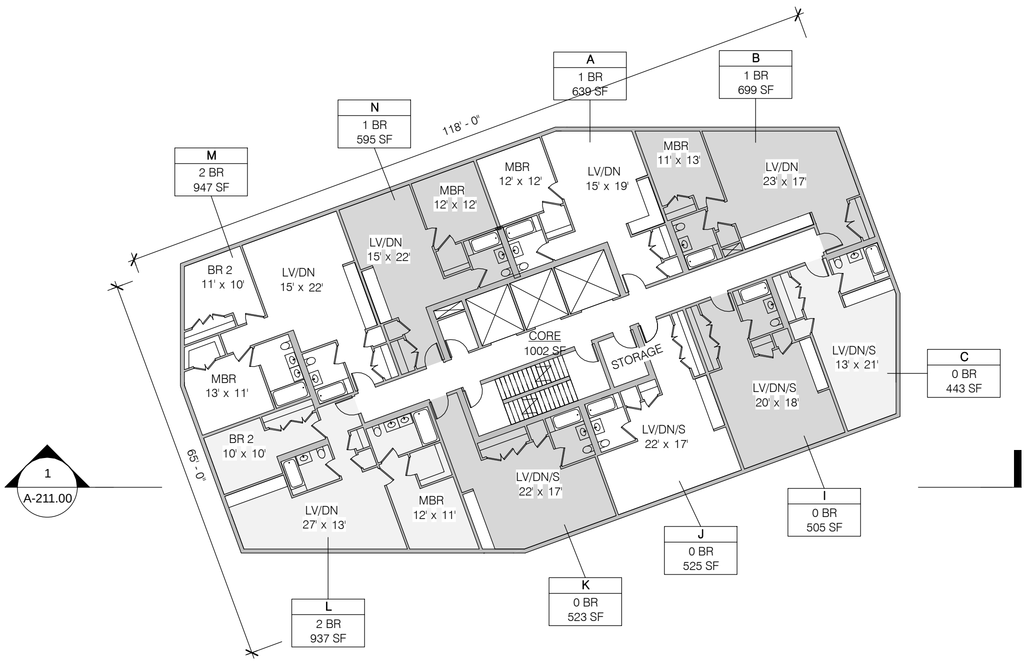

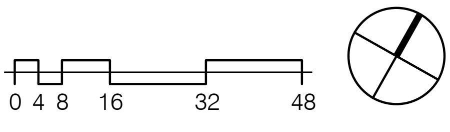

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VERNON BLVD | LEVELS 14-28 FLOOR PLANS

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB # | 110912
DATE | 03/04/2015
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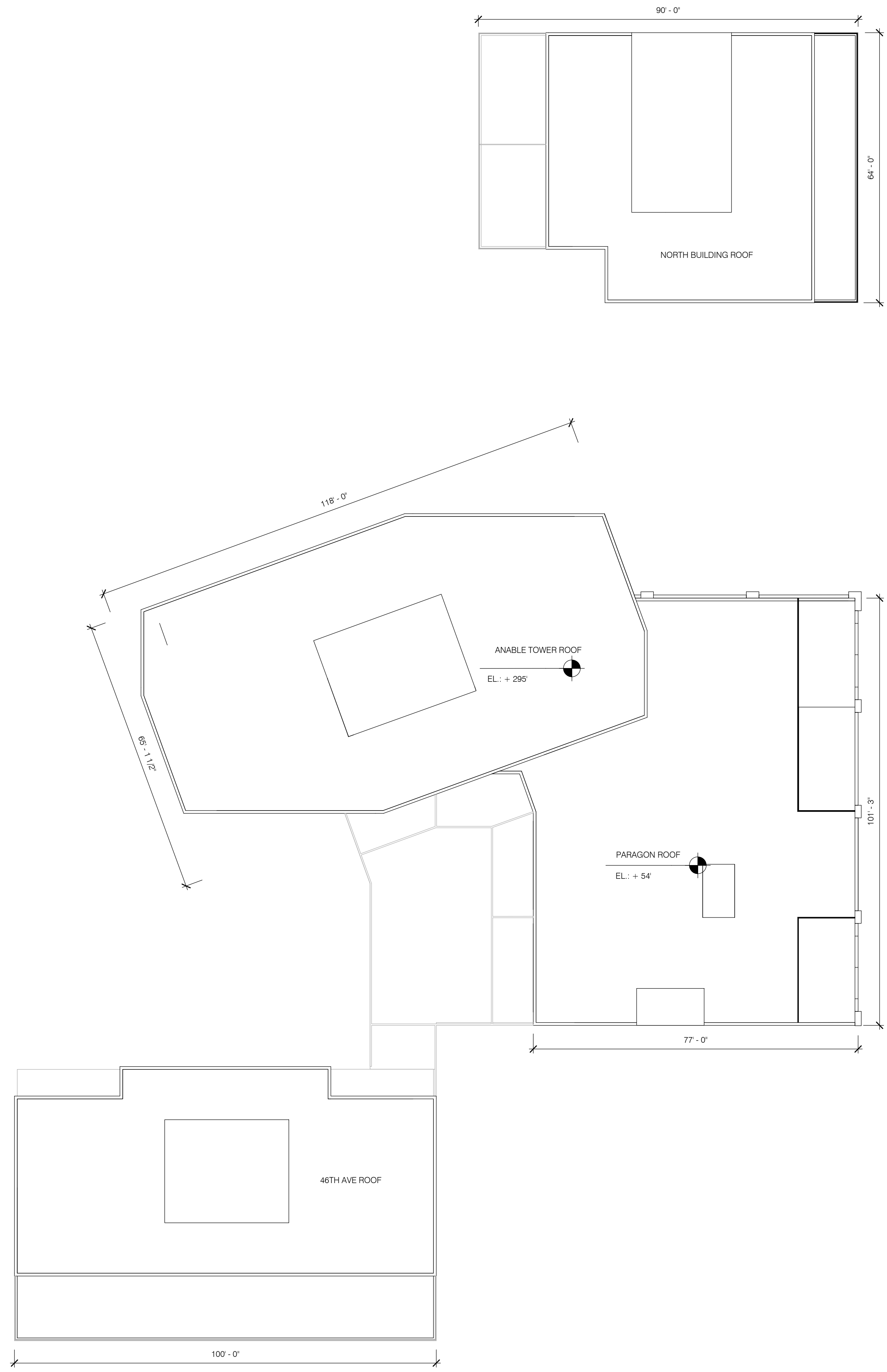

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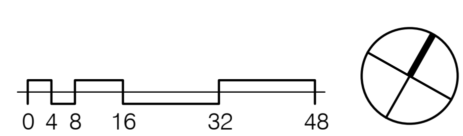

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VERNON BLVD | ROOF PLAN

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

JOB # | 110912
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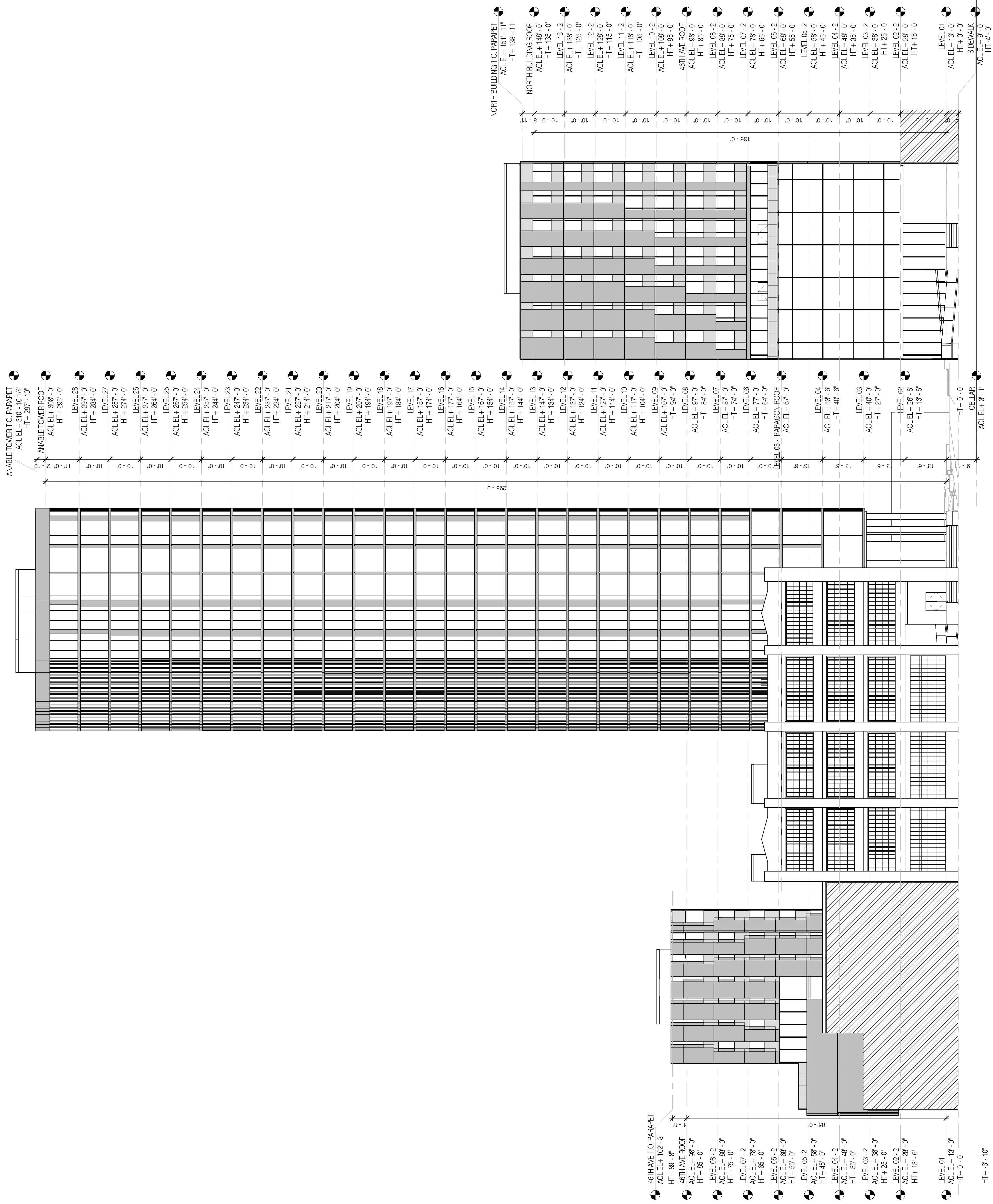

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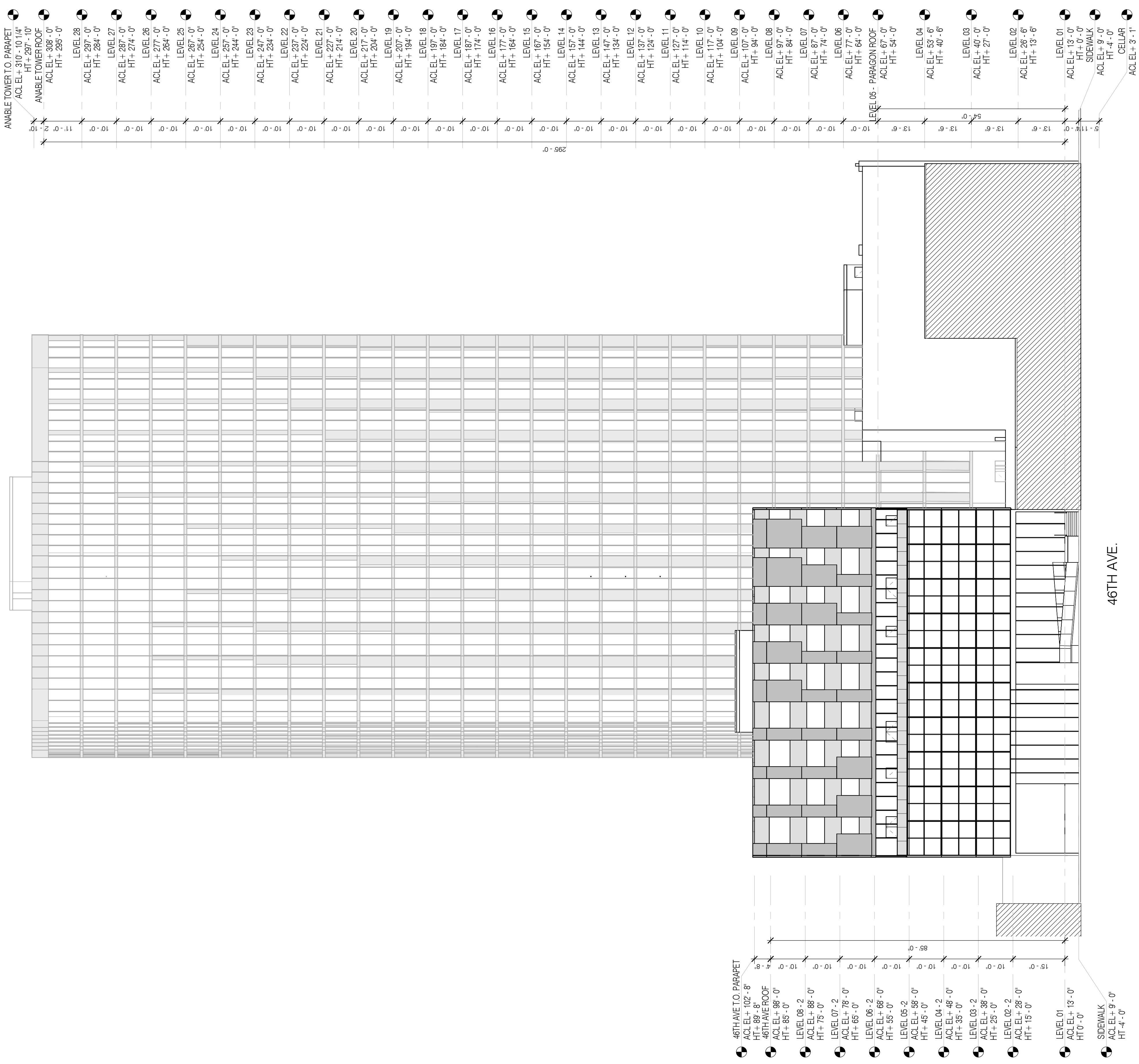
shop	SHoP ARCHITECTS, P.C. 233 BROADWAY 11TH FLOOR NEW YORK, NY 10279 tel 212.889.9005	THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND AS SUCH MAY NOT BE USED FOR OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR COMPLETION OF THIS PROJECT BY OTHERS.	VERNON BLVD | PARAGON PAINT BUILDING DEVELOPMENT 45-40 VERNON BLVD LONG ISLAND CITY, QUEENS, NY 11101 BLOCK 26, LOTS 4, 8, AND 10	OVERALL ELEVATIONS FROM VERNON BLVD	JOB #| 110912 DATE| 03/06/2015 SCALE| 1/32" = 1'-0" DRAWN BY| Author CHECKED BY| Checker	NOT FOR CONSTRUCTION A-200.00



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PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

OVERALL ELEVATIONS FROM 46TH AVE.

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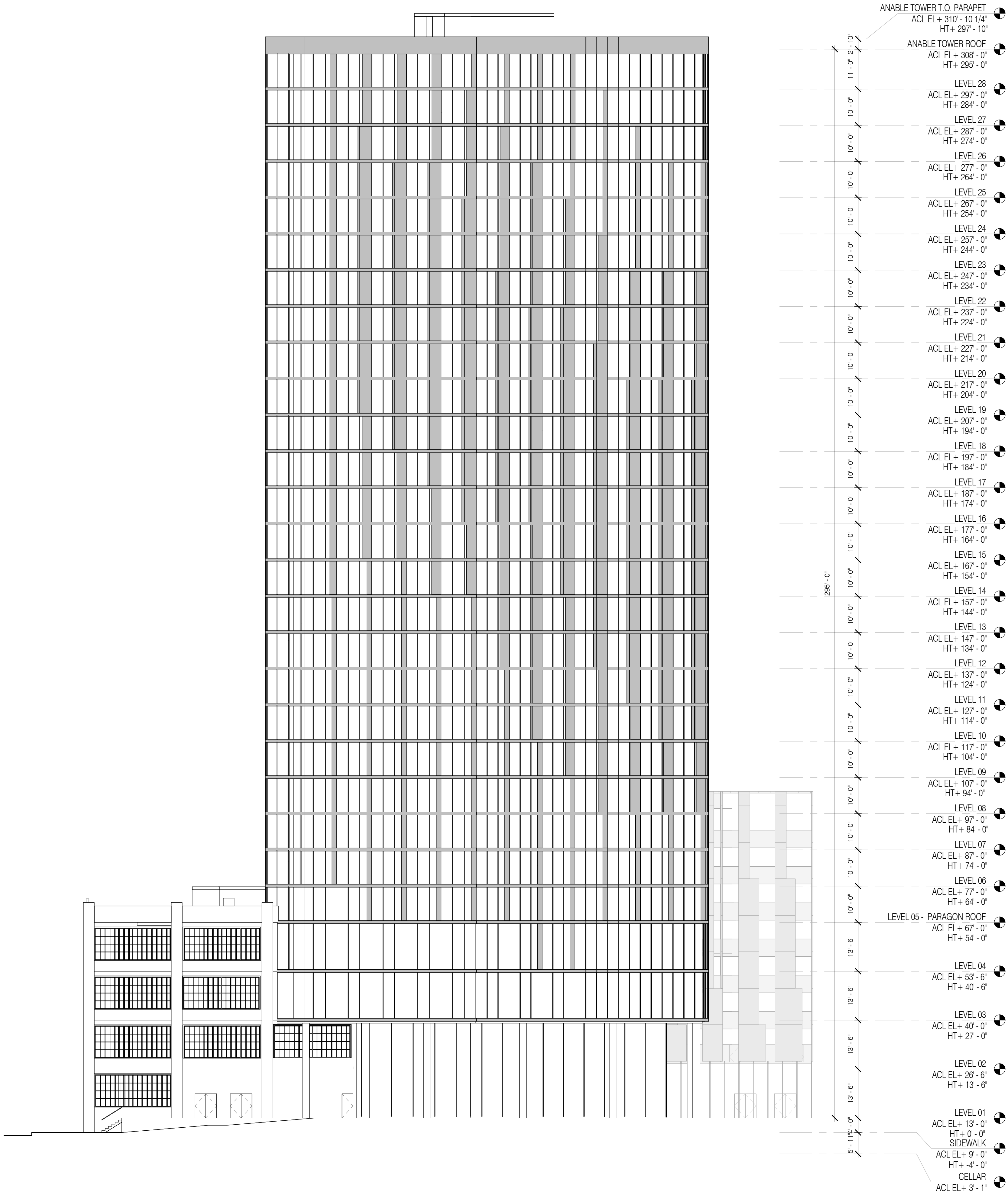

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45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

46TH AVE, PARAGON AND ANABLE TOWER NORTH ELEVATION

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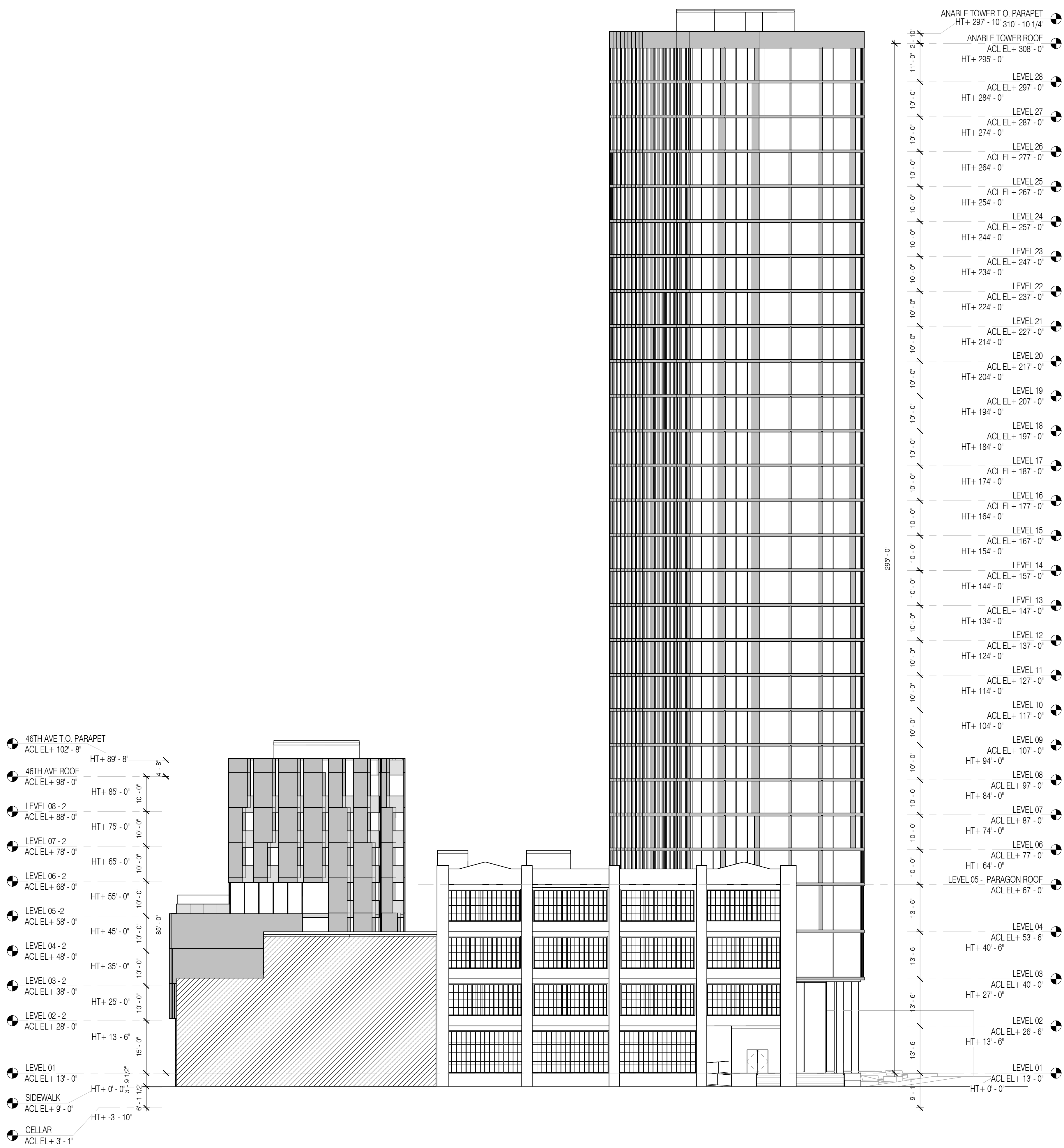

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45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

46TH AVE, PARAGON AND ANABLE TOWER EAST ELEVATION

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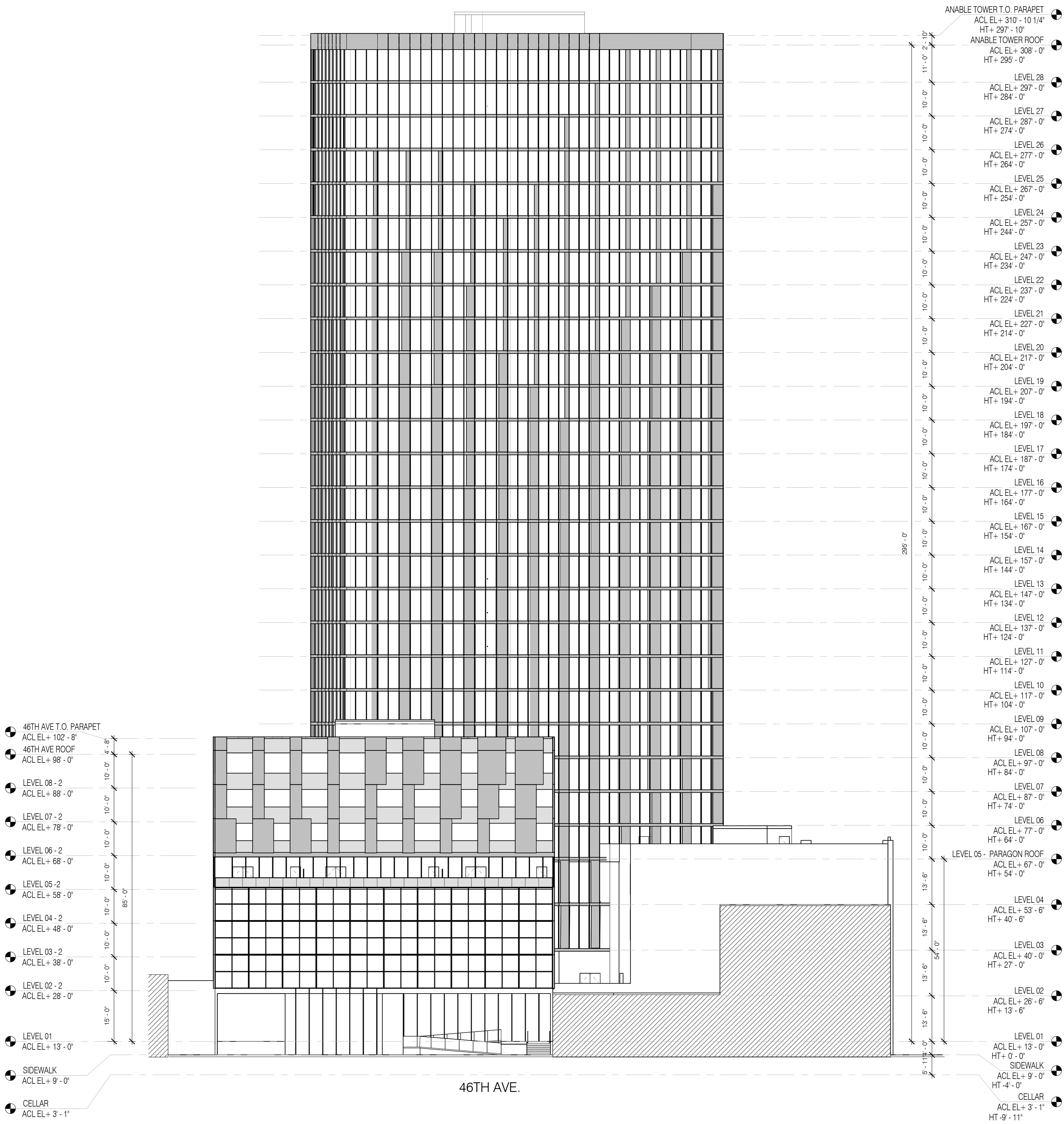

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VERNON BLVD |
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45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

46TH AVE, PARAGON AND ANABLE TOWER SOUTH ELEVATION

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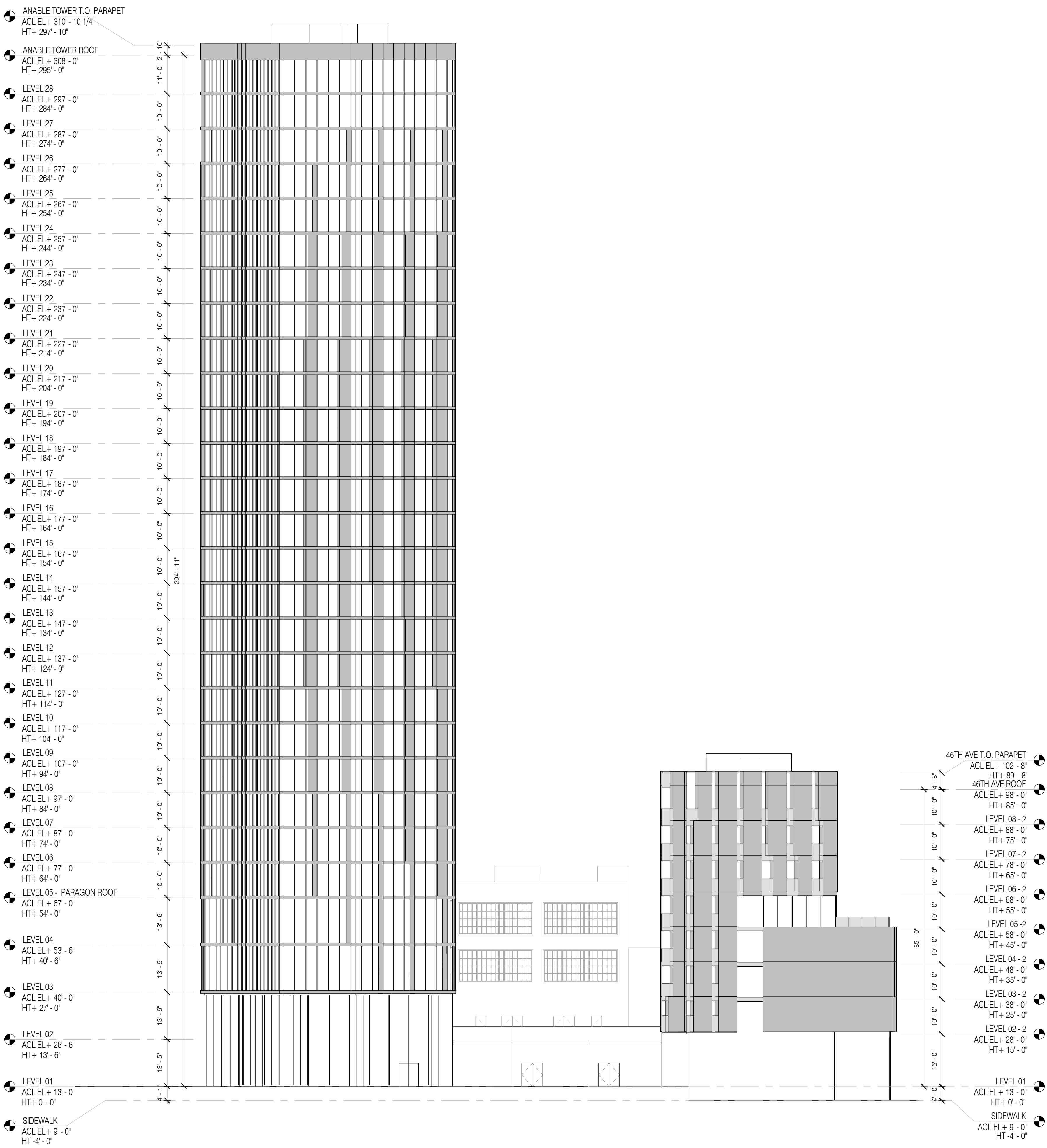

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VERNON BLVD |
PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

46TH AVE, PARAGON AND ANABLE TOWER WEST ELEVATION

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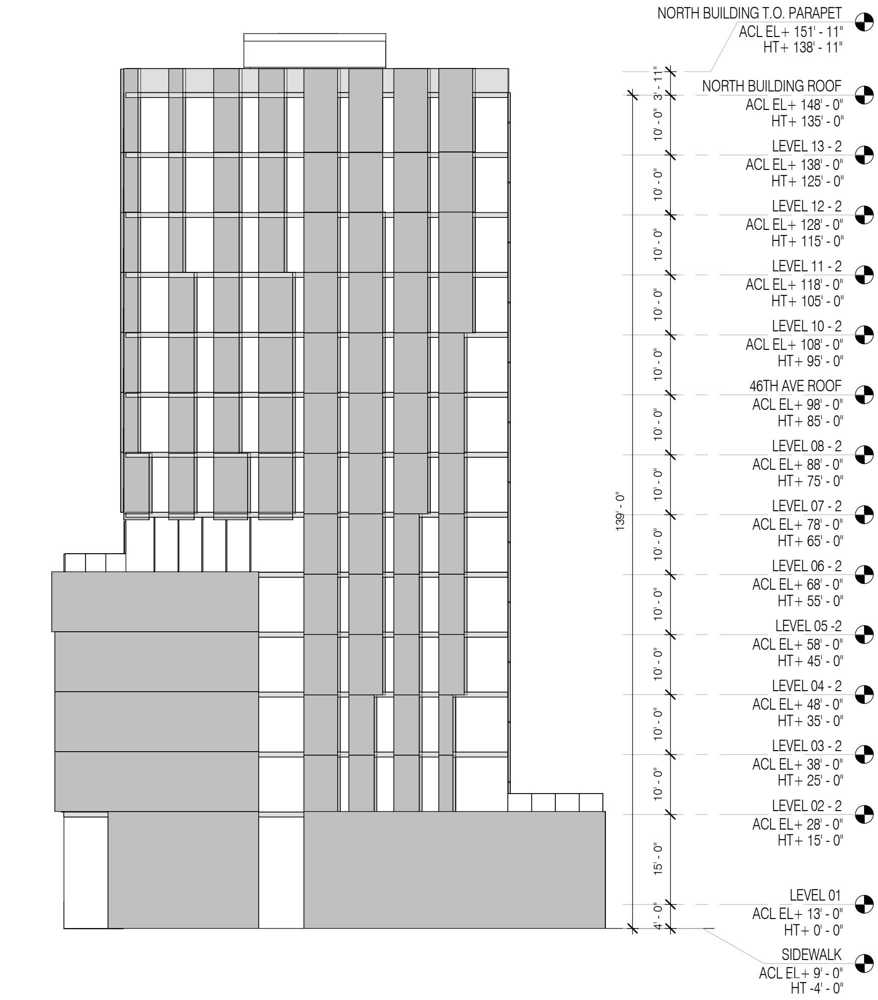

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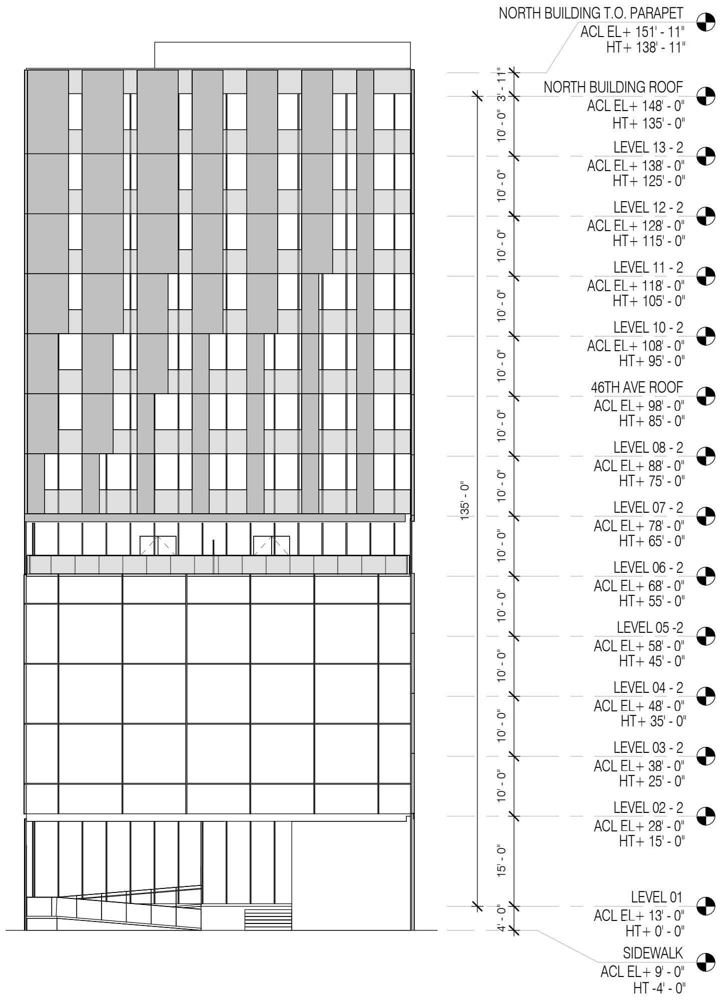

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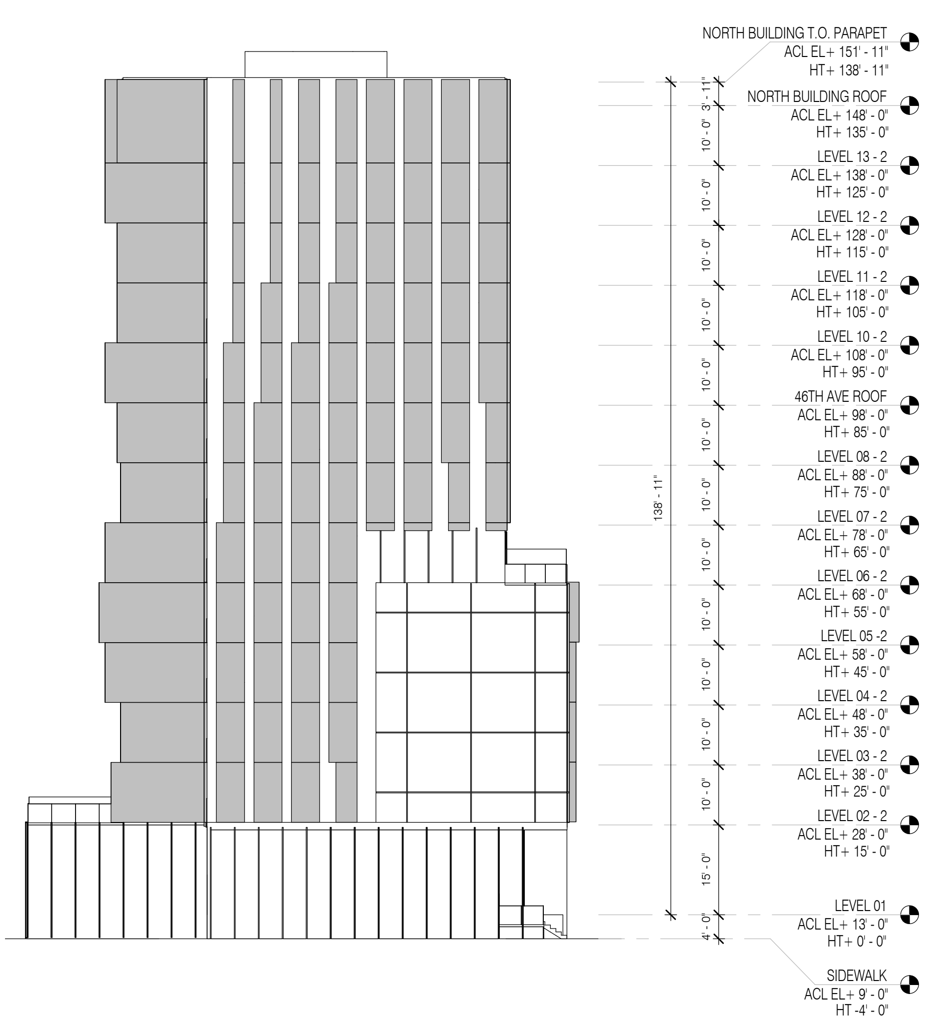

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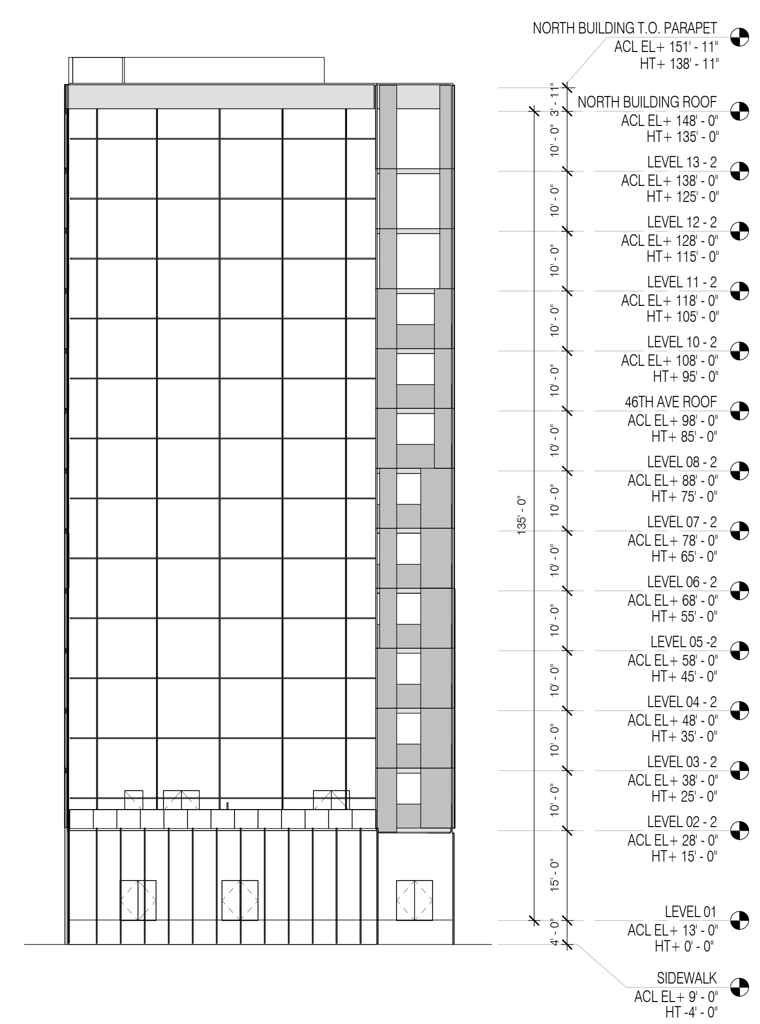

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VERNON BLVD | LOT 10 BUILDING ELEVATIONS

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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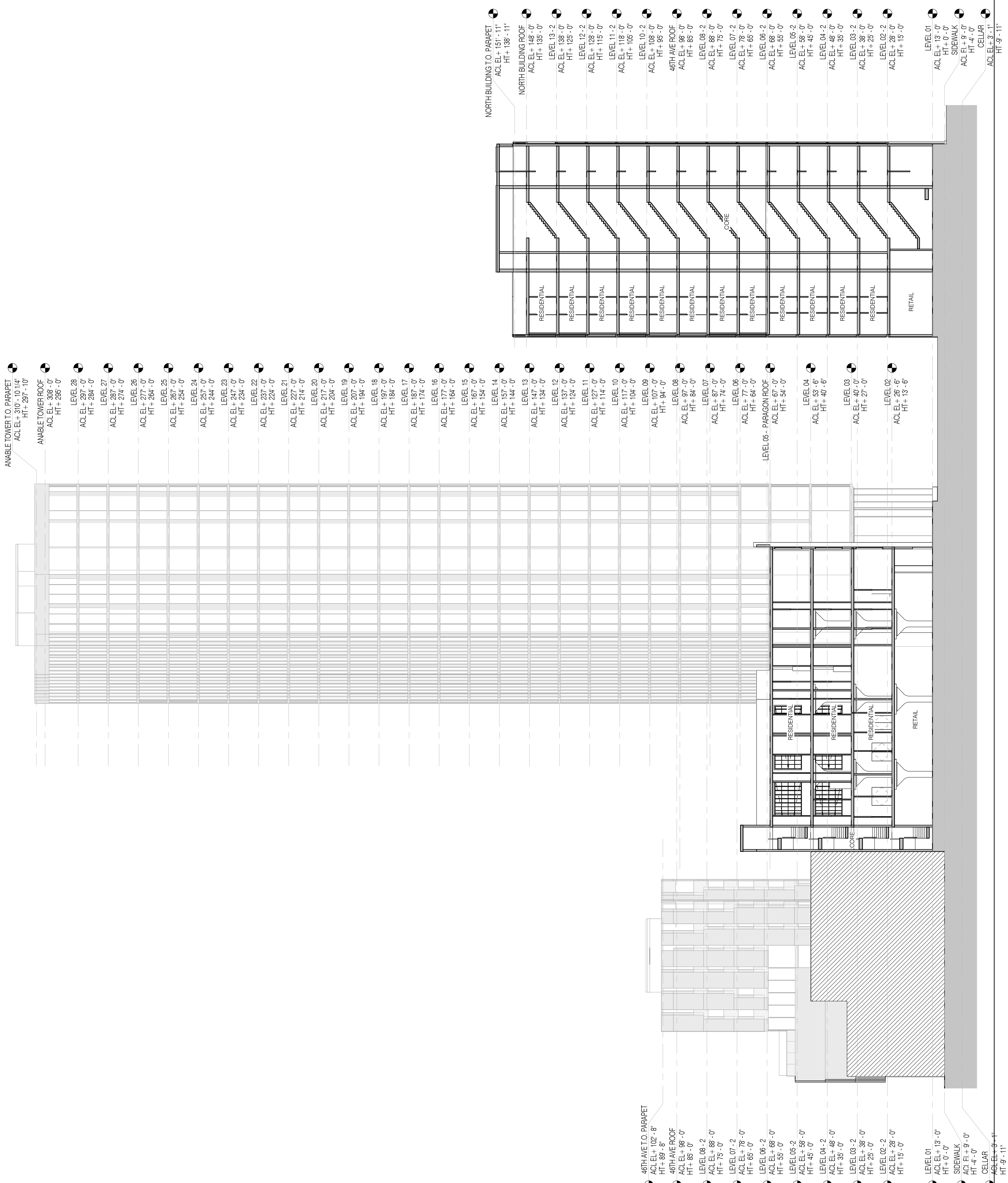

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VERNON BLVD | OVERALL N/S SECTION 1

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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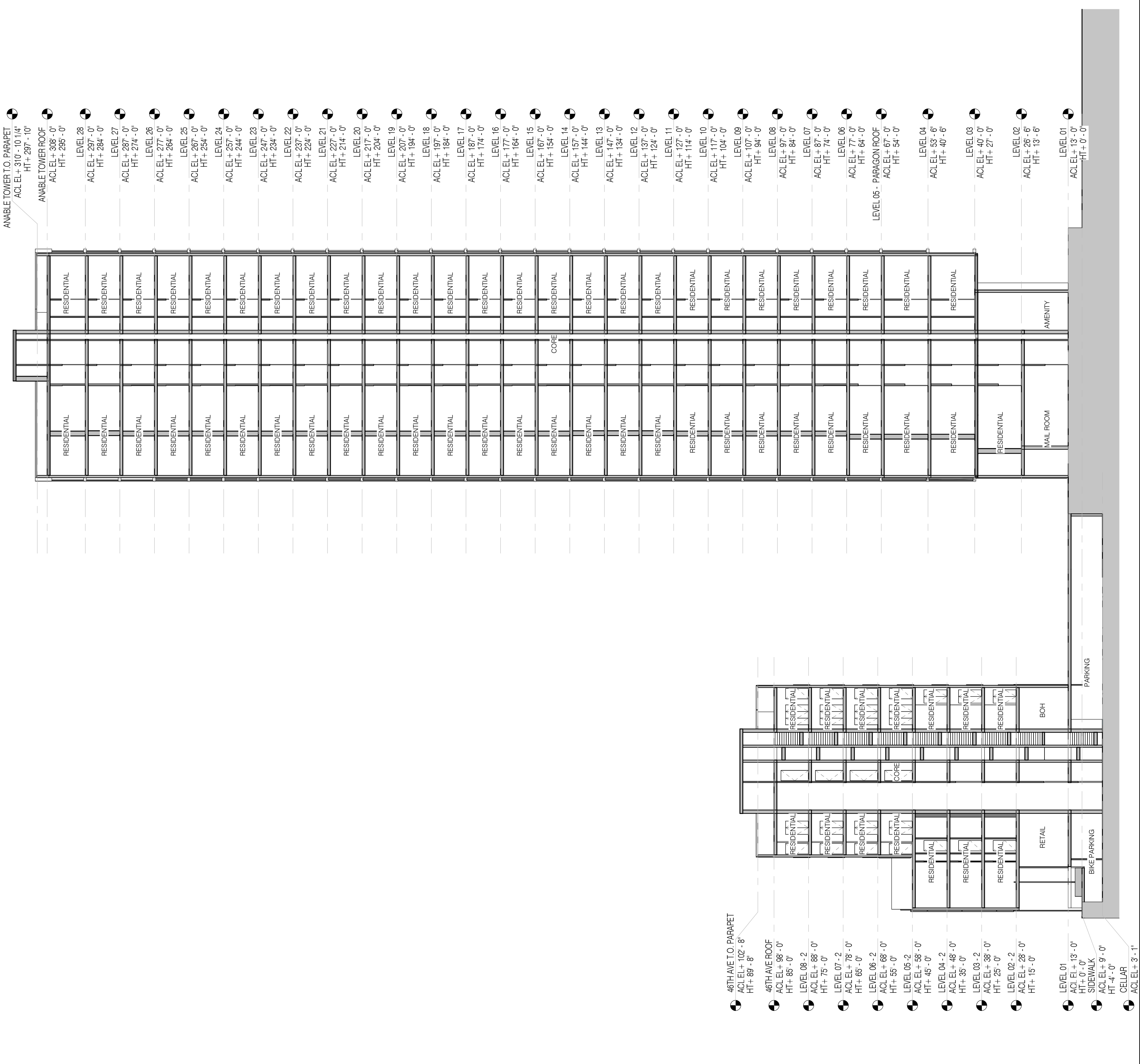

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VERNON BLVD | OVERALL N/S SECTION 2

PARAGON PAINT BUILDING DEVELOPMENT

45-40 VERNON BLVD
LONG ISLAND CITY, QUEENS, NY 11101
BLOCK 26, LOTS 4, 8, AND 10

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APPENDIX B

Citizen Participation Plan

BROWNFIELD CLEANUP PROGRAM
CITIZEN PARTICIPATION PLAN

FORMER PARAGON PAINT AND VARNISH CORP. SITE
C241108
549 46TH AVENUE
LONG ISLAND CITY
QUEENS, NEW YORK

Prepared for:

549 46th Avenue LLC
549 46th Avenue
Long Island City, NY 11101

and

Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

November 17, 2009

Apex Companies, LLC

Apex Companies, LLC
120-D Wilbur Place
Bohemia, New York 11716-2440
Phone: (631) 567-1777 Fax: (631) 567-1967

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APPENDICES:

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the brownfield site's remedial process.

BROWNFIELD CLEANUP PROGRAM
CITIZEN PARTICIPATION PLAN

FORMER PARAGON PAINT AND VARNISH CORP. SITE
C241108
549 46TH AVENUE
LONG ISLAND CITY
QUEENS, NEW YORK

1.0 WHAT IS NEW YORK'S BROWNFIELD CLEANUP PROGRAM?

New York's Brownfield Cleanup Program (BCP) is designed to encourage the private sector to investigate, remediate (clean up) and redevelop brownfield sites. A brownfield site is any real property where redevelopment or reuse may be complicated by the presence or potential presence of a contaminant. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal and financial burdens on a community. If the brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Volunteers that conduct brownfield site remedial activities.[1] A Volunteer is a person whose request to participate in the BCP has been accepted by NYSDEC. The BCP typically contains investigation, possible interim remedial measures (IRMs), and remediation (cleanup) requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

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[1] *"Remedial Activities," "remedial action," and "remediation are defined as all activities or actions undertaken to eliminate, remove, treat, abate, control, manage, or monitor contaminants at or coming from a brownfield site.*

2.0 CITIZEN PARTICIPATION PLAN OVERVIEW

This Citizen Participation (CP) Plan provides members of the affected and interested public with information about how NYSDEC will inform and involve them during the investigation and remediation of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Volunteer. This CP Plan has been developed for Paragon Paint and Varnish Cleanup ("Site") under the BCP. NYSDEC is committed to informing and involving the public concerning the investigation and remediation (cleanup) of the Site. This CP Plan describes the public information and involvement program that will be carried out with assistance from the Volunteer.

Appendix A contains a map identifying the location of the Site.

2.1 Project Contacts

Appendix B identifies the NYSDEC project contact(s) to which the public should address questions or request information about the site's remedial program. The public's suggestions about this CP Plan and the CP program for the Site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

2.2 Document Repositories

The locations of the site's document repositories also are identified in ***Appendix B***. The document repositories provide convenient access to important project documents for public review and comment.

2.3 Site Contact List

Appendix C contains the brownfield site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and remediation process. The brownfield site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming remedial activities at the Site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The brownfield site contact list includes, at a minimum:

- Chief executive officer and official(s) principally involved with relevant zoning and planning matters of each county, city, town and village in which the Site is located;
- Residents, owners, and occupants of the Site and properties adjacent to the Site;

- The public water supplier which services the area in which the Site is located;
- Any person who has requested to be placed on the Site contact list;
- The administrator of any school or day care facility located on or near the Site for purposes of posting and/or dissemination of information at the facility; and,
- Document repositories.

Where the Site or adjacent real property contains multiple dwelling units, the Volunteer will work with NYSDEC to develop an alternative method for providing such notice in lieu of mailing to each individual. For example, the owner of such a property that contains multiple dwellings may be requested to prominently display fact sheets and notices required to be developed during the site's remedial process. This procedure would substitute for the mailing of such notices and fact sheets, especially at locations where renters, tenants and other residents may number in the hundreds or thousands, making the mailing of such notices impractical.

The brownfield site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in ***Appendix B***. Other additions to the brownfield site contact list may be made on a site-specific basis at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

2.4 CP Activities

Appendix D identifies the CP activities, at a minimum, that have been and will be conducted during the site's remedial program. The flowchart in ***Appendix E*** shows how these CP activities integrate with the site remedial process. The public is informed about these CP activities through fact sheets and notices developed at significant points in the site's remedial process.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a brownfield site, and the nature and progress of efforts to investigate and remediate a brownfield site.
- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a brownfield site's investigation and remediation.

The public is encouraged to contact project staff at any time during the site's remedial process with questions, comments, or requests for information about the remedial program. This CP Plan may be revised due to changes in major issues of public concern identified in ***Section 6*** or in the nature and scope of remedial activities. Modifications may include additions to the brownfield site contact list and changes in planned citizen participation activities.

3.0 SITE INFORMATION

3.1 Site Description

The project site ("Site") is identified as the Former Paragon Paint & Varnish Corp. Site located at 549 46th Avenue and 4540 Vernon Boulevard in Long Island City, New York. The parcel is "T" shaped, has frontage on both streets, and is approximately 0.76 acres in size. The legal identifier for the Site is Tax Block 26, Lot 4. The Site is located in an industrial area that is characterized by a variety of warehouse, industrial, service, and light manufacturing businesses. The neighborhood mid-blocks contain many three- and four-story residential buildings. There are small, two- and three- story mixed use residential/commercial buildings adjacent to the southeast portion of the Site.

3.2 Site History

The former Paragon Paint property was developed primarily for industrial purposes. According to historical Sanborn maps, the property was used as industrial property as far back as 1898. The Paragon Paint and Varnish Corp. operated on the property for 68 years, approximately from 1930-1998. Currently, the property is developed with two vacant industrial buildings; a four-story paint factory (c. 1923) connected to a 3-story warehouse with basement (c. 1944). The property is currently inactive and has been unused since 1998 when the paint manufacturing operations ceased. A paved and concrete-covered shipping and receiving courtyard is accessed by a narrow drive connected to 46th Avenue along the western end of the warehouse building.

Hydrocarbon contamination has been documented to exist in soil, groundwater and soil vapor throughout the Site, including areas beneath the paint factory and warehouse building. Contamination was found to be more evident at the water table (5 to 7 feet below grade) in areas surrounding the underground storage tanks in the open courtyard and beneath the 46th Avenue warehouse; whereas contamination was found to be more evident in deeper sediments (12 to 16 feet below grade) in borings further away from the tanks. Free-phase hydrocarbon, identified primarily as paint thinner, was observed in eight monitoring wells on the Paragon Paint property. A second hydrocarbon compound, identified as weathered fuel oil, was documented in one monitoring well.

3.3 Environmental History

Several investigation phases for the Project Site have been performed. The most recent investigation includes the Additional Subsurface Investigation Report (April 2007) prepared by AKRF, Inc. Data from this and other previous investigations were used to prepare a Remedial Investigation Work Plan (June 2007) for the Site. The Remedial Investigation Work

Plan may be modified as necessary to meet project objectives. Modifications of the document will be coordinated with the NYSDEC. Copies of previous investigation reports can be found at the Public Document Repositories listed in ***Appendix B***. Summaries of the studies are included in the following sections.

3.3.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) for the Site was completed at the Paragon Paint property by TRC Engineers, Inc. in September 2005. The findings of this report are summarized below:

- The subject Site had been used for industrial purposes for over 100 years, primarily as a paint manufacturing company. The processes used to manufacture paint included the storage and use of petroleum and solvents. Geotechnical borings conducted in 1975 indicated that there is petroleum contaminated soil located in the courtyard near Anable Basin from 5 feet to 10 feet below grade.

- There were 24 known underground storage tanks on the property with approximately 95,000 gallons of capacity and 53 known aboveground storage tanks that were found to be primarily empty. The contents of these tanks were reported to include mineral spirits, solvents, No. 2 fuel oil, kerosene, varnoline, linseed oil, fish oil, soya alkyd, xylenes, gasoline, oil modified polyurethane resin in mineral spirits, soya alkyd resin in mineral spirits, recycled mineral spirits, and propylene glycol.

- There were approximately 400 primarily empty drums located on the Site. The majority of the drums were found inside the varnish building and the northern end of the open courtyard. Two drums appeared to be in poor condition and possibly leaking petroleum or resin. (The drums were properly removed in February 2007).

- A former gasoline station located east of the Site was listed in the NYSDEC Spills database. The listing indicated that there was gasoline-contaminated soil located at the property. The spill status was listed as active.

3.3.2 Subsurface (Phase II) Investigation

A Phase II for the Paragon Paint property was completed by AKRF, Inc. in May 2006. The objective of this assessment was to identify the major areas and contaminants of concern at the Project Site. The findings of this report are summarized below:

- The field observations and analytical data indicated that hydrocarbon contamination exists in shallow soil in portions of the property, including soil beneath the paint factory.

- Free-phase hydrocarbon was observed in monitoring well MW-2, located in the driveway access off of 46th Avenue, and MW-3, located in the sidewalk adjacent to 46th Avenue. Both well locations are near existing underground storage tanks used to store petroleum liquids.

- Based on the existence of free-phase product in two of the wells, a spill was called into the NYSDEC. Spill #0602506 was assigned to the incident.

- Elevated concentrations of polycyclic aromatic hydrocarbon (PAH) compounds were detected in soil samples collected from borings MW-1, MW-2, MW-3 and MW-4. The highest PAH concentrations were detected in soil sample MW-1 (10-12), located on the northern side of the Site near Anable Basin. Several of these detections exceeded the applicable NYSDEC Recommended Soil Cleanup Objectives (RSCOs).

- Xylenes, compounds found in petroleum products, were detected in soil sample MW-1 (10-12) at a concentration that exceeded the applicable RSCO.

- 2-Butanone, or methyl ethyl ketone (MEK), commonly used in paint products, was detected in soil sample MW-4 (15-16) at a concentration that exceeded the applicable RSCO.

- Naphthalene and ethylbenzene were detected in monitoring well MW-4 at concentrations that exceeded the Class GA ambient water quality standards.

- Metals are present in soil and groundwater samples at concentrations that are consistent with naturally occurring metals in the area.

3.3.3 Supplemental Subsurface Investigation

A supplemental subsurface investigation for the Paragon Paint property was completed by AKRF, Inc. in April 2007. The objective of this assessment was to further define the nature and extent of the previously identified contamination. The investigation included drilling at additional interior and exterior locations, drilling down to the suspected bedrock interface, installation of shallow and deep monitoring wells, and the installation of three interior soil vapor points. Testing included the collection and analysis of soil, groundwater, soil vapor, and ambient air samples. The findings of the supplemental investigation were as follows:

- The field observations and analytical data indicated that hydrocarbon contamination exists throughout the property, including areas beneath the paint factory and warehouse building. Contamination was found to be more evident at the water table (5 to 7 feet below grade) in areas surrounding the underground storage tanks in the open courtyard and beneath the 46th Avenue warehouse; whereas contamination was found to be more evident in deeper sediments (12 to 16 feet below grade) in borings further away from the tanks (i.e., MW-1, MW-6 and MW-9).

- Free-phase hydrocarbon was observed in monitoring wells MW-1 (near Anable basin and the northern end of the on-site building); MW-2 (north end of the driveway); MW-3 (sidewalk along 46th Avenue; MW-6 (beneath the historical varnish pot area in the northern end of building); MW-8 (center of yard, next to underground storage tanks); MW-9 (southern end of the driveway); MW-12 (western property boundary); and, MW-13 (western property boundary). The hydrocarbon was identified as primarily paint thinner. A second hydrocarbon compound identified as weathered fuel oil was documented in the sample collected from monitoring well MW-3. Free-phase product samples were found to be less weathered in wells near the underground storage tanks and more weathered in wells further away.

- Elevated concentrations of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were detected in soil samples collected from borings MW-6 through MW-9, MW-12, and MW-13. Samples from these borings contained concentrations that exceeded the applicable NYSDEC RSCOs.

- There were no polychlorinated bi-phenyl compounds (PCBs) or pesticides detected in the soil samples above the method detection limits.

- VOCs including isopropylbenzene and isopropyltoluene, which are used in the production of paint products including paint thinner, were detected in groundwater samples from MW-4 and MW-7 at concentrations that exceeded the NYSDEC Ambient Water Quality Values (AWQVs). Residual VOCs were detected in MW-11 at concentrations well below the AWQVs. VOCs were not detected in groundwater samples collected from monitoring wells MW-5 and MW-10.

- PAHs, a subset of SVOCs, were detected in groundwater collected from monitoring well MW-10 at concentrations that exceeded the NYSDEC AWQVs. Bis(2-ethylhexyl)phthalate was detected in monitoring well MW-4 at a concentration of 5 micrograms per liter (µg/L), which is below the AWQV. SVOCs were not detected in monitoring wells MW-5 and MW-7. Due to concentration of SVOCs in the groundwater sample from MW-7, the achievable detection limits for many of the SVOC compounds were above the NYSDEC AWQVs. PAHs can be the result of point source pollution (e.g., hydrocarbon spill) or incomplete combustion of carbon containing fuels such as wood, coal, and diesel or fuel oil, and are prevalent in urban areas.

- Metals are present in soil and groundwater samples at concentrations that are generally representative of naturally occurring metals in the area or typical urban fill quality.

- Hydrocarbon, alcohol, and solvent related compounds were detected in the sub-slab and indoor air samples at concentrations ranging from 1.09 micrograms per cubic meter (µg/m^3) to 92.4 µg/m^3. The hydrocarbon compounds included 1,2,4- trimethylbenzene, ethylbenzene, toluene, xylenes, propylene and methyl tert-butyl ether (MTBE), and ranged in concentrations from 2.68 μg/m^3 (1,2,4-trimethylbenzene) in SV-1 (SS) to 39.5 μg/m^3 (MTBE) in SV-2 (SS). The alcohol compounds included ethanol and isopropanol and were detected at concentrations ranging from 1.3 μg/m^3 (isopropanol) to 92.4 μg/m3 (ethanol). The solvent related compounds included 1,2,4-trichlorobenzene; ketones including 2-butanone (methyl ethyl ketone, or MEK) and acetone; methylene chloride; n-heptane; and, tetrahydrofuran. These concentrations ranged from 2.34 μg/m^3 of n-heptane in SV-3 (AA) to 69.2 μg/m^3 of methylene chloride in SV-3 (SS). The detected concentrations in the sub-slab samples were generally higher than the corresponding ambient air samples, but the overall detections were consistent.

4.0 REMEDIAL PROCESS

4.1 Application

The Applicant applied for and was accepted into New York's Brownfield Cleanup Program as a Volunteer**.** This means that the Volunteer was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination on-site, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the site and to contamination that has migrated from the Site.

The Volunteer proposes that the Site will be used for restricted residential/commercial purposes.

To achieve this goal, the Volunteer will conduct remedial activities at the Site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement executed by NYSDEC and the Volunteer sets forth the responsibilities of each party in conducting a remedial program at the site.

4.2 Investigation

The Volunteer developed and submitted a Remedial Investigation (RI) Work Plan with the BCP application. The RI Work Plan discusses the proposed steps for conducting a subsurface investigation at the site. The comment period for the work plan was combined with the 30-day comment period for the application, as noted in ***Appendix D***. It is possible that the preliminary RI Work Plan may require modifications to meet site objectives. Any modifications required will be submitted to the NYSDEC for final approval of the RI Work Plan. After review and approval of the final RI Work Plan by the NYSDEC, the investigation will be performed with NYSDEC oversight. The goals of the investigation are as follows:

- Define the nature and extent of contamination in soil, surface water, groundwater and any other impacted media;
- Identify the source(s) of the contamination;
- Assess the impact of the contamination on public health and/or the environment; and
- Provide information to support the development of a Remedial Work Plan to address the contamination, or to support a conclusion that the contamination does not need to be addressed.

The Volunteer will prepare an RI Report. This report will summarize the results of the RI and will include the Volunteer's recommendation of whether remediation is needed to address site-related contamination. The RI Report is subject to review and approval by NYSDEC. Before the RI Report is approved, a fact sheet that describes the RI Report will be sent to the site's contact list.

NYSDEC will determine if the Site poses a significant threat to public health and/or the environment. If NYSDEC determines that the Site is a "significant threat," a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying community group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the Site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the Site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the eligible site.

Additional information about the TAG Program and the availability of TAGs is provided online at the following internet address:

http://www.dec.ny.gov/regulations/2590.html.

4.3 Interim Remedial Measure(s) Implementation

The Volunteer and NYSDEC may choose to conduct one or more IRMs throughout the implementation of the BCP. According to the NYSDEC, an IRM is "*a discrete set of activities to address both time critical (emergency response actions) and non-time critical site conditions, which can be undertaken without extensive remedial investigation and evaluation, to prevent, mitigate, or remedy environmental damage or the consequences of environmental damage attributable to a site*." The purpose of an IRM "*is to lessen obvious risks to the environment and/or public health from hazardous waste*." IRM's are voluntary actions and are not a required element of the BCP process. However, in many instances they provide substantial benefit to the Volunteer, the Community, and the environment. IRMs may be performed at various stages of the overall BCP process.

Any IRMs that are to be completed will be implemented under a NYSDEC-approved IRM Work Plan.

4.4 Remedy Selection

After NYSDEC approves the RI Report, the Volunteer will be able to develop a Remedial Action Work Plan (RAWP) if remediation is required. The RAWP describes how the Volunteer would address the contamination related to the Site.

The public will have the opportunity to review and comment on the draft RAWP. The site contact list will be sent a fact sheet that describes the draft RAWP and announces a 45-day public comment period. NYSDEC will factor public comments received into its decision to approve, reject or modify the draft RAWP.

A public meeting may be held by NYSDEC about the proposed RAWP if requested by the affected community and if significant, substantive issues are raised about the draft RAWP. Please note that, in order to request a public meeting, the health, economic well-being or enjoyment of the environment of those requesting the public meeting must be threatened or potentially threatened by the Site. In addition, the request for the public meeting should be made within the first 30 days of the 45-day public comment period for the draft RAWP. A public meeting also may be held at the discretion of the NYSDEC project manager in consultation with other NYSDEC staff as appropriate.

4.5 Construction

Approval of the Remedial Work Plan by NYSDEC will allow the Volunteer to design and construct the alternative selected to remediate the Site. The site contact list will receive notification before the start of Site remediation. When the Volunteer completes remedial activities, it will prepare a final engineering report that certifies that remediation requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the remediation is protective of public health and the environment for the intended use of the Site. The site contact list will receive a fact sheet that announces the completion of remedial activities and the review of the final engineering report.

4.6 Certificate of Completion and Site Management

Once NYSDEC approves the final engineering report, it will issue the Volunteer a Certificate of Completion (COC). This COC states that remediation goals have been achieved, and relieves the Volunteer from future remedial liability, subject to statutory conditions. The COC also includes a description of any institutional and engineering controls or monitoring required by the approved remedial work plan. If the Volunteer uses institutional controls or engineering controls to achieve remedial objectives, the site contact list will receive a fact sheet that discusses such controls.

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

An engineering control is a physical barrier or other physical method to manage contamination, such as a cap or vapor barrier.

Site management will be conducted by the Volunteer as required. NYSDEC will provide appropriate oversight. Site management involves implementation of the institutional and engineering controls required for the brownfield site. Examples include: operation of a water treatment plant; maintenance of a cap or cover; and, monitoring of groundwater quality.

5.0 CITIZEN PARTICIPATION ACTIVITIES

CP activities that have already occurred and are planned during the investigation and remediation of the Site under the BCP are identified in ***Appendix D***: Identification of Citizen Participation Activities. These activities also are identified in the flowchart of the BCP process in ***Appendix E***. NYSDEC will ensure that these CP activities are conducted, with appropriate assistance from the Volunteer.

All CP activities are conducted to provide the public with significant information about site findings and planned remedial activities, and some activities announce comment periods and request public input about important draft documents such as the RAWP.

All written materials developed for the public will be reviewed and approved by NYSDEC for clarity and accuracy before they are distributed. Notices and fact sheets can be combined at the discretion, and with the approval of, NYSDEC.

6.0 MAJOR ISSUES OF PUBLIC CONCERN

This section of the CP Plan identifies major issues of public concern, if any, that relate to the Site. Additional major issues of public concern may be identified during the Site's remedial process.

The neighborhood mid-blocks in the vicinity of the Site contain many three- and four-story residential buildings. Small, two- and three-story mixed use residential/commercial buildings are located adjacent to the southeastern boundary for the Site. Surface water bodies include Anable Basin (adjacent to the northwest). The basin has an open intersection with the East River, located approximately 1,300 feet west of the Site. There are currently many on-going construction projects within the vicinity of the Site. There are also several brownfield sites in NYSDEC remedial programs, particularly along the East River waterfront area to the west of the Site.

Current exposure to Site contaminants is limited due to the presence of buildings and paved concrete outside of the building footprints. The area is served by a public water supply and therefore there is no exposure to groundwater. A soil vapor intrusion investigation at adjacent properties is proposed to determine whether on-site contaminants may be affecting sub-slab soil vapor of nearby properties. Potential exposure to Site contaminants during remediation will be addressed by adherence to a site-specific Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP), which will be included in the RAWP.

Any potential odors, nuisances or air quality concerns which may affect the community during remediation will be addressed during the preparation of the RAWP.

APPENDIX A

SITE PLAN

Apex
Companies, LLC

Figure 1: Site Area Map

Former Paragon Paint & Varnish Corporation Site
549 46th Avenue and 4540 Vernon Boulevard
Long Island City, NY 11101

Figure 1A: Site Location Map (Zoom)

Former Paragon Paint & Varnish Corporation Site
549 46th Avenue and 4540 Vernon Boulevard
Long Island City, NY 11101

APPENDIX B

NYSDEC PROJECT CONTACT LIST

Apex Companies, LLC

Project Contacts

For information about the Site's remedial program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Ms. Sondra Martinkat
Project Manager
NYSDEC Region 2
Division of Environmental Remediation
47-40 21St Street
Long Island City, NY 11101-5407
(718) 482-4891

Mr. Arturo Garcia-Costas
Regional Citizen Participation Specialist
NYSDEC Region 2
Division of Environmental Remediation
47-40 21St Street
Long Island City, NY 11101-5407
(718) 482-7287

New York State Department of Health (NYSDOH):

Chris Doroski
Project Manager
NYSDOH
Room 300 - Flanigan Square
547 River St.
Troy, NY 12180-2216
(518) 402-7880

Document Repositories

The document repositories identified below have been established to provide the public with convenient access to important project documents:

Queensborough Public Library
Court Square Branch
25-01 Jackson Avenue
Long Island City, NY 10011
(718) 937-2790
Monday: 12:00PM-7:00PM
Tuesday: 1:00PM-6:00PM
Wednesday: 10:00PM-6:00PM
Thursday, Friday: 12:00PM to 6:00PM
Saturday 10:00AM to 5:30 PM
Sunday Closed

New York State Department of
Environmental Conservation –
Region 2
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101
Attn: Sondra Martinkat
(718) 482-4891
9:00AM-3:00PM by appointment only

Community Board #2 Office
43-22 50th Street- Second Floor
Woodside, NY 11377
(718) 553-8773
Call for days and hours

APPENDIX C

BCP SITE CONTACT LIST

Appendix C
Paragon Paint Site
NYSDEC BCP Number: C241108
Contact List - Local Residential and Business Properties

OWNER/NAME	LOT ADDRESS	CITY	OWNER/NAME #2	OWNER ADDRESS (if different from lot address)				
10 12 47TH AVENUE	10-12 47 AVENUE	LONG ISLAND CITY, NY 11101						
10-15 REALTY LLC	1015-27 46 AVENUE	LONG ISLAND CITY, NY 11101		23 SUBURBAN AVE		PELHAM MANOR	NY	10803-2612
21 29 45TH ROAD INC	10-39 44 DRIVE	LONG ISLAND CITY, NY 11101		36 04 SKILLMAN AVE		LONG ISLAND CITY	NY	11101
21-9 45 RD INC	45-24 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
40 20 23 RD INC	10-30 44 DRIVE	LONG ISLAND CITY, NY 11101						
40 20 23RD INC	44-64 45 AVENUE	LONG ISLAND CITY, NY 11101						
45 38 11TH STREET LLC	45-38 11 STREET	LONG ISLAND CITY, NY 11101						
47 07 VERNON BOULEVAR	47-07 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
47-10 VERNON BOULEVAR	47-10 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4811 37TH ST		LONG ISLAND CITY	NY	11101-1903
47-30 REALTY LLC C/O	47-30 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		2109 BROADWAY 1277		NEW YORK	NY	10023
5 17 46 ROAD LLC	5-17 46 ROAD	LONG ISLAND CITY, NY 11101						
5-01-5-17 48TH AVENU	5-25 48 AVENUE	LONG ISLAND CITY, NY 11101						
5-19 47 ASSOCIATES IN	5-19 47 AVENUE	LONG ISLAND CITY, NY 11101						
5-33 48TH AVENUE CORP	5-33 48 AVENUE	LONG ISLAND CITY, NY 11101						
547 REALTY LLC	5-47 47 ROAD	LONG ISLAND CITY, NY 11101						
5-48 46TH ROAD CORP.	5-48 46 ROAD	LONG ISLAND CITY, NY 11101						
5-49 46 AVE LLC	45-40 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
A ABATECOLA	10-50 47 AVENUE	LONG ISLAND CITY, NY 11101						
A J P REALTY CORP	11-15 45 AVENUE	LONG ISLAND CITY, NY 11101		3520 30TH AVE		LONG ISLAND CITY	NY	11103-4623
A KULAGA	5-43 47 AVENUE	LONG ISLAND CITY, NY 11101						
A-1 MANHATTAN CUST/FU	9-21 44 ROAD	LONG ISLAND CITY, NY 11101						
ABLW PROPERTIES INC	10-37 47 ROAD	LONG ISLAND CITY, NY 11101		PO BOX 4042		MADISON	CT	06443-4000
ABRAHAM & DORIS GOLDB	5-38 46 AVENUE	LONG ISLAND CITY, NY 11101		538 46TH AVE		LONG ISLAND CITY	NY	11101-5215
ACCURATE REALTY ASSO	5-01 47 AVENUE	LONG ISLAND CITY, NY 11101						
ACCURATE REALTY ASSO	46 ROAD	LONG ISLAND CITY, NY 11101						
ALEXANDER FINN	5-50 46 ROAD	LONG ISLAND CITY, NY 11101						
ALLAN ARTHUR A	10-50 44 DRIVE	LONG ISLAND CITY, NY 11101		345 E 52ND ST		NEW YORK	NY	10022-6324
AMBOS, ELEANOR	45-18 11 STREET	LONG ISLAND CITY, NY 11101						
AMODEO CHARLES	5-30 47 ROAD	LONG ISLAND CITY, NY 11101						
ANA A PINO	45-06 11 STREET	LONG ISLAND CITY, NY 11101						
ANGELO MOTTOLA	10-23 47 ROAD	LONG ISLAND CITY, NY 11101						
ANIBAL TELLES	47-38 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
ANL PROPERTIES LTD	10-31 44 DRIVE	LONG ISLAND CITY, NY 11101		1601 BROADWAY		NEW YORK	NY	
ANN MIECZKOWSKI	10-20 47 AVENUE	LONG ISLAND CITY, NY 11101						
ANSANELLI, RONALD	47-29 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
ANTHONY NUVOLA	5-38 47 AVENUE	LONG ISLAND CITY, NY 11101						
ANTHONY PORCELLI	10-27 47 ROAD	LONG ISLAND CITY, NY 11101		4010 216TH ST		BAYSIDE	NY	11361-2322
ANTONIO ABATECOLA	10-47 47 AVENUE	LONG ISLAND CITY, NY 11101						
ANTONIO MOTOLA	47-23 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
ANZALONE, ANDREW	47-16 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101				LONG ISLAND CITY	NY	11101-5451
ANZALONE, ANDREW	47-27 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4716 VERNON BLVD		LONG ISLAND CITY	NY	11101-5451
ARHTUR WEINER	10-12 46 ROAD	LONG ISLAND CITY, NY 11101						
ART CASTING CORP	10-37 47 AVENUE	LONG ISLAND CITY, NY 11101		49 W 27TH ST		NEW YORK	NY	10001-6936
BATAS IRENE	44-19 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101	NICHOLAS BATAS	101 HILLTOP DR		MANHASSET	NY	11030-3424
BATAS, IRENE	10-43 44 DRIVE	LONG ISLAND CITY, NY 11101						
BEDFORD, JAMES R	47-36 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
BINJAMA REALTY INC	10-06 44 DRIVE	LONG ISLAND CITY, NY 11101		36 04 SKILLMAN AVE		LONG ISLAND CITY	NY	11101
BINJAMA REALTY INC	10-16 44 DRIVE	LONG ISLAND CITY, NY 11101		36 04 SKILLMAN AVE		LONG ISLAND CITY	NY	11101
BINJAMA REALTY INC	10-02 44 DRIVE	LONG ISLAND CITY, NY 11101		36 04 SKILLMAN AVE		LONG ISLAND CITY	NY	11101
BOARD OF EDUCATION	44-36 44 DRIVE	LONG ISLAND CITY, NY 11101						
BRAVERMAN ALAN J	46-32 11 STREET	LONG ISLAND CITY, NY 11101		16 HOWLAND RD		EAST ROCKAWAY	NY	11518-1623

Appendix C
Paragon Paint Site
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Contact List - Local Residential and Business Properties

OWNER/NAME	LOT ADDRESS	CITY	OWNER/NAME #2	OWNER ADDRESS (if different from lot address)				
BRENDA CRUZ	10-27 44 DRIVE	LONG ISLAND CITY, NY 11101	C/O COJAM REALTY CORP	PO BOX 8485		LONG ISLAND CITY	NY	11101-8485
CAMPANIELLO,SANDRA	10-41 45 AVENUE	LONG ISLAND CITY, NY 11101						
CANTANNO LENA	10-10 46 ROAD	LONG ISLAND CITY, NY 11101		1115 46TH RD		LONG ISLAND CITY	NY	11101-5339
CASALINO REALTY	10-43 47 AVENUE	LONG ISLAND CITY, NY 11101						
CASSON EILEEN	46-40 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		46-40 VERNON BOULEVARD	# 1	LONG ISLAND CITY	NY	11101-5327
CATTANEO FERDINANDO	47-11 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
CMH REALTY CORP	47-05 5 STREET	LONG ISLAND CITY, NY 11101						
CONHAN REALTY CORP	46-20 11 STREET	LONG ISLAND CITY, NY 11101						
COOPER REALTY LLC	11-15 46 ROAD	LONG ISLAND CITY, NY 11101						
CORASTOR HOLDING COMP	9-01 44 DRIVE	LONG ISLAND CITY, NY 11101						
CORTAZAR JAMES	5-19 47 ROAD	LONG ISLAND CITY, NY 11101		PO BOX 8485		LONG ISLAND CITY	NY	11101-8485
CORTAZAR JAMES	10-29 44 DRIVE	LONG ISLAND CITY, NY 11101		PO BOX 8485		LONG ISLAND CITY	NY	11101-8485
COSTELLO, BRIAN	10-20 47 ROAD	LONG ISLAND CITY, NY 11101						
CREEVE SMITH REALTYCO	5-34 47 ROAD	LONG ISLAND CITY, NY 11101						
CUMMINGS, JAMES C.	5-41 47 ROAD	LONG ISLAND CITY, NY 11101				LONG ISLAND CITY	NY	11101-5511
DA11-14	11-14 46 AVENUE	LONG ISLAND CITY, NY 11101						
D'ALESSANDRO, JOSEPHI	5-45 47 ROAD	LONG ISLAND CITY, NY 11101						
DE RISO, JOSEPH	47-12 11 STREET	LONG ISLAND CITY, NY 11101						
DELAHANTY PARTNERS,	46-01 5 STREET	LONG ISLAND CITY, NY 11101						
DELAHANTY PARTNERS, L	5-01 46 ROAD	LONG ISLAND CITY, NY 11101						
DENGA REALTY CORP.	44-00 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
DEPT OF GENERAL SERVI	4-99 44 DRIVE	LONG ISLAND CITY, NY 11101						
DEPT OF TRANSPORTATIO	44-59 45 AVENUE	LONG ISLAND CITY, NY 11101						
DEPT OF TRANSPORTATIO	5-41 44 DRIVE	LONG ISLAND CITY, NY 11101						
DESIGN CENTER INC	5-37 46 AVENUE	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
DESIGN CENTER INC	5-21 46 ROAD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
DESIMONE ARTHUR	47-06 11 STREET	LONG ISLAND CITY, NY 11101						
DIE CORP	10-10 46 AVENUE	LONG ISLAND CITY, NY 11101		10-16 LONG ISLAND CITY		NEW YORK	NY	
DIMITRIOS H MILONOPOU	10-34 45 ROAD	LONG ISLAND CITY, NY 11101						
DONALD J LAWSON	10-23 44 DRIVE	LONG ISLAND CITY, NY 11101		1021 44TH DR		LONG ISLAND CITY	NY	11101-7013
DONALD J LAWSON	10-21 44 DRIVE	LONG ISLAND CITY, NY 11101						
DRAGON LAND REALTY	45-04 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
E.J. ELECTRIC INSTALL	46-29 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
EAST VIEW CONDO, LLC	10-40 46 ROAD	LONG ISLAND CITY, NY 11101		10-40 46 ROAD		LONG ISLAND CITY	NY	11101
EAST VIEW CONDO, LLC	10-38 46 ROAD	LONG ISLAND CITY, NY 11101						
EAST VIEW CONDO, LLC	10-42 46 ROAD	LONG ISLAND CITY, NY 11101						
EMPIR IRON WKS	10-38 46 AVENUE	LONG ISLAND CITY, NY 11101						
EMPIRE CITY IRON WORK	10-37 46 ROAD	LONG ISLAND CITY, NY 11101						
EMPIRE STATE DEVELOPM	47 ROAD	LONG ISLAND CITY, NY 11101						
ERGAS CO	5-45 47 AVENUE	LONG ISLAND CITY, NY 11101						
ETA REALTY INC	47-01 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
EUGENE RUSSO	47-31 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
EUNHASU CORPORATION	11-15 46 AVENUE	LONG ISLAND CITY, NY 11101						
EVABGELISTA, LUIGI	10-23 47 AVENUE	LONG ISLAND CITY, NY 11101						
FAZIO, AUGUSTA C	10-18 47 AVENUE	LONG ISLAND CITY, NY 11101						
FILOMENA PISCAPO	46-14 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
FIRE DEPARTMENT	10-38 47 AVENUE	LONG ISLAND CITY, NY 11101						
GAR LING REALTY CORP.	45-40 11 STREET	LONG ISLAND CITY, NY 11101						
GENNARO MASSARO D	5-36 47 ROAD	LONG ISLAND CITY, NY 11101						
GERALD GAETA	10-22 47 ROAD	LONG ISLAND CITY, NY 11101		2220 CANTON ST	APT 504	DALLAS	TX	75201-5930
GERARD & ROSE LOTITO	5-33 47 ROAD	LONG ISLAND CITY, NY 11101						

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Contact List - Local Residential and Business Properties

OWNER/NAME	LOT ADDRESS	CITY	OWNER/NAME #2	OWNER ADDRESS (if different from lot address)				
GRACE ANZALONE	10-17 47 AVENUE	LONG ISLAND CITY, NY 11101		4718 VERNON BLVD		LONG ISLAND CITY	NY	11101-5409
GRACE LAURI	10-22 46 ROAD	LONG ISLAND CITY, NY 11101		1022 46TH RD		LONG ISLAND CITY	NY	11101-5320
GRACELAND REALTY CORP	5-49 47 AVENUE	LONG ISLAND CITY, NY 11101						
GREENBERG KENNETH	10-20 46 ROAD	LONG ISLAND CITY, NY 11101		4718 170TH ST		FLUSHING	NY	11358-3720
GREENBERG, KENNETH	10-30 46 ROAD	LONG ISLAND CITY, NY 11101						
GUARRASI, MARY ELLEN	10-24 46 ROAD	LONG ISLAND CITY, NY 11101						
GURFEIN, GREGORY	4-78 47 AVENUE	LONG ISLAND CITY, NY 11101						
H DIETER HOLTERBOSCH	10-01 46 AVENUE	LONG ISLAND CITY, NY 11101		375 PARK AVE		NEW YORK	NY	10152-0002
H DIETER HOLTERBOSCH	45 ROAD	LONG ISLAND CITY, NY 11101		375 PARK AVE		NEW YORK	NY	10152-0002
H DIETER HOLTERBOSCH	10-01 45 ROAD	LONG ISLAND CITY, NY 11101		375 PARK AVE		NEW YORK	NY	10152-0002
HARVEY HOLDING CORP	10-28 46 AVENUE	LONG ISLAND CITY, NY 11101						
HEAD OF POND LLC	11-03 45 AVENUE	LONG ISLAND CITY, NY 11101	C/O WEIL-OKS	2927 41ST AVE	STE 603	LONG ISLAND CITY	NY	11101-3304
HEFFNER, EDWARD D.	10-50 46 AVENUE	LONG ISLAND CITY, NY 11101						
HEFFNER, EDWARD D.	1040-42 46 AVENUE	LONG ISLAND CITY, NY 11101						
HEFFNER, EDWARD D.	10-40 46 AVENUE	LONG ISLAND CITY, NY 11101						
HEFFNER, EDWARD D.	10-30 46 AVENUE	LONG ISLAND CITY, NY 11101						
HOWARD AND NORMAN BAK	47-17 5 STREET	LONG ISLAND CITY, NY 11101		41 10-0A 29 STREET		LONG ISLAND CITY	NY	11101
HUNTERS POINT ASSOCIA	4-20 47 AVENUE	LONG ISLAND CITY, NY 11101						
HUSSEIN, PARWEEN	5-39 47 ROAD	LONG ISLAND CITY, NY 11101						
IDA CERBONE (REVOCABL	45-44 11 STREET	LONG ISLAND CITY, NY 11101						
IDA CERBONE REV LIV T	46-35 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
IDA CERBONE REVOCABLE	46-33 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4735 VERNON BLVD		LONG ISLAND CITY	NY	11101-5505
IDA CERBONE REVOCABLE	45-42 11 STREET	LONG ISLAND CITY, NY 11101		4735 VERNON BLVD		LONG ISLAND CITY	NY	11101-5505
IMPARATO,JOSEPH	10-15 47 AVENUE	LONG ISLAND CITY, NY 11101						
IPPOLITO ANGELO	10-13 47 AVENUE	LONG ISLAND CITY, NY 11101						
IRENA HOCHMAN	10-34 47 AVENUE	LONG ISLAND CITY, NY 11101						
ISLAND POINT PROPERTI	5-35 47 AVENUE	LONG ISLAND CITY, NY 11101						
ISLAND TAPING, INC	5-21 47 ROAD	LONG ISLAND CITY, NY 11101						
J. B. WOLF AND SON,	45-28 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
JAYBRAN,	5-23 47 AVENUE	LONG ISLAND CITY, NY 11101						
JC VERNON CORP	47-04 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4702 VERNON BLVD		LONG ISLAND CITY	NY	11101-5409
JENKINS DAVID	10-41 47 AVENUE	LONG ISLAND CITY, NY 11101		285 RIVERSIDE DR		NEW YORK	NY	10025-5276
JERIST REALTY CORP	4510-22 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
JL SIMMONS REALTY INC	46-04 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		3 CENTRAL DR W		BRIARCLIFF MANOR	NY	10510-1143
JNMY LLC	46-06 11 STREET	LONG ISLAND CITY, NY 11101						
JOHN J CIAFONE	5-36 47 AVENUE	LONG ISLAND CITY, NY 11101		2340 35TH ST		LONG ISLAND CITY	NY	11105-2209
JOHN J PHILLIPS	10-12 47 ROAD	LONG ISLAND CITY, NY 11101						
JOHNA CORRIERI	47-33 5 STREET	LONG ISLAND CITY, NY 11101						
JOSEPH M EVANGELISTA	46-37 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
JOSEPH NANCY CORP	5-16 47 AVENUE	LONG ISLAND CITY, NY 11101	M MUNICH	69 ONTARIO RD		FLORAL PARK	NY	11001-4116
JOSEPH NARGENTINO JOS	46-30 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
JOSEPHINE DALESSANDRO	5-43 47 ROAD	LONG ISLAND CITY, NY 11101		4043 196TH ST		FLUSHING	NY	11358-3027
JOSEPHINE MONTERA	47-10 11 STREET	LONG ISLAND CITY, NY 11101						
JOSEPHINE T TANALSKIL	45-08 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
JULIUS MANN	45-02 11 STREET	LONG ISLAND CITY, NY 11101						
KATZ, ROBIN ANN	10-48 46 ROAD	LONG ISLAND CITY, NY 11101						
L EVANGELISTA	10-19 47 AVENUE	LONG ISLAND CITY, NY 11101						
L MITTMAN	10-27 46 AVENUE	LONG ISLAND CITY, NY 11101						
LANDAU, ARTHUR	47 AVENUE	LONG ISLAND CITY, NY 11101						
LAPENNA JOHN J	47-08 11 STREET	LONG ISLAND CITY, NY 11101						
LAVOUR CORPORATION	47-01 5 STREET	LONG ISLAND CITY, NY 11101						

Appendix C
Paragon Paint Site
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Contact List - Local Residential and Business Properties

OWNER/NAME	LOT ADDRESS	CITY	OWNER/NAME #2	OWNER ADDRESS (if different from lot address)				
LINNEHAN DAVID G	45-10 11 STREET	LONG ISLAND CITY, NY 11101						
LMM REALTY, LLC.	46-42 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
LOFREDO LENORE	10-16 47 AVENUE	LONG ISLAND CITY, NY 11101						
LOMBARDI ERASMO	46-09 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
LOMBARDI LUIGI	46-18 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4818 VERNON BLVD		LONG ISLAND CITY	NY	11101-5626
LORENCE LONG	10-28 46 ROAD	LONG ISLAND CITY, NY 11101		1028 46TH RD		LONG ISLAND CITY	NY	11101-5320
LOUIS ALVAREZ	5-37 47 ROAD	LONG ISLAND CITY, NY 11101				LONG ISLAND CITY	NY	11101-5511
LUCCHI, ROBERT	10-15 47 ROAD	LONG ISLAND CITY, NY 11101						
M VISSILLO	47-09 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
M/M PAUL HORWITZ	45-35 11 STREET	LONG ISLAND CITY, NY 11101		125 NOTTINGHAM DR		WATCHUNG	NJ	07069-6139
MAGENTA FINE ARTS INC	47-15 5 STREET	LONG ISLAND CITY, NY 11101						
MALLOY DOREEN	5-32 47 ROAD	LONG ISLAND CITY, NY 11101						
MANDRACCHIA ANTHONY	47-02 11 STREET	LONG ISLAND CITY, NY 11101		63 PLANK RD		STATEN ISLAND	NY	10314-3248
MANETTA MARIO	10-39 47 AVENUE	LONG ISLAND CITY, NY 11101						
MANN JULIUS	10-29 47 ROAD	LONG ISLAND CITY, NY 11101		6931 60TH RD		FLUSHING	NY	11378-2924
MARIA EVANGELISTA	47-14 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101				LONG ISLAND CITY	NY	11101-5409
MARTIN GISELE	45-34 11 STREET	LONG ISLAND CITY, NY 11101						
MARY EVANGELISTA	10-24 47 AVENUE	LONG ISLAND CITY, NY 11101						
MAXIM HOLDING COMPANY	10-41 45 ROAD	LONG ISLAND CITY, NY 11101						
MET, TRUSTEE, MORRIS	5-11 47 AVENUE	LONG ISLAND CITY, NY 11101						
MET, TRUSTEE, MORRIS	47-09 5 STREET	LONG ISLAND CITY, NY 11101						
MICHAEL A MAURO	47-25 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		6275 DRY HARBOR RD		MIDDLE VILLAGE	NY	11379-1970
MICHAEL CASTELLANO	10-11 46 AVENUE	LONG ISLAND CITY, NY 11101	JACQUELINE CASTELLANO	1011 46TH AVE	# 606	LONG ISLAND CITY	NY	11101-5216
MICHAEL V PAPE	10-25 47 ROAD	LONG ISLAND CITY, NY 11101		48 CHESTERFIELD RD		SCARSDALE	NY	10583-2256
MICHELINA FERDINANDO	10-43 47 ROAD	LONG ISLAND CITY, NY 11101						
MIGLIORELLI, JOSEPH	47-34 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		2531 BAYSIDE LN		FLUSHING	NY	11358-1133
MOORE, ROBERT P	45-04 11 STREET	LONG ISLAND CITY, NY 11101						
MY FOUR DAUGHTERS REA	5-46 47 AVENUE	LONG ISLAND CITY, NY 11101						
NARDONE, ELVIRA (EXEC	47-42 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
NEW YORK CITY INDUSTR	10-32 47 AVENUE	LONG ISLAND CITY, NY 11101		110 WILLIAM ST		NEW YORK	NY	10038-3901
NEW YORK CITY INDUSTR	10-30 47 AVENUE	LONG ISLAND CITY, NY 11101		110 WILLIAM ST		NEW YORK	NY	10038-3901
NEW YORK TELEPHONE CO	44-21 44 ROAD	QUEENS	ROOM G60	10 COUNTY CENTER RD		WHITE PLAINS	NY	10607-1500
NEWMAN, MEIR (IND)	45-44 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
NICHOLSON, ANA MARIA	10-44 47 AVENUE	LONG ISLAND CITY, NY 11101						
ORIGINAL DESIGNS/FAMO	44-46 11 STREET	LONG ISLAND CITY, NY 11101		4440 11TH ST		LONG ISLAND CITY	NY	11101-5105
ORTIZ AIRAM B	47-04 11 STREET	LONG ISLAND CITY, NY 11101						
ORTIZ, MARIA D & ANTH	47-15 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
OTTO, DOUGLAS W.	5-32 47 AVENUE	LONG ISLAND CITY, NY 11101						
PAINO THOMAS A	45-14 11 STREET	LONG ISLAND CITY, NY 11101						
PALUMBO JOSEPH	45-42 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		33 OAK POINT DR W		BAYVILLE	NY	11709-1110
PASTORE ARTHUR A	10-46 46 ROAD	LONG ISLAND CITY, NY 11101		1046 46TH RD		LONG ISLAND CITY	NY	11101-5320
PATRICIA DOOLING	47-28 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		15 GRENVILLE CT		EAST ROCKAWAY	NY	11518-1003
PATRICK J FITZGERALD	10-46 47 AVENUE	LONG ISLAND CITY, NY 11101		13711 W JACKSON		WOODSTOCK	IL	60098-8964
PATUTO, ELISA	5-44 47 ROAD	LONG ISLAND CITY, NY 11101						
PETER MARCHETTE	5-35 47 ROAD	LONG ISLAND CITY, NY 11101				LONG ISLAND CITY	NY	11101-5537
PLASTIC CENTER INC	5-29 46 AVENUE	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER INC	46-16 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER INC	5-35 46 ROAD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER INC	46-44 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER INC	10-19 47 ROAD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER INC	10-52 46 ROAD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215

Appendix C
Paragon Paint Site
NYSDEC BCP Number: C241108
Contact List - Local Residential and Business Properties

OWNER/NAME	LOT ADDRESS	CITY	OWNER/NAME #2	OWNER ADDRESS (if different from lot address)				
PLASTIC CENTER INC	10-50 46 ROAD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER INC	11-18 46 ROAD	LONG ISLAND CITY, NY 11101		546 46TH AVE		LONG ISLAND CITY	NY	11101-5215
PLASTIC CENTER, INC.	46-12 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
PLASTIC CENTER, INC.	46-46 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
PLAXALL, INC.	44-68 5 STREET	LONG ISLAND CITY, NY 11101						
PONOK REALTY CORP	5-26 47 AVENUE	LONG ISLAND CITY, NY 11101						
PONOK REALTY CORP	5-28 47 AVENUE	LONG ISLAND CITY, NY 11101		526 47TH AVE		LONG ISLAND CITY	NY	11101-5415
PONOK REALTY CORP	5-30 47 AVENUE	LONG ISLAND CITY, NY 11101		526 47TH AVE		LONG ISLAND CITY	NY	11101-5415
PONOK REALTY CORP	10-37 45 AVENUE	LONG ISLAND CITY, NY 11101		526 47TH AVE		LONG ISLAND CITY	NY	11101-5415
PROPPER PROP INC	10-27 45 AVENUE	LONG ISLAND CITY, NY 11101						
PROPPER PROPERTIES IN	10-15 45 AVENUE	LONG ISLAND CITY, NY 11101		3604 SKILLMAN AVE		LONG ISLAND CITY	NY	11101-1730
PROPPER PROPERTIES IN	1034 44 DRIVE	LONG ISLAND CITY, NY 11101		3604 SKILLMAN AVE		LONG ISLAND CITY	NY	11101-1730
PROPPER PROPERTIES IN	10-25 44 DRIVE	LONG ISLAND CITY, NY 11101		3604 SKILLMAN AVE		LONG ISLAND CITY	NY	11101-1730
PROPPER PROPERTIES IN	44-42 44 DRIVE	LONG ISLAND CITY, NY 11101		3604 SKILLMAN AVE		LONG ISLAND CITY	NY	11101-1730
QUEENS WEST DEVELOPME	159 47 AVENUE	LONG ISLAND CITY, NY 11101	BRAD BROCKMAN	633 3RD AVE		NEW YORK	NY	10017-6706
QUEENS WEST DEVELOPME	46-00 5 STREET	LONG ISLAND CITY, NY 11101	BRAD BROCKMAN	633 3RD AVE		NEW YORK	NY	10017-6706
R & M EVANGELISTA	10-22 47 AVENUE	LONG ISLAND CITY, NY 11101						
RALPH MATZEL	45-20 11 STREET	LONG ISLAND CITY, NY 11101		PO BOX 247		ARMONK	NY	10504-0247
RANDEL MOLD & DIE COR	46-17 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
RANDEL MOLD & DIE COR	10-11 46 ROAD	LONG ISLAND CITY, NY 11101						
RANDEL MOLD & DIE COR	10-26 46 AVENUE	LONG ISLAND CITY, NY 11101						
RANDEL MOLD & DIE COR	46-01 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
RANDEL MOLD & DIE COR	46-05 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
RANDEL MOLD & DIE COR	46-07 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
RANDEL MOLD&DIE CORP	10-23 46 ROAD	LONG ISLAND CITY, NY 11101						
RANDEL MOLD&DIE CORP	10-20 46 AVENUE	LONG ISLAND CITY, NY 11101						
RANDEL PLASTICS	10-19 46 ROAD	LONG ISLAND CITY, NY 11101						
RAYMOND PALERMO	45-08 11 STREET	LONG ISLAND CITY, NY 11101						
RAYMOND ROGERS	10-11 47 ROAD	LONG ISLAND CITY, NY 11101		1017 47TH RD		LONG ISLAND CITY	NY	11101-5513
RAYMOND ROGERS	10-21 47 ROAD	LONG ISLAND CITY, NY 11101		1017 47TH RD		LONG ISLAND CITY	NY	11101-5513
RAYMOND ROGERS	10-41 47 ROAD	LONG ISLAND CITY, NY 11101						
RIVERVIEW PROPERTY HO	46-32 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		PO BOX 92		NEW YORK	NY	10156-0092
RODI, PAOLA	47-12 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
RODRIGUEZ, LUIS E.	10-54 46 ROAD	LONG ISLAND CITY, NY 11101						
ROSE ANN MANETTA	47-37 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
ROSELLA DWYER	45-32 11 STREET	LONG ISLAND CITY, NY 11101						
RYDER TRUCK RENTAL IN	10-20 10 STREET	LONG ISLAND CITY, NY 11101						
SADIE GREENBERG	44-80 45 AVENUE	LONG ISLAND CITY, NY 11101						
SADIE GREENBERG	10-44 44 DRIVE	LONG ISLAND CITY, NY 11101						
SALA REALTY LLC	46-28 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
SANTO ANZALONE	47-18 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
SAPORITO, STEPHANIE A	5-34 47 AVENUE	LONG ISLAND CITY, NY 11101						
SARLI FRANK	10-11 47 AVENUE	LONG ISLAND CITY, NY 11101						
SEPNER, SANDRA LEE	10-35 44 DRIVE	LONG ISLAND CITY, NY 11101						
SEVENTH ST. RIVERVIEW	5-14 47 ROAD	LONG ISLAND CITY, NY 11101						
SLOOP STEPHEN	5-17 47 ROAD	LONG ISLAND CITY, NY 11101		3454 WOODWARD ST		OCEANSIDE	NY	11572-4531
SLOOP STEPHEN	5-01 47 ROAD	LONG ISLAND CITY, NY 11101		3454 WOODWARD ST		OCEANSIDE	NY	11572-4531
SMOKE, CYNTHIA	47-27 5 STREET	LONG ISLAND CITY, NY 11101		711 SHORE RD	# 2W	LONG BEACH	NY	11561-4798
SMS REALTY LLC	45-46 11 STREET	LONG ISLAND CITY, NY 11101						
SOL SANCHEZ	10-17 47 ROAD	LONG ISLAND CITY, NY 11101						
SORIANO, VINCENT	10-44 46 ROAD	LONG ISLAND CITY, NY 11101						

Appendix C
Paragon Paint Site
NYSDEC BCP Number: C241108
Contact List - Local Residential and Business Properties

OWNER/NAME	LOT ADDRESS	CITY	OWNER/NAME #2	OWNER ADDRESS (if different from lot address)				
STATE LAND UNDER WATE	44 DRIVE	LONG ISLAND CITY, NY 11101						
STEPHEN KOO	10-49 47 ROAD	LONG ISLAND CITY, NY 11101						
STEVEN FOSCHINO	10-24 47 ROAD	LONG ISLAND CITY, NY 11101						
STEVEN J DAMATO	45-12 11 STREET	LONG ISLAND CITY, NY 11101						
SWEHAR REALTY CORP	5-25 47 ROAD	LONG ISLAND CITY, NY 11101		605 3RD AVE		NEW YORK	NY	10158-0180
TE VANOVER JR	5-16 47 ROAD	LONG ISLAND CITY, NY 11101						
THE BADGE DEVELOPMEN	46-48 11 STREET	LONG ISLAND CITY, NY 11101						
THOMAS P MANETTA	10-39 47 ROAD	LONG ISLAND CITY, NY 11101		5830 203RD ST		FLUSHING	NY	11364-1648
TRENT JONES	5-42 47 AVENUE	LONG ISLAND CITY, NY 11101						
ULINO, ROBERT JR	45-16 11 STREET	LONG ISLAND CITY, NY 11101						
UNID RLTY CORP	46-09 11 STREET	LONG ISLAND CITY, NY 11101	C/O HORWITZ	125 NOTTINGHAM DR		WATCHUNG	NJ	07069-6139
V FESTA	5-18 47 ROAD	LONG ISLAND CITY, NY 11101						
VAN OWNERS PURCHASING	10-35 45 AVENUE	LONG ISLAND CITY, NY 11101						
VELASQUEZ ADONY	5-46 47 ROAD	LONG ISLAND CITY, NY 11101						
VERNON II	46-41 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
VERNON II	10-18 46 ROAD	LONG ISLAND CITY, NY 11101						
VERNON II	46 ROAD	LONG ISLAND CITY, NY 11101						
VERNON REALTY CORP	45-58 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
VERONICA CAVALIERE	10-45 47 ROAD	LONG ISLAND CITY, NY 11101						
VINCENT D PITARO	10-26 46 ROAD	LONG ISLAND CITY, NY 11101		1026 46TH RD		LONG ISLAND CITY	NY	11101-5320
VINCENT FESTA	5-43 48 AVENUE	LONG ISLAND CITY, NY 11101		23 HILL HOUSE LN		GLEN HEAD	NY	11545-2503
VINCENT PATUTO	10-36 47 AVENUE	LONG ISLAND CITY, NY 11101						
VINCENTE MARTINEZ	10-14 47 AVENUE	LONG ISLAND CITY, NY 11101	(APT 1-H0	9131 LAMONT AVE		FLUSHING	NY	11373-2713
VINCENZO CERBONE REVO	46-36 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4735 VERNON BLVD		LONG ISLAND CITY	NY	11101-5505
VINCENZO CERBONE REVO	47-35 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
VINCENZO CERBONE REVO	46-31 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101		4735 VERNON BLVD		LONG ISLAND CITY	NY	11101-5505
VINCENZO CERBONE REVO	10-01 45 AVENUE	LONG ISLAND CITY, NY 11101		4735 VERNON BLVD		LONG ISLAND CITY	NY	11101-5505
VINCIQUERRA, ANDREWF	46-30 11 STREET	LONG ISLAND CITY, NY 11101						
VINCIQUERRA, ANDREWSR	10-31 46 ROAD	LONG ISLAND CITY, NY 11101						
VITTIGLIO, CATERINA	45-36 11 STREET	LONG ISLAND CITY, NY 11101						
WHITE CAT ART & TEXTI	5-38 47 ROAD	LONG ISLAND CITY, NY 11101						
WILLIAM GARRETT IV	47-08 VERNON BOULEVARD	LONG ISLAND CITY, NY 11101						
YOUNG MICHAEL W K	45-28 11 STREET	LONG ISLAND CITY, NY 11101		4514 196TH ST		FLUSHING	NY	11358-3527
YOUNG MICHAEL W K	45-30 11 STREET	LONG ISLAND CITY, NY 11101		4514 196TH ST		FLUSHING	NY	11358-3527

Appendix C
Paragon Paint Site
NYSDEC BCP Number: C241108
Contact List - Federal, State, and City Representatives

Categorv	Name	Title	Address Line 1	Address Line 2
United States Congress	Honorable Carolyn Maloney		1051 Third Avenue, Suite 311	New York, NY 10128
United States Senate	Honorable Kirsten E. Gillibrand		780 Third Avenue, Suite 2601	New York, NY 10017
United States Senate	Honorable Charles E. Schumer		757 Third Avenue, Room 17-02	New York, NY 10017
NYS Governor	Honorable David A. Paterson		The State Capitol	Albany, NY 12224
NYS Assembly	Honorable Catherine Nolan	Assemblymember, 37th District	45-25 47th Street	Woodside, NY 11377
NYS Attorney General	Honorable Andrew M. Cuomo		The State Capitol	Albany, NY 12224
NYS Parks, New York City Region	Rachel Gordon	Regional Director	State Office Building, 163 West 125th Street, 17th Floor	New York, NY 10027
NYS Senate	Honorable George Onorato	Senator 12th District	28-11 Astoria Blvd.	Astoria, New York 11102
NYC Comptroller	Honorable William C. Thompson, Jr.	City Comptroller	One Centre Street, Room 530	New York, NY 10007
NYC Dept. of Environmental Protection	Steven Lawitts	Acting Commissioner	59-17 Junction Boulevard	Corona, NY 11368
NYCDEP	John Zimmermann, Air Resources	NYC Dept of Environmental Protection	59-17 Junction Blvd	Corona NY 11368
NYCDEP	John Wuthenow	NYC Dept of Environmental Protection	59-17 Junction Blvd	Corona NY 11368
NYC Local Library	Queensborough Public Library -Court Square Branch		25-01 Jackson Avenue	Long Island City NY, 11101
NYC Mayor	Honorable Michael R. Bloomberg	Mayor	City Hall	New York, New York 10007
NYC Dept. of City Planning	Amanda Burden	Chairperson	22 Reade Street	New York, NY 10007
NYC Mayor's Office of Environmental Coordination	Dr. Robert Kulikowski	Coordination	253 Broadway, 14th Floor	New York, NY 10007
NYC Council Committee on Environmental Protection	Hon. James Gennaro		185-10 Union Turnpike	Fresh Meadows, NY 11366
NYC Mayor's Office of Environmental Remediation	Mark McIntyre		253 Broadway, 14th Floor	New York, NY 10007
Queens Borough Office	Helen Marshall	Queens Borough President	120-55 Queens Boulevard	Kew Gardens, New York 11424
Queens County Clerk's Office	Gloria D'Amico	County Clerk	88-11 Sutphin Boulevard, 1st Floor	Jamaica, NY 11439
Queens Community Board 2 Office	Joseph Conley	Chairperson	43-22 50th Street	Woodside, New York 11377
Queens Community Board 2 Office	Debra Markell-Kleinert	District Manager	43-22 50th Street	Woodside, New York 11377
Queens Community Board 2 Office	Dorothy Morehead	Chairperson, Environment Committee	43-22 50th Street	Woodside, New York 11377
Queens Council Office	Eric N. Gioia	City Council Member, District 26	47-01 Queens Boulevard (suite 205)	Queens, New York, 11104
Schools with in 0.5 mile radius	Mr. Louis Pavone, Principal	PS78	48-09 Center Boulevard	Long Island City, NY 11109
Schools with in 0.5 mile radius	Nancy Cassella, Principal	High School for Information Technology	21-16 44th Road	Long Island City NY, 11101
Schools with in 0.5 mile radius	Karen Briggs	Little Ones Nursery School	4-74 48th Ave	Long Island City NY, 11101
Media		The Daily News	450 West 33rd Street	New York, NY 10001
Media		NY 1 News	75 Ninth Avenue	New York, NY 10011
Media		New York Post	1211 Avenue of the Americas	New York, NY 10036
Media		Times-Ledger Newspapers	41-02 Bell Boulevard, 2nd Floor	Bayside, NY 11361
Media		LIC/Astoria Journal	69-60 Grand Avenue	Maspeth, NY 11378
Media		New York Newsday	235 Pinelawn Road	Melville, NY 11747
Media		Queens Chronicle	PO Box 74-7769	Rego Park, NY 11374-7769
Media		Western Queens Gazette	42-16 34th Avenue	L.I.C. N.Y. 11101
Media	Michael Camindes	Times News Weekly	PO Box 860299	Ridgewood, NY 11386
NYSDEC	Sondra Martinkat	Project Manager	1 Hunter's Point Plaza	Long Island City, NY 11101
NYSDEC	Jane H. O'Connell	Acting Chief, Region 2 Superfund	1 Hunters Point Plaza	Long Island City, NY 11101
NYSDOH	Dawn Hettrick		547 River Street	Trov, NY 12180
NYSDOH	Joseph Crua		547 River Street	Trov. NY 12180
Community, Civic, Religious and other Educational Institutions		Hunters Point Community Coalition	45-14 11th Street	Long Island City, NY 11101
Community, Civic, Religious and other Educational Institutions		Hunters Point Community Development Corporation	49-10 Vernon Boulevard	Long Island City, NY 11101
Community, Civic, Religious and other Educational Institutions		Herbert . J. Birch/Western Queens Early Childhood Center	10-24 49th Ave.	Long Island City, NY 11101
Community, Civic, Religious and other Educational Institutions		St. Mary's Senior Center	10-15 49th Ave.	Long Island City, NY 11101

APPENDIX D

IDENTIFICATION OF CITIZEN PARTICIPATION ACTIVITIES

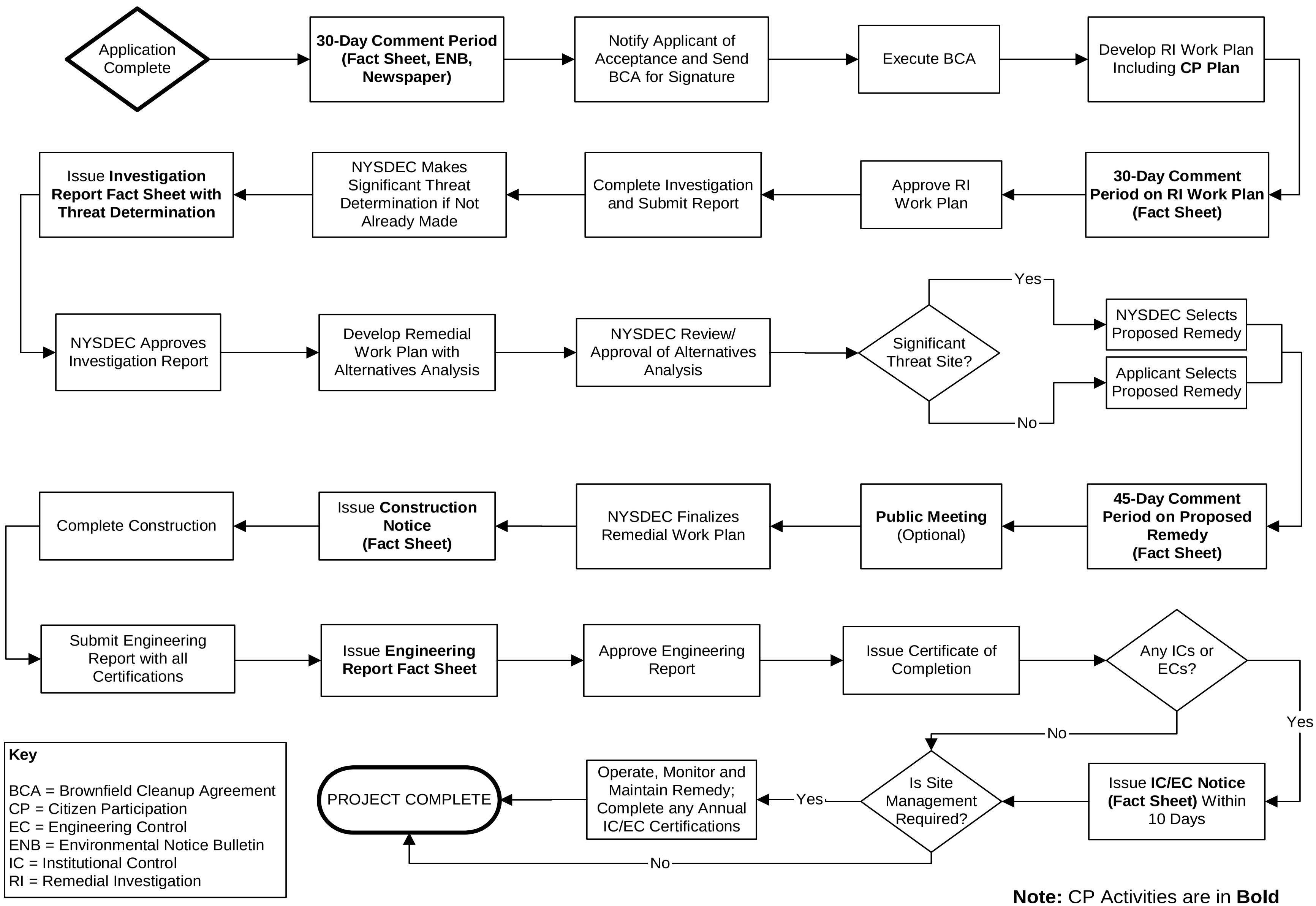
Appendix D – Identification of Citizen Participation Activities

Required Citizen Participation (CP) Activities	CP Activities) Occur at this Point
Application Process:	
• Prepare brownfield site contact list (BSCL) • Establish document repositories	At time of preparation of application to participate in BCP.
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day comment period	When NYSDEC determines that BCP application is complete. The 30-day comment period begins on date of publication of notice in ENB. End date of comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice and notice to the BSCL should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement:	
• Prepare citizen participation (CP) plan	Draft CP Plan must be submitted within 20 days of entering Brownfield Site Cleanup Agreement. CP Plan must be approved by NYSDEC before distribution.
After Remedial Investigation (RI) Work Plan Received:	
• Mail fact sheet to BSCL about proposed RI activities and announcing 30-day public comment period on draft RI Work Plan	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, comment periods will be combined and public notice will include fact sheet. 30-day comment period begins/ends as per dates identified in fact sheet.
After RI Completion:	
• Mail fact sheet to BSCL describing results of RI	Before NYSDEC approves RI Report.
After Remedial Work Plan (RWP) Received:	
• Mail fact sheet to BSCL about proposed RWP and announcing 45-day comment period • Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager in consultation with other NYSDEC staff as appropriate)	Before NYSDEC approves RWP. 45-day comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day comment period.
After Approval of RWP:	
• Mail fact sheet to BSCL summarizing upcoming remedial construction	Before the start of remedial construction.
After Remedial Action Completed:	
• Mail fact sheet to BSCL announcing that remedial construction has been completed • Mail fact sheet to BSCL announcing issuance of Certificate of Completion (COC)	At the time NYSDEC approves Final Engineering Report. These two fact sheets should be combined when possible if there is not a delay in issuance of the COC.

APPENDIX E

CP PROCESS FLOWCHART

Appendix E – Brownfield Cleanup Program Process



Note: CP Activities are in **Bold**

APPENDIX C

Health and Safety Plan
(Including Community Air Monitoring Plan)

February 7, 2013

SITE HEALTH AND SAFETY PLAN

Former Paragon Paint and Varnish Company Manufacturing Facility
BCP Site Number C241108
5-43 to 5-49 46th Avenue and
45-38 Vernon Boulevard to
45-40 Vernon Boulevard
Long Island City, New York

Prepared for

VERNON 4540 REALTY, LLC
45 Carleon Avenue
Larchmont, New York 10538

ROUX ASSOCIATES, INC.

Environmental Consulting & Management

ROUX

209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600

VNN2051.0001Y.105R/HASP-CV

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(Continued)

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APPROVALS

By their signature, the undersigned certify that this Health and Safety Plan (HASP) is approved and will be utilized at the project site located at 5-43 to 5-49 46th Avenue and 45-35 to 45-40 Vernon Boulevard in Long Island City, New York.

Joseph W. Gentile ______________________ February 7, 2013
Joseph Gentile — Date
Corporate Health and Safety Manager
Roux Associates, Inc.

R. Maxwell ______________________ February 7, 2013
Richard Maxwell — Date
Site Health and Safety Officer
Roux Associates, Inc.

Joseph Dum ______________________ February 7, 2013
Joseph D. Duminuco — Date
Project Principal/
Vice President
Roux Associates, Inc.

1.0 INTRODUCTION

This Site-specific health and Safety Plan (HASP) has been prepared in accordance with 29 CFR 1910.120 Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) and Roux Associates, Inc. (Roux Associates) Standard Operating Procedures (SOPs). It addresses all activities to be performed during the implementation of Remedial Investigation (RI) activities, Interim Remedial Measures (IRM), and Remedial Actions (RA) at the property identified as the former Paragon Paint manufacturing facility and located at 5-43 to 5-49 46th Avenue and 45-35 to 45-40 Vernon Boulevard in Long Island City, New York (Site) (Figure 1). The HASP will be implemented by the designated Site Health and Safety Officer (SSO) during work at the Site. The HASP attempts to identify all potential hazards at the Site; however, Site conditions are dynamic and new hazards may appear constantly. Personnel must remain alert to existing and potential hazards as Site conditions change and protect themselves accordingly.

Compliance with this HASP is required of all persons and subcontractors who perform fieldwork or enter the Site. The contents of this HASP may change or undergo revision based upon additional information made available to health and safety personnel, monitoring results, or changes in the technical scope of work. Any changes proposed must be reviewed and approved by the Corporate Health and Safety Manager (CHSM), with the SSO implementing the changes to the HASP.

Upon entering the Site, all visitors are required to sign in. All visitors entering the Contamination Reduction Zone (CRZ) (defined in Section 8.1.2), the Contamination Reduction Corridor (CRC) (defined in Section 8.1.2), or the Exclusion Zone (EZ) (defined in Section 8.1.3) will be required to read and comply with the provisions of this HASP. Visitors will be required to comply with applicable OSHA requirements such as training, medical monitoring, and respiratory protection.

In the event that a visitor does not adhere to the provisions of this HASP, he or she will be required to leave the Site. Mobilization activities not requiring intrusive activities (e.g., survey, equipment staging, etc.) or exposure to potentially impacted areas may only be performed if supervised by a competent Roux Associates employee.

1.1 Scope of Work

The Scope of Work activities will include the implementation of RI activities.

The Scope of Work activities are as follows:

1. Obtain necessary permits and approvals.
2. Preparation and implementation of an approved Health and Safety Plan (HASP).
3. Implementation of RI activities, consisting of site inspection/reconnaissance, geophysical survey, drilling, soil boring and sampling, groundwater sampling, and soil vapor sampling.
4. Implementation of the approved Field Sampling Plan (FSP).
5. Mobilization and demobilization.
6. Maintain good site housekeeping at all times.
7. Identification, protection, and/or relocation of any utilities within the work area.
8. Construct a decontamination pad with proper containment and collection system, if necessary.

1.2 Emergency Numbers

1.2.1 Emergency Phone Numbers

Emergency Medical Service 911

Police: New York City Police Department (NYCPD) 911

Fire: 911

Hospital: Mt. Sinai Queens Hospital 718-267-4285

National Response Center...800-424-8802

Poison Control Center...800-222-1222

CHEMTREC...800-262-8200

Fire: New York City Fire Department.......................................911

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

USEPA (Region II)...212-637-5000

NYSDEC Emergency Spill Response 800-457-7362

1.2.2 Project Management/Health and Safety Personnel

Title	Contact	Telephone/Cell
Roux Associates		
Project Director	Joseph Dumunico	631-232-2600 Cell – 631-921-6279
Site Health and Safety Officer	Richard Maxwell	631-232-2600 Cell – 631-927-9531
Corporate Health and Safety Manager	Joseph Gentile	856-423-8800 Cell – 610-844-6911

1.2.3 Other Important Phone Numbers

New York City Emergency Response Team 911

HealthSource Medical Services of Islandia 631-435-0110
(For non-emergency medical services)

1.2.4 Directions to Mt. Sinai Queens Hospital

See Figure 2 for street map.

- Head west on 46th Avenue toward 5th Street
- Turn left onto 5th Street
- Take first left onto 46th Road
- Take the third left onto 21st Street
- Turn right onto 30th Avenue
- Arrive at Mt. Sinai Queens Hospital on the right (total distance is 2.7 miles)

2.0 HEALTH AND SAFETY STAFF

This section briefly describes all Site personnel and their health and safety responsibilities for the RI work to be implemented at the Site. All personnel are responsible for ensuring compliance with the HASP.

2.1 Project Principal (PP) – Joseph D. Dumunico – Roux Associates

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

2.2 Corporate Health and Safety Manager (CHSM) – Joseph W. Gentile – Roux Associates

- Implements the HASP.
- Performs or oversees site-specific training and approves revised or new safety protocols or field operations.
- Coordinates revisions of this HASP with Project Principal.
- Responsible for the development of new task safety protocols and procedures and resolution of any outstanding safety issues which may arise during the performance of site work.
- Review and approve all health and safety training and medical surveillance records for personnel and subcontractors.

2.3 Site Safety and Health Officer (SSO) – Richard Maxwell – Roux Associates

- Directs and coordinates health and safety monitoring activities.
- Ensures that field teams utilize proper personal protective equipment.
- Conducts initial onsite specific training prior to personnel and/or subcontractors commencing work.
- Conducts and documents periodic safety briefings.
- Ensures that field team members comply with this HASP.
- Completes and maintains Accident Report and Investigation Forms.
- Notifies PP and CHSM of all accidents/incidents.

- Notifies PP of daily field operations and work progress, who will then communicate at the end of the day to the designated representative the following:
    1. End of day tasks completed
    2. Next day’s planned activities
    3. Third party issues
    4. Change of Plans – approvals
- Maintains contact with Contractors.
- Determines upgrade or downgrade of personal protective equipment (PPE) based on Site conditions and/or real time monitoring results.
- Ensures that monitoring instruments are calibrated daily or as manufacturers suggested instructions determine.
- Submits and maintains health and safety field log books, daily safety logs, training logs, air monitoring result reports, weekly safety report.

2.4 Field Personnel and Subcontractors

- Report any unsafe or potentially hazardous conditions to the SSO.
- Maintain knowledge of the information, instructions, and emergency response actions contained in the HASP.
- Comply with rules, regulations, and procedures as set forth in this HASP and any revisions, which are instituted.
- Prevent admittance to work Site by unauthorized personnel.

3.0 SITE LOCATION, DESCRIPTION, AND HISTORY

Descriptions of the Site and surrounding property usage are included in the following sections. The location of the Site is presented in Figure 1.

3.1 Property Location and Description

The Site is located at 5-43 46th Avenue to 5-49 46th Avenue and 45-38 Vernon Boulevard to 45-40 Vernon Boulevard in Long Island City, New York. The New York City Tax Map identified the Site as Block 26, Lot Number 4. The Site consists of an approximately 33,150-square foot lot improved by one four story former paint factory building, one three story former garage and office, one three story former warehouse, one 1-story shed and a concrete paved access road off 46th Avenue and a rear courtyard that fronts approximately 60 feet of Anable Basin. The buildings were reportedly constructed between 1923 and 1947.

The total area of the on-Site buildings is approximately 69,500 square feet. Floors two through four of the former paint factory building contain the bulk of the paint and varnish manufacturing equipment and bulk liquid mixing tanks including multiple (53) ASTs and a significant amount of piping that still may contain unknown liquids or residues. The one story shed, which is attached to the four story former paint factory building, contains a boiler room and a historical varnish cooking pot room that is currently empty. Seven underground varnish cooking pots in addition to two underground storage tanks (USTs) are reported to be located beneath the concrete slab of the shed. The three-story building known as the garage contains offices, a former small paint laboratory and storage space. Nine USTs are reported to be located beneath the concrete slab of the garage. The three-story building known as the warehouse stored raw materials and paint products; currently most of the building is empty.

The courtyard is concrete paved and is reported to contain nine USTs. Vehicular access is provided by a concrete paved access road off 46th Avenue, which is reported to contain two USTs.

4.0 WASTE DESCRIPTION/CHARACTERIZATION

4.1 General

The following information is presented in order to identify the types of materials that may be encountered at the Site. The detailed information on these materials was obtained from:

- Sax's Dangerous Properties of Industrial Materials – Lewis Eight Edition
- Chemical Hazards of the Workplace – Proctor/Hughes
- Condensed Chemical Dictionary – Hawley
- Rapid Guide to Hazardous Chemical in the Workplace – Lewis 1990
- NIOSH Pocket Guide to Chemical Hazards – 2005
- ACGIH TLV Values and Biological Exposure Indices
- OSHA 29 CFR 1910.1000

4.2 Chemical Data Sheets

Several chemicals that may potentially be present in soils and groundwater at the Site, based on previous soil, soil vapor and groundwater sampling results and historic operations conducted at the Site that have been identified. The Summary of Toxicological Data is found in Table 1 and is provided for review of chemicals that may be encountered. The Summary of Toxicological Data Sheets provides information such as the chemicals characteristics, health hazards, protection, and exposure limits.

4.2.1 Contaminants of Concern

Soil and groundwater contaminants that may be encountered during drilling and sampling activities include both organic and inorganic compounds. Prior investigations at the site have indicated detection of light non-aqueous phase liquid (LNAPL), Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs) and metals.

The toxicological, physical, and chemical properties of potential contaminants are presented in Table 1.

5.0 HAZARD ASSESSMENT

The potential to encounter chemical hazards is dependent upon the work activity performed (intrusive versus non-intrusive) and the duration and location of the work activity. Such hazards could include inhalation and/or skin contact with chemicals/gases that could cause: dermatitis, skin burns, being overcome by vapors or asphyxiation.

Physical hazards that may be encountered during Site work include: heat and cold stress, exposure to excessive noise, loss of limbs, being crushed, head injuries, punctures, cuts, falls, electrocution and bruises; structural integrity of buildings; asbestos and lead paint exposure; and other physical hazards due to motor vehicle operation, heavy equipment and power tools.

Biological hazards may exist during Site activities. These hazards include exposure to insect bites/stings, animals and animal wastes, mold and bloodborne pathogens.

Prior to the beginning of each new phase of work, an activity hazard analysis will be prepared by the SSO with assistance from the CHSM. The analysis will address the hazards for each activity performed in the phase and will present the procedures and safeguards necessary to eliminate the hazards or reduce the risk. The Activity Hazard Analysis Sheets are located in Appendix A.

5.1 Chemical Hazards

The potential for personnel and subcontractors to come in contact with chemical hazards may occur during the following tasks:

- Gauging, bailing/purging, and sampling monitoring wells;
- Drilling Activities; and
- Decontamination Activities.

For chronic and acute toxicity data, refer to Summary of Toxicological Data Sheets in Table 1 for further details on compound characteristics.

5.1.1 Exposure Pathways

Exposure to these compounds during ongoing activities may occur through inhalation of contaminated dust particles, inhalation of VOCs and SVOCs, dermal absorption, and accidental ingestion of the contaminant by either direct or indirect cross-contamination activities.

Inhalation of contaminated dust particles (VOCs, SVOCs, and inorganics) can occur during adverse weather conditions (high or changing wind directions) or during operations that may generate airborne dust such as excavation and loading of contaminated soils. Dust control measures such as applying water to roadways and excavations will be implemented where visible dust is generated. Where dust control measures are not feasible or effective, respiratory protection will be used when necessary (see Section 9.2.2 for monitoring procedures and action levels).

5.1.2 Operational Action Levels

A decision-making protocol for an upgrade in levels of protection and/or withdrawal of personnel from an area based on atmospheric hazards is outlined in Table 2.

5.1.3 Additional Precautions

Dermal absorption or skin contact with chemical compounds is possible during intrusive activities and while gauging, purging or sampling a monitoring well at the Site. The use of PPE in accordance with Section 8.2 and strict adherence to proper decontamination procedures should significantly reduce the risk of skin contact.

The potential for accidental ingestion of potentially hazardous chemicals is expected to be remote, when good hygiene practices are used.

5.2 Physical Hazards

A variety of physical hazards may be present during Site activities. These hazards include typical construction activities: operation of motor vehicles and heavy equipment operation, the use of power and hand tools, the use of pressurized pumps for *in situ* injections, roping and rigging of steel sheeting, walking on objects, tripping over objects, working on surfaces which have the potential to promote falling, skin burns, crushing of fingers, toes, limbs, head injuries caused by falling objects, temporary loss of one's hearing and/or eyesight. The referenced hazards are not unique and are generally familiar to most hazardous waste site workers at construction sites. Task-specific safety requirements for each phase will be covered during safety briefings. Activity Hazard Analysis summaries are contained in Appendix A.

5.2.1 Noise

Noise is a potential hazard associated with operation of heavy equipment, power tools, pumps, and generators. High noise equipment operators will be evaluated at the discretion of the SSO. Employees with an 8-hour time weighted average exposure exceeding 85 dBA will be included in a hearing conservation program in accordance with 29 CFR 1910.95 and 1926.52.

It is mandated that employees working around heavy equipment or using power tools that produce noise levels exceeding 90 dBA are to wear hearing protection that shall consist of earplugs or protective earmuffs.

5.2.2 Heat Stress

Heat stress is a significant potential hazard, associated with the use of protective equipment in a hot weather environment. The human body is designed to function at a certain internal temperature. When metabolism or external sources (fire or hot summer day) cause the body temperature to rise, the body seeks to protect itself by triggering cooling mechanisms. The SSO will monitor the air temperature (as described later in this section) to determine potential adverse affects the weather can cause onsite personnel. Excess heat is dissipated by two means:

- Changes in blood flow to dissipate heat by convection, which can be seen as "flushing" or reddening of the skin in extreme cases.
- Perspiration, the release of water through skin and sweat glands. While working in hot environments, evaporation of perspiration is the primary cooling mechanism.

Protective clothing worn to guard against chemical contact effectively stops the evaporation of perspiration. Thus the use of protective clothing increases heat stress problems.

The major disorders due to heat stress are heat cramps, heat exhaustion, and heat stroke. Heat cramps are painful spasms, which occur in the skeletal muscles of workers who sweat profusely in the heat and drink large quantities of water, but fail to replace the bodies lost salts or electrolytes. Drinking water while continuing to lose salt tends to dilute the body's extracellular fluids.

Soon water seeps by osmosis into active muscles and causes pain. Muscles fatigued from work are usually most susceptible to cramps.

Extreme weakness or fatigue, dizziness, nausea, and headache characterize heat exhaustion. In serious cases, a person may vomit or lose consciousness. The skin is clammy and moist, complexion pale or flushed, and body temperature normal or slightly higher than normal. Treatment is rest in a cool place and replacement of body water lost by perspiration. Mild cases may recover spontaneously with this treatment; severe cases may require care for several days. There are no permanent effects. As first aid treatment, the person should be moved to a cool place. Body heat should be reduced artificially, but not too rapidly, by soaking the person's clothes in water and fanning them.

Heat stroke is considered a medical emergency and is caused by the breakdown of the body's regulating mechanisms. The skin is very dry and hot with red mottled or bluish appearance. Unconsciousness, mental confusion, or convulsions may occur. Without quick and adequate treatment, the result can be death or permanent brain damage.

Steps that can be taken to reduce heat stress are:

- Acclimate the body. Allow a period of adjustment to make further heat exposure endurable.
- Drink more liquids to replace the body water lost during sweating.
- Rest is necessary and should be conducted under the direction of the SSO.
- Wear personal cooling devices. These are two basic designs; units with pockets for holding frozen packets and units that circulate fluid from a reservoir through tubes to different parts of the body. Both designs can be in the form of a vest, jacket, or coverall. Some circulating units also have a cap for cooling the head.
- Wear long cotton underwear under chemical protective clothing. The cotton will absorb perspiration and will hold it close to the skin. This will provide the body with the maximum cooling available from the limited evaporation that takes place beneath chemical resistant clothing. It also allows for rapid cooling of the body when the protective clothing is removed.

Heat stress is a significant hazard associated with using protective equipment in hot weather environments. Local weather conditions may produce conditions, which will require restricted work schedules in order to protect employees.

Appendix B contains procedures for heat stress; these will be used as a guideline and to provide additional information.

5.2.3 Cold Stress

Cold temperatures are a significant potential hazard. Examples of cold temperature hazards are frostbite and hypothermia.

Frostbite is the most common injury resulting from exposure to cold. The extremities of the body are most often affected. The signs of frostbite are:

- The skin turns white or grayish-yellow.
- Pain is sometimes felt early but subsides later. Often there is no pain.
- The affected parts feel intensely cold and numb.

Hypothermia is characterized by shivering, numbness, drowsiness, muscular weakness, and a low internal body temperature when the body feels extremely warm. This can lead to unconsciousness and death. With both frostbite and hypothermia, the affected areas need to be warmed quickly. Immersion in warm water is an effective means of warming the affected areas quickly. In such cases, medical assistance will be sought.

To prevent these effects from occurring, persons working in the cold should wear adequate clothing and reduce the time spent in the cold area. The field SSO is responsible for determining appropriate time personnel should spend in adverse weather conditions and will monitor this.

Appendix B, which contains the Heat and Cold Stress Guidelines, provides additional information.

5.2.4 Asbestos

Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Depending on the chemical composition, fibers may range from course to silky. The properties that make asbestos fibers valuable to industry are its high-tensile strength, flexibility, heat and chemical resistance and good frictional properties. Asbestos is a common naturally occurring group of fibrous minerals. Asbestos fibers have been used in a variety of building materials; generally, most asbestos is found in pipe insulation, doors, textures paints and plasters, structural fireproofing, and floor tiles. Friable asbestos (that is, material that contains more than 0.1% asbestos by weight and can be crumbled by hand) is a potential hazard because it can release fibers into the air if damaged. Roux Associates' personnel will not disturb any suspected asbestos material.

5.2.5 Structural Integrity

The structural integrity of a building and the safety of the individuals inside depend on meeting and maintaining national and local building codes. Structural integrity can range from minor defects such as loose floorboards and roof leaks to major defects such as floors and walls sagging and collapsed roofs. Numerous other structural defects can exist with or without consequence to the occupants. If Roux Associates personnel detect a problem, they should notify their supervisor, who in turn, should seek the opinion of a qualified structural engineer to offer an opinion regarding the integrity of the building. If in the opinion of the qualified engineer it is unsafe, no work can proceed until a solution to rectify the situation has been performed.

It is presently known that the majority of the onsite buildings have been unoccupied since approximately 1998. As such, personnel will take this into consideration during the initial site visits and communicate this potential hazard during the safety tailgate meetings to all workers entering the site.

5.2.6 Lockout/Tagout

Roux Associates and all Site contractors will develop a lockout/tagout plan in the event of the repair of electrical, pneumatic, hydraulic, mechanical systems, per OSHA requirements under 29 CFR 1910.147.

5.3 Biological Hazards

The biological hazards, which have the potential to cause adverse health effects, are from exposure to domestic flies, mosquitoes, insects, animals and animal wastes, mold and bloodborne pathogens. The Activity Hazard Analysis (Appendix A) suggests controls for various hazards to be potentially encountered onsite.

5.3.1 Insect Stings

Stings from insects are often painful, cause swelling and can be fatal if a severe allergic reaction such as anaphylactic shock occurs. If a sting occurs, the stinger should be scraped out of the skin, opposite of the sting direction. The area should be washed with soap and water followed by application of an ice pack.

If the victim has a history of allergic reaction, he should be taken to the nearest medical facility. If the victim has medication to reverse the effects of the sting, it should be taken immediately.

If the victim experiences a severe reaction, a constricting band should be placed between the sting and the heart. The bitten area should be kept below the heart if possible. A physician should be contacted immediately for further instructions.

5.3.2 Animals and Animal Wastes

Due to most of the onsite structures being unutilized for several years, there lies the potential for various wildlife to reside within the structures, including, but not limited to, pigeons, bats, mice, rats, squirrels, raccoons, and feral cats. Certain animals can represent significant sources (vectors) of disease transmission. Precautions to avoid or minimize potential contact with (biting) animals (such as some of the above listed) or animal waste and/or deceased animals should be considered prior to all field activities. Rats, squirrels, raccoons, feral cats, and other wild animals can inflict painful bites which can also cause disease (as in the case of rabid animals). Site personnel should avoid contact with any of the above.

If contact occurs, be sure to clean the area thoroughly with soap and water as soon as possible. If a bite occurs, the area should be cleaned thoroughly immediately with soap and water and medical attention should be sought.

5.3.3 Mold

Due to the unutilized state of the various structures onsite, leaking roofs and the collection of water may have gone unnoticed which may have led to the growth of mold within the buildings.

Although mold affects individuals differently and to different degrees, the following are some of the most common adverse health effects:

- Respiratory problems – wheezing, difficulty breathing;
- Nasal and sinus congestion;
- Eyes – burning, watery, reddened, blurry vision, light sensitivity;
- Dry, hacking cough;
- Sore throat;
- Nose and throat irritation;
- Shortness of breath and lung disease;
- Chronic fatigue;
- Skin irritation;
- Central nervous system (headaches, loss of memory, and mood changes);
- Aches and pains;
- Fever;
- Headaches;
- Diarrhea; and
- Immune suppression.

Decisions about removing individuals from an affected area must be based on the results of a medical evaluation, and will be made on a case-by-case basis.

Workers that discover the visible presence of mold in excess of 10 sq. feet need to notify the SSO for consultation. If a worker smells mold and feels that he/she is experiencing symptoms of exposure, he/she should leave the area and report the symptoms to the SSO.

5.3.4 Bloodborne Pathogens

The majority of the occupational tasks onsite will not involve a significant risk of exposure to blood, blood components, or body fluids. The highest risk of acquiring any bloodborne pathogen for employees onsite will be following an injury. When administering first aid care, there are potential hazards associated with bloodborne pathogens that cause diseases such as Human Immunodeficiency Virus (HIV), Hepatitis B (HBV), Hepatitis A (HAV), Hepatitis C (HCV), or the Herpes Simplex Virus (HSV). An employee who has not received the appropriate certification should never execute first aid and/or CPR.

In order to minimize any potential pathogen exposure, all employees should use the hand washing facilities on a regular basis. Additionally, the following universal precautions should be followed to prevent further potential risk:

- Direct skin or mucous membrane contact with blood should be avoided.
- Open skin cuts or sores should be covered to prevent contamination from infectious agents.
- Body parts should be washed immediately after contact with blood or body fluids that might contain blood, even when gloves or other barriers have been used.
- Gloves and disposable materials used to clean spilled blood shall be properly disposed of in an approved hazardous waste container.
- First aid responders shall wear latex or thin mil nitrile gloves when performing any procedure risking contact with blood or body substances.
- Safety glasses will be worn to protect the eyes from splashing or aerosolization of body fluids.
- A CPR mask will be worn when performing CPR to avoid mouth-to-mouth contact.
- Appropriate work gloves will be worn to minimize the risk of injury to the hands and fingers when working on all equipment with sharp or rough edges.
- Never pick up broken glass or possible contaminated material with your unprotected hands.
- Never handle wildlife (living or deceased) encountered onsite.

5.4 Hazard Assessment

Task	Hazards	Risk of Exposure
Gauging, purging and Sampling Monitoring Wells	Inhalation/Skin Contact	Moderate/High
	Heat Stress/Cold Stress	Moderate
	Physical Injury	Low/Moderate
	Noise	Low
Decontamination	Inhalation/Skin Contact	Moderate
	Heat Stress/Cold Stress	Moderate
	Physical Injury	Low/Moderate
	Noise	Low
Drilling/Sampling	Inhalation/Skin Contact	Moderate
	Heat Stress/Cold Stress	Moderate
	Noise	Moderate/High
	Physical Injury	Moderate

6.0 TRAINING

6.1 General Health and Safety Training

In accordance with Roux Associates' corporate policies, and pursuant to 29 CFR 1910.120, hazardous waste site workers shall, at the time of the job assignment, have received a minimum of 40 hours of initial health and safety training for hazardous waste site operations. As a minimum, the training shall have consisted of instruction in the topics outlined in the above reference. Personnel who have not met the requirements for initial training will not be allowed to work in any Site activities in which they may be exposed to hazards (chemical or physical).

Completion of a 40-hour Health and Safety Training Course for Hazardous Waste Operations or an approved equivalent will fulfill the requirements of this section.

In addition to the required initial training, each employee shall have received 3 days of directly supervised on-the-job training. This training will address the duties the employees are expected to perform.

Roux Associates' SSO has the responsibility of ensuring that personnel assigned to this project comply with these requirements.

6.2 Annual Eight-Hour Refresher Training

Current, annual 8-hour refresher training will be required of all hazardous waste site field personnel in order to maintain their qualifications for fieldwork. The following topics will be reviewed; toxicology, respiratory protection, including air purifying devices and self-contained breathing apparatus (SCBA), medical surveillance, decontamination procedures, and personal protective clothing. In addition, topics deemed necessary by Roux Associates' Health and Safety Director may be added to the above list.

6.3 Site-Specific Training

Site personnel will receive training that will specifically address the activities, procedures, monitoring and equipment for Site operations. It will include Site and facility layout, hazards, first aid equipment locations and emergency services at the Site, and will highlight all provisions contained within this HASP. This training will also allow field workers to clarify anything they do not understand and to reinforce their responsibilities regarding safety and operations for their particular activity.

6.4 Onsite Safety Meetings

Daily safety meetings will be presented each morning to discuss potential safety concerns for the upcoming activities.

The briefings will also provide a forum to facilitate conformance with safety requirements and to identify performance deficiencies related to safety during daily activities or as a result of safety audits by Roux Associates or other involved parties.

6.5 First Aid and CPR

The SSO will identify those individuals having first aid and CPR training in order to ensure that emergency medical treatment is available during field activities. The training will be consistent with the requirements of the American Red Cross Association and, as applicable, the American Heart Association. Certification and appropriate training documentation will be kept with the Site personnel records.

6.6 Additional Training

The CHSM may require additional or specialized training throughout the project. Such training shall be in the safe operation of heavy or power tool equipment or hazard communication training or other topic deemed Site appropriate.

6.7 Subcontractor Training

All subcontractor personnel working on the Site shall have completed the 40-hour training requirement and meet the medical surveillance requirements found in Section 7.1. Subcontractor training shall be performed in accordance with 29 CFR 1910.120 and HASP specifications. In certain unique situations (e.g., mechanical failure of equipment), the non-trained individual performing emergency repairs may be allowed, at the discretion of the SSO, to perform repairs when no intrusive activities are being performed and provisions have been made to mitigate potential exposure.

7.0 MEDICAL SURVEILLANCE PROCEDURES

7.1 General

A Medical Surveillance Program has been established as part of this plan and is included in Appendix C. Roux Associates and subcontractor personnel performing field work at the Site are required to have passed a complete medical surveillance examination in accordance with 29 CFR 1910.120(f). A physician's medical release for work will be confirmed by the SSO before an employee can begin Site activities. Such examinations shall include a statement as to the worker's present health status, the ability to work in a hazardous environment (including any required PPE, which may be used during temperature extremes), and the worker's ability to wear respiratory protection.

In the event that personal medical information is needed for emergency treatment, information will be made available to the treating health care professional through Roux Associates' Human Resources Department and the CHSM.

8.0 SITE CONTROL, PERSONAL PROTECTIVE EQUIPMENT, AND COMMUNICATIONS

A modified Site control approach may be utilized since activities will be limited to site inspection/geophysical survey, drilling and sampling only during this phase of work. If remedial work is necessary, the following four-zone approach will be used.

8.1 Site Control

Based on the Site history and operations, a potential for the presence of hazardous material does exist. During drilling and sampling work areas will be delineated with high visibility cones and/or caution tape. A dedicated decontamination area will be established to decontaminate all equipment used for sampling.

If remedial activities are necessary, a four-zone approach will be employed in order to prevent the spread of contamination from the disturbed areas onsite. The four zones include: the Exclusion Zone (EZ), the Contamination Reduction Zone (CRZ), Contamination Reduction Corridor (CRC) and the Support Zone (SZ). A stepped remedial approach will be managed and the zones modified as the work progresses. Each of the areas will be defined through the use of control barricades and/or construction/hazard fencing. A clearly marked delineation between the SZ and the remaining three zones, the CRZ, CRC and EZ, will be maintained. The preferred method will utilize high visibility orange fencing and hand-driven metal posts, or orange cones. Signage will be posted to further identify and delineate these areas.

8.1.1 Support Zone

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

8.1.2 Contamination Reduction Zone

A Contamination Reduction Zone (CRZ) is established between the exclusion zone and the support zone. The CRZ contains the Contamination Reduction Corridor (CRC) and provides an area for decontamination of personnel and equipment. The CRZ will be used for general Site entry and egress in addition to access for heavy equipment and emergency support services. Personnel are not allowed in the CRZ without:

- A buddy (co-worker);
- Appropriate PPE;
- Medical authorization;
- Training certification; and
- A need to be in the zone.

8.1.3 Exclusion Zone

The area where contamination exists is considered to be the Exclusion Zone (EZ). All areas where excavation and handling of contaminated materials take place are considered the EZ. This zone will be clearly delineated by orange high visibility fencing. Safety tape may be used as a secondary delineation within the EZ. The zone delineation markings may be opened in areas for varying lengths of time to accommodate equipment operation or specific construction activities. The SSO may establish more than one EZ where different levels of protection may be employed or where different hazards exist. Personnel are not allowed in the EZ without:

- A buddy (co-worker);
- Appropriate PPE;
- Medical authorization;
- Training certification; and
- A need to be in the zone.

8.2 Personal Protective Equipment

8.2.1 General

The level of protection worn by field personnel will be enforced by the SSO. Levels of protection for general operations are provided below and are defined in this section. Levels of protection may be upgraded at the discretion of the SSO. All decisions on the level of protection will be based upon a conservative interpretation by the SSO of the information provided by air monitoring results, environmental results and other appropriate information. Any changes in the level of protection shall be recorded in the health and safety field logbook.

8.2.2 Personal Protective Equipment Specifications

The initial level of personal protective equipment is Level D. It is not anticipated that either Level B or Level C protection will be necessary.

Although not anticipated, any tasks requiring Level B personal protective equipment (PPE) will utilize the following equipment:

- Positive pressure, full facepiece, self-contained breathing apparatus (SCBA) or positive pressure, supplied air respirator with escape SCBA (NIOSH approved)
- Disposable coveralls (Tyvek, Poly-coated Tyvek, or Saranex)
- Gloves, inner: latex or nitrile
- Gloves, outer: cut-resistant
- Chemical resistant boots over the work boots
- Steel toe work boots
- Hard hat
- Hearing protection (as needed)
- Boot cover (as needed)

For tasks requiring Level C PPE, the following equipment may be used in any combination:

- Full-face, air purifying, canister-equipped respirators (NIOSH approved) utilizing Organic Vapor/Acid Gas and P-100 filters (half-face if approved by SSO)
- Disposable coveralls (Tyvek, Poly-coated Tyvek, or Saranex) as required
- Gloves, inner: latex or nitrile as required
- Gloves, outer: cut-resistant
- Chemical resistant boots over the work boots as required

- Steel toe work boots
- Hard hat
- Hearing protection (as needed)
- Safety glasses (if half-mask is utilized)
- Boot covers (as needed)

The Minimum level of PPE for entry onto the Site is Level D PPE. The following equipment shall be used:

- Work uniform (long pants, sleeved shirt)
- Hard hat
- Steel toe work boots
- Safety glasses
- Boot covers (as needed)
- Hearing protection (as needed)
- Reflective safety vest

Modified Level D PPE consists of the following:

- Regular Tyvek coveralls (Poly-coated Tyvek as required)
- Outer gloves: cut-resistant, leather, cotton (as required)
- Inner gloves: latex or nitrile (doubled) as required
- Chemical resistant boots over work boots (as required)
- Steel toe work boots
- Hard hat
- Safety glasses
- Hearing protection as needed
- Reflective safety vest

8.2.3 Initial Levels of Protection

Levels of protection for the proposed scope of work may be upgraded or downgraded depending on direct-reading instruments or personnel monitoring. The following are the initial levels of protection that shall be used for each planned field activity:

Activity	**Initial level of PPE**
Mobilization/Demobilization	D
Site Inspection/Geophysical Survey	D
Decontamination	D
Drilling	D
Monitoring Well Gauging, Purging and Sampling	D

8.3 Communications

If working in level C/B respiratory protection is required, personnel may find that communication becomes a more difficult task and process to accomplish. Distance and space further complicate this. In order to address this problem, electronic instruments, mechanical devices, or hand signals will be used as follows:

Telephones – Mobile telephones will be carried by designated personnel for communication with emergency support services/facilities.

Radios – Two-way radios will be utilized onsite for communications between field personnel in areas where visual contact cannot be maintained and where hand signals cannot be employed.

Air Horn – Available as posted in the Site trailer or support zone to alert field personnel to an emergency situation. The emergency signal will be three sharp blasts of the air horn.

Hand Signals – This communication method will be employed by members of the field team along with use of the buddy system. Signals become especially important when in the vicinity of heavy moving equipment and when using Level B respiratory equipment. The signals shall become familiar to the entire field team before Site operations commence, and will be reinforced and reviewed during site-specific training.

Signal	**Meaning**
Hand gripping throat	Out of air; can't breathe
Grip partner's wrist	Leave area immediately; no debate
Hands on top of head	Need assistance
Thumbs up	OK; I'm all right; I understand
Thumbs down	No; Unable to understand you, I'm not all right

9.0 MONITORING PROCEDURES

9.1 General

Monitoring will be performed to verify the adequacy of respiratory protection, to aid in Site layout, and to document worker exposure. If air monitoring in these areas indicates the presence of potentially hazardous materials, control measures will be implemented. All monitoring instruments shall be operated by qualified personnel only and will be calibrated daily prior to use or, more often, as necessary. General air monitoring will be performed in accordance with the Community Air Monitoring Plan included as Appendix E of the Revised Remedial Investigation Work Plan.

9.2 Exclusion Zone Monitoring

9.2.1 Instrumentation

The following monitoring instruments will be available for use during field operations as necessary. There will be a minimum of one of each piece of equipment on the Site at all times during intrusive activities:

- <u>Photoionization Detector</u> (PID) with 10.6 EV probe or Flame Ionization Detector (FID) or equivalent.

- <u>Dust/Particulate Monitor</u> (DM), MIE Miniram, or equivalent.

A PID will be used to monitor VOCs in active work areas during intrusive activities. VOCs shall also be measured upwind of the work areas to determine background concentrations.

A particulate monitor shall be used to measure concentrations of dust and particulate matter.

When deemed necessary, a CGI/O_2 meter shall be used to monitor for combustible gases and oxygen content during confined space entry or when the HSO deems necessary.

Calibration records shall be documented and recorded daily and included in the daily air monitoring report. This report will be specific to work area monitoring. All instruments shall be calibrated before and after each daily use in accordance with manufacturer's procedures (Appendix D).

9.2.2 Action Levels

Action levels for the upgrading of PPE requirements in the HASP will apply to all Site work during investigation and remediation activities at the Site. Action levels are for known contaminants using direct reading instruments in the Breathing Zone (BZ) for VOCs and particulates, and at the source for combustible gases. The BZ will be determined by the SSO, but is typically 4 to 5 feet above the work area surface or elevation. The action levels to be utilized for the Site are found in Table 2.

9.2.3 Monitoring During Field Activities

Intrusive Operations – Continuous Personnel Breathing Zone Air Monitoring will be performed by the SSO during drilling activities. Real-time monitoring for all onsite activities will be accomplished as follows:

- Monitoring of VOCs in and around the work zones.
- Monitoring for particulates in and around the work zones, when necessary.

The frequency of monitoring may be modified by the SSO, after consultation with the Project Principal. The rationale for any modification must be documented in the HASP.

10.0 SAFETY CONSIDERATIONS

10.1 General

In addition to the specific requirements of this HASP, common sense should be used at all times.

The following general safety rules and practices will be in effect at the site.

- All open holes, trenches, and obstacles will be properly barricaded in accordance with local Site needs and requirements. Proximity to traffic ways, both pedestrian and vehicular, and location of the open hole, trench, or obstacle will determine these needs.

- All excavation and other Site work will be planned and performed with consideration for underground lines.

- Smoking and ignition sources in the vicinity of potentially flammable or contaminated material are strictly prohibited.

- Drilling, boring, and use of cranes and drilling rigs, erection of towers, movement of vehicles and equipment, and other activities will be planned and performed with consideration for the location, height, and relative position of aboveground utilities and fixtures, including signs; lights; canopies; buildings and other structures and construction; and natural features such as trees, boulders, bodies of water, and terrain.

- When working in areas where flammable vapors may be present, particular care shall be exercised with tools and equipment that may be sources of ignition. All tools and equipment provided must be properly bonded and/or grounded.

- Approved and appropriate safety equipment (as specified in this HASP), such as eye protection, hard hats, hand protection (nitrile, leather and/or cut resistant gloves as necessary), foot protection, and respirators, must be worn in areas where required. In addition, eye protection must be worn when sampling soil or water that may be contaminated.

- All site personnel may be called upon to use respiratory protection in some situations. Fit testing will be necessary for all persons using respirators. The criteria for facial hair will be determined by the SSO. In general, the guideline is that facial hair cannot impede the fit of the respirator.

- No smoking, eating, chewing tobacco, gum chewing or drinking will be allowed outside the SZ.

- Contaminated tools and hands must be kept away from the face.

- Personnel must use personal hygiene safe guards (washing up) at the end of the shift.

- Each sample must be treated and handled as though it were contaminated.

- Persons with long hair and/or loose-fitting clothing that could become entangled in power equipment must take adequate precautions.

- Horseplay is prohibited in the work area.

- Work while under the influence of intoxicants, narcotics, or controlled substances is strictly prohibited.

10.2 Traffic Control

Traffic control methods and barricades will be used when working on the sidewalk along 46th Avenue and when working on the driveway off of 46th Avenue. Since the site is fenced off and the areas of investigation are not in current use, outside vehicular and pedestrian traffic is not considered to be an issue when working in other areas of the Site.

10.3 Sample Handling

Personnel responsible for handling of samples will wear the prescribed level of protection. Samples are to be identified as to their hazard and packaged as to prevent spillage or breakage. Any unusual sample conditions shall be noted. Laboratory personnel and all field personnel shall be advised of sample hazard levels and the potential contaminants present. This can be accomplished by a phone call to the lab coordinator and/or including a written statement with the samples reviewing lab safety procedures in handling in order to assure that the practices are appropriate for the suspected contaminants in the sample.

11.0 DECONTAMINATION AND DISPOSAL PROCEDURES

11.1 Contamination Prevention

Contamination prevention should minimize worker exposure and help ensure valid sample results by precluding cross-contamination. Procedures for contamination avoidance include:

Personnel

- Do not walk through areas of obvious or known contamination.
- Do not directly handle or touch contaminated materials.
- Make sure that there are no cuts or tears on PPE.
- Fasten all closures in suits; cover with tape, if necessary.
- Particular care should be taken to protect any skin injuries.
- Stay upwind of airborne contaminants.
- Do not carry cigarettes, cosmetics, gum, etc., into contaminated areas.

Sampling/Monitoring

- When required by the SSO, cover instruments with clear plastic, leaving openings for sampling ports.
- Bag sample containers prior to emplacement of sample material.

Heavy Equipment

- Care should be taken to limit the amount of contamination that comes in contact with heavy equipment (tires, contaminated augers).
- If contaminated tools are to be placed on non-contaminated equipment for transport to a decontamination area, plastic should be used to keep the equipment clean.
- Dust control measures including water misting will be used on roads inside the Site boundaries.

11.2 Personnel Decontamination

A field wash for equipment and PPE shall be set up and maintained for all persons exiting the EZ. The system will include a gross wash and rinse for all disposable clothing and boots worn in the EZ. As necessary, equipment and facilities will be available for personnel to wash their hands, arms, neck, and face.

11.3 Equipment Decontamination

All potentially contaminated equipment used at the Site will be decontaminated to prevent contaminants from leaving the Site. The decontamination area will provide for the containment of all wastewater from the decontamination process. Respirators and any other PPE that comes in contact with contaminated materials shall pass through a field wash in the decontamination area, and a thorough decontamination at the end of the day. All decontamination rinse water will be collected and managed in accordance with all applicable regulations.

11.4 Decontamination during Medical Emergencies

If emergency life-saving first aid and/or medical treatment are required, normal decontamination procedures may need to be abbreviated or omitted. The Site SSO or designee will accompany contaminated victims to the medical facility to advise on matters involving decontamination, when necessary. The outer garments can be removed if they do not cause delays, interfere with treatment, or aggravate the problem. Respiratory equipment must always be removed. Protective clothing can be cut away. If the outer contaminated garments cannot be safely removed, a plastic barrier between the individual and clean surfaces should be used to help prevent contaminating the inside of ambulances and/or medical personnel. Outer garments are then removed at the medical facility. Attempt to wash or rinse the victim if it is known that the individual has been contaminated with an extremely toxic or corrosive material, which could also cause severe injury or loss of life to emergency response personnel. For minor medical problems (ambulatory) or injuries, the normal decontamination procedures will be followed. Note that heat stroke requires prompt treatment to prevent irreversible damage or death. Protective clothing must be promptly removed. Less serious forms of heat stress also require prompt attention and removal of protective clothing immediately. Unless the victim is obviously contaminated, decontamination should be omitted or minimized, and treatment begun immediately.

11.5 Disposal Procedures

A system of segregating all waste will be developed by the SSO.

All discarded materials, waste materials, or other objects shall be handled in such a way as to preclude the potential for spreading contamination, creating a sanitary hazard, or causing litter to be left onsite. All potentially contaminated materials (e.g., clothing, gloves, etc.,) will be bagged or drummed as necessary, labeled and segregated for disposal. All non-contaminated materials shall be collected and bagged for appropriate disposal as domestic waste.

12.0 EMERGENCY PLAN

Should an emergency situation occur, the emergency plan, outlined in this section, shall be known by Roux Associates and all Subcontractors prior to the start of work. The emergency plan will be available for use at all times during Site work. The plan provides the phone numbers for the fire, police, ambulance, hospital, poison control centers, and directions to the hospital from the Site. This information is to be found in Section 1.2 of the HASP.

Various individual Site characteristics will determine preliminary actions taken to assure that this emergency plan is successfully implemented in the event of a Site emergency. Careful consideration must be given to the proximity of neighborhood housing or places of employment, and to the relative possibility of Site release of vapors, which could affect the surrounding community.

The emergency coordinator shall implement the contingency plan whenever conditions at the Site warrant such action. The coordinator will be responsible for coordination of the evacuation, emergency treatment, and transport of Site personnel as necessary, and notification of emergency response units and the appropriate management staff.

In cases where the project principal (manager is not mentioned in HASP?) is not available, the SSO shall serve as the alternate emergency coordinator.

The SSO during an emergency will perform air monitoring as needed, as well as lend assistance and provide health and safety information to responding emergency personnel.

Site Personnel will endeavor to keep non-essential personnel away from the incident until the appropriate emergency resources arrive. At that time the responders will take control of the Site. Site personnel may be asked to lend assistance to emergency personnel such as during evacuations, help with the injured, etc.

12.1 Evacuation

Evacuation procedures will be discussed prior to the start of work and periodically during safety meetings. In the event of an emergency situation, such as fire, or explosion, an air horn, automobile horn, or other appropriate device will be sounded for three (3) sharp blasts indicating the initiation of evacuation procedures. The emergency evacuation route shall be known by all site workers. Under no circumstances will incoming personnel or visitors be allowed to proceed into the area once the emergency signal has been given. The SSO or project manager must ensure that access for emergency equipment is provided and that all combustion apparatuses have been shut down once the alarm has been sounded. All Site personnel will assemble in the designated nearest safe location. Once the safety of all personnel is established, the fire department and other emergency response groups will be notified by telephone of the emergency.

12.2 Personnel Injury

Emergency first aid shall be applied onsite as appropriate. If necessary, the individual shall be decontaminated and transported to the nearest hospital. The SSO will supply medical data sheets to medical personnel and complete the accident/incident reports in accordance with Section 13.4 of the HASP.

The ambulance/rescue squad shall be contacted for transport as necessary in an emergency. However, since some situations may require transport of an injured party by other means, the injured person shall be escorted to the occupational health clinic or hospital. Maps to these facilities are shown in Figure 2.

12.3 Accident/Incident Reporting

As soon as first aid and/or emergency response needs have been met, the following parties are to be contacted by telephone: (Direct contact, no phone messages).

			Office:	Cell:
1.	Project Director:	Joseph Duminuco	631-232-2600	631-921-6279
2.	Office Health and Safety Manager:	Joe Gentile	856-423-8800	610-844-6911
3.	Site Health and Safety Officer:	Richard Maxwell	631-232-2600	631-921-9531

4. The employer of any injured worker, if not a Roux Associates employee.

Written confirmation of verbal reports are to be submitted within 24 hours. The report form entitled "Accident Report and Investigation Form" (Appendix E) is to be used for this purpose. All representatives contacted by telephone are to receive a copy of this report. If the employee involved is not a Roux Associates employee, his employer shall receive a copy of the report. In addition to filling out the Accident Report and Investigation Form, if a Roux employee is involved in a motor vehicle accident, the employee must also complete the Acord form (Appendix F).

For reporting purposes, the term accident refers to fatalities, lost time injuries, spill or exposure to hazardous materials (radioactive materials, toxic materials, explosive or flammable materials), fire, explosion, property damage, or potential occurrence (i.e., near miss) of the above.

Any information released from the health care provider, which is not deemed confidential patient information, is to be attached to the appropriate form. Any medical information, which is released by patient consent, is to be filed in the individual's medical record and treated as confidential.

12.4 Personnel Exposure

Skin Contact:	Use copious amounts of soap and water. Wash/rinse affected area thoroughly, then provide appropriate medical attention. Eyes should be rinsed for 15 minutes upon chemical contamination.
Inhalation:	Move to fresh air and/or, if necessary, decontaminate/transport to hospital.
Ingestion:	Decontamination and transport to emergency medical facility.
Puncture Wound or Laceration:	Decontamination and transport to emergency medical facility.

12.5 Adverse Weather Conditions

In the event of adverse weather conditions, the SSO or project manager will determine if work can continue without sacrificing the health and safety of all field workers. Some of the items to be considered prior to determining if work should continue are:

- Potential for heat stress and heat-related injuries.
- Potential for cold stress and cold-related injuries.
- Treacherous weather-related conditions.

- Limited visibility.
- Electrical storm potential.

Site activities will be limited to daylight hours and acceptable weather conditions. Inclement working conditions include heavy rain, fog, high winds, and lightning. Observe daily weather reports and evacuate if necessary in case of inclement weather conditions.

13.0 LOGS, REPORTS AND RECORD KEEPING

The following is a summary of required health and safety logs, reports, and record keeping for this project.

13.1 Medical and Training Records

The employer keeps medical and training records. The subcontractor employer must provide verification of training and medical qualifications to the SSO. The SSO will keep a log of personnel meeting appropriate training and medical qualifications for Site work. The log will be kept in the project file. Roux Associates will maintain medical records in accordance with 29 CFR 1910.20.

13.2 Onsite Log

The SSO or project manager will keep a log of onsite personnel daily in the designated field book.

13.3 Exposure Records

Any personal monitoring results, laboratory reports, calculations, and air sampling data sheets are part of an employee exposure record. These records will be kept by Roux Associates in accordance with 29 CFR 1910.20.

13.4 Accident/Incident Reports

An accident/incident report must be completed following procedures given in Appendix E. The originals will be sent to Roux Associates for maintenance. Copies will be distributed as stated. A copy of the forms will be kept in the project file.

13.5 OSHA Form 300

An OSHA Form 300 (Log of Occupational Injuries and Illnesses) (Appendix G) will be kept at the Site. All reportable injuries or illnesses will be recorded on this form. At the end of the project, the original will be sent to Roux Associates for maintenance. Subcontractor employers must also meet the requirements of maintaining an OSHA 300 form.

13.6 Daily Safety Logs

The Daily Safety Log form in Appendix D will be completed daily by the SSO and submitted to the project manager.

13.7 Weekly Safety Reports

The Weekly Safety Reports in Appendix H will be completed by the SSO and submitted to the designated Owner's representative, if requested.

13.8 Close-Out Safety Report

At the completion of the work, Roux Associates will submit a closeout Safety Report that will include all logs and reports generated during the project. The report will be signed and dated by the SSO and submitted to the Safety Manager and/or Owner's representative, if requested.

14.0 FIELD TEAM REVIEW

Each Roux Associates employee or subcontractor shall sign this section after site-specific training is completed and before being permitted to work at the Site.

I have read and reviewed the Site Health and Safety Plan prepared for this Site. I understand and will comply with the provisions contained therein.

Site/Project: Former Paragon Paint Manufacturing Facility
5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard
Long Island City, New York

Date	Name	Signature	Company

SSO CERTIFICATION OF
OCCUPATIONAL HEALTH CLINIC AND HOSPITAL DIRECTIONS

Name of Roux Associates SSO: Richard Maxwell

Date: February 7, 2013

This is to certify that on February 1, 2013, I personally drove the route to Mt. Sinai Queens Hospital as listed in the HASP. The Map Routings and Directions were/were not as listed in the plan. Listed below were conditions that resulted in different directions.

R Maxwell

Roux Associates Site Health and Safety Officer

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
1,1,1-Trichloroethane	71-55-6	TWA 350 ppm STEL 440 ppm C 440 ppm	C 350 ppm (1900 mg/m^3) [15-minute]	TWA 350 ppm (1900 mg/m^3)	700 ppm	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin; headache, lassitude (weakness, exhaustion), central nervous system depression, poor equilibrium; dermatitis; cardiac arrhythmias;	Eyes, skin, central nervous system, cardiovascular system, liver	Colorless liquid with a mild, chloroform-like odor. BP: 165°F UEL: 12.5% LEL: 7.5%
1,1,2-Trichloroethane	79-00-5	TWA 10 ppm	Ca TWA 10 ppm (45 mg/m^3) [skin]	TWA 10 ppm (45 mg/m^3) [skin]	Ca [100 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, nose; central nervous system depression; liver, kidney damage; dermatitis; [potential occupational carcinogen]	Eyes, respiratory system, central nervous system, liver, kidneys	Colorless liquid with a sweet, chloroform-like odor. BP: 237°F UEL: 15.5% LEL: 6%
1,1-Dichloroethane	75-34-3	TWA 100 ppm	TWA 100 ppm (400 mg/m^3)	TWA 100 ppm (400 mg/m^3)	3000 ppm	inhalation, ingestion, skin and/or eye contact	Irritation skin; central nervous system depression; liver, kidney, lung damage	Skin, liver, kidneys, lungs, central nervous system	Colorless, oily liquid with a chloroform-like odor. BP: 135°F Fl.P: 2°F UEL: 11.4% LEL: 5.4%
1,1-Dichloroethene	75-35-4	TWA 5 ppm	Ca (lowest feasible concentration)	TWA 1ppm	Ca [N.D.]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, throat; dizziness, headache, nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen]	Eyes, skin, respiratory system, central nervous system, liver, kidneys	Colorless liquid or gas (above 89°F) with a mild, sweet, chloroform-like odor. BP: 89°F Fl.P: -2°F UEL: 15.5% LEL: 6.5% Class IA Flammable Liquid
1,2,4-Trimethylbenzene	95-63-6	None established	TWA 25 ppm (125mg/m^3)	None established	N.D.	Inhalation; ingestion; skin and/or eye contact	Eye, skin, nose, and throat, resp syst irritation; bronchitis; hypochromic anemia; headache, drowsiness, weakness, dizziness, nausea, incoordination, vomit, confusion; chemical pneumonitis	Eyes, skin, resp sys, CNS, blood	Clear, colorless liquid with a distinctive, aromatic odor BP: 337°F FL.P: 112°F UEL: 6.4% LEL: 0.9% Class II Flammable liquid
1,2,4-Trimethylbenzene	95-63-6	TWA 25 ppm (125 mg	TWA 25 ppm (125 mg/m^3)	None established	N.D.	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat, respiratory system; bronchitis; hypochromic anemia; headache, drowsiness, fatigue, dizziness, nausea, incoordination; vomiting, confusion; chemical pneumonitis (aspiration liquid)	Eyes, skin, respiratory system, central nervous system, blood	Clear, colorless liquid with a distinctive, aromatic odor. BP: 337°F Fl.P: 112°F UEL: 6.4% LEL: 0.9% Class II Flammable Liquid
1,2-Dichlorobenzene	95-50-1	TWA 25 ppm STEL 50 ppm	C 50 ppm (300 mg/m^3)	C 50 ppm (300 mg/m^3)	200 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, nose; liver, kidney damage; skin blisters	Eyes, skin, respiratory system, liver, kidneys	Colorless to pale-yellow liquid with a pleasant, aromatic odor. [herbicide] BP: 357°F Fl.P: 151°F UEL: 9.2% LEL: 2.2% Class IIIA Combustible Liquid

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
1,2-Dichloroethane	107-06-2	TWA 10 ppm	Ca TWA 1 ppm (4 mg/m^3) STEL 2 ppm (8 mg/m^3)	TWA 50 ppm C 100 ppm 200 ppm [5-minute maximum peak in any 3 hours]	Ca [50 ppm]	inhalation, ingestion, skin absorption, skin and/or eye contact	Irritation eyes, corneal opacity; central nervous system depression; nausea, vomiting; dermatitis; liver, kidney, cardiovascular system damage; [potential occupational carcinogen]	Eyes, skin, kidneys, liver, central nervous system, cardiovascular system	Colorless liquid with a pleasant, chloroform-like odor. [Note: Decomposes slowly, becomes acidic & darkens in color.] BP: 182°F Fl.P: 56°F UEL: 16% LEL: 6.2% Class IB Flammable Liquid
1,2-Dichloroethene (total)	540-59-0	TWA 200 ppm (790 m	TWA 200 ppm (790 mg/m^3)	TWA 200 ppm (790 mg/m^3)	1000 ppm	inhalation, ingestion, skin and/or eye contact	Irritation eyes, respiratory system; central nervous system depression	Eyes, respiratory system, central nervous system	Colorless liquid (usually a mixture of the cis & trans isomers) with a slightly acrid, chloroform-like odor BP: 118-140°F Fl.P: 36-39°F UEL: 12.8% LEL: 5.6% Class IB Flammable Liquid
1,3,5-Trimethylbenzene	108-67-8	None established	TWA 25 ppm (125mg/m^3)	None established	N.D.	Inhalation; ingestion; skin and/or eye contact	Eye, skin, nose, and throat, resp syst irritation; bronchitis; hypochromic anemia; headache, drowsiness, weakness, dizziness, nausea, incoordination, vomit, confusion; chemical pneumonitis	Eyes, skin, resp sys, CNS, blood	Clear, colorless liquid with a distinctive, aromatic odor BP: 329°F FL.P: 122°F Class II Flammable liquid
1,3,5-Trimethylbenzene	108-67-8	TWA 25 ppm (125 mg	TWA 25 ppm (125 mg/m^3)	None established	N.D	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat, respiratory system; bronchitis; hypochromic anemia; headache, drowsiness, lassitude (weakness, exhaustion), dizziness, nausea, incoordination; vomiting, confusion; chemical pneumonitis (aspiration liquid)	Eyes, skin, respiratory system, central nervous system, blood	Clear, colorless liquid with a distinctive, aromatic odor. BP: 329°F Fl.P: 122°F Class II Flammable Liquid
1,4-Dichlorobenzene	106-46-7	TWA 10 ppm	Ca	TWA 75 ppm (450 mg/m^3)	Ca [150 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Eye irritation, swelling periorbital (situated around the eye); profuse rhinitis; headache, anorexia, nausea, vomiting; weight loss, jaundice, cirrhosis; in animals: liver, kidney injury; [potential occupational carcinogen]	Liver, respiratory system, eyes, kidneys, skin	Colorless or white crystalline solid with a mothball-like odor. [insecticide] BP: 345°F Fl.P: 150°F LEL: 2.5% Combustible Solid
2,4-Dimethylphenol	105-67-9	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, respiratory system, mouth, throat, stomach; dizziness, weakness, fatigue, nausea, headache; systemic damage; moderate to severe eye injury.	Skin, CVS, eyes, CNS	Clear, colorless liquid with a faint ether or chloroform-like odor BP: 178°F

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Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
2-Butanone (MEK)	78-93-3	TWA 200 ppm (590 mg/m^3) STEL 300 ppm (885 mg/m^3)	TWA 200 ppm (590 mg/m^3) STEL 300 ppm (885 mg/m^3)	TWA 200 ppm (590 mg/m^3)	3000 ppm	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose; headache; dizziness; vomiting; dermatitis	Eyes, skin, respiratory system, central nervous system	Colorless liquid with a moderately sharp, fragrant, mint- or acetone-like odor. BP: 175°F Fl.P: 16°F UEL(200°F): 11.4% LEL(200°F): 1.4% Class IB Flammable Liquid
Acenaphthene	83-32-9	None established	None established	None established	None established	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, respiratory system	Eyes, skin, respiratory system	Brown solid
Acetone	67-64-1	TWA 500 ppm STEL 50 ppm	TWA 250 ppm (590 mg/m^3)	TWA 1000 ppm (2400 mg/m^3)	2500 ppm [10%LEL]	inhalation, ingestion, skin and/or eye contact	Irritation eyes, nose, throat; headache, dizziness, central nervous system depression; dermatitis	Eyes, skin, respiratory system, central nervous system	Colorless liquid with a fragrant, mint-like odor BP: 133°F Fl.P: 0°F UEL: 12.8% LEL: 2.5% Class IB Flammable Liquid
Anthracene	65996-93-2	TWA 0.2 mg/m^3	Ca TWA 0.1 mg/m^3 (cyclohexane-extractable fraction)	TWA 0.2 mg/m^3 (benzene-soluble fraction)	Ca [80 mg/m^3]	inhalation, skin and/or eye contact	Dermatitis, bronchitis, [potential occupational carcinogen]	respiratory system, skin, bladder, kidneys	Black or dark-brown amorphous residue. Combustible Solids
Antimony	7440-36-0	TWA 0.5 mg/m^3	TWA 0.5 mg/m^3	TWA 0.5 mg/m^3	50 mg/m^3 (as Sb	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat, mouth; cough; dizziness; headache; nausea, vomiting, diarrhea; stomach cramps; insomnia; anorexia; unable to smell properly	Eyes, skin, respiratory system, cardiovascular system	Silver-white, lustrous, hard, brittle solid; scale-like crystals; or a dark-gray, lustrous powder. BP: 2975°F
Arsenic (inorganic)	7440-38-2 (metal)	TWA 0.01 mg/m3	Ca C 0.002 mg/m3 [15-min]	TWA 0.010 mg/m3	Ca [5 mg/m3 (as As)]	Inhalation; ingestion; skin absorption; skin and/or eye contact	Ulceration of nasal septum, dermatitis, GI disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen]	Liver, kidneys, skin, lungs, lymphatic sys	Metal: sliver-gray or tin-white, brittle, odorless solid BP: sublimes
Asbestos	1332-21-4	TWA 0.1 f/cc	Ca 100,000 fibers/m3	TWA 0.1 fiber/cm3	Ca [IDLH value has not been determined]	Inhalation; ingestion; skin and/or eye contact	Asbestosis (chronic exposure), dyspnea, interstitial fibrosis, restricted pulmonary function, finger clubbing, irritation eyes, [potential occupational carcinogen]	Respiratory system, eyes,	White or greenish (chrysotile), blue (crocidolite), or gray-green (amosite), fibrous, odorless solids. BP: decomposes
Asphalt fumes	8052-42-4	TWA 0.5 mg/m^3(fumes)	Ca C 5 mg/m3 [15 min]	None established	Ca [IDLH value has not been determined]	Skin absorption; inhalation; skin and/or eye contact	Irritation eyes, resp sys	Eyes, respiratory system	Black or dark brown cement-like substance Combustible solid
Barium	7440-39-3	TWA 0.5 mg/m3	None established	TWA 0.5 mg/m3	None established	Inhalation, ingestion, skin contact	Irritation skin, respiratory system, (	Skin, eyes, respiratory system	Yellow white powder BP: 1640 C
Benzene	71-43-2	TWA 0.5 ppm STEL 2.5 ppm	Ca TWA 0.1 ppm STEL 1 ppm	TWA 1 ppm STEL 5 ppm	Ca [500 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude (weakness, exhaustion); dermatitis; bone marrow depression; [potential occupational carcinogen]	Eyes, skin, respiratory system, blood, central nervous system, bone marrow	Colorless to light yellow liquid with an aromatic odor [Note: Solid below 42 °F] BP: 176°F Fl.Pt = 12°F LEL: 1.2% UEL: 7.8% Class B Flammable liquid

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Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Benzo[a]anthracene	56-55-3	None established	None established	None established	None established	Inhalation; ingestion; skin absorption; skin and/or eye contact	Irritation eyes, skin, respiratory system, CNS	Skin	Pale Yellow crystal, solid BP: 438 C
Benzo[a]pyrene	50-32-8	None established	TWA 0.1 mg/m3	TWA 0.2 mg/m3	None established	Inhalation; ingestion; skin absorption; skin and/or eye contact	POISON. This material is an experimental carcinogen, mutagen, tumorigen, neoplastigen and teratogen. It is a probable carcinogen in humans and a known human mutagen. IARC Group 2A carcinogen. It is believed to cause bladder, skin and lung cancer. Exposure to it may damage the developing foetus. May cause reproductive damage. Skin, respiratory and eye irritant or burns.	Skin, eye, bladder, lung, reproductive	Yellow crystals or powder [found in cigarette smoke, coal tar, fuel exhaust gas and in many other sources] BP: 495 C
Benzo[b]fluoranthene	205-99-2	None established	TWA 0.1 mg/m3	TWA 0.2 mg/m3	None established	Inhalation; ingestion; skin and/or eye contact	No data were identified on the toxicity of benzo[b]fluoranthene to humans. Based on results of studies in animals, IARC concluded that benzo[b]fluoranthene is possibly carcinogenic to humans	Respiratory system, skin, bladder, kidneys	Off-white to tan powder
Benzo[k]fluoranthene	207-08-9	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, respiratory tract, gastrointestinal; fatal if swallowed, inhaled, absorbed through the skin; vomiting, nausea, diarrhea	Lungs, respiratory system	Yellow crystals BP: 480 C
Beryllium	7440-41-7 (metal)	TWA 0.002 mg/m^3	Ca C 0.0005 mg/m^3	TWA 0.002 mg/m^3 C 0.005 mg/m^3 (30 minutes) with a maximum peak of 0.025 mg/m^3	Ca [4 mg/m^3 (as Be)]	inhalation, skin and/or eye contact	Berylliosis (chronic exposure): anorexia, weight loss, lassitude (weakness, exhaustion), chest pain, cough, clubbing of fingers, cyanosis, pulmonary insufficiency; irritation eyes; dermatitis; [potential occupational carcinogen]	Eyes, skin, respiratory system	Metal: A hard, brittle, gray-white solid. BP: 4532°F
Bis(2-ethylhexyl) phthalate	117-81-7	TWA 5 mg/m^3	TWA 5 mg/m^3 STEL 10 mg/m^3 (do not exceed during andy 15-minute work period)	TWA 5 mg/m^3	None established	inhalation, skin and/or eye contact	Irritation eyes, skin, nose, throat; affect the nervous system and liver; damage to male reproductive glands	Eyes, skin, nose, respiratory system, nervous system, reproductive system, liver	Colorless to light colored, thick liquid with slight odor
Butane	106-97-8	TWA 1000 ppm	TWA 800 ppm (1900 mg/m^3)	None established	None established	inhalation, skin and/or eye contact (liquid)	Drowsiness, narcosis, asphyxia; liquid: frostbite	central nervous system	Colorless gas with a gasoline-like or natural gas odor. BP: 31°F UEL: 8.4% LEL: 1.6% Flammable Gas

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Cadmium	7440-43-9 (metal)	TWA 0.01 mg/m^3	Ca	TWA 0.005 mg/m^3	Ca [9 mg/m^3 (as Cd)]	inhalation, ingestion	Pulmonary edema, dyspnea (breathing difficulty), cough, chest tightness, substernal (occurring beneath the sternum) pain; headache; chills, muscle aches; nausea, vomiting, diarrhea; anosmia (loss of the sense of smell), emphysema, proteinuria, mild anemia; [potential occupational carcinogen]	respiratory system, kidneys, prostate, blood	Metal: Silver-white, blue-tinged lustrous, odorless solid. BP: 1409°F
Carbon Disulfide	75-15-0	TWA 1 ppm	TWA 1 ppm (3 mg/m^3) STEL 10 ppm (30 mg/m^3) [skin]	TWA 20 ppm C 30 ppm 100 ppm (30-minute maximum peak)	500 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Dizziness, headache, poor sleep, lassitude (weakness, exhaustion), anxiety, anorexia, weight loss; psychosis; polyneuropathy; Parkinson-like syndrome; ocular changes; coronary heart disease; gastritis; kidney, liver injury; eye, skin burns; dermatitis; reproductive effects	central nervous system, peripheral nervous system, cardiovascular system, eyes, kidneys, liver, skin, reproductive system	Colorless to faint-yellow liquid with a sweet ether-like odor. BP: 116°F Fl.P: -22°F UEL: 50.0% LEL: 1.3% Class IB Flammable Liquid
Chlorobenzene	108-90-7	TWA 10 ppm	None established	TWA 75 ppm (350 mg/m^3)	1000 ppm	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose; drowsiness, incoordination; central nervous system depression; in animals: liver, lung, kidney injury	Eyes, skin, respiratory system, central nervous system, liver	Colorless liquid with an almond-like odor BP: 270°F Fl.P: 82°F UEL: 9.6% LEL: 1.3%
Chloroethane	75-00-3	TWA 100ppm	Handle with caution in the workplace	TWA 1000 ppm (2600 mg/m^3)	3800 ppm [10%LEL]	inhalation, skin absorption (liquid), ingestion (liquid), skin and/or eye contact	Incoordination, inebriation; abdominal cramps; cardiac arrhythmias, cardiac arrest; liver, kidney damage	Liver, kidneys, respiratory system, cardiovascular system, central nervous system	Colorless gas or liquid (below 54°F) with a pungent, ether-like odor. BP: 54°F Fl.P: NA (Gas) -58°F (Liquid) UEL: 15.4% LEL: 3.8%
Chloroform	67-66-3	TWA 10 ppm	Ca STEL 2 ppm (9.78 mg/m^3) [60-minute]	C 50 ppm (240 mg/m^3)	Ca [500 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; dizziness, mental dullness, nausea, confusion; headache, lassitude (weakness, exhaustion); anesthesia; enlarged liver; [potential occupational carcinogen]	Liver, kidneys, heart, eyes, skin, central nervous system	Colorless liquid with a pleasant odor BP: 143°F
Chromium	7440-47-3	TWA 0.5 mg/m^3 (metal and Cr III compounds) TWA 0.05 mg/m^3 (water-soluble Cr IV compounds) TWA 0.01 mg/m^3 (insoluble Cr IV compounds)	TWA 0.5 mg/m^3	TWA 1 mg/m^3	250 mg/m^3 (as Cr)	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin; lung fibrosis (histologic)	Eyes, skin, respiratory system	Blue-white to steel-gray, lustrous, brittle, hard, odorless solid. BP: 4788°F
Chrysene; Phenanthrene; Pyrene; Coal tar pitch volatiles	65996-93-2	TWA 0.2 mg/m3	Ca TWA 0.1 mg/m^3 (cyclohexane-extractable fraction)	TWA 0.2 mg/m^3 (benzene-soluble fraction)	Ca [80 mg/m^3]	Inhalation, skin and/or eye contact	Dermatitis, bronchitis, [potential occupational carcinogen]	Respiratory system, skin, bladder, kidneys	Black or dark-brown amorphous residue. Combustible Solids

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
cis-1,2-Dichloroethene	158-59-2	TWA 200 ppm	TWA 200 ppm	TWA 200 ppm	None established	inhalation, skin absorption, ingestion	Harmful if swallowed, inhaled, or absorbed through skin. Irritant. Narcotic. Suspected carcinogen	Skin	Colorless liquid BP: 60 C Fl.P: 4 C UEL: 12.8% LEL: 9.7 %
Copper	7440-50-8	TWA 0.2mg/m^3 (fume) 1 mg/m^3 (dusts and mists)	TWA 1 mg/m^3	TWA 1 mg/m^3	100 mg/m^3 (as Cu)	Inhalation, ingestion, skin and/or eye contact	Irritation eyes, respiratory system; cough, dyspnea (breathing difficulty), wheezing	Eyes, skin, respiratory system, liver, kidneys (increase(d) risk with Wilson's disease)	Noncombustible Solid in bulk form, but powdered form may ignite. BP: 4703°F
Dibenzo[a,h]anthracene	53-70-3	None established	None established	None established	None established	Inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin	Eyes, skin; skin photosensitization.	Colorless crystalline powder BP: 524°C
Diesel Fuel #2	68476-34-6	None established	None established	Designated as an OSHA Select Carcinogen	None established	ingestion, skin and/or eye contact	Kidney damage; potential lung damage; suspected carcinogen; irritation of eyes, skin, respiratory tract; dizziness, headache, nausea; chemical pneumonitis (from aspiration of liquid); dry, red skin; irritant contact dermatitis; eye redness, pain.	Eyes, skin, kidneys	Clear yellow brown combustible liquid; floats on water; distinct diesel petroleum hydrocarbon odor. BP: 356-716°F Fl.P: 154.4-165.2°F LEL: 0.6% UEL: 7.0%
Ethylbenzene	100-41-4	TWA 100 ppm STEL 125 ppm	TWA 100 ppm (435 mg/m^3) STEL 125 ppm (545 mg/m^3)	TWA 100 ppm (435 mg/m^3)	800 ppm [10%LEL]	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, mucous membrane; headache; dermatitis; narcosis, coma	Eyes, skin, respiratory system, central nervous system	Colorless liquid with an aromatic odor. BP: 277°F Fl.P: 55°F UEL: 6.7% LEL: 0.8% Class IB Flammable Liquid
Fluoranthene	206-44-0	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; possible burns; heart and liver injury, pulmonary edema, respiratory arrest, gastrointestinal disturbances.	Heart, liver, lungs.	Yellow needles.
Fluorene	86-73-7	None established	None established	None established	None established	inhalation, ingestion, skin and/or eye contact	Irritation skin, digestive tract	Skin	White crystals BP: 563°F
Fuel Oil #2	68476-30-2	TWA 100mg/m^3 (aerosol and vapor, as total hydrocarbons)	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; CNS effects; nausea, vomiting, headache, cramping, dizziness, weakness, loss of coordination,, drowsiness; kidney, liver damage	Eyes, skin, CNS	Clear or yellow to red oily liquid, kerosene-like odor BP: 347 - 689 °F UEL:5-6% LEL: 0.7-1.0%
Gasoline	8006-61-9	TWA 300 ppm STEL 500 ppm	Carcinogen	None established	Ca [IDLH value has not been determined]	Skin absorption; inhalation; ingestion; skin and/or eye contact	Eyes and skin irritation, mucous membrane; dermatitis; headache; listlessness, blurred vision, dizziness, slurred speech, confusion, convulsions; chemical pneumonitis; possible liver, kidney damage [Potential occupational carcinogen]	Eyes, skin, respiratory system, CNS, Liver, Kidneys	Clear liquid with a characteristic odor, aromatic Fl.Pt = -45°F LEL = 1.4% UEL = 7.6% Classs 1B Flammable Liquid

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Hexachlorobutadiene	87-68-3	TWA 0.02 ppm	Ca TWA 0.02 ppm (0.24 mg/m^3) [skin]	None established	Ca [N.D.]	inhalation, skin absorption, ingestion, skin and/or eye contact	In animals: irritation eyes, skin, respiratory system; kidney damage; [potential occupational carcinogen]	Eyes, skin, respiratory system, kidneys	Clear, colorless liquid with a mild, turpentine-like odor. BP: 419°F
Hydrogen Sulfide	7783-06-4	TWA (10 ppm) STEL (15 ppm) (adopted values for which changes are proposed in the NIC)	C 10 ppm (15 mg/m^3) [10-minute]	C 20 ppm 50 ppm [10-minute maximum peak]	100 ppm	inhalation, skin and/or eye contact	Irritation eyes, respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation; dizziness, headache, lassitude (weakness, exhaustion), irritability, insomnia; gastrointestinal disturbance; liquid: frostbite	Eyes, respiratory system, central nervous system	Colorless gas with a strong odor of rotten eggs. BP: -77°F UEL: 44.0% LEL: 4.0% Flammable Gas
Indeno[1,2,3-cd]pyrene	193-39-5	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; possible human carcinogen (skin); weakness; affect liver, lung tissue, renal tissue; impariment of blood forming tissue	Skin	Fluorescent green-yellow crystalline solid BP: 536 C
Indeno[1,2,3-cd]pyrene	193-39-5	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; possible human carcinogen (skin); weakness; affect liver, lung tissue, renal tissue; impariment of blood forming tissue	Skin	Yellowish crystal solid BP: 536 C
Isopropylbenzene	98-82-8	TWA 50 ppm	TWA 50 ppm (245 mg/m^3) [skin]	TWA 50 ppm (245 mg/m^3) [skin]	900 ppm [10%LEL]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, mucous membrane; dermatitis; headache, narcosis, coma	Eyes, skin, respiratory system, central nervous system	Colorless liquid with a sharp, penetrating, aromatic odor. BP: 306°F Fl.P: 96°F UEL: 6.5% LEL: 0.9%
Kerosene	8008-20-6	TWA 200 mg/m^3	TWA 100 mg/m^3	None established	IDLH value has not been determined	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid)	Eyes, skin, respiratory system, central nervous system	Colorless to yellowish, oily liquid with a strong, characteristic odor. BP: 347-617°F Fl.P: 100-162°F UEL: 5% LEL: 0.7% Class II Combustible Liquid
Lead	7439-92-1	TWA 0.05 mg/m^3	TWA (8-hour) 0.050 mg/m^3	TWA 0.050 mg/m^3	100 mg/m^3 (as Pb)	inhalation, ingestion, skin and/or eye contact	Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension	Eyes, gastrointestinal tract, central nervous system, kidneys, blood, gingival tissue	A heavy, ductile, soft, gray solid. BP: 3164°F Noncombustible Solid in bulk form

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Manganese	7439-96-5 (metal)	TWA 0.2 mg/m^3	TWA 1 mg/m^3 STEL 3 mg/m^3	C 5 mg/m^3	500 mg/m^3 (as Mn)	inhalation, ingestion	Manganism; asthenia, insomnia, mental confusion; metal fume fever: dry throat, cough, chest tightness, dyspnea (breathing difficulty), rales, flu-like fever; low-back pain; vomiting; malaise (vague feeling of discomfort); lassitude (weakness, exhaustion); kidney damage	respiratory system, central nervous system, blood, kidneys	A lustrous, brittle, silvery solid. BP: 3564°F
Mercury (organo) alkyl compounds (as Hg)	7439-97-6	TWA 0.01 mg/m^3 STEL 0.03 mg/m^3 [skin]	TWA 0.01 mg/m^3 STEL 0.03 mg/m^3 [skin]	TWA 0.01 mg/m^3 C 0.04 mg/m^3	2 mg/m^3 (as Hg)	inhalation, skin absorption, ingestion, skin and/or eye contact	Paresthesia; ataxia, dysarthria; vision, hearing disturbance; spasticity, jerking limbs; dizziness; salivation; lacrimation (discharge of tears); nausea, vomiting, diarrhea, constipation; skin burns; emotional disturbance; kidney injury; possible teratogenic effects	Eyes, skin, central nervous system, peripheral nervous system, kidneys	Appearance and odor vary depending upon the specific (organo) alkyl mercury compound
Mercury compounds [except (organo) alkyls] (as Hg) Mercury	7439-97-6	TWA 0.025 mg/m^3 (elemental and inorganic forms)	Hg Vapor: TWA 0.05 mg/m^3 [skin] Other: C 0.1 mg/m3 [skin]	TWA 0.1 mg/m^3	10 mg/m^3 (as Hg)	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria	Eyes, skin, respiratory system, central nervous system, kidneys	Metal: Silver-white, heavy, odorless liquid. [Note: "Other" Hg compounds include all inorganic & aryl Hg compounds except (organo) alkyls.] BP: 674°F
Methyl tert-butyl ether (MTBE)	1634-04-4	TWA 50 ppm	No established REL	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, mucous membrane, respiratory; dizziness, nausea, headache, intoxication	Eyes, skin, mucous membrane, respiratory system, central nervous system	Colorless liquid BP: 55.2 C
Methylene Chloride	75-09-2	TWA 50 ppm, A3 - suspected human carcinogen	Ca	TWA 25 ppm STEL 125 ppm	Ca [2300 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; lassitude (weakness, exhaustion), drowsiness, dizziness; numbness, tingle limbs; nausea; [potential occupational carcinogen]	Eyes, skin, cardiovascular system, central nervous system	Colorless liquid with a chloroform-like odor BP: 104°F UEL: 23% LEL: 13%
Naphtha (coal tar)	8030-30-6	None established	TWA 100 ppm (400 mg/m^3)	TWA 100 ppm (400 mg/m^3)	1000 ppm [10%LEL]	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose; dizziness, drowsiness; dermatitis; in animals: liver, kidney damage	Eyes, skin, respiratory system, central nervous system, liver, kidneys	Reddish-brown, mobile liquid with an aromatic odor BP: 320-428°F Fl.P: 100-109°F Class II Combustible Liquid

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Naphthalene	91-20-3	TWA 10 ppm STEL 15 ppm	TWA 10 ppm (50 mg/m^3) STEL 15 ppm (75 mg/m^3)	TWA 10 ppm (50 mg/m^3)	250 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes; headache, confusion, excitement, malaise (vague feeling of discomfort); nausea, vomiting, abdominal pain; irritation bladder; profuse sweating; jaundice; hematuria (blood in the urine), renal shutdown; dermatitis, optical neuritis, corneal damage	Eyes, skin, blood, liver, kidneys, central nervous system	Colorless to brown solid with an odor of mothballs. BP: 424°F Fl.P: 174°F UEL: 5.9% LEL: 0.9%
n-Butylbenzene	104-51-8	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; CNS depression, lung damage; nausea, vomiting, headache, dizziness, weakness, loss of coordination, blured vision, drowsiness, confusion, disorientation	Eyes, skin,repiratory system, central nervous system	Colorless liquid with a sweet odor BP: 183 C Fl.P: 59 C UEL: 5.8% LEL: 0.8%
Nickel	7440-02-0 (Metal)	TWA 1.5 mg/m^3 (elemental) TWA 0.1 mg/m^3 (soluble inorganic compounds) TWA 0.2 mg/m^3 (insoluble inorganic compounds) TWA 0.1 mg/m^3 (Nickle subsulfide)	Ca TWA 0.015 mg/m^3	TWA 1 mg/m^3	Ca [10 mg/m^3 (as Ni)]	inhalation, ingestion, skin and/or eye contact	Sensitization dermatitis, allergic asthma, pneumonitis; [potential occupational carcinogen]	Nasal cavities, lungs, skin	Metal: Lustrous, silvery, odorless solid. BP: 5139°F
Nitrobenzene	98-95-3	TWA 1 ppm	TWA 1 ppm (5 mg/m^3) [skin]	TWA 1 ppm (5 mg/m^3) [skin]	200 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; anoxia; dermatitis; anemia; methemoglobinemia; in animals: liver, kidney damage; testicular effects	Eyes, skin, blood, liver, kidneys, cardiovascular system, reproductive system	Yellow, oily liquid with a pungent odor like paste shoe polish. BP: 411°F Fl.P: 190°F LEL(200°F): 1.8%
n-Propylbenzene	103-65-1	None established	None established	None established	None established	inhalation, ingestion, skin and/or eye contact	Harmful if swallowed, Irritation eyes, skin, digestive tract, respiratory tract, central nervous system	Eyes, skin, central nervous system, respiratory system	colorless or light yellow liquid BP: 159 C Fl.P: 47 C UEL: 6% LEL: 0.8%
Petroleum hydrocarbons(Petroleum distillates)	8002-05-9	None established	TWA 350 mg/m^3 C 1800 mg/m^3 [15 min]	TWA 500 ppm (2000 mg/m^3)	1,100 [10% LEL]	Inhalation; ingestion; skin and/or eye contact	Irritation eyes, skin, nose, throat; dizziness, drowsiness, headache, nausea; dried/cracked skin; chemical pneumonitis	CNS, eyes, respiratory system, skin	Colorless liquid with a gasoline or kerosene-like odor BP: 86-460°F Fl. Pt = -40 to -86°F UEL: 5.9% LEL: 1.1% Flammable liquid

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Phenol	108-95-2	TWA 5 ppm	TWA 5 ppm (19 mg/m^3) C 15.6 ppm (60 mg/m^3) [15-minute] [skin]	TWA 5 ppm (19 mg/m^3) [skin]	250 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion), muscle ache, pain; dark urine; cyanosis; liver, kidney damage; skin burns; dermatitis; ochronosis; tremor, convulsions, twitching	Eyes, skin, respiratory system, liver, kidneys	Colorless to light-pink, crystalline solid with a sweet, acrid odor. BP: 359°F UEL: 8.6% LEL: 1.8%
p-Isopropyltoluene	99-87-6	None established	None established	None established	None established	inhalation, skin absorption, eye contact	Irritation skin	CNS, skin	Colorless, clear liquid, sweetish aromatic odor BP: 350.8°F Class III Flammable liquid
sec-Butylbenzene	135-98-8	None established	None established	None established	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, upper airway; central nervous system, headache, dizziness; gastrointestinal disturbance	Respiratory system, central nervous system, eyes, skin;	Colorless liquid BP: 344°F Fl.P: 126 °F UEL: 6.9% LEL: 0.8% Combustible liquid
Selenium	7782-49-2	TWA 0.2 mg/m^3	TWA 0.2 mg/m^3	TWA 0.2 mg/m^3	1 mg/m^3 (as Se)	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat; visual disturbance; headache; chills, fever; dyspnea (breathing difficulty), bronchitis; metallic taste, garlic breath, gastrointestinal disturbance; dermatitis; eye, skin burns; in animals: anemia; liver necrosis, cirrhosis; kidney, spleen damage	Eyes, skin, respiratory system, liver, kidneys, blood, spleen	Amorphous or crystalline, red to gray solid. [Note: Occurs as an impurity in most sulfide ores.] BP: 1265°F
Silver	7440-22-4 (metal)	TWA 0.1 mg/m^3 (metal, dust, fumes) TWA 0.01 mg/m^3 (Soluble compounds, as Ag)	TWA 0.01 mg/m^3	TWA 0.01 mg/m^3	10 mg/m^3 (as Ag)	inhalation, ingestion, skin and/or eye contact	Blue-gray eyes, nasal septum, throat, skin; irritation, ulceration skin; gastrointestinal disturbance	Nasal septum, skin, eyes	Metal: White, lustrous solid BP: 3632°F
Slop Oil	69029-75-0	None established	None established	None established	None established	Inhalation; ingestion	Irritation eyes, skin, gastrointestinal tract	Eyes, skin, gastrointestinal tract	Clear light to dark amber liquid, with mild hydrocarbon odor. BP: >500°F Fl.P : 250°F
Sulfuric Acid	7664-93-9	TWA 0.2 mg/m^3	TWA 1 mg/m^3	TWA 1 mg/m^3	15 mg/m^3	inhalation, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat; pulmonary edema, bronchitis; emphysema; conjunctivitis; stomatis; dental erosion; eye, skin burns; dermatitis	Eyes, skin, respiratory system, teeth	Colorless to dark-brown, oily, odorless liquid. BP: 554°F Noncombustible Liquid
tert-Butylbenzene	98-06-6	None established	None established	None established	None established	inhalation, skin absorption, ingestion,	Eye and respiratory irritant; CNS depression; liver or kidney damage	Respiratory system, central nervous system, eyes, liver, kidney	Colorless liquid with an aromatic odor BP: 168 - 169 C Fl.P: 34 C UEL:5.6 % LEL: 0.8 %

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, Long Island City, New York

Compound	CAS #	ACGIH TLV	NIOSH REL	OSHA PEL	IDLH	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Tetrachloroethene	127-18-4	TWA 25 ppm STEL 100 ppm (STEL) listed as A3, animal carcinogen	Ca Minimize workplace exposure concentrations	TWA 100 ppm C 200 ppm (for 5 minutes in any 3-hour period), with a maximum peak of 300 ppm	Ca [150 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]	Eyes, skin, respiratory system, liver, kidneys, central nervous system	Colorless liquid with a mild, chloroform-like odor. BP: 250°F Noncombustible Liquid
Toluene	108-88-3	TWA 20 ppm	TWA 100 ppm (375 mg/m^3) STEL 150 ppm (560 mg/m^3)	TWA 200 ppm C 300 ppm 500 ppm (10-minute maximum peak)	500 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage	Eyes, skin, respiratory system, central nervous system, liver, kidneys	Colorless liquid with a sweet, pungent, benzene-like odor. BP: 232°F Fl.P: 40°F UEL: 7.1% LEL: 1.1% Class IB Flammable Liquid
trans-1,2-Dichloroethene	156-60-5	TWA 200 ppm	None established	TWA 200 ppm STEL 250 ppm (skin)	None established	inhalation, skin absorption, ingestion, skin and/or eye contact	Narcotic. Irritation eyes, skin, respiratory tract, mucous membrane; CNS depression.	Respiratory tract, mucous membrane, eyes, skin, CNS	Colorless liquid with a fruity pleasant odor BP: 48°C Fl.P 6C UEL: 12.8% LEL: 9.7%
Trichloroethene	79-01-6	TWA 10 ppm STEL 25 ppm	Ca	TWA 100 ppm C 200 ppm 300 ppm (5-minute maximum peak in any 2 hours)	Ca [1000 ppm]	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]	Eyes, skin, respiratory system, heart, liver, kidneys, central nervous system	Colorless liquid (unless dyed blue) with a chloroform-like odor. BP: 189°F UEL(77°F): 10.5% LEL(77°F): 8%
Vinyl Chloride	75-01-4	TWA 1 ppm	Carcinogen	TWA 1 ppm C 5 ppm [15-minute]	Ca [IDLH value has not been determined]	inhalation, skin, and/or eye contact (liquid)	Lassitude (weakness, exhaustion); abdominal pain, gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; liquid: frostbite; [potential occupational carcinogen]	Liver, central nervous system, blood, respiratory system, lymphatic system	Colorless gas or liquid (below 7°F) with a pleasant odor at high concentrations. BP: 7°F UEL: 33.0% LEL: 3.6% Flammable Gas
Xylene (m, o & p isomers)	108-38-3, 95-47-6, 106-42-3	TWA 100 ppm (435 mg/m^3) STEL 150 ppm	TWA 100 ppm (435 mg/m^3)	TWA 100 ppm (435 mg/m^3)	900 ppm	Skin absorption, inhalation, ingestion, skin, and/or eye contact	Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis	Eyes, skin, respiratory system, central nervous system, gastrointestinal tract, blood, liver, kidneys	Colorless liquid with an aromatic odor BP: 282°F, 292°F, 281°F Fl. Pt. 82°F, 90°F, 81°F LEL: 1.1%, 0.9%, 1.1% UEL: 7.0%, 6.7%, 7.0% Classs C Flammable Liquid
Zinc	7440-66-6	TWA 10 mg/m3 (Inhalable fraction)	None established	TWA 10 mg/m3 (for zinc oxide fume)	None established	skin and/or eye contact, inhalation, ingestion	Irritation eyes, skin, respiratory tract; gastrointestinal disturbances	Eyes, skin, respiratory system	Bluish gray solid BP: 1664.6°F Flammable

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at 900 Old Country Road, Garden City, New York

References

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Sax, N.I. and R.J. Lewis. 1989. Dangerous Properties of Industrial Materials. 7th Edition. Van Nostrand Reinhold. New York.
Guide to Occupational Exposure Values. 2008. American Conference of Governmental Industrial Hygienists (ACGIH).
NIOSH Pocket Guide to Chemical Hazards. 2005. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health

Abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists.
BP – boiling point at 1 atmosphere, °F
C – Ceiling, is a concentration that should not be exceeded during and part of the working exposure.
Ca - considered by NIOSH to be a potential occupational carcinogen
CAS# Chemical Abstracts Service registry number which is unique for each chemical.
Fl. Pt. – Flash point
IDLH - Immediately Dangerous to Life and Health concentrations represent the maximum concentration
from which, in the event of respirator failure, one could escape within 30 minutes without a respirator
and without experiencing any escape-impairing or irreversible health effects.
LEL – Lower explosive (flammable) limit in air, % by volume (at room temperature)
mg/m^3 – Milligrams of substance per cubic meter of air
NIOSH -National Institute for Occupational Safety and Health.
OSHA – Occupational Safety and Health Administration
PEL - OSHA Permissible Exposure Limit (usually) a time weighted average concentration that must not be exceeded during any 8 hour work shift of a 40 hr work week.
ppm – parts per million
REL – NIOSH Recommended Limit indicated a time weighted average concentration that must not be exceeded during any 10 hour work shift of a 40 hr work week
STEL – Short-term exposure limit
TLV -ACGIH Threshold Limit Values (usually 8 hour time weighted average concentrations).
TWA – 8-hour, time-weighted average
UEL – Upper explosive (flammable) limit in air, % by volume (at room temperature)

TABLE 2

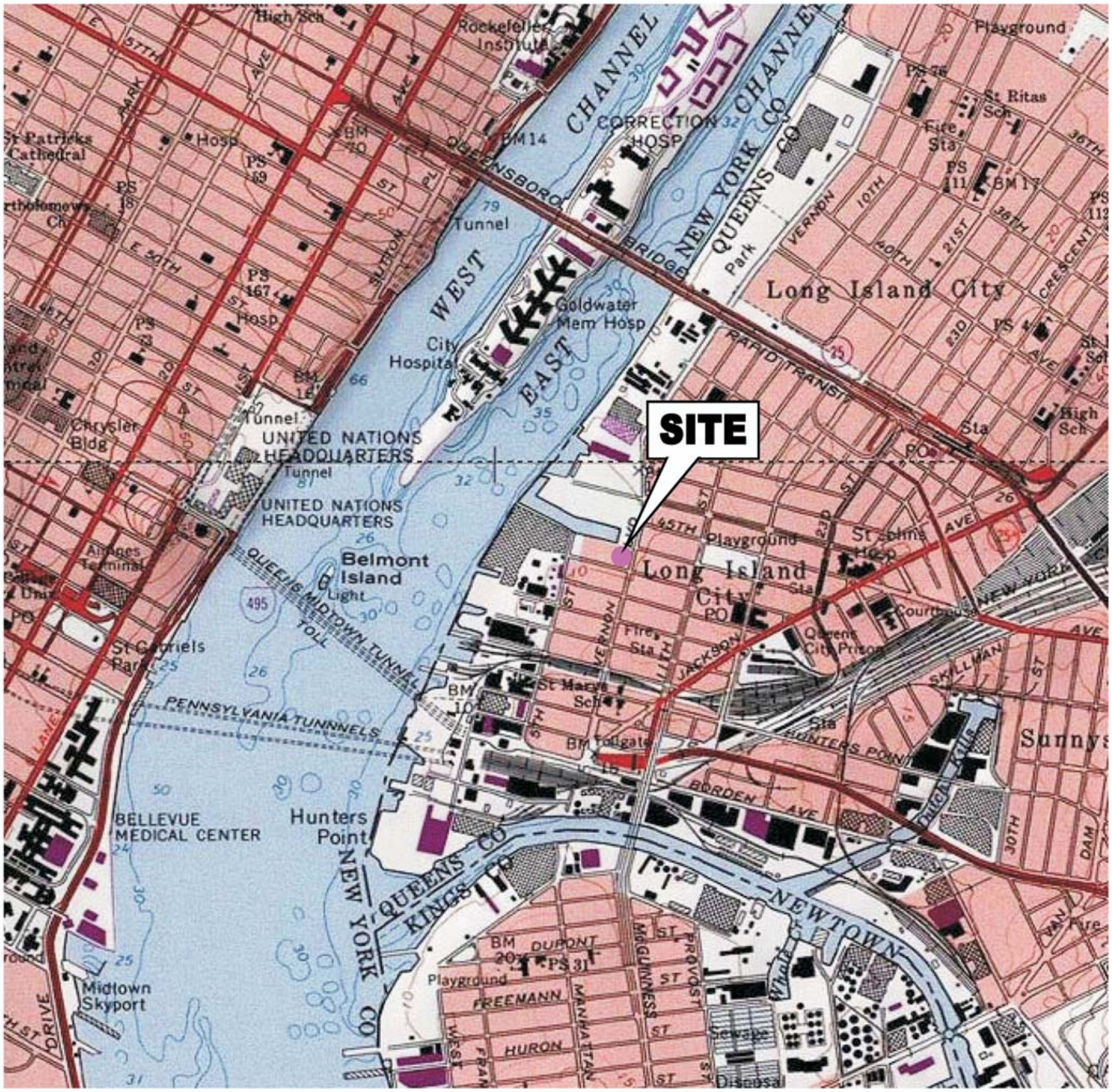
ACTION LEVELS FOR WORKER BREATHING ZONE

Instrument	Action Level *	Level of Respiratory Protection/Action
PID	0 to <5 ppm (one minute sustained)	Level D *
PID	>5 to <50 ppm (one minute sustained)	Utilize APR (Level C)
PID	>50 to <100 ppm (one minute sustained)	Level B
PID	>100ppm	Stop work** (ventilate, apply foam)
CGI/H_2S Meter	<5%	Level D
CGI/H_2S Meter	>5% to <25%	Level B
CGI/H_2S Meter	>25%	Stop work**
CGI/CO Meter	>25%	Level B
CGI/CO Meter	>50%	Stop work** (ventilate area)
CGI/O_2 Meter	<10% LEL, in excavation	Level D
	19.5% oxygen – 23.5%	Level D
CGI/O_2 Meter	>10% LEL, in excavation	Allow to vent, apply foam**
	>23.5% oxygen	Stop work, Oxygen Enriched ATM**
Dust Monitor	0 – 1.0 mg/m^3, 5-minutes average	Level D
Dust Monitor	>1.0 to 5.0 mg/m^3, 5-minutes average	Level D – Institute dust suppression measures
Dust Monitor	5.0 to >50 mg/m^3, 5-minute average	Level C – Institute dust suppression measures

Note: Action levels are based on above background levels.

* Instrument readings will be taken in the breathing zone (BZ) of the workers, unless otherwise indicated.

** Suspend work in immediate area. Conduct air monitoring periodically to determine when work can continue. Implement mitigative measures.



QUADRANGLE LOCATION

N

0 2000'

SOURCE:
USGS; 1995, Central Park & Brooklyn
7.5 Minute Topographic Quadrangle

Title:

SITE LOCATION MAP

FORMER PARAGON PAINT AND VARNISH
COMPANY MANUFACTURING FACILITY
5-49 46TH AVENUE & 45-40 VERNON BOULEVARD
LONG ISLAND CITY, NEW YORK

Prepared for:

VERNON 4540 REALTY LLC

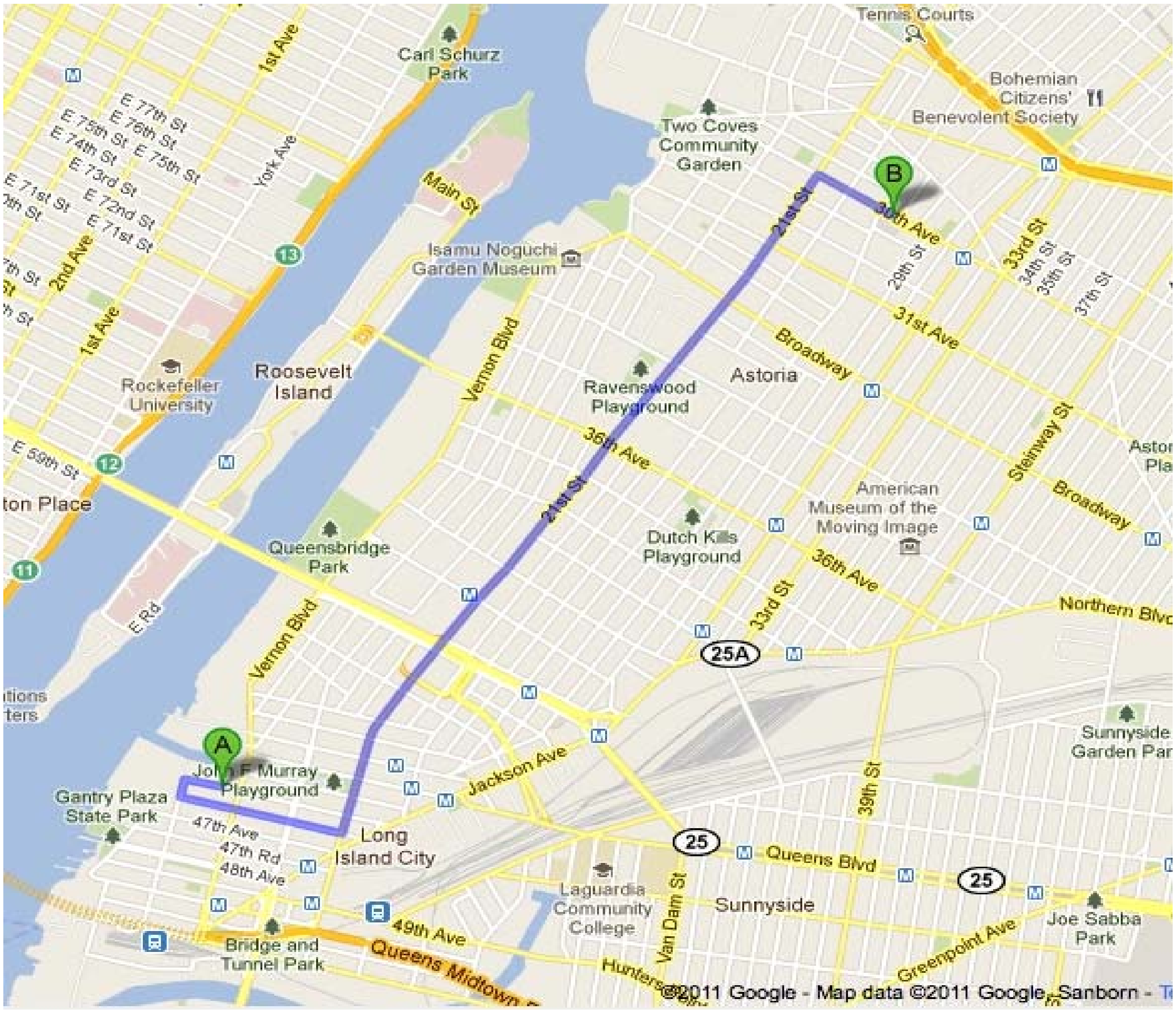
ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 11OCT11	FIGURE
Prepared by: J.A.D.	Scale: AS SHOWN	1
Project Mgr.: R.M.	Project No.: 2051.0001Y000	
File: 2051.0001Y105.01.CDR		

V:\CAD\PROJECTS\2051Y\0001Y\105\2051.0001Y105.01.CDR

FIGURE 2

Directions to Mt. Sinai Queens Hospital – 25-10 30th Avenue, Long Island City, New York



- Head west on 46th Avenue toward 5th Street
- Turn left onto 46th Road
- Take the third left onto 21st Street
- Turn right onto 30th Avenue
- Arrive at Mt. Sinai Queens Hospital on your right

APPENDIX A

Activity Hazard Analysis and Material Safety Data Sheets

ACTIVITY HAZARD ANALYSIS

ACTIVITY: Mobilization/Demobilization	Analyzed by / Date:________________________	
Principal Steps	**Potential Hazards**	**Recommended Controls**
Temporary Facilities Set Up (Support and CRZ zones)	Noise	Ear plugs, ear muffs.
	Eyes	Safety glasses with side shields, safety visor or shield.
	Slips-Trips-Falls	Be sure footing is in a clear area free of loose material.
	Power Tools	Hard hats, work gloves.
	Heat Stress/Cold Stress	Follow heat stress/cold stress guidelines in HASP appendices.
	Cuts and Abrasions	Wear work gloves.
	Punctures	Wear puncture resistant steel toed boots, long sleeve shirts, work shirts or coveralls.
	Electrocution	Ground fault circuit interrupters, inspect power supply cords of equipment prior to use.
	Traffic Hazards	Wear orange safety vests and/or high visibility clothing.
	Insect Bites/Wildlife	Use insect repellent. Avoid contact with all wildlife.
	Sun exposure	Use sunscreen as needed, take breaks in shaded areas, drink ample fluids.
Equipment to be Used	**Inspection Requirements**	**Training Requirements**
Power Tools (e.g., Drills, Saws) Hand Tools (e.g., Hammer, Shovel, Pry Bars) Trailers, Vehicles, Low Boy, Heavy Equipment	Daily inspections to insure personnel wear appropriate PPE during mobilization and demobilization and survey work. Inspect equipment for wear or damage, test emergency shut-off switches. Ensure all equipment on wheels is chocked per Wheel Chocking Policy.	Tool box safety meetings. Review heavy equipment safety guidelines. Review Wheel Chocking Policy.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Contaminated Soil Excavation	**Analyzed by / Date:________________________**	
Principal Steps	**Potential Hazards**	**Recommended Controls**
Work Zone Delineations Decon Area Layout Personal/Perimeter Air Monitoring Removal of Contaminated Soil Verification of Soil Removal Loading Contaminated Soil for Disposal Decon/Demobilization	Noise	Ear plugs, ear muffs.
	Eyes	Safety glasses with side shields or upgrade to Level C full-face respirators.
	Electrocution	Inspect area for overhead and/or subsurface electrical lines. Follow Lock out/Tag out Procedures.
	Puncture	Steel toe/steel shank boots. Avoid direct handling of soil – use shovels, rakes or squeegees.
	Wildlife	Avoid contact with all animals.
	Hose Connections	Make sure all vacuum line connections are clamped and secured.
	Traffic – Vehicle	Cones and flagging to be used for vehicles parked on streets – if a lane is to be taken, flagmen to be used.
	Traffic – Pedestrian	All work zones to be delineated by SSO to be able to control area from curious onlookers.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Contaminated Soil Excavation	**Analyzed by / Date:________________________**	
Equipment to be Used	**Inspection Requirements**	**Training Requirements**
Dump Truck(s) Rubber Tire Backhoe Miscellaneous Hand Tools Level D and Level C PPE Excavator	Prior to start of work daily - area for security - barriers in place - equipment inspection/proper wheel chocking PPE Inspections - before donning - buddy system to continually observe - upon de-suiting During Operations – that area remains secure Atmosphere - prior to entering confined space - continually during operations	40-Hour HAZWOPER 8-Hour Refresher Site Specific Training and Orientation Daily Safety Meetings

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Drilling Activities	**Analyzed by / Date:________________________**	
Principal Steps	**Potential Hazards**	**Recommended Controls**
Work Zone Delineations Decon Area Layout Personal Air Monitoring Installation of Soil Borings Installation of Monitoring Wells Installation of Soil Vapor Sampling Points Decon/Demobilization	Noise	Ear plugs, ear muffs.
	Eyes	Safety glasses with side shields or upgrade to Level C full-face respirators.
	Electrocution	Inspect area for overhead and/or subsurface electrical lines. Follow Lock out/Tag out Procedures.
	Puncture	Steel toe/steel shank boots. Avoid direct handling of soil – use shovels, rakes or squeegees. Leather and/or cut resistant work gloves as appropriate to protect hands.
	Wildlife/Insect Bites	Avoid contact with all animals, use insect repellent.
	Hose Connections	Make sure all vacuum line connections are clamped and secured.
	Traffic – Vehicle	Cones and flagging to be used for vehicles parked on streets – if a lane is to be taken, flagmen to be used.
	Traffic – Pedestrian	All work zones to be delineated by SSO to be able to control area from curious onlookers.
	Hands	Employ a “Show Hands Policy” between drillers and helpers.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Drilling Activities		**Analyzed by / Date:________________________**
Equipment to be Used	**Inspection Requirements**	**Training Requirements**
Drill Rig Support Truck Miscellaneous Hand Tools Level D and Level C PPE	Prior to start of work daily - area for security - barriers in place - equipment inspection, including emergency shut-off switch testing PPE Inspections - before donning - buddy system to continually observe - upon de-suiting During Operations - that area remains secure Atmosphere - prior to entering confined space - continually during operations	40-Hour HAZWOPER 8-Hour Refresher Site Specific Training and Orientation Daily Safety Meetings

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Miscellaneous Fill Placement		**Analyzed by / Date:________________________**
Principal Steps	**Potential Hazards**	**Recommended Controls**
Grading Placement of Fill	Abrasions; heat stress; cold stress; cuts; slips; trips; falls; insects; rodents and stray animals; hazardous noise; puncture; struck by moving heavy equipment; loading and unloading of heavy equipment; crushed or pinned between machinery; and nuisance dust.	Hard hats; safety glasses/goggles; work gloves; puncture resistant steel toed, steel shank work boots; reflective vest and/or high visibility clothing. Hearing protection (muffs/plugs). Personnel should stand at least 10 feet from moving or swing radius of equipment. Personal protective equipment.
Equipment to be Used	**Inspection Requirements**	**Training Requirements**
Bull dozer Grader Dump Trucks Water Truck Hand Tools (Shovels, etc.)	Periodic inspections to ensure site personnel wear the appropriate PPE. Daily site safety inspection check list. Heavy equipment/machinery must be inspected by SSHO & Operator, test emergency shutoff switches.	Tool box safety meetings. Review working around or near heavy equipment and review heavy equipment safety guidelines.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Sheeting/Pile Installation	**Analyzed by / Date:________________________**	
Principal Steps	**Potential Hazards**	**Recommended Controls**
Mobilization Equipment Set Up Unloading of Equipment Installation of Shoring/Sheeting Removal of Shoring Loading of Equipment Demobilization	Buried utilities and underground structures Truck traffic Slip / trip / fall Rigging to unload and handle materials Overhead hazards Workmen in the area Site control Equipment operation Sheeting installation and removal Demobilization of equipment Cold / heat stress Biological hazards Hearing protection / eye protection Hand protection Untrained personnel Electric powered hand tools Cutting torches	All trucks to be equipped with backup alarms – pedestrian traffic to have orange protective vests and/or high visibility clothing for visibility. All personnel are to be aware that the potential for slipping / tripping / falling exists at all times due to uneven terrain. Equipment being laid out and staged. Any person working at a height of greater than 6 feet must have a safety harness and shock absorbing lanyard. Sheeting being delivered to the site will have to be unloaded prior to this activity – all grips, slings, chains, clevises or grab hooks and any other lifting devices shall be inspected. A regular inspection of these items shall be made prior to their use for any lifting. Any equipment with frayed or broken components will be set aside and tagged and shall not be used until the appropriate repairs are made. Prior to the start of any activity, the area shall be checked for overhead hazards. Operators and spotters are to be aware of the potential for personnel and/or equipment to be in the work zone. No lifting and rigging shall go over a person or vehicle. During all phases of operations, the minimum personal protection will consist of hard hat, steel-toed and steel-shanked work boots, safety glasses. When handling wire rope, slings, chains, etc., appropriate hand protection will be used (leather or cut resistant work gloves). When working

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Sheeting/Pile Installation		Analyzed by / Date:________________________
Principal Steps	**Potential Hazards**	**Recommended Controls**
		around equipment, hearing protection shall be used. Extra care shall be taken to make sure no one's hands or feet are caught under or between metal objects when lifting or setting sheeting. Employ hand signals to give "all clear" approval. All personnel shall be trained and qualified to perform the task assigned them. Equipment operators are responsible to make sure their swing radius and work areas are clear. Operators are to be trained and competent with their equipment. During operations, a zone will be established outside of the swing radius and/or fall radius of the equipment and sheeting where control of persons entering and exiting can be safety maintained. The same type of control for vehicles will be maintained. Equipment will be in good working order, equipped with current protective devices and travel alarms, and chocked when not in use. A competent person shall have designed the sheeting/pile plan to meet the stress loads of the environment. This plan shall include all bracing, cross bracing, installation depths.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Sheeting/Pile Installation		**Analyzed by / Date:________________________**
Principal Steps	**Potential Hazards**	**Recommended Controls**
		Hydraulic and/or airlines used to power the vibratory sheeting drive/extractor shall be checked twice daily. Operators and spotters will have a clear plan of communications. All hand signals will be predetermined. There will only be one person spotting for the operator that gives directions. If two-way communications are to be used, the channel will remain undisturbed during lifting and setting operations by company personnel. Tag lines as appropriate will be used to erect and disassemble the sheeting. When loading shoring up to demobilize, there shall not be any lifts over a person or equipment. Potential exists for cold / heat stress. Follow the guidelines for cold / heat stress in the HASP. Replenish fluids and take breaks, as necessary. If there is a need to utilize electric power tools, all cords will be inspected. Ground Fault Interrupter (GFI) outlets will be used. No guards shall have been removed and no triggers will be wired open. If cutting torches are utilized, all lines, gauges, regulators and torches shall be inspected prior to use. Tanks will have current inspection and be inspected upon receipt at the site prior to their use. A 30-minute fire watch will be maintained after burning activity has stopped for the day.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: Sheeting/Pile Installation	**Analyzed by / Date:________________________**	
Equipment to be Used	**Inspection Requirements**	**Training Requirements**
Tractor Trailers Hydraulic Excavators and/or Cranes Interlocking Steel Sheeting/Shoring/Bracing Materials Miscellaneous Slings, Grips, chains, hooks, Clevises Miscellaneous Electric Power Tools Oxygen and Acetylene Torches Pile Drivers	Daily inspection of equipment as recommended by manufacturer. Inspection of work area and perimeters prior to start and during works operations. Twice daily inspection of cables, slings, etc., electric equipment, torches, regulators, gauges.	Current CDL license for tractor trailer operators. Competent person to develop shoring plan. Site specific HASP. Trained operations/laborers. Daily safety meetings.

ACTIVITY HAZARD ANALYSIS

(Continued)

ACTIVITY: In-situ Chemical Injections		**Analyzed by / Date:________________________**
Principal Steps	**Potential Hazards**	**Recommended Controls**
Work Zone Delineations Decon Area Layout Personal Air Monitoring Mixing of Chemicals to be Injected Injection of Chemicals Decon/Demobilization	Noise	Ear plugs, ear muffs.
	Eyes	Safety glasses with side shields, safety visor or shield.
	Skin Contact/Irritation	Wear long sleeved shirts, have ample clean water supply in immediate vicinity of work zone to flush skin if needed.
	Slips-Trips-Falls	Be sure footing is in a clear area free of loose material.
	Power Tools	Hard hats, work gloves.
	Heat Stress/Cold Stress	Follow heat stress/cold stress guidelines in HASP appendices.
	Cuts and Abrasions	Wear work gloves.
	Punctures	Wear puncture resistant steel toed boots, long sleeve shirts, work shirts or cover alls.
	Electrocution	Ground fault circuit interrupters, inspect power supply cords of equipment prior to use.
	Traffic Hazards	Wear reflective safety vests and/or high visibility clothing.
	Insect Bites/Wildlife	Use insect repellent. Avoid contact with all wildlife.
	Sun exposure	Use sunscreen as needed, take breaks in shaded areas, drink ample fluids.

ACTIVITY HAZARD ANALYSIS

(Continued)

Equipment to be Used	Inspection Requirements	Training Requirements
Geoprobe [See Drilling Activity Hazard Analysis (AHA)]	Inspect drill rig for wear and tear and/or damage to rig or any pieces of the drill string or assembly. Test emergency shut offs. Ensure that drill rig is level and stable for injections to proceed. See Drilling AHA.	Competent drill rig operator. Identify subsurface utility lines prior to any drilling activities. (verify location with Site supervisor) Tool box safety meeting to review potential hazards.
Chemicals to be injected [Regenox Parts A and B; Metals Remediation Compound (MRC); Oxygen Releasing Compounds (ORC), etc.]	Store each chemical in the manner directed by manufacturer and per MSDS.	Review MSDS and manufacturer specifications and application procedures. Only required personnel should be near the chemicals, maintain distance from mixing and injection activities when possible.
Power Tools (e.g., Drills, Saws, Injection Pumps) Hand Tools (e.g., Hammer, Shovel, Pry Bars)	Daily inspections to insure personnel wear appropriate PPE during mobilization and demobilization and survey work. Inspect equipment for wear or damage, test emergency shut-off switches.	Tool box safety meetings.
Trailers, Vehicles, Low Boy, Heavy Equipment	Ensure all equipment on wheels is chocked per Wheel Chocking Policy.	Review heavy equipment safety guidelines. Review Wheel Chocking Policy.

APPENDIX B

Heat and Cold Stress Guidelines

Heat Stress

Heat stress is a significant potential hazard and can be associated with heavy physical activity and/or the use of personal protective equipment (PPE) in hot weather environments.

Heat cramps are brought on by prolonged exposure to heat. As an individual sweats, water and salts are lost by the body resulting in painful muscle cramps. The signs and symptoms of heat cramps are as follows:

- severe muscle cramps, usually in the legs and abdomen;
- exhaustion, often to the point of collapse; and
- dizziness or periods of faintness.

First aid treatment includes moving to a shaded area, rest, and fluid intake. Normally, the individual should recover within one-half hour. If the individual has not recovered within 30 minutes and the temperature has not decreased, the individual should be transported to a hospital for medical attention.

Heat exhaustion may occur in a healthy individual who has been exposed to excessive heat. The circulatory system of the individual fails as blood collects near the skin in an effort to rid the body of excess heat. The signs and symptoms of heat exhaustion are as follows:

- rapid and shallow breathing;
- weak pulse;
- cold and clammy skin with heavy perspiration;
- skin appears pale;
- fatigue and weakness;
- dizziness; and
- elevated body temperature.

First aid treatment includes cooling the victim, elevating the feet, and replacing fluids and electrolytes. If the individual has not recovered within 30 minutes and the temperature has not decreased, the individual should be transported to the hospital for medical attention.

Heat stroke occurs when an individual is exposed to excessive heat and stops sweating. This condition is classified as a **MEDICAL EMERGENCY**, requiring immediate cooling of the victim and transport to a medical facility. The signs and symptoms of heat stroke are as follows:

- dry, hot, red skin;
- body temperature approaching or above 105°F;
- large (dilated) pupils; and
- loss of consciousness – the individual may go into a coma.

First aid treatment requires immediate cooling and transportation to a medical facility.

Heat stress (heat cramps, heat exhaustion, and heat stroke) is a significant hazard if any type of protective equipment (semi-permeable or impermeable) which prevents evaporative cooling is worn in hot weather environments. Local weather conditions may require restricted work schedules in order to adequately protect personnel. The use of work/rest cycles (including working in the cooler periods of the day or evening) and training on the signs and symptoms of heat stress should help prevent heat-related illnesses from occurring. Work/rest cycles will depend on the work load required to perform each task, type of protective equipment, temperature, and humidity. In general, when the temperature exceeds 88°F, a 15 minute rest cycle will be initiated once every two hours. In addition, potable water and fluids containing electrolytes (e.g., Gatorade) will be available to replace lost body fluids.

Cold Stress

Cold stress is a danger at low temperatures and when the wind-chill factor is low. Prevention of cold-related illnesses is a function of whole-body protection. Adequate insulating clothing must be used when the air temperature is below 40°F. In addition, reduced work periods followed by rest in a warm area may be necessary in extreme conditions. Training on the signs and symptoms of cold stress should prevent cold-related illnesses from occurring. The signs and symptoms of cold stress include the following:

- severe shivering;
- abnormal behavior;

- slowing of body movement;
- confusion;
- weakness;
- stumbling or repeated falling;
- inability to walk;
- collapse; and/or
- unconsciousness.

First aid requires removing the victim from the cold environment and seeking medical attention immediately. Also, prevent further body heat loss by covering the victim lightly with blankets. Do not cover the victim's face. If the victim is still conscious, administer hot drinks, and encourage activity, such as walking wrapped in a blanket.

APPENDIX C

Medical Data Form

MEDICAL DATA SHEET

This form must be completed by all onsite personnel prior to the commencement of activities, and shall be kept by the Site Health and Safety Officer during site activities. This form must be delivered to any attending physician when medical assistance is needed.

(This form should be typed or printed legibly.)

Site: ______________________________

Name: ______________________ Home Telephone: ______________________
(Area Code/Telephone Number)

Address: ______________________________

Date of Birth: ______________ Height: ______________ Weight: ______________

Emergency Contact: ______________________ Telephone: ______________________
(Area Code/Telephone Number)

Drug Allergies or Other Allergies: ______________________________

____

Previous Illnesses or Exposures to Hazardous Substances: ______________________________

____

____

Current Medication (Prescription and Non-Prescription): ______________________________

____

____

Medical Restrictions: ______________________________

____

Name, Address and Telephone Number of Person Physician: ______________________________

____

APPENDIX D

Health and Safety
Briefing/Tailgate Meeting Form

HEALTH AND SAFETY BRIEFING / TAILGATE MEETING FORM

Site Name / Location ______________________________

Date: ____________________ Weather Forecast: ____________________

Names of Personnel Attending Briefing

Planned Work

Instrument Calibration: Instrument/Time/Cal. Gas/Cal. Concentration/Actual Concentration

Items Discussed

Work Permit Type and Applicable Restrictions

Signatures of Attending Personnel

APPENDIX E

Accident Report and Investigation Form

☐ **Roux Associates, Inc.** ☐ **Remedial Engineering, P.C.**
(Check applicable company name)

ACCIDENT REPORT

Joe Gentile, Corporate Health and Safety Manager
Cell: (610) 844-6911; Office: (856) 423-8800; Office FAX: (856) 423-3220; Home: (484) 373-0953

PART 1: ADMINISTRATIVE INFORMATION

Project #: ______________________
Project Name: ______________________
Project Location (street address/city/state): ______________________

Client Corporate Name / Contact / Address / Phone #: ______________________

Immediate Verbal Notifications Given To:

Corporate Health & Safety	☐Yes	☐No
Office Health & Safety	☐Yes	☐No
Office Manager	☐Yes	☐No
Project Principal	☐Yes	☐No
Project Manager	☐Yes	☐No
Client Contact	☐Yes	☐No

REPORT STATUS (time due):

☐ Initial (24 hr) Date: ________ ☐ Final (5-10 days) Date: ________

Accident Report Delivered To:

Corporate Health & Safety	☐Yes	☐No
Office Health & Safety	☐Yes	☐No
Office Manager	☐Yes	☐No
Project Principal	☐Yes	☐No
Project Manager	☐Yes	☐No

REPORT TYPE: ☐ Loss ☐ Near Loss Estimated Costs: $ ______

OSHA CASE # Assigned by Corporate Health & Safety if Applicable: ______________________

Corporate Health & Safety Confirmed Final Accident Report ☐Yes ☐No

DATE OF INCIDENT: ____________

TIME INCIDENT OCCURRED: ____________ ☐AM ☐PM

INCIDENT LOCATION – City, State, and Country (If outside U.S.A.) ______________________

INCIDENT TYPES: (Select most appropriate if Loss occurred.)
From lists below, please select the option that best categories the incident. When selecting an injury or illness, also indicate the severity level.

☐**INJURY** ☐**ILLNESS**

------------------------**Severity Level**---------------------------

☐Fatality ☐First Aid ☐Medical Treatment
☐Restricted Work ☐Lost Time

OTHER INCIDENT TYPES

☐Spill / Release
Material involved: ____________
Quantity (U.S. Gallons): ____________

☐Misdirected Waste ☐Consent Order ☐NOV
☐Property Damage ☐Exceedance
☐Motor Vehicle ☐Fine / Penalty

ACTIVITY TYPE (Check most appropriate one.)

☐Decommissioning ☐Geoprobe ☐Sampling
☐Demolition ☐Motor Vehicle ☐System Start-up
☐Dewatering ☐Operations/ Maintenance ☐Trenching
☐Drilling ☐AST/UST Removal
☐Excavation ☐Pump/Pilot Test ☐Other________
☐Gauging ☐Rigging/Lifting

INJURY TYPE (Check all applicable.)

☐Abrasion ☐Occupational Illness
☐Amputation ☐Puncture
☐Burn ☐Rash
☐Cold/Heat Stress ☐Repetitive Motion
☐Inflammation ☐Sprain/Strain
☐Laceration ☐Other________

BODY PART AFFECTED (Check all applicable.)

☐Respiratory ☐Shoulder ☐Face
☐Neck ☐Arm ☐Leg
☐Chest ☐Wrist ☐Knee
☐Abdomen ☐Hand/Fingers ☐Ankle
☐Groin ☐Eye ☐Foot/Toes
☐Back ☐Head ☐Other______

I. PERSON(S) DIRECTLY / INDIRECTLY INVOLVED IN INCIDENT (Attach additional information as necessary/applicable.)

Name/Phone # of Each Person Directly/Indirectly Involved in Incident:	Designate: Roux/Remedial Employee Roux/Remedial Subcontractor Client Employee Client Contractor Third Party	As applicable, Current Occupation; Yrs in Current Occupation; Current Position; and Yrs in Current Position:	As applicable, Employer Name; Address; and Phone #:	As applicable, Supervisor Name; and Phone #:
1)				
2)				

II. PERSONS INJURED IN INCIDENT (Attach additional information as necessary/applicable.)

Name/Phone # of Each Person Injured in Incident:	Designate: Roux/Remedial Employee Roux/Remedial Subcontractor Client Employee Client Contractor Third Party	As applicable, Current Occupation; Yrs in Current Occupation; Current Position; and Yrs in Current Position:	As applicable, Employer Name; Address; and Phone #:	As applicable, Supervisor Name; and Phone #:	Description of Injury:
1)					
2)					

III. PROPERTY DAMAGED IN INCIDENT (Attach additional information as necessary/applicable.)

Property Damaged:	Property Location:	Owner Name, Address & Phone #:	Description of Damage:	Estimated Cost:
1)				$

2)				$

IV. WITNESSES TO INCIDENT (Attach additional information as necessary/applicable.)

Witness Name:	Address:	Phone #:
1)		
2)		

PART 2: WHAT HAPPENED AND INCIDENT DETAILS

PROVIDE FACTUAL DESCRIPTION OF INCIDENT (e.g., describe loss/near loss, injury, response / treatment).

I. AUTHORITIES/GOVERNMENTAL AGENCIES NOTIFIED (Attach additional information as necessary/applicable.)

Authority/Agency Notified:	Name/Phone #/Fax # of Person Notified:	Address of Person Notified:	Date & Time of Notification:	Exact Information Reported/Provided:

II. PUBLIC RESPONSES TO INCIDENT (if applicable)

Response/Inquiry By: (check one)	Entity Name:	Name/Phone # of Respondent/ Inquirer:	Address of Entity/Person:	Date & Time of Response/Inquiry:
☐Newspaper ☐Television ☐Community Group ☐Neighbors ☐Other ____________				

Describe Response/Inquiry:

Roux/Remedial Response:

(Check all that apply.) (Attach photos, drawings, etc. to help illustrate the incident.)
ATTACHED INFORMATION: ☐Photo ☐Sketches ☐Vehicle Acord Form ☐Police Report ☐Other

Name(s) of person(s) who prepared Initial and Final Report:	**Title(s):**	**Phone number(s):**

PART 3: INVESTIGATION TEAM ANALYSIS

CONCLUSION: WHY IT HAPPENED (LIST CAUSAL FACTORS AND CORRESPONDING ROOT CAUSES)

(Root Causes: Lack of knowledge or skill, Doing the task according to procedures or acceptable practices takes more time or effort, Short-cuts or not following acceptable practices is reinforced or tolerated, Not following procedures or acceptable practices did not result in an accident, Lack of or inadequate procedures, Inadequate communications of expectations regarding procedures or acceptable practices, Inadequate tools or equipment, External Factors)

ROOT CAUSE(S) AND SOLUTION(S): HOW TO PREVENT INCIDENT FROM RECURRING

CAUSAL FACTOR	ROOT CAUSE		SOLUTION(S) [Must Match Root Cause(s)]		PERSON RESPONSIBLE	AGREED DUE DATE	ACTUAL COMPLETION DATE
			#	Solution(s)			
			1				
			2				
			3				

INVESTIGATION TEAM:

PRINT NAME	JOB POSITION	DATE	SIGNATURE

APPENDIX F

Acord Form

ACORD™ AUTOMOBILE LOSS NOTICE

DATE:

PRODUCER	PHONE (A/C, No, Ext): 516-678-2626	COMPANY	NAIC CODE: 19410	MISCELLANEOUS INFO (Site & location code)
James C. Herrmann & Associates LTD 265 Sunrise Highway, Suite #20 Rockville Centre, NY 11570		Commerce & Industry		
		POLICY NUMBER: CA-3777920		REFERENCE NUMBER / CAT #
CODE:	SUB CODE:	EFFECTIVE DATE: 06/01/10	EXPIRATION DATE: 06/01/11	DATE OF ACCIDENT AND TIME: AM / PM; PREVIOUSLY REPORTED: YES / NO
AGENCY CUSTOMER ID:				

INSURED

NAME AND ADDRESS — SOC SEC # OR FEIN: 11-2579482

Roux Associates, Inc.
209 Shafter Street
Islandia, NY 11749

RESIDENCE PHONE (A/C, No): NA
BUSINESS PHONE (A/C, No, Ext): 631-232-2600

CONTACT

CONTACT INSURED

NAME AND ADDRESS

Susan Sullivan, General Counsel
Roux Associates, Inc.
209 Shafter Street
Islandia, NY 11749

RESIDENCE PHONE (A/C, No):
BUSINESS PHONE (A/C, No, Ext): 631-232-2600

WHERE TO CONTACT: Fax Notice: 631-232-1525

WHEN TO CONTACT:

LOSS

LOCATION OF ACCIDENT (Include city & state):
AUTHORITY CONTACTED:
REPORT #:
VIOLATIONS/CITATIONS:
DESCRIPTION OF ACCIDENT (Use separate sheet, if necessary):

POLICY INFORMATION

BODILY INJURY (Per Person)	BODILY INJURY (Per Accident)	PROPERTY DAMAGE	SINGLE LIMIT	MEDICAL PAYMENT	OTC DEDUCTIBLE	OTHER COVERAGE & DEDUCTIBLES (UM, no-fault, towing, etc)

LOSS PAYEE:
COLLISION DED:
UMBRELLA/EXCESS: UMBRELLA / EXCESS — CARRIER: — LIMITS: — AGGR — PER CLAIM/OCC — SIR/DED

INSURED VEHICLE

VEH # | YEAR | MAKE: | BODY TYPE: | PLATE NUMBER | STATE
MODEL: | V.I.N.:

OWNER'S NAME & ADDRESS: — RESIDENCE PHONE (A/C, No): — BUSINESS PHONE (A/C, No, Ext):
DRIVER'S NAME & ADDRESS (Check if same as owner): — RESIDENCE PHONE (A/C, No): — BUSINESS PHONE (A/C, No, Ext):

RELATION TO INSURED (Employee, family, etc.)	DATE OF BIRTH	DRIVER'S LICENSE NUMBER	STATE	PURPOSE OF USE	USED WITH PERMISSION? YES / NO
Employee					

DESCRIBE DAMAGE: — ESTIMATE AMOUNT: — WHERE CAN VEHICLE BE SEEN? — WHEN CAN VEH BE SEEN? — OTHER INSURANCE ON VEHICLE

PROPERTY DAMAGED

DESCRIBE PROPERTY (If auto, year, make, model, plate #): — OTHER VEH/PROP INS? YES / NO — COMPANY OR AGENCY NAME: — POLICY #:
OWNER'S NAME & ADDRESS: — RESIDENCE PHONE (A/C, No): — BUSINESS PHONE (A/C, No, Ext):
OTHER DRIVER'S NAME & ADDRESS (Check if same as owner): — RESIDENCE PHONE (A/C, No): — BUSINESS PHONE (A/C, No, Ext):
DESCRIBE DAMAGE: — ESTIMATE AMOUNT: — WHERE CAN DAMAGE BE SEEN?

INJURED

NAME & ADDRESS	PHONE (A/C, No)	PED	INS VEH	OTH VEH	AGE	EXTENT OF INJURY

WITNESSES OR PASSENGERS

NAME & ADDRESS	PHONE (A/C, No)	INS VEH	OTH VEH	OTHER (Specify)

REMARKS (Include adjuster assigned):

REPORTED BY	REPORTED TO	SIGNATURE OF INSURED	SIGNATURE OF PRODUCER

Applicable in Arizona

For your protection, Arizona law requires the following statement to appear on this form. Any person who knowingly presents a false or fraudulent claim for payment of a loss is subject to criminal and civil penalties.

Applicable in Arkansas, District of Columbia, Kentucky, Louisiana, Maine, Michigan, New Jersey, New Mexico, Pennsylvania and Virginia

Any person who knowingly and with intent to defraud any insurance company or another person, files a statement of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact, material thereto, commits a fraudulent insurance act, which is a crime, subject to criminal prosecution and civil penalties. In D.C., LA, ME and VA insurance benefits may also be denied.

Applicable in California

Any person who knowingly files a statement of claim containing any false or misleading information is subject to criminal and civil penalties.

Applicable in Colorado

It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance, and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policy holder or claimant for the purpose of defrauding or attempting to defraud the policy holder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado Division of Insurance within the Department of Regulatory Agencies.

Applicable in Florida and Idaho

Any person who knowingly and with the intent to injure, Defraud, or Deceive any Insurance Company Files a Statement of Claim Containing any False, Incomplete or Misleading information is Guilty of a Felony.*

* In Florida - Third Degree Felony

Applicable in Hawaii

For your protection, Hawaii law requires you to be informed that presenting a fraudulanet claim for payment of a loss or benefit is a crime punishable by fines or imprisonment , or both.

Applicable in Indiana

A person who knowingly and with intent to defraud an insurer files a statement of claim containing any false, incomplete, or misleading information commits a felony.

Applicable in Minnesota

A person who files a claim with intent to defraud or helps commit a fraud against an insurer is guilty of a crime.

Applicable in Nevada

Pursuant to NRS 686A.291, any person who knowingly and willfully files a statement of claim that contains any false, incomplete or misleading information concerning a material fact is guilty of a felony.

Applicable in New Hampshire

Any person who, with purpose to injure, defraud or deceive any insurance company, files a statement of claim containing any false, incomplete or misleading information is subject to prosecution and punishment for insurance fraud, as provided in RSA 638:20.

Applicable in New York

Any person who knowingly makes or knowingly assists, abets, solicits or conspires with another to make a false report of the theft, destruction, damage or conversion of any motor vehicle to a law enforcement agency, the Department of Motor Vehicles or an insurance company, commits a fraudulent insurance act, which is a crime, and shall also be subject to a civil penalty not to exceed five thousand dollars and the value of the subject motor vehicle or stated claim for each violation.

Applicable in Ohio

Any person who, with intent to defraud or knowing that he/she is facilitating a fraud against an insurer, submits an application or files a claim containing a false or deceptive statement is guilty of insurance fraud.

Applicable in Oklahoma

WARNING: Any person who knowingly and with intent to injure, defraud or deceive any insurer, makes any claim for the proceeds of an insurance policy containing any false, incomplete or misleading information is guilty of a felony.

APPENDIX G

OSHA 300

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year _______

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an injury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name ______________________

City ______________________ State ______________________

Identify the person			Describe the case			Classify the case											
						CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death	Days away from work	Remained at work: Job transfer or restriction	Remained at work: Other record-able cases	Away From Work (days)	On job transfer or restriction (days)	(M) Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
					Page totals	0	0	0	0	0	0	0	0	0	0	0	0
												Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
												(1)	(2)	(3)	(4)	(5)	(6)

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year ______

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	0	0
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0	0
(K)	(L)

Injury and Illness Types

Total number of…
(M)

(1) Injury	0	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Establishment information

Your establishment name ______

Street ______

City ______ State ______ Zip ______

Industry description (e.g., Manufacture of motor truck trailers)

______

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)

__ __ __ __

OR North American Industrial Classification (NAICS), if known (e.g., 336212)

__ __ __ __ __ __

Employment information

Annual average number of employees ______

Total hours worked by all employees last year ______

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

______ Company executive ______ Title

______ Phone ______ Date

OSHA's Form 301
Injuries and Illnesses Incident Report

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

This *Injury and Illness Incident Repor* t is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the *Log of Work-Related injuries and Illnesses* and the accompanying *Summary*, these forms help the employer and OSHA develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers' compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to Public Law 91-596 and 29 CFR 1904, OSHA's recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains

If you need additional copies of this form, you may photocopy and use as many as you need.

Completed by ____________________

Title ____________________

Phone ____________ Date ____________

Information about the employee

1) Full Name ____________________

2) Street ____________________

City ____________ State ______ Zip ______

3) Date of birth ____________________

4) Date hired ____________________

5) ☐ Male
☐ Female

Information about the physician or other health care professional

6) Name of physician or other health care professional
____
____

7) If treatment was given away from the worksite, where was it given?

Facility ____________________

Street ____________________

City ____________ State ______ Zip ______

8) Was employee treated in an emergency room?
☐ Yes
☐ No

9) Was employee hospitalized overnight as an in-patient?
☐ Yes
☐ No

Information about the case

10) Case number from the Log ________ *(Transfer the case number from the Log after you record the case.)*

11) Date of injury or illness ________

12) Time employee began work ________ AM/PM

13) Time of event ________ AM/PM ☐ Check if time cannot be determined

14) **What was the employee doing just before the incident occurred?** Describe the activity, as well as the tools, equipment or material the employee was using. Be specific. Examples: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."

15) **What happened?** Tell us how the injury occurred. Examples: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."

16) **What was the injury or illness?** Tell us the part of the body that was affected and how it was affected; be more specific than "hurt", "pain", or "sore." Examples: "strained back"; "chemical burn, hand"; "carpal tunnel syndrome."

17) **What object or substance directly harmed the employee?** Examples: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.

18) **If the employee died, when did death occur?** Date of death

APPENDIX H

Weekly Safety Report

APPENDIX H

WEEKLY SAFETY REPORT

Job Name______________________________ Job#______________________

Week of: **Days Without Lost Time Injury:**

Describe any recordable incidents or accidents:

What actions were taken to prevent such incidents or accidents from occurring again?

Was training conducted addressing the incident? Y N What date?___

What level of PPE is currently in place?

Has PPE been upgraded or downgraded?

Have Perimeter Air Monitoring action limits been exceeded:

What action was taken to mitigate the exceedance?

Have personal air monitoring limits been exceeded:

What actions were taken?

List any problems with air monitoring equipment:

Write a summary of work completed during the week:

Write a summary of proposed work for the coming week:

Summarize any safety issues that are outstanding:

HSO Name: ________________________ HSO Signature: _______________________

APPENDIX I

Job Safety and Health Protection Poster

You Have a Right to a Safe and Healthful Workplace.

IT'S THE LAW!

- You have the right to notify your employer or OSHA about workplace hazards. You may ask OSHA to keep your name confidential.
- You have the right to request an OSHA inspection if you believe that there are unsafe and unhealthful conditions in your workplace. You or your representative may participate in the inspection.
- You can file a complaint with OSHA within 30 days of discrimination by your employer for making safety and health complaints or for exercising your rights under the *OSH Act.*
- You have a right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violation.
- Your employer must correct workplace hazards by the date indicated on the citation and must certify that these hazards have been reduced or eliminated.
- You have the right to copies of your medical records or records of your exposure to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.

The *Occupational Safety and Health Act of 1970 (OSH Act),* P.L. 91-596, assures safe and healthful working conditions for working men and women throughout the Nation. The Occupational Safety and Health Administration, in the U.S. Department of Labor, has the primary responsibility for administering the *OSH Act.* The rights listed here may vary depending on the particular circumstances. To file a complaint, report an emergency, or seek OSHA advice, assistance, or products, call 1-800-321-OSHA or your nearest OSHA office: • Atlanta (404) 562-2300 • Boston (617) 565-9860 • Chicago (312) 353-2220 • Dallas (214) 767-4731 • Denver (303) 844-1600 • Kansas City (816) 426-5861 • New York (212) 337-2378 • Philadelphia (215) 861-4900 • San Francisco (415) 975-4310 • Seattle (206) 553-5930. Teletypewriter (TTY) number is 1-877-889-5627. To file a complaint online or obtain more information on OSHA federal and state programs, visit OSHA's website at **www.osha.gov**. If your workplace is in a state operating under an OSHA-approved plan, your employer must post the required state equivalent of this poster.

1-800-321-OSHA

www.osha.gov

U.S. Department of Labor • **Occupational Safety and Health Administration** • **OSHA 3165**

APPENDIX J

Community Air Monitoring Program

September 29, 2015

SITE-SPECIFIC COMMUNITY AIR MONITORING PLAN

Paragon Pain and Varnish Corp. Site
5-43 to 5-49 46th Avenue and
45-38 to 45-40 Vernon Boulevard

Prepared for

VERNON 4540 REALTY, LLC
45 Carlton Avenue
Larchmont, **New York 10538**

ROUX ASSOCIATES, INC.

Environmental Consulting & Management

209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600

2051.0001Y.180/RAWP/CAMP-CV

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APPENDICES

1.0 INTRODUCTION

Remedial Engineering, P.C and Roux Associates, Inc. (collectively referred to herein as Roux Associates), on behalf of VERNON 4540 L.L.C. (the "Applicant"), have developed a project specific Community Air Monitoring Plan (CAMP) to implement real time monitoring at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard (Tax Block 26, Lot 4) in Long Island City, State of New York (Site) during soil excavation/foundation construction activities. Based on the results of previous investigations conducted, volatile organic compounds (VOCs) and particulates have been identified as contaminants of potential concern (COPC). Additionally, residual petroleum (and associated VOCs) poses the potential for nuisance odors to adjacent offsite receptors. The monitoring program will screen and analyze ambient air for total VOCs and particulate concentrations at the downwind perimeter of the Site. The monitoring program will be implemented at all times during excavation of the Site and while performing any support of excavation and excavation construction activities that could potentially cause vapors or particulates to migrate towards the Site perimeter. The CAMP is designed to provide a measure of protection for the downwind community and onsite workers not directly involved with the subject work activities from potential airborne contaminant releases as a direct result of remedial and construction activities. This plan is consistent with the New York State Department of Health's (NYSDOH) Generic Community Air Monitoring Plan guidance document.

Roux Associates shall be responsible for implementation of the CAMP and will have direct and constant communication with all components of the remediation team in order to effectively and instantaneously initiate the necessary onsite controls to prevent and/or minimize offsite migration of fugitive dust or air.

Given the Site-specific characteristics, it is expected that the odor threshold will be lower than the minimum allowable VOC air concentrations. As such, primary emphasis will be placed on odor management as part of the CAMP and Site Operations Plan (SOP) implementation. The suppression techniques discussed in Section 1.4 addresses not only VOCs and particulates, but odors as well. This comprehensive odor management approach will minimize the potential for exceedance of the VOC action levels.

Additionally, a significant portion of the intrusive activities will be conducted in a relatively deep excavation with substantial work below the water table in moist soil. This high moisture content will provide for "natural" dust suppression in these areas. The implementation of direct loading and offsite transport of excavated soils will also minimize particulate issues.

The specifics of the CAMP are presented in the following four (4) sections:

- 1.1 VOC Monitoring Approach
- 1.2 Particulate Monitoring Approach
- 1.3 Meteorological Monitoring Approach
- 1.4 Available Suppression Techniques

1.1 VOC Monitoring Approach

Due to the relatively small size of the Site, it is not practical to monitor individual work areas within the Site. Thus, total VOC concentrations in air will be monitored continuously at the upwind and downwind perimeters of the Site during all ground intrusive activities. The VOC monitoring equipment will be located at temporary monitoring stations that will be established daily based on Site logistics and weather conditions. The monitoring work will be conducted using MiniRAE 3000 portable VOC monitors, or similar type monitors, for all VOC monitoring. The equipment will be calibrated at least once daily using isobutylene as the calibration gas. One (1) upwind and one (1) downwind monitor will be deployed each day. In addition, one roaming portable VOC monitor will be used to evaluate the VOC concentrations in the neighboring community three times a day during times of active excavation to ensure no potential nuisance odors travel offsite. Each monitoring unit is equipped with an audible alarm to indicate exceedance of the action levels (as defined below and summarized in Table 1).

The equipment is capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

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

- If the ambient air concentration of total VOCs at the downwind perimeter of the Site persists at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of VOCs identified, suppression techniques employed to abate emissions, and monitoring continued. After these steps, work activities can resume if the total organic vapor level at the Site perimeter is below 5 ppm over the background concentration for the 15-minute average. If levels are in excess of 25 ppm above background, identified contributing ground-intrusive activities will be halted and vapor suppression techniques will be evaluated and modified until monitoring indicates VOC levels at the Site perimeter are below 5 ppm over background. Once VOC levels are below 5 ppm at the Site perimeter, work will resume with continued monitoring.

All 15-minute readings will be recorded and be available for State Regulator (NYSDEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will be recorded. If an exceedance of the action level occurs, an Action Limit Report will be completed, identifying the monitoring device location, the measured VOC level, the activity causing the exceedance, meteorological conditions, and the corrective actions taken, as provided in Appendix A. Additionally, the NYSDEC and NYSDOH will be notified within 24 hours of the VOC Action Limit Report generation. Daily monitoring equipment locations and meteorological conditions will also be documented on the daily CAMP Monitoring Location Plan, as shown in Appendix B. All documentation will be kept on file at the Site. Chemical specific air monitoring using similar methods and procedures as outlined for the VOCs baseline sampling will be conducted if perimeter action levels for VOCs are regularly exceeded or nuisance odors (as defined by offsite odor complaints) are prevalent offsite.

1.2 Particulate Monitoring, Response Levels and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the Site at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action levels (as defined below and summarized in Table 1). Monitoring equipment will be MIE Data Ram monitors or equivalent. A minimum of one (1) upwind and one (1) downwind monitor will be deployed each day, equipped with an omni-directional sampling inlet and a PM-10 sample head. The data logging averaging period will be set to 15-minutes with time and date stamp recording. Alarm averaging will be set at 90 micrograms per cubic meter ($\mu g/m^3$) above the average background concentration per 15-minute period. This setting will allow proactive evaluation of Site conditions prior to reaching Action Levels of 100 $\mu g/m^3$ above background. The equipment will be outfitted with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. The monitoring will be used to compare values to the following:

- If the downwind PM-10 particulate level is 100 $\mu g/m^3$ greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the Site, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the Site.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work must be stopped, a re-evaluation of activities initiated, and dust suppression techniques modified. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

All 15-minute readings will be recorded and be available for State Regulator (NYSDEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will be recorded. If an exceedance of the action level occurs, an Action Limit Report will be completed, identifying the monitoring device location, the measured particulate concentration, the activity causing the exceedance, meteorological conditions, and the corrective actions taken, as provided in Appendix A. Daily monitoring equipment locations and meteorological conditions will also be documented on the daily CAMP Monitoring Location Plan, as shown in Appendix B. All documentation will be kept on file at the Site.

1.3 Meteorological Monitoring

Meteorological data consisting of wind speed, wind direction, temperature, barometric pressure, and relative humidity will be collected. At a minimum, a full set of meteorological parameters will be measured and recorded at the start of each workday, noon of each workday, and the end of each workday. Wind direction readings will be utilized to position the VOC and particulate monitoring equipment in appropriate upwind and downwind locations. A Davis Corporation wireless instrument station or equivalent will be used to measure and log the meteorological monitoring data.

1.4 Available Suppression Techniques

During all intrusive activities, vapor suppression foam will be applied routinely to areas where there is active excavation and handling or exposure of grossly contaminated odor-producing soils/materials to preemptively mitigate the potential for odors, VOCs, and particulates to be released into the air. Water misting via controlled fire hose and/or dedicated water truck will be utilized as necessary to mitigate the potential for particulate/dust release in non-contaminated Site work areas and roadways. Excavation methods and material staging and loading methods will be continually evaluated and modified (as necessary) to alleviate the potential for odor, VOCs, and particulate releases.

If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any complaints about the project from the local community. Implementation of all odor controls, including the halt of work, will be the responsibility of the Contractor.

1.5 Reporting

All recorded monitoring data will be downloaded and field logged daily, including action limit reports (if any) and daily CAMP monitoring location plans. All records will be maintained onsite for NYSDEC/NYSDOH review. The results of the CAMP monitoring will be submitted to the NYSDEC and NYSDOH in monthly CAMP data summary reports that will contain all of the CAMP data collected during the month, daily monitoring station location maps, and copies of the month’s Action Limit Reports (ALRs) (if any). A description of all CAMP-related activities will also be included in the Monthly Progress Report submitted to the NYSDEC and NYSDOH. Additionally, all CAMP monitoring records will be included in the overall Remedial Action Completion Report that will be submitted to the NYSDEC and NYSDOH. If an ALR is generated due to VOC exceedances, the NYSDEC and NYSDOH will be notified within 24 hours of the exceedance.

Table 1. Action Limit Summary for VOCs and Particulates, 5-43 to 5-49 46th Avenue and 45-38 to 45 40 Vernon Boulevard

Contaminant	Downwind Action Levels*	Action/Response
Volatile Organic Compounds (VOCs) (Monitoring Via Photoionization Detector and Odor Observation)	< 5 ppm	1. Resume work with continuing monitoring.
	5 ppm < level < 25 ppm	1. Work activities must be temporarily halted, source vapors must be identified, suppression techniques employed to abate emissions and monitoring continued. 2. After these steps, if VOC levels (200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or structure, whichever is less) is below 5 ppm over background, resume work.
	> 25 ppm	1. Identified contributing ground intrusive activities must be halted and vapor suppression techniques must be evaluated and modified until monitoring indicates VOC levels below the action level. 2. After these steps, if VOC levels (half the distance to the nearest potential receptor or structure) are below 5 ppm over background, resume work.
Particulates (Monitoring Via Particulate Meter and Observation)	< 100 ug/m^3	1. If dust is observed leaving the work area, then dust control techniques must be implemented or additional controls used.
	100 ug/m3 < level < 150 ug/m^3	1. Employ dust suppression techniques. 2. Work may continue with dust suppression techniques provided that downwind PM-10 particulate concentration do not exceed 150 ug/m^3 above the upwind level and provided that no visible dust is migrating from the work area.
	> 150 ug/m^3	1. STOP work 2. Re-evaluate activities, modify dust suppression techniques. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

* 15-minute running time-weighted average (twa) above background. Particulate readings are based on the respirable (PM-10) fraction. Background readings are taken at upwind locations relative to Work Areas or Exclusion Zones.

COMMUNITY AIR MONITORING PLAN

APPENDIX A

Action Limit Report

ACTION LIMIT REPORT

Project Location: 5-43 to 5-49 46th Avenue and 45-38 to 45 40 Vernon Boulevard

Date: ______________________ Time: ______________________

Name: ____

Contaminant: PM-10: ______________ VOC: ______________________

Wind Speed: ______________ Wind Direction: ______________________

Temperature: ______________ Barometric Pressure: ______________________

DOWNWIND DATA

Monitor ID #: ______________ Location:______________ Level Reported: __________

Monitor ID#: ______________ Location:______________ Level Reported: __________

UPWIND DATA

Monitor ID #: ______________ Location:______________ Level Reported: __________

Monitor ID#: ______________ Location:______________ Level Reported: __________

BACKGROUND CORRECTED LEVELS

Monitor ID #: ______________ Location:______________ Level Reported: __________

Monitor ID#: ______________ Location:______________ Level Reported: __________

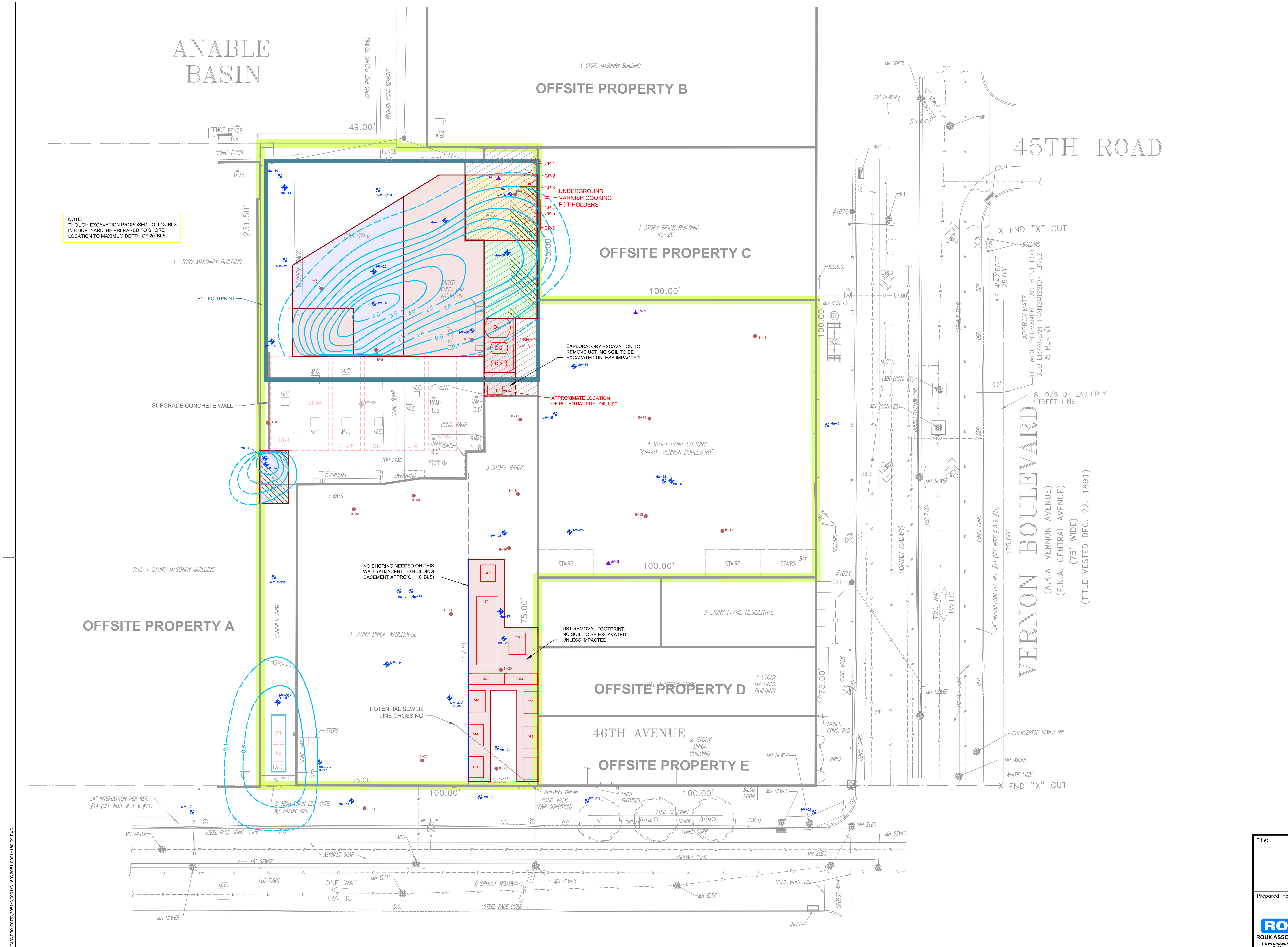
ACTIVITY DESCRIPTION

CORRECTIVE ACTION TAKEN

COMMUNITY AIR MONITORING PLAN

APPENDIX B

Daily CAMP Monitoring Location Plan



LEGEND

- SOIL BORING LOCATION AND DESIGNATION
- MONITORING WELL LOCATION AND DESIGNATION
- DESTROYED MONITORING WELL LOCATION AND DESIGNATION
- SOIL VAPOR SAMPLE LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID
- APPROXIMATE LINE OF EQUAL LNAPL THICKNESS (FEET)
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK (UST)
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK (UST)
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT HOLDER
- CONCRETE VAULT (REMOVED)
- TO BE DEMOLISHED DURING RA
- BACKFILL WITH CLEAN STONE
- PROPOSED 9' BLS EXCAVATION FOOTPRINT
- PROPOSED 13' BLS EXCAVATION FOOTPRINT
- PROPOSED 19' BLS EXCAVATION FOOTPRINT
- PROPOSED 20' BLS EXCAVATION FOOTPRINT
- TENT BOUNDARY (APPROXIMATE)

NOTES

1. MW–6 AND MW–7 ARE ONE–INCH DIAMETER MONITORING WELLS AND WERE THEREFORE NOT USED TO GENERATE LNAPL CONTOURS.
2. ALTHOUGH MONITORING WELL MW–38 WAS NOT GAUGED DURING THE JANUARY 9, 2015 GAUGING EVENT LNAPL HAS NOT BEEN DETECTED IN MW–38 DURING SUBSEQUENT GAUGING EVENTS.

GARAGE TANK INFO

TANK	DEPTH TO BOTTOM (FT)	REPORTED CAPACITY (GAL)
GT–1	10	20,000
GT–2	10	<1,000
GT–3	10	<1,000
GT–4	10	<1,000
GT–5	10	<1,000
GT–6	10	<1,000
GT–7	10.08	<1,000
GT–8	10	<1,000
GT–9	10.21	<1,000
GT–10	10	<1,000
GT–11	10.01	<1,000
D–1	~10	<1,000
D–2	~10	<1,000
D–3	~10	<1,000
F–1	~10	<1,000

Title:

PROPOSED REMEDIAL ACTION WORK PLAN EXCAVATION

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: K.C.	Date: 28SEP15	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	1
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.09.DWG		

APPENDIX D

Quality Assurance Project Plan

February 7, 2013

QUALITY ASSURANCE PROJECT PLAN

Former Paragon Paint and Varnish Company
Manufacturing Facility
BCP Site Number C241108
5-43 to 5-49 46th Avenue and
45-38 Vernon Boulevard to
45-40 Vernon Boulevard
Long Island City, New York

Prepared for

VERNON 4540 REALTY, LLC
45 Carleon Avenue
Larchmont, New York 10538

ROUX ASSOCIATES, INC.

Environmental Consulting & Management

ROUX

209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600

2051.0001Y.105R/QAPP-CV

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TABLE

1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) has been prepared to describe the measures that will be taken to ensure that the data generated during performance of the Remedial Investigation (RI) at the property identified as the former Paragon Paint manufacturing facility located at 5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard, in Long Island City (Site) are of sufficient quality to meet project-specific data quality objectives (DQOs). The QAPP was prepared in accordance with the guidance provided in New York State Department of Environmental Conservation (NYSDEC) Technical Guidance DER-10 (Technical Guidance for Site Investigation and Remediation), the Brownfield Cleanup Program Guide and the United States Environmental Protection Agency's (USEPA's) Guidance for the Data Quality Objectives Process (EPA QA/G-4).

2.0 PROJECT OBJECTIVES, AND SCOPE

As described in the RI Work Plan, the objectives of the RI are to further characterize the nature and extent of the light non-aqueous phase liquid (LNAPL), and soil and groundwater impacts. In order to achieve project objectives, Roux Associates has developed a scope of work that includes sampling of soil and groundwater. A brief overview of each element of the RI scope of work is provided below. RI sampling locations are shown in Figure 3 of the RI Work Plan.

2.1 Soil

Samples of soil will be collected and analyzed at a minimum of 28 locations for the following analytes:

- Target Compound List (TCL) volatile organic compounds (VOCs) with a library search (VOCs+10) using United States Environmental Protection Agency (USEPA) Method 8260;
- TCL semivolatile organic compounds (SVOCs) with a library search (SVOCs+20) using USEPA Method 8270;
- Target Analyte List (TAL) metals using USEPA Method 6010; and
- Provided the historic data is verified as described in Section 3.2.1 of the RIWP, a portion (25%) of all soil samples collected will also be analyzed for TCL pesticides (USEPA Method 8081) and TCL polychlorinated biphenyls (PCBs) (USEPA Method 8082) (all samples will be analyzed for PCBs and pesticides in the event the historic data could not be verified).

2.2 Groundwater

There are 13 existing monitoring wells at the Site, over the course of the RI, nine additional monitoring wells will be installed (four existing wells will also be replaced). All monitoring wells will be gauged using an electronic interface probe capable of detecting light non-aqueous phase liquid (LNAPL) with an accuracy of +/- 0.01 feet. Groundwater samples will be collected from those wells that do not exhibit any LNAPL at the time of gauging.

To ensure groundwater samples collected are representative of the conditions in the surrounding aquifer, monitoring wells will be purged prior to sample collection using low flow sampling procedures as outlined in USEPA document titled “Low Stress (Low Flow) Purging and Sampling Procedures for the Collection of Groundwater Samples From Monitoring Wells” (USEPA, 1996).

Samples will be analyzed for TCL VOCs with a library search (VOC+10) (USEPA Method 8260) TCL SVOCs with a library search (SVOC+20) (USEPA Method 8270) and TAL metals (USEPA Method 6010). Additionally, provided the historic data is verified as described in Section 3.2.1 of the RIWP a portion (25%) of the groundwater samples collected will also be analyzed for TCL pesticides (USEPA Method 8081) and TCL PCBs (USEPA Method 8082). In the event that the historic data is not verified all samples will be analyzed for PCBs and pesticides. Field parameters, including temperature, pH, conductivity, redox potential, dissolved oxygen, and turbidity will also be measured.

2.3 Light Non-aqueous Phase Liquid

LNAPL samples will be collected from a all USTs and monitoring wells to be analyzed by a laboratory for fingerprinting to determine the type and characteristics of the LNAPL. This sampling may consist of viscosity, density, corrosivity, solubility and fingerprinting among others. This information will be used to develop the RAWP, and will assist in the designing of a LNAPL recovery system.

3.0 PROJECT ORGANIZATION

The overall management structure and a general summary of the responsibilities of project team members are presented below. Professional profiles are included in Appendix E of the Remedial Action Work Plan.

Project Manager

Joseph D. Dumunico of Roux Associates will serve as Project Manager. The Project Manager is responsible for defining project objectives and bears ultimate responsibility for the successful completion of the investigation. This individual will provide overall management for the implementation of the scope of work and will coordinate all field activities. The Project Manager is also responsible for data review/interpretation and report preparation. Activities of the Project Manager are supported by the Project Quality Assurance Officer.

Field Team Leader

Richard Maxwell of Roux Associates will serve as the Field Team Leader. The Field Team Leader bears the responsibility for the successful execution of the field program, as scoped in the RI Work Plan and the Field Sampling Plan (FSP). The Field Team Leader will direct the activities of all technical staff in the field as well all subcontractors. The Field Team Leader will also assist in the interpretation of data and in report preparation. The Field Team Leader reports to the Project Manager.

Laboratory Project Manager

The laboratory Project Manager is responsible for sample container preparation, sample custody in the laboratory, and completion of the required analysis through oversight of the laboratory staff. The Laboratory Project Manager will ensure that quality assurance procedures are followed and that an acceptable laboratory report is prepared and submitted. The Laboratory Project Manager reports to the Project Manager or the Field Team Leader.

Quality Assurance Officer

Wai Kwan, PhD. of Roux Associates will serve as the Quality Assurance Officer (QAO) for this project. The QAO is responsible for conducting reviews, inspections, and audits to ensure that the data collection is conducted in accordance with the FSP and QAPP. The QAO’s responsibilities range from ensuring effective field equipment decontamination procedures and proper sample collection to the review of all laboratory analytical data for completeness and usefulness. The QAO reports to the Project Manager and makes independent recommendations to the Field Team Leader.

Field Technical Staff

Field technical staff consists of scientists, engineers, Geoprobe operators and technicians who will perform sampling activities. The field technical staff will also be responsible for the preparation of any required field documentation. The field technical staff reports to the Field Team Leader.

4.0 SAMPLING PROCEDURES

Detailed discussions of sampling, decontamination, and sample handling procedures are provided in the FSP (Appendix B of the RI Work Plan).

5.0 QUALITY ASSURANCE/QUALITY CONTROL

The primary intended use for the RI data is to characterize Site conditions and determine if remediation needs to be undertaken at the Site. The primary DQO of the soil, groundwater, sampling programs, therefore, is that data be accurate and precise, and hence representative of the actual Site conditions. Accuracy refers to the ability of the laboratory to obtain a true value (i.e., compared to a standard) and is assessed through the use of laboratory quality control (QC) samples, including laboratory control samples and matrix spike samples, as well as through the use of surrogates, which are compounds not typically found in the environment that are injected into the samples prior to analysis. Precision refers to the ability to replicate a value, and is assessed through both field and laboratory duplicate samples.

Sensitivity is also a critical issue in generating representative data. Laboratory equipment must be of sufficient sensitivity to detect target compounds and analytes at levels below NYSDEC standards and guidelines whenever possible. Equipment sensitivity can be decreased by field or laboratory contamination of samples, and by sample matrix effects. Assessment of instrument sensitivity is performed through the analysis of reagent blanks, near-detection-limit standards, and response factors. Potential field and/or laboratory contamination is assessed through use of trip blanks, method blanks, and equipment rinse blanks (also called "field blanks").

Table 1 lists the field and laboratory QC samples that will be analyzed to assess data accuracy and precision, as well as to determine if equipment sensitivity has been compromised.

All RI "assessment" analyses (i.e., TCL VOCs, SVOCs, pesticides/PCBs; and TAL metals) will be performed in accordance with the NYSDEC Analytical Services Protocol (ASP), using USEPA SW-846 methods. The laboratory selected to analyze the field samples (soil and groundwater) collected during the RI shall maintain a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) Contract Laboratory Protocol (CLP) certification for each of the "assessment" analyses listed in Section 2.0.

All laboratory data generated for soil and groundwater samples are to be reported in NYSDEC ASP Category B deliverables and will be delivered to NYSDEC in electronic data deliverable (EDD) format as described on NYSDEC's website (http://www.dec.ny.gov/chemical/62440.html). A Data Usability Report will be prepared by an independent party meeting the requirements in Section 2.2(a)1.ii and Appendix 2B of DER-10 for all data packages generated for the RI.

Table 1. Field and Laboratory QC Summary

QC Check Type	Minimum Frequency	Use
Field QC		
Duplicate	1 per matrix per SDG*	Precision
Trip Blank	1 per VOC cooler	Sensitivity
Equipment Rinse Blank	1 per day	Sensitivity
Laboratory QC		
Laboratory Control Sample	1 per matrix per SDG	Accuracy
Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate**	1 per matrix per SDG	Accuracy/Precision
Surrogate Spike	All organics samples	Accuracy
Laboratory Duplicate	1 per matrix per SDG	Precision
Method Blank	1 per matrix per SDG	Sensitivity

Notes:
* SDG - Sample Delivery Group - Assumes a single extraction or preparation
** Provided to lab by field sampling personnel

APPENDIX E

Professional Profiles

Charles J. McGuckin, P.E.
Principal Engineer

Technical Specialties:
Engineering design of soil and groundwater remediation systems. brownfields cleanup plans, stormwater studies and engineered natural treatment systems.

Experience Summary:
Twenty five years of experience: Principal, Senior and Project Engineer with Roux Associates; President of Remedial Engineering, P.C.; and Design Engineer at Dvirka and Bartilucci Consulting Engineers.

Credentials:
B.C.E., Civil Engineering, University of Delaware, 1987.
M.B.A., Management, Adelphi University, 1992.
Professional Engineer: New York, New Jersey, Pennsylvania, Rhode Island, Connecticut, Vermont, Virginia, North Carolina, Ohio and Michigan

Professional Affiliations:
American Society of Civil Engineers.
WEF Hazardous Waste Committee, 1996 – 1998.

Publications:
Assessment and Remediation of Off-Spec Asphalt Disposal Areas - Co-authored, Contaminated Soils, Volume 3, Amherst Scientist Publishers, 1998.
Use of a Subsurface Flow Constructed Wetlands for Collection and Removal of Water Containing BTEX, Co-authored, Proceedings of the 2000 Petroleum Hydrocarbons and Organic Chemicals in Groundwater Conference, National Ground Water Association.

Key Projects:

- Principal Engineer providing expert settlement support services to a county municipality in New York State. The case involved an EPA Order for underground storage tank (UST) compliance for over 50 county operated facilities with over 125 USTs. The project involved the field inventory of the USTs at each facility and development of both Interim and final compliance plans to comply with EPA, NYSDEC and local UST regulations. Detailed cost estimates were prepared for multiple scenarios for upgrading USTs including tightness testing, manway repairs, leak detection and overfill protection monitoring systems, UST removal and replacement, and new piping. The upgrade evaluation and negotiations included incorporation of Supplemental Environmental Project (SEPs) in accordance with EPA requirements. SEPs included centralized monitoring systems for leak detection and inventory control.
- Principal Engineer for the preparation of an expert report for a former valve manufacturing facility in Coxsackie, New York. The report was prepared on behalf of counsel for a Contractor who performed remedial construction work for this State "Superfund" site. The actions were against the holder of the construction contract, NYSDEC, and their engineering consultant. The remedial action included building demolition, remediation of soils impacted by chlorinated VOCs, removal of DNAPL source areas, treatment of excavated soils using low temperature thermal desorption, and consolidation and capping of metals impacted soils. The expert project work involved a detailed review of the RI/FS, remedial action plans and construction progress documentation to formulate opinions as to the industry acceptable accuracy of the Contract Documents.
- Senior Engineer for the performance of a stormwater runoff evaluation for a manufacturing facility in Watertown, New York. Roux Associates was retained as third party to evaluate the drainage design and construction elements for an industrial landfill cap. The evaluation was performed for the facility owner in support of potential litigation arising from onsite building flooding incidents following a severe snow and rain storm event. The scope of work included an evaluation of the existing onsite storm sewer system capacity, calculation of runoff flow rates for the 300-acre contributing area, review of landfill cap surface drainage design, review of erosion control measures implemented during construction, and analysis of specific flooding incident causes. The runoff analyses were performed using the TR 55 Method for three conditions: pre-capped, capping under construction prior to establishment of vegetation, and final vegetated cap design. Recommendations were made to improve the site drainage including design of surface drainage swales, temporary berms and sediment traps during construction and modification of snow handling practices.
- Project Engineer for the evaluation of expected remedial costs for nine hazardous waste sites, two of which are federal superfund sites. The evaluation of both single and multiple PRP sites was performed to identify costs for an insurance claim. The expected remedial costs for nine sites, which include landfills or facility surface impoundments, totaled approximately $65 million. Remedial plans evaluated for multiple site operable units included groundwater pump and treat, alternative water supply systems, soil/sludge in situ solidification and treatment, and wetlands restoration. Additional work included evaluating invoices for site work previously performed and allocating expenses into their appropriate operable unit and work type, i.e., defense or indemnity.
- Principal Engineer for preparation of a site management plan for redevelopment of a former watch case factory in Sag Harbor, New York. The primary engineering controls for the former factory conversion to a residential building consisted of a vapor barrier and an active subslab depressurization system (SSDS) to address chlorinated VOCs. The SSDS system was complicated due to the existing 100 year old structure. A unique raised floor approach was designed to allow for the SSDS installation. The system design, approved by NYSDEC and NYSDOH includes multiple legs, dual blowers, low vacuum alarms and monitoring points.
- Principal Engineer for the Remedial Action Work Plan (RAWP) for redevelopment of a shopping center in the Bronx, New York. The RAWP elements included soil and groundwater management plans, stormwater management, air monitoring and vapor mitigation systems. To address vapor intrusion, active subslab depressurization systems were designed for two pad buildings. One system for a new retail building construction and one retro-fit system for an existing building to be used as a restaurant. Closure reports were prepared and certified documenting all remediation work and approved by NYC Mayor's Office of Environmental Remediation (OER).
- Principal Engineer for the preparation of a preliminary remedial design for the remediation and restoration of a pond and surface water tributaries to Canaan Lake that have been impacted from leachate generated from an upgradient former municipal landfill located in Holtsville, New York. Completed a preliminary remedial design for the construction of a compost-based permeable reactive barrier for the removal and treatment of leachate prior to discharge to the surface water, followed by restoration of the surface water body and surrounding wetlands. The project included development of a long term remedial strategy to reduce rainfall infiltration into the landfill and minimize leachate generation. Current plans to reduce rainfall infiltration include the planting of 3,250 hybrid poplars, regrading and lining of drainage swales, and the

Charles J. McGuckin, P.E.
Principal Engineer

resurfacing of low lying areas consistent with recreational facilities.

- Principal engineer for the preparation of the feasibility study, IRM plans, and remedial design/remedial action plans for a 40-acre former manufacturing facility in Rensselaer, New York. IRM Soil remediation included excavation of over 10,000 cubic yards of CVOC and metals source material for disposal at multiple facilities based on waste characteristics. Basement cleaning was performed in three large buildings to remove accumulated process sludges. Lagoon closure plans included sediment removal, dewatering, soil washing, and soil capping. The final remedy for the site includes a groundwater perimeter containment trench and 40 gpm treatment system for metals and VOCs and a 9-acre vegetated cap for a former landfill.
- Principal Engineer for final capping elements and wetlands restoration work and completion of the Final Engineering Report for an inactive hazardous waste site in Syracuse, New York. The project included onsite consolidation of lead impacted waste; 7-acre landfill cap with vegetated layer, cover soil, and geomembrane; stormwater runoff controls; reconstruction of waste water ponds; and an 8-acre wetland restoration. An O &M Plan was prepared and implemented consisting of groundwater, surface water and landfill gas monitoring, and annual cap and wetland inspections.
- Principal Engineer for the feasibility studies and remedial action work plans for multiple operable units of a large railyard located in Sunnyside, Queens, New York under the NYSDEC Inactive hazardous waste program. For the former engine house and maintenance area unit, pre-design studies included product plume thickness data collection and modeling, *ex situ* biopiles treatment, in situ enhanced bioremediation, and in situ chemical oxidation. The final design consisted of decontamination and removal of structures, excavation of hot spot soils for PCBs and lead, UST closures, a dual phase high vacuum extraction system and *in situ* bioremediation.
- Principal Engineer responsible for the preparation of the remediation completion report at Captain's Cove former municipal landfill State Superfund Site located in Glen Cove, New York. This work has been performed in accordance with Title 3 of the NYS Environmental Quality Bond Act under contract to the City of Glen Cove. Design elements included excavation plans, radiological waste monitoring, demo debris and waste separation and screening, dewatering water management, waste disposal, and site restoration. Additional work included the delisting of a six-acre "clean" portion of the site to allow the development of a ferry terminal and esplanade and development of alternative cleanup standards consistent with future site uses. Site remediation will accommodate site redevelopment as a commercial waterfront and operating ferry service and seaport area.
- Principal Engineer for the remediation of a former Manufactured Gas Plant (MGP) facility in Brooklyn, NY, including oversight of the excavation of both the former gasholders, and adjacent contaminated hotspots requiring offsite thermal desorption of over 30,000 tons of coal tar impacted soil. Directed the Community Air Monitoring Program (CAMP) specific to the MGP impacted soil removal, as required by both New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH). Remedial activity met all substantive requirements of the NYSDEC approved Remedial Action Work Plan for the Site. The remedy included design of a passive subsurface vapor monitoring/recovery system for a 500,000 sq.ft. retail structure in Brooklyn, NY. The system design integrated a perforated piping system complemented by a protective vapor barrier below the structural floor slab to monitor and mitigate volatile organic compound vapors. Multiple vapor barrier options were evaluated to determine the optimum design based on the site conditions.
- Principal Engineer for the preparation of the remedial action work plan for an 11-acre former Department of Defense owned Site that manufactured airplane parts along Hempstead Harbor in Manorhaven, New York. The project is regulated under the NYSDEC Voluntary Cleanup Program. The remedial design consisted of both soil vapor extraction/air sparging and in situ enhanced bioremediation systems for Site groundwater impacted by chlorinated VOCs. The final remedial design and site management plan are expected to include soil capping, vapor barriers and passive ventilation systems to be incorporated into a residential redevelopment with waterfront access.
- Project Engineer for the design and construction management of a 600 gpm groundwater extraction and treatment system to prevent offsite migration at a petroleum storage and pipeline transfer facility in Providence, Rhode Island. The treatment system was designed to remove iron, BTEX, and naphthalene from the groundwater to below surface water discharge standards for the Providence River. The system processes consisted of equalization, aeration, de-aeration, flocculation, clarification, air stripping, dual media filtration, granular activated carbon adsorption (liquid and vapor phase), and sludge thickening and dewatering. The system included an outfall diffuser designed in accordance with the CORMIX computer model.
- Senior Engineer responsible for the design, construction management, and O&M of a 60,000-gpd constructed wetlands treatment system for a former manufacturing facility in Virginia. The 16-acre treatment system was designed within an existing phragmites wetland to remove zinc and iron from landfill leachate prior to discharge to an adjacent creek. The treatment system consisted of alkalinity producing cells, oxic ponds, compost and limestone berms, anaerobic cells and aerobic cells. The design included a 400-foot reinforced earthen dike together with hydraulic control structures and piping to maintain cell water levels and flow rates. The system also includes a pump station and force main for both effluent discharge and irrigation purposes. Joint wetlands and local permit approvals were obtained for the project.
- Senior Engineer for the performance of a feasibility study and remedial design for the closure of a concrete oil/water separator filled with refinery sludge and demolition materials impacted with lead at a former refinery in Providence, Rhode Island. Remedial alternatives were developed and evaluated including capping and containment using a perimeter slurry wall, sheet piling or concrete wall sealing; excavation and disposal; and in situ solidification. The capping and containment using a slurry wall alternative was selected for implementation of the remedial design. The design consisted of removal and replacement of existing monitoring wells, sealing of separator wall openings, a 2-acre multi-layer cap, a 1200-foot long by 30-foot deep soil-bentonite slurry wall, and a perimeter drainage swale. The multi-layer cap included a 40-mil HDPE geomembrane and a geosynthetic clay liner. The slurry wall was keyed into the existing clay confining layer beneath the separator. The design incorporated disposal of an additional 10,000 cubic yards of petroleum impacted soil under the cap.
- Principal Engineer for the preparation of field implementation plans, construction monitoring, and Engineers Certification Report for a former manufactured gas Plant (MGP) site in

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Manhattan, New York. The site was one of the first projects completed under the NYS Brownfields Cleanup Program. The remedy included soil excavation and offsite thermal treatment, a sheet pile barrier wall, a vapor barrier and basement ventilation system. A comprehensive air monitoring program was conducted due to the concerns over coal tar residue emissions and odors on the surrounding community. The remedy was incorporated into the design and construction of the headquarters office building of an international media company.

- Principal Engineer for the management of a soil and groundwater remediation system for a nationwide overnight delivery distribution center in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. A risk-based remedial approach that called for the remediation of "hot spot" source area soils, and mass-reduction of VOCs was successfully utilized for the Site. As a result, the focus of remediation was on reducing the mass of VOCs in on-site groundwater to a level where natural attenuation would be effective in remediation of VOCs. To address the contamination in the source area, a soil vapor extraction (SVE) and air sparge (AS) system consisting of 8 SVE wells and 17 AS wells was designed, constructed, operated and maintained for a period of approximately 3 years. Permanent shutdown of the system was approved by the NYSDEC.
- Senior Engineer for the design and construction management of a soil remediation and stormwater management project at a 16-acre former pesticide warehouse facility in Dayton, New Jersey. The Site was redeveloped for storage and trailer parking. The project consisted of consolidation of pesticide contaminated soils; asphalt capping of the 3.5 acre contaminated soils area; stormwater collection, conveyance and detention; and site regrading. The evaluation included TR-55 runoff modeling for pre and post capping and development conditions. The storm sewer system consisted of multiple catch basins, over 2,000 linear feet of reinforced concrete pipe ranging in size from 15 to 30 inches, and a recharge basin. A Soil Erosion and Sedimentation Control Plan and a NJPDES General Permit were prepared for the project.
- Project Principal for the performance of LNAPL remediation studies at the New Jersey Transit former Lake Street Bus Garage in Newark, New Jersey. The studies involved evaluating remedial alternatives for free product recovery, performance of an LNAPL recovery pilot test and cost estimating. A RAWP and engineering design plans were prepared for both the bus garage and the adjacent park properties. The remedy included excavation of the source area, horizontal recovery wells, a vertical recovery trench, *in situ* oxidation injections and product recovery using vacuum extraction.
- Senior Engineer for the performance of a stormwater management analysis for a 28-acre industrial landfill in Virginia. The principal objective of the study was to identify engineering controls to minimize stormwater runoff to a metals contaminated sediment impoundment. The study included TR-55 runoff modeling and storage analyses for multiple detention ponds. Three engineering control alternatives were identified including landfill cap regrading, diversion using berms and swales, and diking and weir raising.
- Senior Engineer for the investigation, design, and construction management of the closure of a 2-acre fire-water supply pond and modification of the stormwater conveyance system at a former manufacturing facility in Williamsburg, Virginia. The investigation phase of the project was focused on determining the sources and loading of metals influent to the pond. Field activities included examination of the existing stormwater drainage system, subwatershed delineation, groundwater monitoring, and installation of automatic stormwater sampling devices. The final design included 400 feet of open concrete channels, 250 feet of culvert replacement, sliplining of 370 feet of 36-inch RCP culvert, reconstruction of five catch basins, placement of 10,000 cubic yards of clay fill within the pond and regrading of existing drainage ditches. Erosion control measures and slope stabilization were also included as well as the design of a special outlet structure for minimizing erosion at the outfall.
- Project Principal for the investigation and closure of five USTs at the New Jersey Transit Broad Street Station site in Summit, New Jersey. Tank sizes ranged from 20,000 to 30,000-gallon capacity. UST closure program completed in accordance with the NJDEP Technical Requirements for Site Remediation. Closure report prepared and submitted to the NJDEP and subsequent issuance of a No Further Action letter from the NJDEP.
- Project Engineer of the underground storage tank (UST) program for a major retail chain store in the New York, New Jersey and Pennsylvania region. Responsibilities included preparation of a UST management plan based on federal, state, and local regulations and costs to prioritize UST maintenance. The tank designs included plans and specifications for the removal and replacement, or upgrading, of USTs to meet regulatory requirements. The engineering design involved fuel requirements for dual heating and back-up generator usage, mechanical pumping equipment and fire wall design.
- Project Engineer for the design and construction management of a 1,000 sq.ft. hazardous and flammable materials storage facility in Syosset, New York. The facility included concrete secondary containment dikes, access ramps, sprinkler system modifications, and lighting. The separate flammable materials area included 2-hour fire rated concrete block walls and doors, ventilation equipment and a fire alarm system. Permitting services were performed for the Nassau County Department of Health, the Nassau County Fire Marshall, and the Building Department.
- Project Engineer for the design of a 2,000 sq.ft. hazardous waste storage facility in Astoria, New York. Prior to construction, demolition of an existing building was required and included removal of asbestos and lead paint. The project included driving treated timber piles and excavation and removal of contaminated soil and groundwater. The structure consisted of a steel frame with a metal standing seam roof system, decorative masonry block walls, and a roll-up door. Temporary and permanent fencing were required along with concrete sidewalk replacement.
- Senior Engineer for the decommissioning of a pharmaceutical facility covering two entire city blocks as a part of a NYSDEC Voluntary Cleanup Agreement in Brooklyn, New York. Responsibilities include technical review of Interim Remedial Measure (IRM) work plans for lead and mercury-contaminated soil excavation and disposal, implementation of these work plans (excavation and offsite disposal), preparation of biddable plans and specifications, review of IRM Closure Reports, and obtaining closure documentation from regulators on a fast track basis to allow redevelopment for a large scale shopping complex and public schools.
- Senior Engineer providing construction management services in support of the BNYCP Cogeneration Facility construction and Brooklyn Navy Yard facility decommissioning. Work included preparation of construction management plans, supervision of soil, concrete, and sediment disposal activities, asbestos surveys, and PCB sampling and analysis work. A NYCDEP wastewater

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discharge permit was prepared for the million gallon per day stream condensate and wastewater backwash flow rate.

- Project Principal for performing remedial alternative cost estimating for a New Jersey Transit site in Montclair, New Jersey, which is to be redeveloped as a firehouse. A cost estimate prepared by another consultant was reviewed as part of the scope of work. The proposed remedial alternative for the site consisted of excavation and disposal of PAH-impacted fill material and capping. The alternative remedy proposed by Roux Associates was a more risk-based approach, resulting in a cost savings of approximately $100,000 for New Jersey Transit.
- Project Engineer for the design and construction management of cap repair and drainage improvement measures for an industrial hazardous waste landfill in Tennessee. Components of the design included replacement of the primary clay cover material, temporary and permanent erosion and sedimentation control measures, and a lined drainage channel to minimize the generation of landfill leachate. The project included the performance of a focused feasibility study to characterize the flow, quality, and treatability of the leachate. A feasibility study was also performed in order to evaluate constructed wetlands remedial technology as a method of effective and economical treatment of leachate.
- Senior Engineer for the remedial design and construction management of a 7-acre off-spec asphalt waste pond at a former refinery in New England. The asphalt material exhibited a low load bearing capacity combined with a viscous, tacky surface. An in situ solidification mix design was developed consisting of liquification using hot water and a 2-stage lime kiln dust reagent injection and mixing step. Gravel was added to the mix when the existing subgrade material was of insufficient bearing capacity. Solidified material was tested for unconfined compressive strength, durability, and TCLP. The final cover material consisted of a 6-inch vegetated layer.
- Principal Engineer for the performance of LNAPL remediation studies for a former bus maintenance facility and a segment of a Metropolitan Subway System in Newark, New Jersey. The studies involved evaluating groundwater and soil monitoring data, performance of LNAPL recovery pilot tests, evaluation of remedial alternatives and cost estimating. Recommendations included the use of mobile high vacuum extraction methods to collect LNAPL while minimizing capital expenditures and permanent low vacuum extraction methods to minimize odors to subway cars and surrounding communities.

Litigation Support Experience

- Project Engineer for the evaluation of remedial investigations and remedial cost estimates for a 30-acre former book publishing facility in Poughkeepsie, New York. The evaluation included the review of Phase I and Phase II investigation reports, remedial investigation (RI) and feasibility study (FS) reports, and the remedial investigation work plan. The findings included the presence of chlorinated volatile organic compounds in the soil and groundwater as well as identification of underground storage tanks. Deficiencies were identified in both the RI and FS reports by comparing with the NYSDEC's required criteria and recommendations were proposed for the RI work plan to further delineate source areas. Based on the remedial investigation review, revised costing assumptions were made and remedial cost estimates were prepared totaling $3.6 million.

Water Treatment Experience:

- Senior Engineer for the engineering design of a 10 gpm groundwater recovery and treatment system at a former tank farm in Rhode Island. The recovery system included a 200-foot slotted HDPE horizontal well, a 400-foot coated concrete swale and curbing, and a series of seepage collection points manifolded to a common receiving structure. The entire system was designed for passive recovery and gravity flow transmission targeting free-product seepage areas. The treatment system consisted of a collection sump retrofitted within an existing separator, a coalescing plate oil/water separator, a surge tank, a bag filter, and carbon adsorption units. The project included a permit modification for discharge to the Providence River.
- Design Engineer for the design and start-up operation of a 2 mgd packed tower aeration system for potable water in Williston Park, New York. The primary contaminants were trichloroethane and tetrachloroethene which were stripped below drinking water standards. The design process included full scale pilot testing to assure proper removal levels.
- Design Engineer for the design, construction and start-up operation of a 5 mgd industrial cooling water treatment system utilizing mechanical surface aeration. The system consisted of two lined aeration basins operating in series with floating mechanical aerators to remove volatile organic contaminants to levels suitable for recharge into the Long Island groundwater aquifer. The primary contaminants were 1,1-dichloroethene, trichloroethane, tetrachloroethene and vinyl chloride.
- Design Engineer for the design and construction of a 4 mgd granular activated carbon system for potable water in Hempstead, New York. The primary contaminants consisted of more than 8 volatile and semivolatile organic compounds. Responsibilities included site inspection for the installation of the six vessels containing 20,000 lbs of carbon in each. The system was designed for 99.9% removal efficiency with two units operating in series.

Constructed Wetlands Experience

- Senior engineer for the conceptual design of a constructed wetlands stormwater treatment system for a coal handling freight railroad facility in Norfolk, Virginia. The design consists of treatment of contaminated stormwater runoff generated from maintenance and fuel handling areas onsite. The design treatment performance objective is the reduction of total suspended solids, oil and grease, and selected metals to levels below the SPDES permit discharge standards established for two of the site's outfalls discharging to the Elizabeth River. The 3-acre system consists of a passively operated 200,000-gpd subsurface-type constructed wetlands with a low visual impact and specialized structural design to meet the needs of a busy railyard facility. Additional design components include stormwater bypass structures, jacking beneath tracks, a grit chamber, a lift station, and outfall modifications. A joint wetlands permit will be prepared for the project.
- Senior Engineer for the feasibility study, conceptual design and construction of four constructed wetlands units and sedimentation basin for a stormwater treatment system along Cedar Swamp Creek for the City of Glen Cove, New York. The project consisted of review of stormwater studies of the 12 square mile contributing watershed, compilation of USGS water quality and flow data, evaluation of stormwater treatment methods and best management practices and optimum site selection along the creek. The constructed wetlands design included a forebay, high and low marsh cells, a micropool, and stormwater bypass structures for removal of sediment, nitrogen, phosphorus, and trace metals during first flush events. Final design for the first 1.8 acre constructed wetlands unit was completed and performance of construction management is ongoing. Design activities include structural and hydraulic design tasks with specific emphasis on storm water bypass. The

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design has been integrated into an into an intermodal transportation project with the addition of bicycle and walking paths. NYSDEC and Army Corps permits were obtained for the project.

- Project Engineer for the design of a 7,000 gpd subsurface flow-type constructed wetlands treatment system for a refinery site in Rhode Island. The system was designed to treat a surface-water stream impacted by petroleum hydrocarbons. The system's high aesthetic, low visual impact appeal was ideal for its golf course setting. Both phragmites SPP and Typha SPP wetland species were incorporated in the design in order to assess the biodegradation/biotransformation processes effectiveness. A growth and maturation plan and a treatment evaluation plan were developed in order to evaluate the system performance.
- Lead Engineer responsible for technical review of a design for modifications to a constructed wetlands system in Nicholas County, West Virginia. The system was designed to treat the leachate from a solid waste landfill at a maximum capacity of 30 gpm. The complete water tight treatment system consisted of a sedimentation basin, stabilization basin, a series of three wetland cells and a finishing ditch. The wetland cells consisted of a double liner system with leachate collection piping overlaid with stone fill and a matrix of plant life. The technology combines physical, geochemical and biological removal mechanisms operating simultaneously.

Permitting/Compliance Plans

- Project Engineer for the preparation of a Spill Prevention Control and Countermeasure (SPCC) Plan and a Storm Water Pollution Prevention Plan (SWPPP) for an 850-acre petroleum storage terminal in New England. The SPCC Plan involved the inventory of 50 bulk storage tanks and miscellaneous storage vessels and an assessment of barge loading areas, truck loading racks, additive loading areas, pumping stations, and a network of aboveground pipelines. The SWPPP encompassed an inventory and surveying of the existing storm sewer system, an evaluation of oil/water separator performance and identification of storm water management controls and practices.
- Project Engineer for the design of modifications to multiple discharge facilities along the Providence and Runnins Rivers in Rhode Island. Permitting activities were performed with the following agencies: Rhode Island Department of Environmental Management (RIDEM) Pollutant Discharge Elimination System (RPDES), RIDEM Division of Freshwater Wetlands, Coastal Resources Management Council (CRMC), and the Army Corps of Engineers.

Sanitary Experience

- Design Engineer for the evaluation of a municipal sanitary sewer system consisting of approximately 70 miles of piping ranging in size from 8 inch to 16 inch, in Garden City, New York. The sewer system was evaluated for existing and proposed flow capacity, surcharging, infiltration of groundwater, inflow of storm water, root encroachment, and sewer breaks. Evaluation methods consisted of hydraulic profile analysis, television inspection of piping, field inspection of manholes, and flow measurement. Sewer upgrading methods were evaluated including direct replacement, manhole restoration and pipe slip lining, and a rehabilitation program was implemented.
- Design Engineer for the City of Glen Cove's industrial wastewater pretreatment program which was established to monitor significant industrial users discharging to the city's wastewater treatment plant to minimize upsets to the biological treatment mechanisms. The program work included annual facility inspections, wastewater discharge sampling, review and evaluation of quarterly self-monitoring results, calculation of discharge penalty fees, preparation of annual monitoring reports for each facility and development of wastewater discharge permits to comply with City regulations.
- Design Engineer for a heavy metals study for the municipal sanitary sewer system in the City of Glen Cove, New York. The heavy metals study consisted of the development and performance of a city-wide sewer sampling program to identify the sources of heavy metals loadings on the wastewater treatment plant. The evaluation included industrial sources, scavengers, non-industrial sources, the plant operation itself, and review of existing heavy metal studies. Recommendations were provided for minimization of loadings and pretreatment to protect the plant operations.

Stormwater Experience

- Design Engineer for the evaluation and conceptual design of a water management plan for a 200 acre proposed office complex in Bethpage, New York. The design included inlets, piping and recharge basin sizing for peak storm water runoff flows as well as a system of architectural ponds and level control structures. For dry periods, the design included flow controls connected to an existing cooling water system to maintain pond levels and for utilization as a water supply for an irrigation sprinkler system during the growing season.
- Design Engineer for the design of a municipal storm drainage system for a 200-acre contributing area in Garden City, New York. The purpose of the drainage system was to alleviate severe flooding problems for eight homes located in a local low point of a residential neighborhood. The system included over 4,800 linear feet of reinforced concrete piping ranging in size from 12 to 60 inches. Design considerations included hydraulic gradient analysis, inlet capacity, utility crossings, minimization of removals of established trees, a county road crossing, utilization of existing structures and piping, and a headwall discharge to a recharge basin. Additional design items included pavement restoration, service line relocations, curbs and sidewalks, and maintenance and protection of traffic.

Site Assessment Experience

- Principal Engineer for the performance of a Brownfields Demonstration Pilot Program in the Hamlet of New Cassel for the Town of North Hempstead, New York. Under an EPA grant, Roux Associates created an inventory of 50 potential commercial/industrial properties within New Cassel and evaluated these properties based on perceived contamination and potential for redevelopment/reuse. Eight sites exhibiting the greatest potential for redevelopment were selected to perform Phase I Environmental Site Assessments. Of these eight sites, four sites were selected for Brownfield Site investigations to identify the nature and extent of contamination in soil and groundwater and provide potential remedial alternatives and cleanup costs to revitalize these properties. The Brownfields Demonstration Pilot Program also included community outreach activities to promote a unified approach to the redevelopment of Brownfields in new Cassel.
- Senior Engineer for coordination and review of Phase I environmental site assessments for five large research and development complexes located throughout the eastern United States for a major chemical company. The site assessments were performed for due diligence prior to engaging in long-term property lease agreements. The site assessments evaluated chemical storage and handling areas and previous site usage.
- Senior Engineer for coordination and review of Phase I environmental site assessments for 12 properties associated with

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tennis centers acquisition on Long Island, New York. The properties were either active tennis center facilities or vacant parcels available for new construction. All site assessments were conducted in accordance with ASTM standards for commercial real estate transactions. Primary concerns identified were USTs, drum storage areas, and unauthorized dumping.

- Project Manager representing a group of banks investing in a 20-acre commercial property in Westchester, New York. The onsite soil was contaminated with several volatile and semivolatile organics. Performed an evaluation of the remediation plan which included onsite biological treatment of soils and aeration and oil water separation of groundwater.

Water Main Experience

- Project Engineer for the design of over 6,000 feet of ductile iron water main in sizes from 4 to 16 inches for Town of Hempstead, New York Department of Water and the Nassau County, New York Department of Public Works. The designs included wet and dry connections to existing mains, fittings, valves, copper services and fire hydrants. Restoration work included replacement of asphalt pavement, concrete sidewalk and curbs, and grass areas.
- Design Engineer for the design and construction management of over 10,000 feet of ductile iron water main in sizes from 6 to 12 inches for the Town of Wallkill, New York. The designs included booster pump station upgrades, a stream crossing, a wetlands crossing, jacking of 36-inch casing beneath a state highway, air release chambers, copper service re-connections, fire hydrants, valves and appurtenances. Restoration work included wetlands restoration, backfilling and regrading within a NYSDOT right-of-way and grass and pavement replacement.
- Design Engineer for the design and construction management of upgrades to a 3.7 mgd potable water booster pump station for the Town of Wallkill, New York. The design featured the replacement of a hydropneumatic tank and pump system with three larger capacity centrifugal pumps. The upgrades were performed while maintaining the pump station service. The pump station revisions included piping, pump pads, shut-off valves, silent check valves, pressure relief valves, gauges, ventilation equipment and a motor control center.

Feasibility Study Experience

- Senior Engineer for the performance of a feasibility study and remedial design of a free product containment and recovery system at a former refinery in New England. The areal extent of the free-product plume was approximately 10 acres with a measured thickness of up to eight feet. Pilot testing activities consisted of pump tests, baildown tests, and funnel and gate systems with and without sheeting. The selected remedial alternative consisted of re-routing and repair of active storm sewer piping, closure-in place of a former 72-inch storm drain using clay fill material to form a barrier wall, and installation of multiple recovery trenches totaling 450 linear feet. The recovery trenches were installed to a depth of 14 feet using a deep trenching machine and were completed with gravel, horizontal perforated piping, recovery wells, and monitoring wells to accommodate both passive and active product recovery pumping equipment. Product recovery enhancement pilot testing was also performed by using non-ionic surfactants, mechanical re-working of soil and vacuum extraction methods.
- Project Engineer for the performance of a feasibility study for the containment of a free-product plume beneath a refinery site in Rhode Island. The feasibility study included analysis of groundwater modeling, bench and pilot scale treatability studies, groundwater quality characterization, identification and screening of discharge alternatives, and treatment process evaluations. The work also included the evaluation of the discharge of treatment system effluent to several receptors including groundwater, wetlands, sanitary sewers, and storm sewers. Discharge requirements were evaluated for process water, off-gas air and residual wastes. Several treatment processes were also evaluated including metals precipitation and sludge dewatering, VOC and SVOC removal, and off-gas treatment. Preferred alternatives for each process were selected for remedial design development.
- Project Engineer for the performance of a feasibility study for a hazardous waste landfill located at a Superfund site in Tennessee. The feasibility study focused on the characterization and quantification of landfill leachate consisting of chlorinated organic compounds as well as proprietary pesticide compounds. The remedial technologies which were evaluated included leachate collection alternatives, onsite treatment alternatives and offsite disposal methods. An analysis was performed for onsite treatment technologies which included constructed wetlands, biological fluidized bed reactor, and granular activated carbon adsorption. The technologies were assembled into four feasible remedial alternatives and treatability studies were recommended to confirm the suitability of selected processes.

ROUX

Professional Profile

Omar Ramotar, P.E.

Principal Engineer

Technical Specialties:

Engineering services for the investigation, design, construction, operation, maintenance and monitoring of remedial systems for the remediation of contaminated soil, sediment, and ground water.

Experience Summary:

Nineteen years of experience: Staff, Project, Senior, and Principal Engineer with Roux Associates, Inc.

Credentials:

B.E., Environmental Engineering, Hofstra University 1994
M.E., Environmental Engineering, Manhattan College 1995
Professional Engineer: New York, 2000
OSHA 40 hour Health & Safety Course, 1995
OSHA 8-hour Health & Safety Refresher Course, 1996-2013

Key Projects

- Project Manager and Principal-In-Charge for a multi-element (large scale removal action [45,000 cubic yards of impacted materials excavated and consolidated on-site/ disposed off-site], large scale subsurface feature and UST removal action, and remediation and restoration of a 3.2-acre seasonal pond located in the Massapequa Preserve) remedial design of a USEPA Superfund Site in Nassau County, New York. Responsible for the Preparation of USEPA response letters, technical drawings, and 95% and 100% remedial design documents in accordance with the Record of Decision and Consent Judgment.
- Project Manager and Principal-In-Charge for design of a natural wastewater treatment solution for a 3,000 acre new industrial complex in Saudi Arabia. Roux Associates was tasked to design an Engineered Natural System ((to treat all wastewaters (sanitary, process and storm water) from construction through operation, incorporate transitioning through phases, and plan for future expansion of the facility and increased wastewater flow rates. The 23-acre ENS® was designed to treat a total flow of 1.4 million gallons per day. The major system components include: dump station with five truck hookup ports to collect and convey sanitary wastewater during construction of the facility; three primary sedimentation and anaerobic treatment tanks; one oil/water separator; six patented enhanced subsurface flow constructed treatment wetlands; two down flow disinfection filters; UV disinfection system; One treated water holding tank which conveys the treated water back to the facility for reuse within the refinery and as irrigations for landscaped areas; two infiltration basins; and six activated alumina treatment cells to remove fluoride from facility storm water runoff.
- Project Manager and Principal-In-Charge for the bidding, contractor selection, and remediation of the wetland and canal portions of a 440-acre tract in western Staten Island that was used as a Major Oil Storage Facility (MOSF) for petroleum products until the end of 1995. Responsible for the preparation of a Remedial Action Work Plans, technical drawings, and 95% and 100% remedial design documents and for the remedial construction phase in accordance with the Site-specific Consent Order issued by the NYSDEC. Key elements of the Work include dredging/ excavation of approximately 20,000 cubic yards of petroleum and lead impacted sediments/ soils, off-site disposal, on-site capping and restoration of approximately 6.5 acres of disturbed wetlands. Routine activities included coordinating weekly construction meetings and preparing associated meeting minutes; preparing detailed NYSDEC monthly construction progress reports; ensuring Contractor compliance with remedial design; and managing the overall project budget and schedule.
- Project Manager for the bidding, contractor selection, and remedial construction phase at a 40 acre former metals manufacturing facility in Staten Island under the NYSDEC Voluntary Cleanup Program. Responsible for overall construction management for dredging/stabilization and off-site disposal of approximately 7,000 cubic yards of metal-impacted sediments from a tidally influenced embayment area and creek system, off-site disposal of approximately 3,000 cubic yards of sediment, on-site consolidation of approximately 4,000 cubic yards of sediment; capping of fill material/ bank stabilization; in-place abandonment of former water and sanitary sewer system; construction of an 8 acre asphalt cap, installation of new storm-water sewer system and restoration and mitigation of approximately 2 acres of wetland areas disturbed by ongoing remedial activities. Routine activities included coordinating weekly construction meetings and preparing associated meeting minutes; preparing detailed NYSDEC monthly construction progress reports; ensuring Contractor compliance with remedial design; and managing the overall project budget and schedule.
- Project Manager for the preparation of a Feasibility Study Report and ongoing remediation of a 40-acre former manufacturing facility in Rensselaer, New York as part of the NY State Superfund Program. Responsible for the preparation and implementation of multiple large-scale IRM soil removal remedial actions resulting in approximately 12,000 tons of non-hazardous waste and 10,720 tons of hazardous waste shipped off-site. Also, responsible for the preparation and implementation of the remediation of two 80,000 square foot former wastewater treatment lagoons. Approximately 7,000 cubic yards of hazardous waste sediments shipped off-site. Approximately 4,000 cubic yards of riprap lining the perimeter of both lagoons mechanical screened to remove interstitial sludge within the riprap matrix. NYSDEC approval gained for on-site reuse of 3,200 tons of riprap saving the client approximately $400,000 in disposal costs. Provided ongoing support for various tasks associated with constructing, operating and maintaining the on-site groundwater treatment system.
- Project Manager for the remedial design and remediation of a 23-acre former municipal landfill located in Glen Cove, New York as part of the NY State Superfund Program. The work was performed in accordance with Title 3 of the NYS Environmental Quality Bond Act under contract to the City of Glen Cove. Design elements included excavation of hazardous and radiological waste (8,500 cubic yards in total), 44,000 cubic yards of bulky waste, VOC and radiological waste monitoring, demo debris and waste separation and screening, dewatering, waste disposal, capping and site restoration. Additional work included the de-listing of a six-acre "clean" portion of the site to allow the development of a ferry terminal and esplanade and development of alternative cleanup standards consistent with future site uses. Site remediation will accommodate site redevelopment as a commercial waterfront and operating ferry service and seaport area.
- Project Manager for the investigation and remediation of several sites spanning multiple blocks for a major pharmaceutical company in Brooklyn, New York. Environmental investigation is being conducted in preparation of possible property transfer. Responsibilities include development and preparation of investigation and remedial action work plans and coordination and management of resulting field investigation and remediation efforts. Project Engineer for a SVE/AS system to treat groundwater contaminated with VOCs and chlorinated VOCs at one 0.8-acre block. Designed and performed two SVE/AS pilot studies. Designed the full-scale SVE/AS system. Managed bidding, contractor selection, remedial construction, system start-up, operation, maintenance and monitoring phases for the full-scale SVE/AS system.
- Project Manager for the design of a soil and groundwater remediation system for a nationwide overnight delivery distribution center in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. A risk-based remedial approach that called for the remediation of "hot spot" source area soils and mass-reduction of VOCs was successfully utilized for the Site. As a result, the focus of remediation was on reducing the mass of VOCs in on-site groundwater to a level where natural attenuation would be effective in remediation of VOCs. To address the contamination in the source area, a SVE/ AS system consisting of 8 SVE wells and 17 AS wells was designed, constructed, operated, and maintained for a period of approximately 3 years. The SVE/ AS system has been permanently shut down and the Site is currently in the post-remediation monitoring phase.

Omar Ramotar, P.E.

Principal Engineer

- Project Manager for the remediation of a former major pharmaceutical plant located in Hicksville, New York as part of the NY State Superfund Program. The project consisted of the excavation of non-hazardous soil from 5 on-site drywells and a former waste disposal area, implementation of a community air monitoring plan, coordination with the Long Island Rail Road (LIRR) for work performed within the LIRR's right of way, steel sheeting installation and removal, backfilling, monitoring well abandonment and replacement, transportation and disposal of 3,300 tons of VOC, SVOC and metal contaminated soil, and restoration of approximately 9,800 square feet of asphalt. A 7-foot diameter steel caisson was used to support the deeper excavation required at the invert of two drywells. This innovative approach saved the client approximately $50,000 in costs that would have been incurred by using a traditional steel sheeting support system to protect the on-site commercial building.

Additional Feasibility Study Experience:

- Principal Engineer for preparation of a Focused Feasibility Study to optimize ongoing free-product recovery efforts for an 18-million gallon release of petroleum hydrocarbon product from a former refinery and petroleum storage terminal in Brooklyn, New York. The remedial action objectives of the feasibility study were: removal of free product to the extent practicable, prevention and/or elimination of any product seeps from the Site that result in visual petroleum product sheens on surface water and eliminate through removal, treatment, and/or containment the source of surface water contamination to the extent practicable. Technologies evaluated and retained included: Excavation, skimming, dual pump liquid extraction, water flooding, surfactant enhanced subsurface remediation, cosolvent flushing, vapor enhanced fluid recovery, enhanced fluid recovery, and natural source zone depletion.
- Project Manager and Senior Engineer for the preparation of a Remedial Action Selection (RAS) Report for a 9-acre landfill in Rensselaer, New York as part of the NYSDEC Voluntary Cleanup Program. The primary goal of the RASR was to select a remedial alternative that was most protective of human health and the environment under the contemplated future use of the Site as a landfill with an integrated wildlife habitat vegetative cap. The final remedy for the landfill will include 1,000 linear feet of perimeter groundwater collection trenches, a 40 gpm treatment system for metals and VOCs and excavation and in-situ chemical oxidation of VOC source areas.
- Project Engineer for the preparation of a Focused Feasibility Study (FFS) Report for the remediation of two dry wells at a formerly government owned, contractor operated, 105 acre New York State RCRA site in Bethpage, New York. The soils below and in the vicinity of each drywell were contaminated at various locations from 2 to 55 feet below land surface (bls) with PCBs exceeding NYSDEC standards. The FFS evaluated the following options: no action, in-situ thermal desorption and excavation and off-site disposal. The no action alternative was recommended because the Site characterization and exposure assessment results indicated that there was no potential risk to persons using the Site for commercial or industrial activities, PCB impacted soils had been previously excavated to a depth of 28 feet bls and because PCBs are generally immobile in the environment, so migration is unlikely.

Additional Soil and Groundwater Remediation Experience:

- Project Engineer for the complete design, implementation and startup of five distinct air sparge (AS) and soil vapor extraction (SVE) systems for the remediation of gasoline contaminated ground water and soils. Pilot studies were performed at several locations at an 850-acre petroleum terminal site in Rhode Island and lead to the design of full-scale AS and SVE remediation systems that are being used in a phased approach, to remediate selected areas of the site. The designs included specialized modeling techniques to determine the optimum system requirements and components.
- Project Engineer for the design and construction management of a soil remediation project at a 28-acre former pesticide warehouse facility in Dayton, New Jersey. The project consisted of the excavation and on-site consolidation and capping of 7,500 cubic yards of pesticide-contaminated soil. The capped areas were designed to be incorporated into a Site re-development plan for use as a storage and trailer parking lot. A Soil Erosion and Sedimentation Control Plan and a NJPDES General Permit were prepared for the project.
- Project Engineer for the design and remediation of a former sanitary wastewater leaching system at a 16.6 acre NYS RCRA site in Bethpage, New York. The project consisted of the excavation, staging, transportation, and disposal of VOC, SVOC, metal and pesticide contaminated soil. Approximately, 5,100 tons of non-hazardous soil, 1,300 tons of hazardous metals contaminated soil and 350 tons of hazardous VOCs contaminated soil. Structures remediated consisted of an imhoff tank, 33 leach pools, 2 distribution boxes, 2 storm water drains, 2 sludge drying beds, and a blast fence area.
- Staff Engineer for the preparation and implementation of a Soil IRM plan for a major pharmaceutical plant in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. Work elements included contractor plan preparation, steel sheeting and removal, excavation of hazardous and non-hazardous waste, VOC and particulate monitoring, dewatering water management, waste transportation, disposal and tracking, backfill placement and compaction. IRM Soil remediation included excavation of over 1,620 tons of non-hazardous soil and 524 tons of hazardous soil.
- Senior Engineer for design and construction of several elements of a 40 gpm treatment system for a 40-acre former manufacturing facility in Rensselaer, New York. BASF Site. Design support for 4,000 linear feet of collection trenches, 7 extraction well vaults, 2 air release chambers, and 2 groundwater re-injection galleries and a 50 foot by 60 foot treatment system containment pad. Coordination of construction efforts between mechanical and electrical contractors.

Additional Miscellaneous Design Experience:

- Project Engineer for the design and construction management of a private vehicle fueling area at a New York City railyard. System components included: UST and process piping, level/monitoring systems, pump dispenser and keycard system, pump island, canopy and fire suppression system. Design met all substantive requirements of the New York City Fire Department (NYCFD) and New York City Department of Buildings (NYCDOB). Tasks included equipment selection, equipment sizing, piping layout, preparation of plans and specifications and shop drawing review and approval.

Additional Stormwater Design Experience:

- Project Engineer for the design and construction management of a storm-water drainage project for a 28-acre former chemical pesticide manufacturing facility located in Dayton, New Jersey. The storm-water drainage system consisted of multiple catch basins, over 2,000 linear feet of reinforced concrete pipe ranging in size from 15 to 30 inches, and a recharge basin. The TR-55 computation method was used to size the drainage system for a 25-year storm event. The drainage system was designed in strict accordance with the New Jersey Department of Environmental Protection (NJDEP), the New Jersey Soil Conservation District (NJSCD) and the local planning departments.

Additional Engineered Natural System Design Experience:

- Senior Engineer for the design of a compost treatment (CT) cell retrofitted into an existing sludge drying bed located at an integrated aluminum smelting and fabricating facility in Massena, New York. The principal objective of the CT will be to remove and sequester low level PCBs in the Site wastewater stream prior to discharge to the Site's permitted outfall. The proposed CT cell will be incorporated into the wastewater treatment process to evaluate PCB treatability in a CT environment as an alternative to other technologies currently being considered for the Site. The CT cell

Omar Ramotar, P.E.

Principal Engineer

will be designed to accommodate variable hydraulic loading rates (10 to 70 gpm) and retention times in order to evaluate and define optimal system performance.

- Senior Engineer for the design of two pilot-scale compost treatment (CT) systems for storm-water management at an active aluminum manufacturing facility in Lafayette, Indiana. The design included the retrofit of a 1,000 gallon above-grade septic tank (to handle a variable flow of 0.1 to 1 gpm) and a 100,000 gallon above-grade storage tank (to handle a variable flow of 10 to 50 gpm). The remedial goal of the pilot CT systems is for the removal of PCBs and aluminum from storm-water currently collected in the on-Site 100,000 gallon storage tank. The pilot systems were designed for incorporation into the existing storm-water system, thus precluding the need for additional permitting. The systems have been designed for year round operation.
- Senior Engineer for the development of design improvements for a 45 acre former Landfill in Holtsville, New York to minimize the source of contamination to a downgradient pond and its' associated creek. A detailed budget water analysis was performed comparing current and proposed conditions to determine the best methods to minimize infiltration into the landfill and divert the stormwater runoff to the onsite recharge basin and away from the landfill. The proposed strategy currently entails modifying the existing stormwater conveyance controls (i.e., lining drainage swales), reducing the permeability of the landfill surface through the addition of recreational areas and lined stormwater storage ponds, and planting hybrid poplar trees to increase evapotranspiration at the Landfill. Overall, these modifications would be expected to reduce annual infiltration in the landfill surface from 24 inches to 18 inches, equivalent to approximately 8.2 million gallons of water annually.

Additional Operation and Maintenance (O&M) Experience:

- Senior Engineer responsible for supporting the OM&M of a 40 gpm treatment system for a 40-acre former manufacturing facility in Rensselaer, New York. Processes and system maintained include aeration, bag filtration, air stripping, metals adsorption, liquid and vapor phase carbon adsorption.
- Senior Engineer responsible for the O&M and monitoring of a soil vapor extraction (SVE) and air sparge (AS) system for nationwide distribution center in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. O&M activities included system operation and maintenance, performance monitoring, soil gas monitoring, quarterly monitoring, and preparation of quarterly and annual status reports for submission to the NYSDEC. The SVE and AS system consists of 8 SVE wells and 17 AS wells and was designed, constructed, operated and maintained for a period of approximately 3 years. The SVE and AS system has permanently shut down and the Site is currently in the post-remediation monitoring phase.
- Project Engineer responsible for the O&M of a 430-gpm, dual-phase, product-recovery system in Greenpoint, Brooklyn, New York. Processes and system maintained include dual-phase ground-water and product recovery, low profile air strippers and a catalytic oxidation unit. The Site encompasses one of the nation's largest petroleum releases (18 million gallons).
- Project Engineer for the metals removal system upgrade of a 430-gpm, dual-phase, product-recovery system in Greenpoint, Brooklyn, New York. Upgrades included design, procurement and construction oversight to install a metals removal system, allowing the remedial system to run at full capacity with minimal O&M. The metals removal system included two 10-foot diameter continuously backwashing sand filters, process liquid aeration system and ancillary equipment. The pre-design phase also included the performance of an extensive bench study to optimize the system design.
- Project Engineer for the control system upgrade of a 430-gpm, dual-phase, product-recovery system in Greenpoint, Brooklyn, New York. Upgrade included design procurement and construction oversight to install a new control system to eliminate intermittent power surges and sags which, in combination with the communication problems, had caused the previous control system to operate unpredictably. These upgrades included installation of new remote input/output systems, new uninterruptible power supplies and new remote communication cables at all six remote well sites.
- Staff Engineer for the O&M of a product recovery system in Howard Beach, New York. O&M activities include system maintenance and performance monitoring through on-site and off-site monitoring wells.
- Staff Engineer for the O&M of a 40 gpm ground-water remediation system at an industrial facility in Queens, New York as part of the State Superfund Program. O&M activities included system maintenance, effluent sampling, quarterly monitoring, and preparation of quarterly and annual status reports for submission to the NYSDEC.
- Staff Engineer for the design, implementation and O&M for two remedial treatment facilities to remediate ground-water impacted by leaking USTs at two service garages owned by a New York state telecommunications company. System was designed to treat groundwater at a flow-rate between 5 and 10 gpm using granular activated carbon adsorption treatment units.

Additional Health and Safety Management or Facility Decontamination or Demolition Experience:

- Principal Engineer for the decontamination and decomissioning (D&D) of a 700,000+ square foot facility, in Brooklyn, New York for a major pharmaceutical company. The D&D activities were performed to allow for future use of the former facility for commercial, retail, and/or industrial purposes after renovation and redevelopment by others, by removing, cleaning, encapsulating or otherwise abating: (1) contaminants in indoor concrete identified during previous environmental investigations, (2) pharmaceutical manufacturing residues in ductwork identified during previous environmental investigations, (3) pharmaceutical manufacturing residues in select existing manufacturing infrastructure [including but not limited to relic air handling units (AHUs), dust collection systems, and air exhaust units], and performing partial interior building demolition and cleaning in connection with such infrastructure, (4) the horizontal drain piping associated with the eighth floor laboratories, and (5) paint containing polychlorinated biphenyls (PCBs) at a concentration of 50 milligrams per kilogram (mg/kg) or greater.
- Senior Engineer responsible for providing both worker and community Health and Safety through the monitoring of air particulates and VOCs during the electrical upgrade of pharmaceutical manufacturing facility in Brooklyn, New York. All work was performed in accordance with OSHA, NYSDEC and USEPA protocols for worker and community health and safety monitoring.
- Senior Engineer responsible for providing both worker and community Health and Safety through the monitoring of air particulates and VOCs during the construction of a parking lot redevelopment project for a pharmaceutical manufacturing facility in Brooklyn, New York. All work was performed in accordance with OSHA, NYSDEC and USEPA protocols for worker and community health and safety monitoring.
- Staff Engineer and Site Health and Safety Officer for the decommissioning of a pharmaceutical manufacturing facility in Brooklyn, New York. Responsibilities included construction oversight of all contractors for the following: dewatering, removal of 26 USTs ranging in capacity up to 30,000 gallons, excavation and stabilization of soil contaminated with VOCs, lead and mercury, and disposal of all waste generated. Additional responsibilities included providing both worker and community Health and Safety through the monitoring of air particulates, VOCs and mercury vapors. All work was performed in accordance with OSHA, NYSDEC and USEPA protocols for worker and community health and safety monitoring.

Omar Ramotar, P.E.

Principal Engineer

- Staff Engineer and Site Health and Safety Officer providing construction oversight and management for the completion of a building demolition and UST Removal Program at a metals manufacturing facility in Staten Island, New York. The project included asbestos and lead abatement oversight prior to building demolition activities and the removal of six 550-gallon gasoline USTs, one 1,000-gallon No. 2 fuel oil UST and one 600-gallon No 2 fuel oil UST. A total of four buildings, two smelting kettles, a 200-foot emissions stack and a 50-foot water tower were removed as part of the demolition program. Responsibilities included providing both worker and community Health and Safety through the monitoring of air particulates and VOCs, performing all required sampling, waste disposal tracking to document all activities performed, providing construction oversight of all contractors and preparing weekly progress reports.

Additional UST Experience:

- Staff Engineer for the excavation oversight of 11 gasoline USTs, one waste oil UST, three pump islands and all associated underground and aboveground piping at a national railroad company in Queens, New York. Field oversight included post-excavation and waste characterization soil sampling, health and safety monitoring, supervision during the removal of the USTs and preparation of a Closure Report.
- Staff Engineer for the excavation oversight of three 8,000-gallon USTs, two pump islands and all associated piping at a service station in Greenwich, New York. Field oversight included post-excavation and waste characterization soil sampling, health and safety monitoring, supervision during the removal, cleaning, and disposal of the USTs and preparation of a Closure Report.

Additional Litigation Support Experience:

- Staff Engineer providing technical support to evaluate competitive bids for an advanced remedial system to expedite the mitigation of a one million-gallon gasoline plume. Review of technologies including horizontal well drilling, in-situ bioremediation, air sparging and soil-vapor extraction for the $1.5 million two year contract for the 14-acre site.
- Project Engineer for evaluation of twelve sites throughout the country, primarily in California, for the determination of past, present and future remedial and legal costs and client allocation of each as a PRP. Provided basis of opinions, detailed estimates, document review, determined justified versus non-justified cost contribution, and corresponded with the government case managers for each facility. Provided a detailed report summary brief for each facility.

Jordanna Kendrot

Staff Engineer

Technical Specialties:
Remedial construction and soil excavation oversight, management of waste characterization and disposal, environmental site assessments focusing on soil, groundwater and soil vapor investigations.

Experience Summary:
Over two years of experience: Staff Engineer with Roux Associates, Inc., Islandia, New York.

Credentials:

B.E., Materials Engineering, Stony Brook University, 2011

M.E., Civil and Environmental Engineering, Cornell University, 2012

OSHA 40-Hour Health and Safety Course, 2012

OSHA 10-Hour Construction Health and Safety Course, 2013

OSHA 8-Hour Annual Refresher Course

Loss Prevention System (LPS) Awareness,
8-Hour Certified

First Aid and CPR Certified

E.I.T. (Engineer-In-Training) Certification

Transportation Worker Identification Credential (TWIC) Certification

Stormwater Pollution Protection Plan (SWPPP) Certification

Key Projects:

- Creator of Community Air Monitoring Plan (CAMP) and Health and Safety Plan (HASP) documentation to be used in Remedial Action Work Plan (RAWP) at a former ink ribbon and carbon manufacturer in Glen Cove, New York. Field manager duties include implementation of the RAWP in conjunction with third-party contractor to remove toluene-contaminated soil at various final excavation depths within 1.4-acre area, to be followed by *In Situ* Chemical Oxidation injections across the excavated area. Field responsibilities include daily construction reports, performing duties as Site Health and Safety Officer, training personnel performing CAMP duties, waste tracking of non-hazardous and potentially hazardous soil throughout the site prior to disposal, oversight of Geoprobe sampling activities at discrete sample depths, collection of soil and perched groundwater samples from open excavation, and logging soil lithology throughout site and at confirmatory base depths.

- Field Manager addressing the largest subsurface free-product plume in North America at a former petroleum refinery and terminal in Brooklyn, New York. Responsibilities include construction oversight of subcontractors in various tasks (electrical wiring installation, well installation/development, test pitting, and several different manifold constructions), and implementation of site specific health and safety plan. Tasks include: oversight of installation of single and double cased monitoring wells using Sonic and Hollow Stem Auger drilling methods, collection of groundwater samples in accordance with EPA groundwater sampling method via low stress purging and sampling, collection of soil vapor and ambient air sampling with EPA method TO-15, development and review of job safety analysis (JSA) documents.

- Creator of Remedial Investigation Report, HASP, and RAWP for a long term remediation project enrolled in the NYSDEC Volunteer Cleanup Program (VCP) located in Williamsburg, New York. Field manager duties include quarterly groundwater sampling and soil vapor sampling as part of an NYSDEC approved work plan, as well as soil sampling as part of subsurface investigation. Responsible for oversight of contractors for installation of soil vapor sampling points, and decommissioning of SVE/AS treatment system. Was also responsible as third-party observer of soil vapor barrier and Sub-Slab Depressurization System installed on property after remediation activities had been completed.

- Field manager responsible for implementation of CAMP and SWPPP during a six-month long remedial action soil cap installation at an 8-acre former petroleum distribution terminal along the Hudson River waterfront in the Village of Hastings-on-Hudson, Westchester County, New York. Intrusive activities included soil and sediment excavation, soil stabilization, and up to grade soil grading. In addition to CAMP activities, assisted project engineer and construction manager with contractor oversight, material review, health and safety oversight, and daily reporting before taking over responsibilities after three-month period.

- Staff Engineer/Field Manager for underground storage tank (UST) discovery, inventory, and removal at multiple sites. Field responsibilities involved subcontractor oversight for excavation and removal of UST, collection of end-point soil and groundwater samples, tank cleaning and waste management.

- Site Safety Officer for various remedial investigation sites. Responsibilities include preparation of health and safety plans (HASPs), directing onsite safety meetings, ensuring site-specific safety procedures are implemented in accordance with the HASP, and performing field audits/recordable observations.

Rachel Henke

Staff Assistant Scientist

Technical Specialties:
Remedial soil excavation oversight; management of waste disposal; environmental site assessments focusing on soil, groundwater and soil vapor investigations.

Experience Summary:
One year of experience: Staff Assistant Scientist at Roux Associates.

Credentials:
B.S. Earth and Environmental Science, Lehigh University, 2014
B.A. Biology, Lehigh University, 2014
OSHA 40-hour HAZWOPER Training, 2014
OSHA 10-hour Construction Safety Training, 2015
First Aid and CPR Certified
Loss Prevention System (LPS) Awareness, 8-Hour Certified

Key Projects:

- **Former Paragon Paint Factory:** Field Manager for a site in the New York State Brownfields Cleanup Program that also requires a RCRA compliant facility closure. The site is a former paint factory located in Long Island City, New York. Due diligence environmental investigations determined historical site operations adversely impacted the subsurface including a LNAPL plume in addition to petroleum hydrocarbon impacts to the soil and groundwater. Responsibilities include subcontractor oversight during the UST removal and during RCRA decontamination, providing health and safety oversight during UST removal, gauging of groundwater wells, collection of soil, groundwater and rinsate samples, soil classification and implementation of community air monitoring program (CAMP).

- **VHS 10th Avenue Redevelopment:** Field Manager for a site in the New York State Brownfields Cleanup Program. The site is a former gas station located in Manhattan, New York. Historical site operations adversely affected the subsurface through petroleum hydrocarbon impacts. Responsibilities include implementation of a CAMP, management of soils including transportation and disposal, collection of soil samples and maintaining communication between subcontractors and Roux office support.

- Field Manager for the implementation of a CAMP. Monitored airborne dust and VOCs that are potentially generated by remedial action work activities, reviewing the collected data for exceedances of the New York State Department of Health (NYSDOH) guidelines.

- Assisted in implementation of in situ groundwater injections. Responsibilities include soil borings, soil classification, collection of soil samples, managing subcontractors and providing health and safety oversite.

- Site Safety Officer for various remedial investigation sites. Responsibilities include preparation of health and safety plans (HASPs), job safety analysis (JSA) documents development and review, onsite safety meeting management, safety document preparation (Lessons Learned, Near Loss, Field Audits, etc.), and planning/execution of corrective actions.

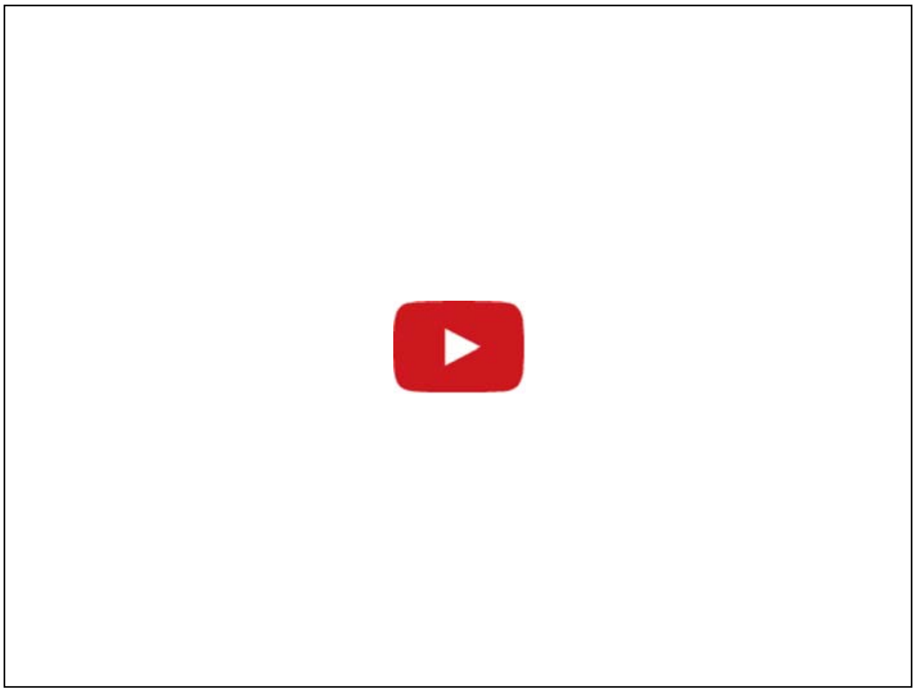
- Assisted in bi-annual soil vapor monitoring round to monitor the largest subsurface free-product plume in North America at a former fuel and oil distribution terminal in Brooklyn, New York. Activities included the collection of soil vapor and ambient air samples from on-site and off-site monitoring wells using EPA method TO-15.

APPENDIX F

Product Recovery System Information

About Magnum Spill Buster

Pumps Oil Not Water!



The Magnum Spill Buster™ is an automated free phase petroleum contamination pumping system. It is specifically designed to remove NAPL petroleum product from the water table via a 2″ or larger diameter well. Its unique auto-seeking device allows the pump intake to automatically follow the elevation of the oil/water interface as it fluctuates throughout the entire length of the well. The Magnum Spill Buster will not pump any amount of water.

Magnum Spill Buster, Automated free phase petroleum contamination pumping system (shown with Explosion Proof Auto Seeker).

The system can be wired to 115 VAC or 230 VAC power or is capable of true 24 VDC deep cycle battery/solar panel operation for remote site locations.

Optional water depression can be added to the system through a Clean Earth Technology Water Depression Module and a Grundfos Redi-Flo 3 water pump. The Magnum is also very compatible with vacuum extraction systems when a dual phase recovery system is desired.

The Magnum Spill Buster™ system is composed of three interactive modules:

Control Box

The Magnum Spill Buster™ **Control Box** coordinates and displays the condition of the system operation. The control box also allows certain system parameters to be varied according to site requirements.


Magnum Spill Buster Control Box

The NEMA 4 weatherproof enclosure with its connector "pouch" (shown at right with its protective cover) provides easy access to the cables, adjustable controls, and AC wiring.

The input power to the Control Box is 110-120 VAC. Therefore, the box must be located outside of any hazardous areas. If your site conditions require the box to be placed farther than 25′ from the well head, we can build custom sized cable lengths to accommodate the extra length required. If the panel must be located in a hazardous location, CET can provide an explosion-proof enclosure (Class 1, Div 1, Groups B,C, & D).


Explosion Proof Enclosure for the Control Box

Cable terminations within the connector pouch utilize our unique, size-coded SLIMLINE connectors that pull through underground conduits easily and are color-coded for intuitive placement. They are extremely rugged and very easy to clean.

Auto Seeker

The **Auto Seeker** is a small, motorized, reel assembly that automatically raises and lowers the probe to follow the NAPL interface through the entire depth of the well. This makes the system operation highly efficient even with large changes in the level of the ground water.


Standard Auto Seeker Installation

This self-winding feature also means that routine maintenance of the product pump is a matter of pushing a button to reel the probe to the top of the wellhead- eliminating the need to haul an oil-covered cable up by hand to spread out all over the ground.

The Standard Auto Seeker is not rated explosion proof and should be mounted outside of all classified hazardous zones. Refer to applicable codes for your site to determine how the Auto Seeker should be installed. On many sites it is possible to remove the Standard Auto Seeker from the classified hazardous area by raising it above the well head. For example, the use of a wood or metal scaffold such as the one pictured to the right may accomplish this.


New Explosion Proof Magnum Spill Buster Auto Seeker

If the Auto Seeker must be located in a hazardous location, CET can provide an explosion-proof enclosure, utilizing Mil-Spec sealed connectors. This version is certified for use in Class1, Div1, Groups B, C and D locations and may be mounted directly on the well head as shown to the right.

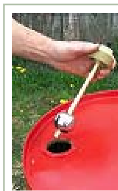
Probe

The Magnum Spill Buster Probe is certified NEC 2011, Section 500 compliant for use in the Class 1, Div 1 area within recovery wells. The 1.93" diameter **Probe** contains the patented ALPHA ARRAY™ interface sensors, as well as a small but powerful 12vdc electric product pump. These sensors are non-contact, fluid-interface sensors that are a spin-off of spacecraft fuel gauging developed for NASA. The use of this interface sensor in the environmental industry is unique. Since it is a non-contact sensor, it is highly immune to


Exploded View of Probe and Pump

fouling, which is a problem with virtually all other types of sensing methods (including conductive, float, optical and even radio frequency methods).

The pump used in the Magnum is a modified off the shelf, diesel fuel pump. This pump is a rugged and chemically resistant roller vane unit capable of pumping up to 46 gallons (174 liters) per hour of low viscosity liquids (up to 12 Cp(see System Specifications below).



Recovery Tank Overflow Sensor

Also included with every standard system:

- A Recovery Tank Overflow Sensor with 30′ of cable
- 30′ Set of Auto Seeker and Probe cable extensions
- 50′ of nylon discharge tubing with bung

Features and Benefits

- All-modular system installs in 20 minutes
- Pumps only product; the water stays behind- no costly, messy, surface separation
- Keeps on pumping through temperatures -40 to 60°C
- 24/7 automatic operation yields steady, impressive, results
- Quiet & low profile- doesn't draw attention in public places
- Speedy, no-fuss maintenance
- Uses less power to operate than a 60 watt bulb
- Technical support from the designer and manufacturer is only a phone call away

View Specifications

For More Information about the Magnum Spill Buster

What sets the Magnum Spill Buster apart from other technologies?

What site conditions is the Magnum Spill Buster ideally suited to treat?

What optional accessories expand the versatility of the Magnum Spill Buster?

Operator's Manual

p) 802.425.3710 | f) 802.425.2896 | info@cleanearth.biz

APPENDIX G

In-Situ Chemical Oxidation Data Sheets

RegenOx™

CHEMICAL OXIDATION REDEFINED...

RegenOx™ is an advanced in situ chemical oxidation technology designed to treat organic contaminants including high concentration source areas in the saturated and vadose zones*

PRODUCT FEATURES:

- Rapid and sustained oxidation of target compounds
- Easily applied with readily available equipment
- Destroys a broad range of contaminants
- More efficient than other solid oxidants
- Enhances subsequent bioremediation
- Avoids detrimental impacts to groundwater aquifers

RegenOx product application

HOW IT WORKS:

RegenOx maximizes in situ performance using a solid alkaline oxidant that employs a sodium percarbonate complex with a multi-part catalytic formula. The product is delivered as two parts that are combined and injected into the subsurface using common drilling or direct-push equipment. Once in the subsurface, the combined product produces an effective oxidation reaction comparable to that of Fenton's Reagent without a violent exothermic reaction. RegenOx safely, effectively and rapidly destroys a wide range of contaminants in both soil and groundwater (Table 1).

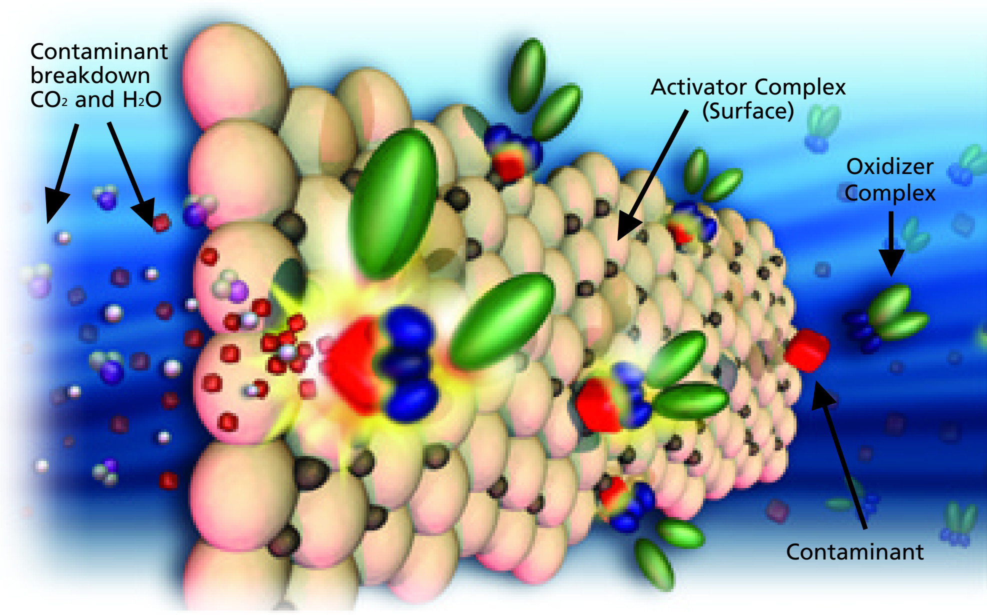
ACHIEVES RAPID OXIDATION VIA A NUMBER OF MECHANISMS

RegenOx directly oxidizes contaminants while its unique catalytic complex generates a suite of highly charged, oxidative free radicals that are responsible for the rapid destruction of contaminants. The mechanisms by which RegenOx operates are:

- Surface- Mediated Oxidation: (see Figure 1 and description below)
- Direct Oxidation: $C_2Cl_4 + 2\ Na_2CO_3 \bullet 3\ H_2O_2 + 2\ H_2O \longleftrightarrow 2CO_2 + 4\ NaCl + 4\ H_2O + 2\ H_2CO_3$
- Free Radical Oxidation:
  - – Perhydroxyl Radical ($HO_2\bullet$)
  - – Hydroxyl Radical ($OH\bullet$)
  - – Superoxide Radical ($O_2\bullet$)

Figure 1. Surface-Mediated Oxidation is responsible for the majority of RegenOx contaminant destruction. This process takes place in two stages. First, the RegenOx activator complex coats the subsurface. Second, the oxidizer complex and contaminant react with the activator complex surface destroying the contaminant.

Figure 1. RegenOx™ Surface-Mediated Oxidation



* Patent applied for

RegenOx™

From Mass Reduction to Bioremediation:

RegenOx™ is an effective and rapid contaminant mass reduction technology. A single injection will remove significant amounts of target contaminants from the subsurface. Strategies employing multiple Regenox injections coupled with follow-on accelerated bioremediation can be used to treat highly contaminated sites to regulatory closure. In fact, RegenOx was designed specifically to allow for a seamless transition to low-cost accelerated bioremediation using any of Regenesis controlled release compounds.

Significant Longevity:

RegenOx has been shown to destroy contaminants for periods of up to one month.

Product Application Made Safe and Easy:

RegenOx produces minimal heat and as with all oxidants proper health and safety procedures must be followed. The necessary safety guidance accompanies all shipments of RegenOx and additional resources are available on request. Through the use of readily available, highly mobile, direct-push equipment and an array of pumps, RegenOx has been designed to be as easy to install as other Regenesis products like ORC® and HRC®.

Effective on a Wide Range of Contaminants:

RegenOx has been rigorously tested in both the laboratory and the field on petroleum hydrocarbons (aliphatics and aromatics), gasoline oxygenates (e.g., MTBE and TAME), polyaromatic hydrocarbons (e.g., naphthalene and phenanthrene) and chlorinated hydrocarbons (e.g., PCE, TCE, TCA).

Oxidant Effectiveness vs. Contaminant Type:

Table 1

Contaminant	RegenOx™	Fenton's Reagent	Permanganate	Persulfate	Activated Persulfate	Ozone
Petroleum Hydrocarbons	**A**	**A**	B	B	B	**A**
Benzene	**A**	**A**	D	B	B	**A**
MTBE	**A**	B	B	C	B	B
Phenols	**A**	**A**	B	C	B	**A**
Chlorinated Ethenes (PCE, TCE, DCE, VC)	**A**	**A**	**A**	B	**A**	**A**
Chlorinated Ethanes (TCA, DCA)	**A**	B	C	D	C	B
Polycyclic Aromatic Hydrocarbons (PAHs)	**A**	**A**	B	B	**A**	**A**
Polychlorinated Biphenyls (PCBs)	B	C	D	D	D	B
Explosives (RDX, HMX)	**A**	**A**	**A**	**A**	**A**	**A**

Based on laboratory kinetic data, thermodynamic calculations, and literature reports.

Oxidant Effectiveness Key:

A = Short half life, low free energy (most energetically favored), most complete
B = Intermediate half life, low free energy, intermediate degree of completion
C = Intermediate half life, intermediate free energy, low degree of completion
D = Long half life, high free energy (least favored), very low degree of completion

REGENESIS
Advanced Technologies for Groundwater Resources
1011 Calle Sombra / San Clemente / California 92673-6244
Tel: 949/366-8000 / Fax: 949/366-8090 / www.regenesis.com

Regen OX – Part A (Oxidizer Complex)

Material Safety Data Sheet (MSDS)

Last Revised: November 7, 2005

Section 1 – Supplier Information and Material Identification

Supplier:

REGENESIS
1011 Calle Sombra
San Clemente, CA 92673
Telephone: 949.366.8000
Fax: 949.366.8090
E-mail: info@regenesis.com

Chemical Description:	A mixture of sodium percarbonate [$2Na_2CO_3 \cdot 3H_2O_2$], sodium carbonate [Na_2CO_3], sodium silicate and silica gel.
Chemical Family:	Inorganic Chemicals
Trade Name:	Regen Ox – Part A (Oxidizer Complex)
Product Use:	Used to remediate contaminated soil and groundwater (environmental applications)

Section 2 – Chemical Information/Other Designations

CAS No.	Chemical
15630-89-4	Sodium Percarbonate
5968-11-6	Sodium Carbonate Monohydrate
1344-09-8	Silicic Acid, Sodium Salt, Sodium Silicate
63231-67-4	Silica Gel

Section 3 – Physical Data

Form:	Powder
Color:	White
Odor:	Odorless
Melting Point:	NA
Boiling Point:	NA

Section 3 – Physical Data (cont)

Flammability/Flash Point:	NA
Vapor Pressure:	NA
Bulk Density:	0.9 – 1.2 g/cm^3
Solubility:	Min 14.5g/100g water @ 20 ºC
Viscosity:	NA
pH (3% solution):	˜ 10.5
Decomposition Temperature:	Self-accelerating decomposition with oxygen release starts at 50 ºC.

Section 4 – Reactivity Data

Stability:	Stable under normal conditions
Conditions to Avoid/Incompatibility:	Acids, bases, salts of heavy metals, reducing agents, and flammable substances
Hazardous Decomposition Products:	Oxygen. Contamination with many substances will cause decomposition. The rate of decomposition increases with increasing temperature and may be very vigorous with rapid generation of oxygen and steam.

Section 5 – Regulations

TSCA Inventory Listed: Yes

CERCLA Hazardous Substance (40 CFR Part 302)

Listed Substance: *No*

Unlisted Substance: *Yes*

SARA, Title III, Sections 313 (40 CFR Part 372) – Toxic Chemical Release Reporting: Community Right-To-Know

Extremely Hazardous Substance:	No
WHMIS Classification:	C, D2B
Canadian Domestic Substance List:	Appears

Section 6 – Protective Measures, Storage and Handling

Technical Protective Measures

Storage:	Oxidizer. Store in a cool, well ventilated area away from all sources of ignition and out of the direct sunlight. Store in a dry location away from heat and in temperatures less than 40 ?C. Keep away from incompatible materials and keep lids tightly closed. Do not store in improperly labeled containers. Protect from moisture. Do not store near combustible materials. Keep containers well sealed. Store separately from reducing materials. Avoid contamination which may lead to decomposition.
Handling:	Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists or dust. Do not eat, drink or smoke in the work area. Label containers and keep them tightly closed when not in use. Wash hands thoroughly after handling.

Personal Protective Equipment (PPE)

Engineering Controls:	General room ventilation is required if used indoors. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mists. Maintain adequate ventilation at all times. Do not use in confined areas. Keep levels below recommended exposure limits. To determine actual exposure limits, monitoring should be performed on a routine basis.
Respiratory Protection:	For many conditions, no respiratory protection is necessary; however, in dusty or unknown conditions or when exposures exceed limit values a NIOSH approved respirator should be used.
Hand Protection:	Wear chemical resistant gloves (neoprene, rubber, or PVC).

Section 6 – Protective Measures, Storage and Handling (cont)

Eye Protection:	Wear chemical safety goggles. A full face shield may be worn in lieu of safety goggles.
Skin Protection:	Try to avoid skin contact with this product. Chemical resistant gloves (neoprene, PVC or rubber) and protective clothing should be worn during use.
Other:	Eye wash station.
Protection Against Fire & Explosion:	Product is non-explosive. In case of fire, evacuate all non-essential personnel, wear protective clothing and a self-contained breathing apparatus, stay upwind of fire, and use water to spray cool fire-exposed containers.

Section 7 – Hazards Identification

Potential Health Effects

Inhalation:	Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath, and irritations to mucous membranes, nose and throat.
Eye Contact:	Causes irritation, redness and pain.
Skin Contact:	Causes slight irritation.
Ingestion:	May be harmful if swallowed (vomiting and diarrhea).

Section 8 – Measures in Case of Accidents and Fire

After Spillage/Leakage:	Eliminate all ignition sources. Evacuate unprotected personnel and never exceed any occupational exposure limit. Shovel or sweep spilt material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to the inventory.
Extinguishing Media:	Water

First Aid

Eye Contact:	Flush eyes with running water for at least 15 minutes with eyelids held open. Seek a specialist.
Inhalation:	Remove affected person to fresh air. Seek medical attention if the effects persist.
Ingestion:	If the individual is conscious and not convulsing, give two-four cups of water to dilute the chemical and seek medical attention immediately. **Do Not** induce vomiting.

Section 8 – Measures in Case of Accidents and Fire (cont)

Skin Contact:	Wash affected areas with soap and a mild detergent and large amounts of water.

Section 9 – Accidental Release Measures

Precautions:	
Cleanup Methods:	Shovel or sweep spilt material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to the inventory.

Section 10 – Information on Toxicology

Toxicity Data	
LD50 Oral (rat):	2,400 mg/kg
LD50 Dermal (rabbit):	Min 2,000 mg/kg
LD50 Inhalation (rat):	Min 4,580 mg/kg

Section 11 – Information on Ecology

Ecology Data	
Ecotoxicological Information:	NA

Section 12 – Disposal Considerations

Waste Disposal Method	
Waste Treatment:	Dispose of in an approved waste facility operated by an authorized contactor in compliance with local regulations.
Package (Pail) Treatment:	The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

Section 13 – Shipping/Transport Information

D.O.T. Shipping Name:	Oxidizing Solid, N.O.S. [A mixture of sodium percarbonate [$2Na_2CO_3{\cdot}3H2O_2$], sodium carbonate [Na_2CO_3], sodium silicate and silica gel.]
UN Number:	1479
Hazard Class:	5.1
Labels:	5.1 (Oxidizer)
Packaging Group:	III

Section 14 – Other Information

HMIS® Rating	Health – 1 (slight)	Reactivity – 1 (slight)
	Flammability – 0 (none)	Lab PPE – goggles, gloves, and lab coat

HMIS® is a registered trademark of the National Painting and Coating Association.

Section 15 – Further Information

The information contained in this document is the best available to the supplier at the time of writing, but is provided without warranty of any kind. Some possible hazards have been determined by analogy to similar classes of material. The items in this document are subject to change and clarification as more information become available. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Regen OX – Part B (Activator Complex)

Material Safety Data Sheet (MSDS)

Last Revised: November 7, 2005

Section 1 – Supplier Information and Material Identification

Supplier:

REGENESIS
1011 Calle Sombra
San Clemente, CA 92673
Telephone: 949.366.8000
Fax: 949.366.8090
E-mail: info@regenesis.com

Chemical Description:	A mixture of sodium silicate solution, silica gel and ferrous sulfate
Chemical Family:	Inorganic Chemicals
Trade Name:	Regen Ox – Part B (Activator Complex)
Product Use:	Used for environmental remediation of contaminated soils and groundwater

Section 2 – Chemical Information/Other Designations

CAS No.	Chemical
1344-09-8	Silicic Acid, Sodium Salt, Sodium Silicate
63231-67-4	Silica Gel
7720-78-7	Ferrous Sulfate
7732-18-5	Water

Section 3 – Physical Data

Form:	Liquid
Color:	Blue/Green
Odor:	Odorless
Melting Point:	NA
Boiling Point:	NA
Flammability/Flash Point:	NA
Vapor Pressure:	NA

Section 3 – Physical Data (cont)

Specific Gravity	1.39 g/cm^3
Solubility:	Miscible
Viscosity:	NA
pH (3% solution):	11
Hazardous Decomposition Products:	Oxides of carbon and silicon may be formed when heated to decomposition.

Section 4 – Reactivity Data

Stability:	Stable under normal conditions.
Conditions to Avoid:	None.
Incompatibility:	Avoid hydrogen fluoride, fluorine, oxygen difluoride, chlorine trifluoride, strong acids, strong bases, oxidizers, aluminum, fiberglass, copper, brass, zinc, and galvanized containers.

Section 5 – Regulations

TSCA Inventory Listed: Yes

CERCLA Hazardous Substance (40 CFR Part 302)

Listed Substance: *No*

Unlisted Substance: *Yes*

SARA, Title III, Sections 302/303 (40 CFR Part 355) – Emergency Planning and Notification

Extremely Hazardous Substance: No

SARA, Title III, Sections 311/312 (40 CFR Part 370) – Hazardous Chemical Reporting: Community Right-To-Know

Hazard Category: Acute

SARA, Title III, Sections 313 (40 CFR Part 372) – Toxic Chemical Release Reporting: Community Right-To-Know

Extremely Hazardous Substance: No

Section 6 – Protective Measures, Storage and Handling

Technical Protective Measures

Storage:	Keep in a tightly closed container (steel or plastic) and store in a cool, well ventilated area away from all incompatible materials (acids, reactive metals, and ammonium salts). Store in a dry location away from heat and in temperatures less than 24 ?C. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers.
Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Use with adequate ventilation. Do not use product if it is brownish-yellow in color.

Personal Protective Equipment (PPE)

Engineering Controls:	General room ventilation is required if used indoors. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Safety shower and eyewash station should be within direct access.
Respiratory Protection:	Use NIOSH-approved dust and mist respirator where spray mist exists. Respirators should be used in accordance with 29 CFR 1910.134.
Hand Protection:	Wear chemical resistant gloves.
Eye Protection:	Wear chemical safety goggles. A full face shield may be worn in lieu of safety goggles.
Skin Protection:	Try to avoid skin contact with this product. Gloves and protective clothing should be worn during use.
Other:	
Protection Against Fire & Explosion:	Product is non-explosive and non-combustible.

Section 7 – Hazards Identification

Potential Health Effects	
Inhalation:	Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath, and irritations to mucous membranes, nose and throat.
Eye Contact:	Causes irritation, redness and pain.
Skin Contact:	Causes irritation. Symptoms include redness, itching and pain.
Ingestion:	May cause irritation to mouth, esophagus, and stomach.

Section 8 – Measures in Case of Accidents and Fire

After Spillage/Leakage (small):	Mop up and neutralize liquid, then discharge to sewer in accordance with local, state and federal regulations.
After Spillage/Leakage (large):	Keep unnecessary personnel away; isolate hazard area and do not allow entrance into the affected area. Do not touch or walk through spilled material. Stop leak if possible without risking injury. Prevent runoff from entering into storm sewers and ditches that lead to natural waterways. Isolate the material if at all possible. Sand or earth may be used to contain the spill. If containment is not possible, neutralize the contaminated area and flush with large quantities of water.
Extinguishing Media:	Material is compatible with all extinguishing media.
Further Information:	
First Aid	
Eye Contact:	Flush eyes with running water for at least 15 minutes with eyelids held open. Seek a specialist.
Inhalation:	Remove affected person to fresh air. Give artificial respiration if individual is not breathing. If breathing is difficult, give oxygen. Seek medical attention if the effects persist.
Ingestion:	If the individual is conscious and not convulsing, give two-four cups of water to dilute the chemical and seek medical attention immediately. **DO NOT** induce vomiting.
Skin Contact:	Wash affected areas with soap and a mild detergent and large amounts of water. Remove contaminated clothing and shoes.

Section 9 – Accidental Release Measures

Precautions:	
PPE:	Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots (see Section 6).
Environmental Hazards:	Sinks and mixes with water. High pH of this material may be harmful to aquatic life. Only water will evaporate from a spill of this material.
Cleanup Methods:	Pick-up and place in an appropriate container for reclamation or disposal. US regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities.

Section 10 – Information on Toxicology

Toxicity Data	
Sodium Silicate:	When tested for primary eye irritation potential according to OECD Guidelines, Section 405, a similar sodium silicate solution produced corneal, iridal and conjunctival irritation. Some eye irritation was still present 14 days after treatment, although the average primary irritation score has declined from 29.7 after 1 day to 4.0 after 14 days. When tested for primary skin irritation potential, a similar sodium silicate solution produced irritation with a primary irritation index of 3 to abraded skin and 0 to intact skin. Human experience confirms that irritation occurs when sodium silicates get on clothes at the collar, cuffs, or other areas where abrasion may exist. The acute oral toxicity of this product has not been tested.
Ferrous Sulfate:	LD50 Oral (rat): 319 mg/kg not a suspected carcinogen.

Section 11 – Information on Ecology

Ecology Data

Ecotoxicological Information:	Based on 100% solid sodium silicate, a 96 hour median tolerance for fish of 2,320 mg/l; a 96 hour median tolerance for water fleas of 247 mg/L; a 96 hour median tolerance for snail eggs of 632 mg/L; and a 96 hour median tolerance for Amphipoda of 160 mg/L.

Section 12 – Disposal Considerations

Waste Disposal Method

Waste Treatment:	Neutralize and landfill solids in an approved waste facility operated by an authorized contactor in compliance with local regulations.
Package (Pail) Treatment:	The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

Section 13 – Shipping/Transport Information

D.O.T.	This product is not regulated as a hazardous material so there are no restrictions.

Section 14 – Other Information

HMIS® Rating	Health – 2 (moderate)	Reactivity – 0 (none)
	Flammability – 0 (none)	Lab PPE – goggles, gloves, and lab coat
	Contact – 1 (slight)	

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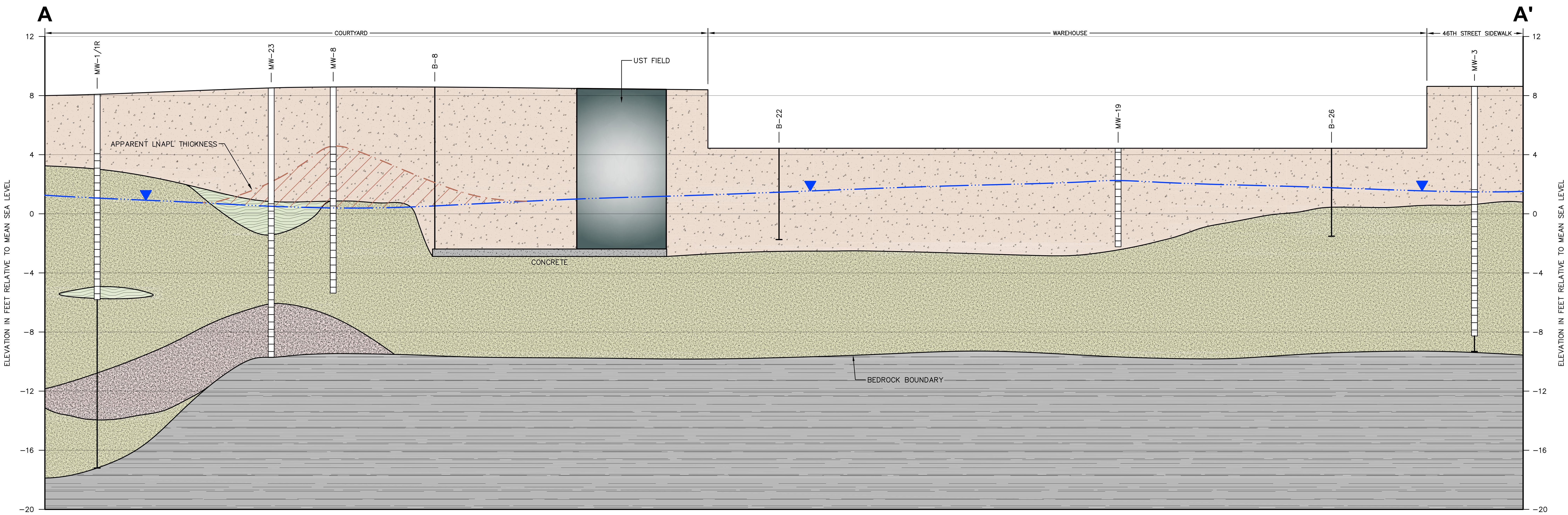
Section 15 – Further Information

The information contained in this document is the best available to the supplier at the time of writing, but is provided without warranty of any kind. Some possible hazards have been determined by analogy to similar classes of material. The items in this document are subject to change and clarification as more information become available. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

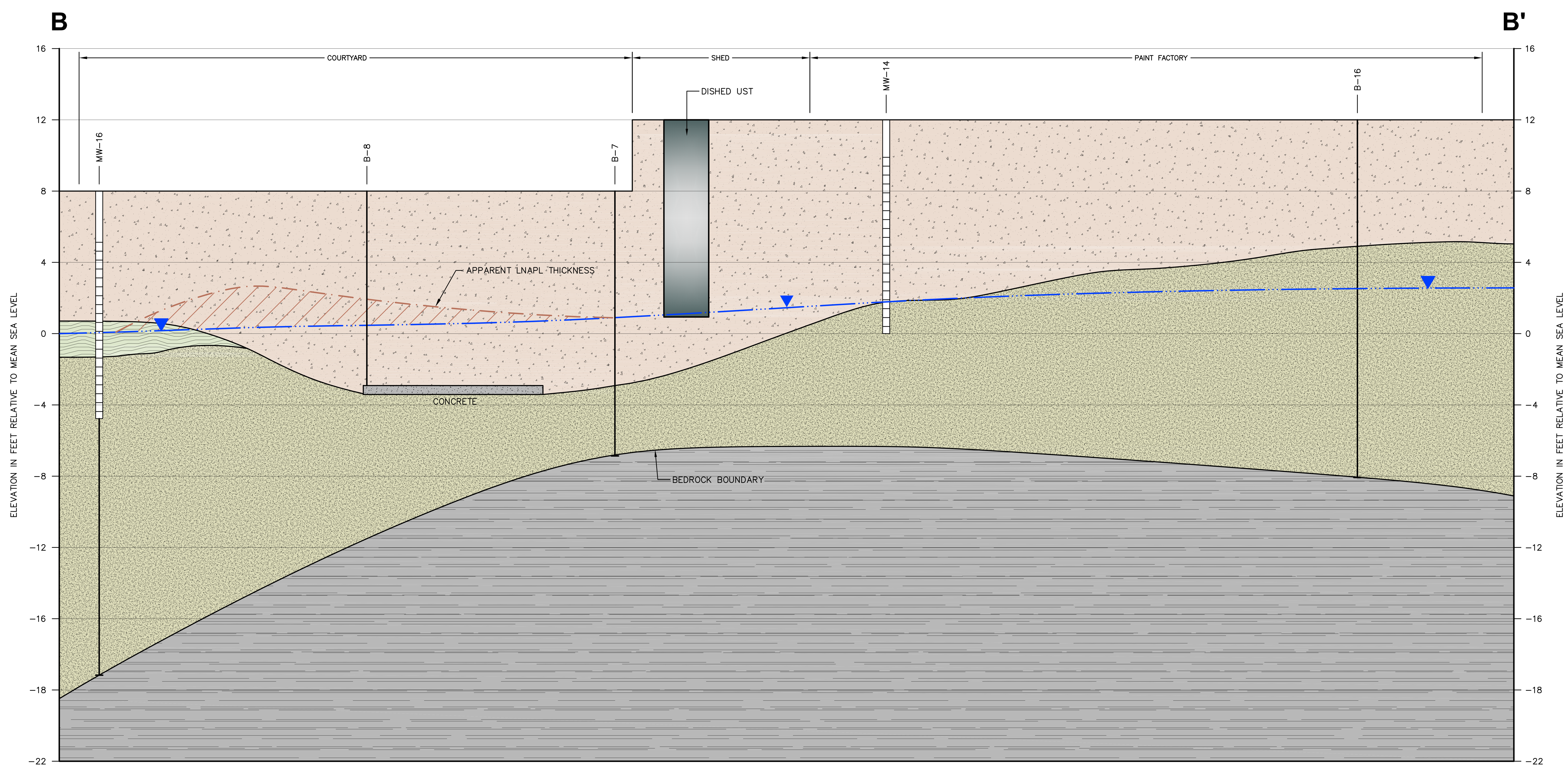
PLATES

A A'



SECTION A–A'
HORIZONTAL SCALE: 1:10
VERTICAL SCALE: 1:4

B B'



SECTION B–B'
HORIZONTAL SCALE: 1:10
VERTICAL SCALE: 1:4

LEGEND

- FILL MATERIAL (FINE TO MEDIUM SAND, SOME SILT AND GRAVEL, LITTLE CONCRETE, BRICK, ASH OR SLAG)
- SILTY PEAT
- PRIMARILY FINE TO MEDIUM SAND WITH VARYING AMOUNTS OF SILT AND LITTLE TO TRACE AMOUNTS OF GRAVEL AND COARSE SAND
- SAND AND GRAVEL
- BEDROCK
- INFERRED GROUNDWATER ELEVATION (MARCH 2014)
- LAND SURFACE
- SCREENED INTERVAL
- SOIL BORING

NOTES

1. LNAPL – LIGHT NON- AQUEOUS PHASE LIQUID
2. LNAPL THICKNESS BASED ON JANUARY 9, 2015 GAUGING DATA.

Title:
GENERALIZED HYDROGEOLOGIC CROSS SECTIONS A-A' AND B-B'

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:
VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	1
Project Mgr: R.M.	Project: 2051.0001Y000	
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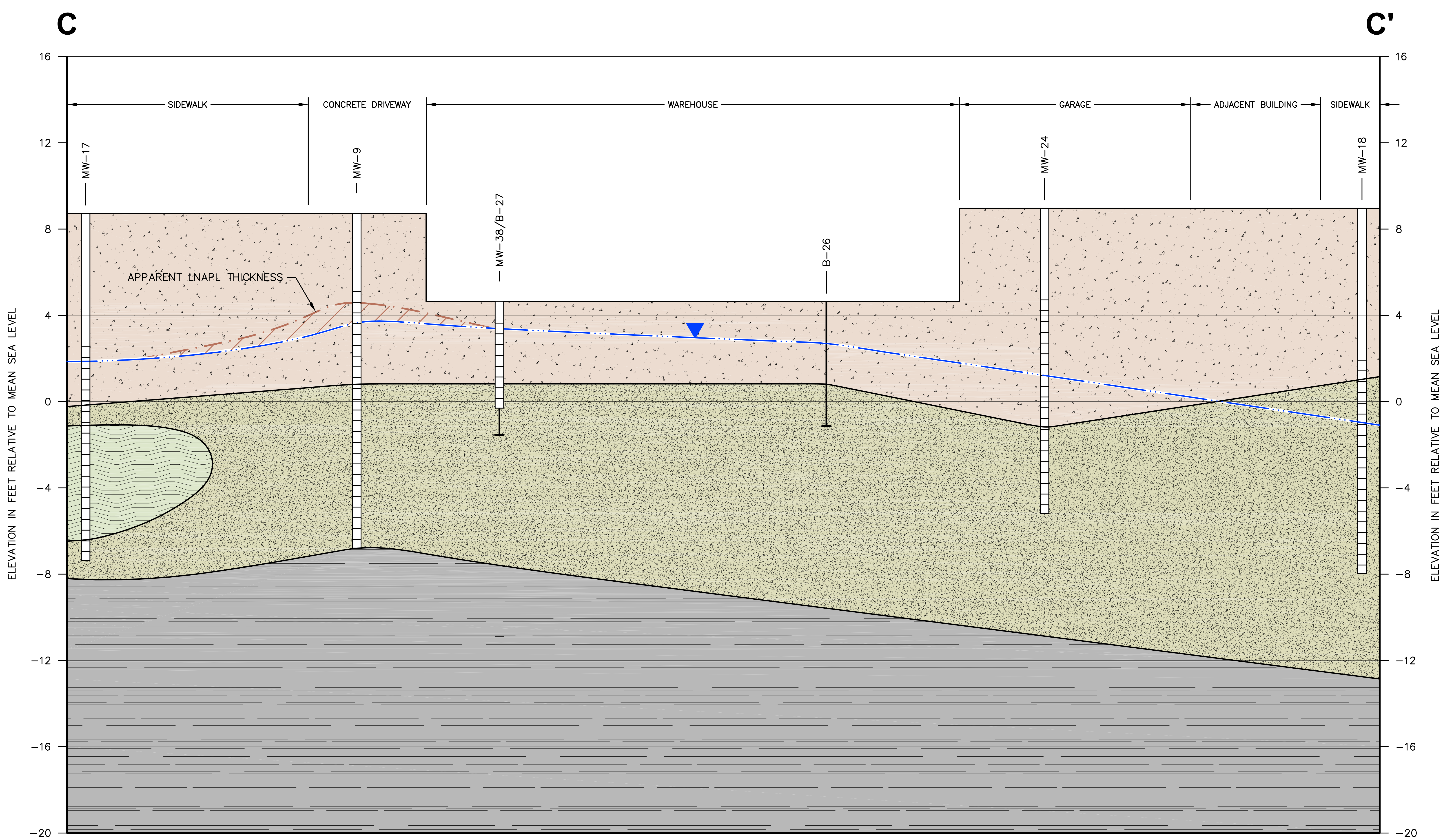

SECTION C–C'
HORIZONTAL SCALE: 1:10
VERTICAL SCALE: 1:4

LEGEND

- FILL MATERIAL (FINE TO MEDIUM SAND, SOME SILT AND GRAVEL, LITTLE CONCRETE, BRICK, ASH OR SLAG)
- SILTY PEAT
- PRIMARILY FINE TO MEDIUM SAND WITH VARYING AMOUNTS OF SILT AND LITTLE TO TRACE AMOUNTS OF GRAVEL AND COARSE SAND
- BEDROCK
- INFERRED GROUNDWATER ELEVATION (MARCH 2014)
- LAND SURFACE
- SCREENED INTERVAL
- SOIL BORING

NOTES

1. LNAPL – LIGHT NON- AQUEOUS PHASE LIQUID
2. LNAPL THICKNESS BASED ON JANUARY 9, 2015 GAUGING DATA.

Title:
GENERALIZED HYDROGEOLOGIC CROSS SECTION C-C'

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:
VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.M.	Date: 15MAY15	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	2
Project Mgr: R.M.	Project: 2051.0001Y000	
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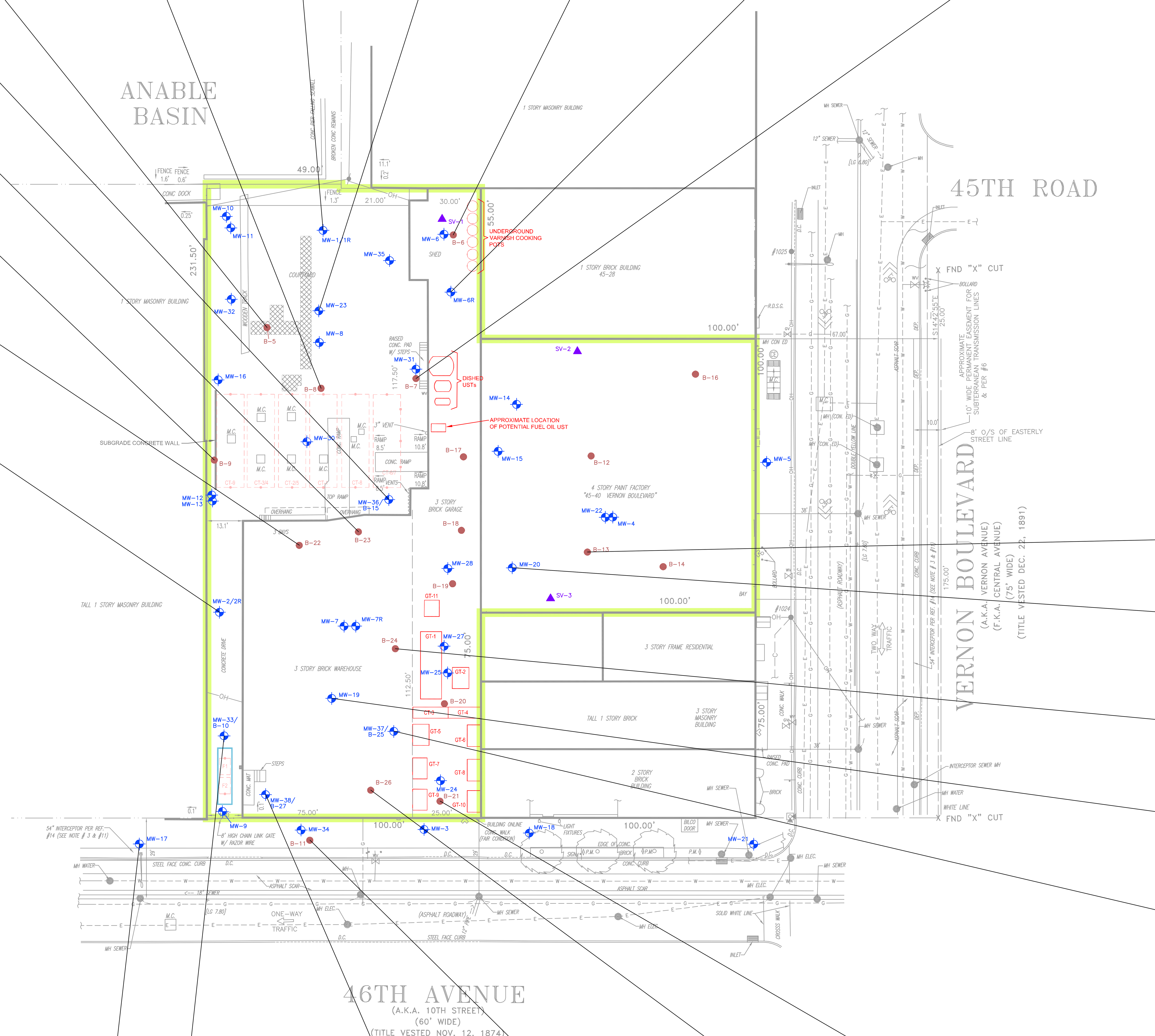

B-5	12/31/13	12/31/13	12/31/13	12/31/13
Depth (ft bls)	0 - 2	3 - 5	10 - 12	15 - 16
VOCs				
Ethylbenzene	ND	ND	8900 D	ND
Isopropylbenzene	ND	ND	11000 D	ND
Xylenes (total)	ND	ND	11800 D	ND

B-8	12/30/13	12/30/13	12/30/13
Depth (ft bls)	0 - 2	5 - 7	9 - 11
VOCs			
Acetone	90	90	ND

MW-1R	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	3 - 5	6 - 8	24 - 25
VOCs				
Isopropylbenzene	ND	ND	3400 D	NE

MW-23	12/31/13	12/31/13	12/31/13	12/31/13
Depth (ft bls)	0 - 2	5 - 7	10 - 12	18 - 19
VOCs				
Acetone	NE	110 D	ND	NE
Ethylbenzene	ND	ND	9400D	ND
Isopropylbenzene	ND	NE	14000 D	ND
Xylenes (total)	ND	ND	8800 JD	ND

B-6	12/31/13	1/17/14	1/17/14	1/17/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	16 - 18
VOCs				
Ethylbenzene	ND	ND	11000 D	26000 D
Isopropylbenzene	ND	ND	38000 D	76000 D
Xylenes (total)	ND	NE	32000 D	77000 D

MW-6R	12/30/13	1/17/14	1/17/14	1/17/14	1/17/14
Depth (ft bls)	0 - 2	9 - 11	11 - 12	15 - 17	15 - 17 DUP
VOCs					
Acetone	NE	410 JD	ND	ND	ND
Ethylbenzene	ND	1700 D	31000 D	21000 JVD	10000 JVD
Isopropylbenzene	ND	5200 D	78000 D	57000 JVD	30000 JVD
Xylenes (total)	ND	2900 D	60000 D	38000 JVD	18000 JVD

B-7	12/30/13	12/30/13	12/30/13
Depth (ft bls)	0 - 2	5 - 7	14 - 15
VOCs			
Acetone	1200 D	240 D	ND
Isopropylbenzene	ND	ND	9900 D

B-15	12/31/13	1/10/14	1/10/14	1/10/14
Depth (ft bls)	0 - 2	5 - 7	7 - 9	10 - 11
VOCs				
Isopropylbenzene	ND	ND	3200 D	NE

B-23	1/13/14	1/13/14
Depth (ft bls)	0 - 2	2 - 4
VOCs		
2-Butanone (MEK)	220 JD	660 JD
Acetone	240 JD	ND
Isopropylbenzene	NE	4600 D

B-9	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	5 - 7	7 - 9	19 - 20
VOCs				
Acetone	86	NE	ND	NE

B-22	1/13/14	1/13/14	1/13/14
Depth (ft bls)	0 - 2	0 - 2 DUP	4 - 6
VOCs			
Acetone	130	80	ND
Isopropylbenzene	NE	NE	17000 D

MW-2R	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	0 - 2 DUP	6 - 8	14 - 15	23 - 24
VOCs					
Acetone	78	120	88	ND	NE
Benzene	ND	ND	ND	130 D	ND
Ethylbenzene	ND	ND	ND	1200 D	ND
Isopropylbenzene	ND	ND	ND	3500 D	ND
Xylenes (total)	ND	ND	ND	2100 D	ND

B-13	12/19/13	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	10 - 12	16 - 18
VOCs				
2-Butanone (MEK)	ND	ND	ND	1900 JD
Acetone	NE	NE	NE	4800 JD
Isopropylbenzene	ND	NE	NE	6000 D

MW-20	12/19/13	1/15/14	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	12 - 14 DUP	18 - 19
VOCs					
2-Butanone (MEK)	ND	ND	ND	2100 JD	1700 JD
Acetone	NE	ND	ND	4500 JD	4600 JD
Isopropylbenzene	ND	ND	4100 D	5500 D	3700 D

B-24	1/14/14	1/14/14
Depth (ft bls)	0 - 2	2 - 4
VOCs		
Isopropylbenzene	NE	5800 D
Xylenes (total)	NE	ND

MW-19	1/14/14	1/14/14
Depth (ft bls)	0 - 2	4 - 6
VOCs		
Ethylbenzene	ND	3300 D
Isopropylbenzene	NE	17000 D

B-25	1/14/14	1/14/14
Depth (ft bls)	0 - 2	2 - 4
VOCs		
Isopropylbenzene	7200 D	5600 D

MW-17	1/2/14	1/2/14	1/2/14	1/2/14
Depth (ft bls)	0 - 2	5 - 7	12 - 13	23 - 24
VOCs				
Acetone	ND	NE	94 D	NE

B-10	12/20/13	12/20/13	12/20/13	12/20/13
Depth (ft bls)	0 - 2	5 - 7	10 - 12	17.5 - 18
VOCs				
Ethylbenzene	ND	ND	5800 D	ND
Isopropylbenzene	ND	ND	9200 D	ND
Xylenes (total)	ND	ND	22000 D	ND

B-27	1/14/14	1/14/14
Depth (ft bls)	0 - 2	4 - 6
VOCs		
Isopropylbenzene	NE	9500 D

B-11	1/2/14	1/6/14	1/6/14	1/6/14
Depth (ft bls)	0 - 2	8 - 10	11 - 13	15 - 17
VOCs				
Isopropylbenzene	ND	NE	3200 D	NE

B-26	1/14/14	1/14/14
Depth (ft bls)	0 - 2	4 - 6
VOCs		
Isopropylbenzene	8100 D	5600 D

B-21	12/17/13	12/17/13	12/17/13
Depth (ft bls)	0 - 2	5 - 7	7 - 8
VOCs			
Isopropylbenzene	ND	NE	2700 D
Methylene chloride	NE	300 JD	1400 JD
Xylenes (total)	ND	2300 D	NE

LEGEND

- B-6 — SOIL BORING LOCATION AND DESIGNATION
- MW-5 — MONITORING WELL LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- CONCRETE VAULT

TYPICAL DATA BOX INFORMATION

SAMPLE ID → B-19; SAMPLE DATE; SAMPLE DEPTH; ANALYTES; CONCENTRATIONS IN µg/kg

B-19	12/17/13	12/17/13	12/17/13
Depth (ft bls)	0 - 2	6 - 8	8 - 10
VOCs			
Xylenes (total)	ND	ND	1100 JD
SVOCs	NE	NE	NE
Metals			
Copper	140	NE	75
Lead	120	NE	NE
Zinc	450	NE	NE
PCBs	NA	NA	NA
Pesticides	NA	NA	NA

Parameter (Concentrations in µg/kg)	Standards* (µg/kg)
VOCs	
2-Butanone (MEK)	120
Acetone	50
Benzene	60
Ethylbenzene	1000
Isopropylbenzene	**2300
Methylene chloride	50
Xylenes (total)	1600

Concentrations in µg/kg
µg/kg - Micrograms per kilogram
*NYSDEC Part 375 Protection of Groundwater
**NYSDEC CP-51 Protection of Groundwater Standards
NYSDEC - New York State Department of Environmental Conservation
-- Not detected above NYSDEC Protection of Groundwater Standards
J - Estimated value
D - a secondary analysis after dilution due to exceedance of the calibration range in the original sample.
V - Qualified by Validator
DUP - Duplicate Sample
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
PCBs - Polychlorinated Biphenyls
NE - No exceedance
ND - No detection
NA - Not analyzed for by laboratory
ft bls - Feet below land surface

20' 0 20'

Title:
SOIL DETECTIONS IN EXCESS OF NYSDEC PROTECTION OF GROUNDWATER FOR VOCs

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:
VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.L.	Date: 04AUG15	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	3
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.01.DWG		

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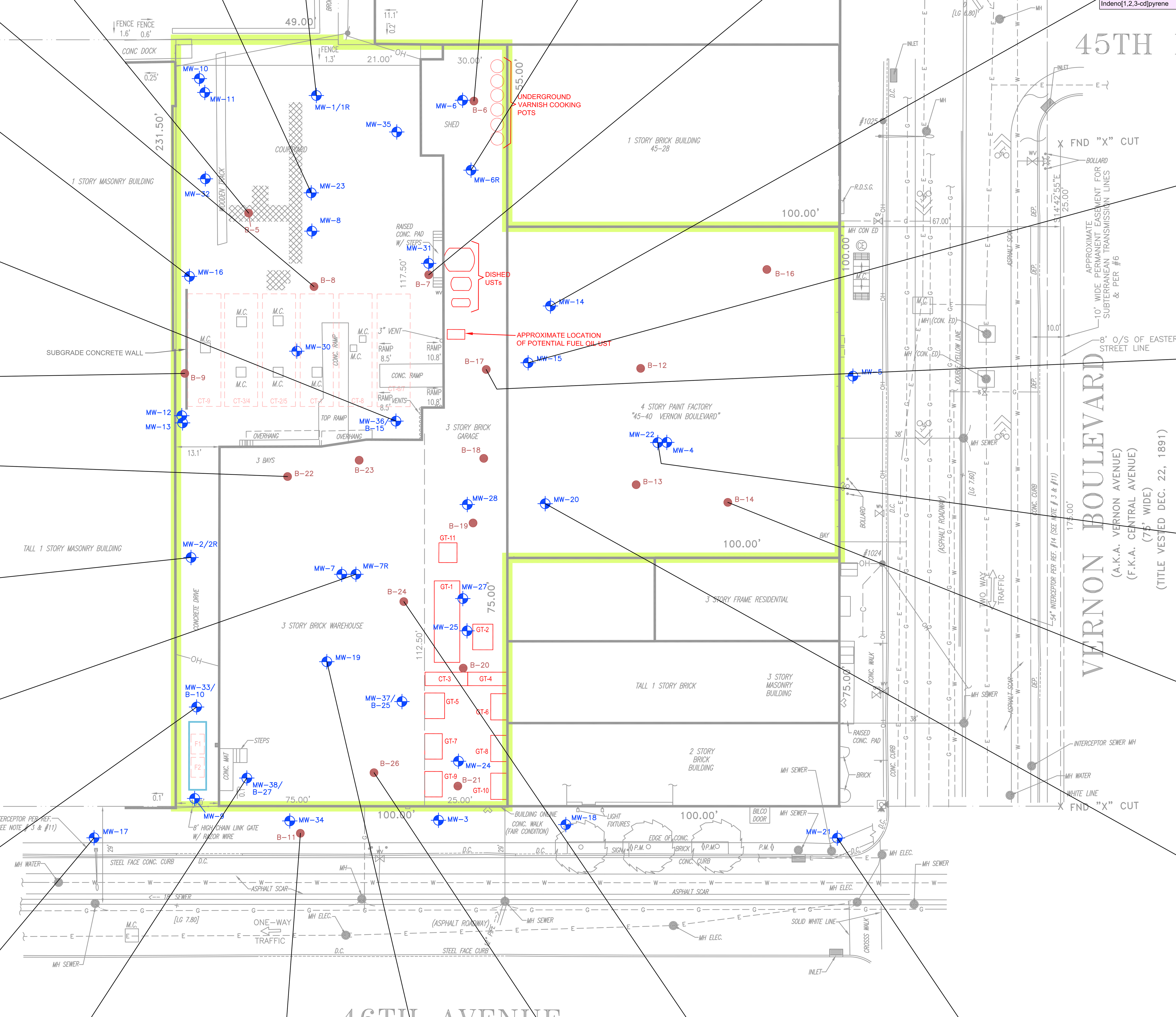

B-5	12/31/13	12/31/13	12/31/13	12/31/13
Depth (ft bls)	0 - 2	3 - 5	10 - 12	15 - 16
SVOCs				
Benzo[a]anthracene	NE	18000 D	ND	ND
Benzo[a]pyrene	NE	14000 D	ND	ND
Benzo[b]fluoranthene	NE	17000 D	ND	ND
Benzo[k]fluoranthene	NE	7500 D	ND	ND
Chrysene	NE	18000 D	ND	ND
Dibenzo[a,h]anthracene	NE	2100 D	ND	ND
Indeno[1,2,3-cd]pyrene	NE	6900 D	ND	ND

MW-23	12/31/13	12/31/13	12/31/13	12/31/13
Depth (ft bls)	0 - 2	5 - 7	10 - 12	18 - 19
SVOCs				
Benzo[b]fluoranthene	1100	NE	ND	ND

MW-1R	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	3 - 5	6 - 8	24 - 25
SVOCs				
Benzo[a]anthracene	1500	1600	ND	ND
Benzo[a]pyrene	1500	1400	ND	ND
Benzo[b]fluoranthene	1800	1700	ND	ND
Indeno[1,2,3-cd]pyrene	990	860	ND	ND

B-6	12/31/13	1/17/14	1/17/14	1/17/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	16 - 18
SVOCs				
Benzo[a]pyrene	NE	1200 JD	ND	ND
Benzo[b]fluoranthene	NE	1600 D	ND	ND
Indeno[1,2,3-cd]pyrene	NE	1200 JD	ND	ND

MW-6R	12/30/13	1/17/14	1/17/14	1/17/14	1/17/14
Depth (ft bls)	0 - 2	9 - 11	11 - 12	15 - 17	15 - 17
SVOCs					DUP
Benzo[a]anthracene	2000	5700 D	ND	ND	NE
Benzo[a]pyrene	1700	4900 D	ND	ND	ND
Benzo[b]fluoranthene	2200	6500 D	ND	ND	NE
Chrysene	NE	5900 D	ND	ND	ND
Dibenzo[a,h]anthracene	NE	700 JD	ND	ND	ND
Indeno[1,2,3-cd]pyrene	1100	3300 D	ND	ND	ND

B-7	12/30/13	12/30/13	12/30/13
Depth (ft bls)	0 - 2	5 - 7	14 - 15
SVOCs			
Benzo[a]anthracene	4600 D	7900 D	ND
Benzo[a]pyrene	4300 D	7300 D	ND
Benzo[b]fluoranthene	5400 D	9300 D	ND
Benzo[k]fluoranthene	NE	4000 D	ND
Chrysene	4900 D	8400 D	ND
Dibenzo[a,h]anthracene	680 D	1200 D	ND
Indeno[1,2,3-cd]pyrene	2500 D	4500 D	ND

B-8	12/30/13	12/30/13	12/30/13
Depth (ft bls)	0 - 2	5 - 7	9 - 11
SVOCs			
Benzo[a]anthracene	2500	1600	2400 JD
Benzo[a]pyrene	2500	1600	2300 JD
Benzo[b]fluoranthene	3200	2100	2900 D
Dibenzo[a,h]anthracene	410	NE	ND
Indeno[1,2,3-cd]pyrene	1600	1100	1600 JD

MW-14	12/19/13	12/19/13	1/17/14	1/17/14
Depth (ft bls)	0 - 2	0 - 2	7 - 9	10 - 12
SVOCs		DUP		
Benzo[a]anthracene	NE	1900 JV	4000 D	ND
Benzo[a]pyrene	NE	1900 JV	3800 D	ND
Benzo[b]fluoranthene	NE	1900 JV	4900 D	ND
Chrysene	NE	NE	4400 D	ND
Dibenzo[a,h]anthracene	ND	360 JV	630 D	ND
Indeno[1,2,3-cd]pyrene	NE	1100 JV	2100 D	ND

MW-16	1/7/14	1/7/14	1/7/14	1/7/14
Depth (ft bls)	0 - 2	5 - 7	10 - 12	25 - 26.5
SVOCs				
Benzo[a]anthracene	2000	3100 D	23000 D	ND
Benzo[a]pyrene	2000	2800 JD	18000 D	ND
Benzo[b]fluoranthene	2900	3300 D	20000 D	ND
Benzo[k]fluoranthene	NE	NE	8700 D	ND
Chrysene	NE	NE	20000 D	ND
Dibenzo[a,h]anthracene	NE	ND	2300 D	ND
Indeno[1,2,3-cd]pyrene	1300	2000 JD	9000 D	ND

MW-15	1/20/14	1/20/14	1/20/14
Depth (ft bls)	0 - 2	6 - 8	10 - 12
SVOCs			
Benzo[a]anthracene	34000 D	1200	ND
Benzo[a]pyrene	35000 D	1400	ND
Benzo[b]fluoranthene	44000 D	1700	ND
Benzo[k]fluoranthene	17000 D	NE	ND
Chrysene	36000 D	NE	ND
Dibenzo[a,h]anthracene	5300 D	NE	ND
Indeno[1,2,3-cd]pyrene	22000 D	930	ND

B-15	12/31/13	1/10/14	1/10/14	1/10/14
Depth (ft bls)	0 - 2	5 - 7	7 - 9	10 - 11
SVOCs				
Benzo[a]anthracene	34000 D	NE	5300	NE
Benzo[a]pyrene	35000 D	NE	5000	NE
Benzo[b]fluoranthene	44000 D	NE	6200	NE
Benzo[k]fluoranthene	17000 D	NE	NE	NE
Chrysene	36000 D	NE	5700	NE
Dibenzo[a,h]anthracene	5300 D	NE	760	NE
Indeno[1,2,3-cd]pyrene	22000 D	NE	3600	NE

B-9	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	5 - 7	7 - 9	19 - 20
SVOCs				
Benzo[a]anthracene	1600 D	3000	3600 D	ND
Benzo[a]pyrene	2300 D	2900	3700 D	ND
Benzo[b]fluoranthene	2600	3800	4400 D	ND
Dibenzo[a,h]anthracene	NE	550	420 D	ND
Indeno[1,2,3-cd]pyrene	870 D	1600	2600 D	ND

B-17	1/20/14	1/20/14
Depth (ft bls)	0 - 2	7 - 9
SVOCs		
Benzo[a]anthracene	5600 D	NE
Benzo[a]pyrene	4900 D	NE
Benzo[b]fluoranthene	7200 D	NE
Chrysene	4900 D	NE
Dibenzo[a,h]anthracene	840 D	ND
Indeno[1,2,3-cd]pyrene	2900 D	NE

B-22	1/13/14	1/13/14	1/13/14
Depth (ft bls)	0 - 2	0 - 2	4 - 6
SVOCs		DUP	
Benzo[a]anthracene	1500	2100	1300 JD
Benzo[a]pyrene	1500	2300	ND
Benzo[b]fluoranthene	1900	2800	1200 JD
Dibenzo[a,h]anthracene	NE	360	ND
Indeno[1,2,3-cd]pyrene	960	1400	ND

MW-22	12/19/13	1/16/14	1/16/14	1/16/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	18 - 20
SVOCs				
Benzo[a]anthracene	1800 D	ND	ND	ND
Benzo[a]pyrene	1800 D	ND	ND	ND
Benzo[b]fluoranthene	2000 D	ND	ND	ND
Indeno[1,2,3-cd]pyrene	1100 D	ND	ND	NE

MW-2R	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	0 - 2	6 - 8	14 - 15	23 - 24
SVOCs		DUP			
Benzo[a]anthracene	2400 D	3500	4100	ND	ND
Benzo[a]pyrene	2400 D	2900	3100	ND	ND
Benzo[b]fluoranthene	4100	3600 D	3900	ND	ND
Chrysene	NE	NE	4000	ND	ND
Dibenzo[a,h]anthracene	520	540	490	ND	ND
Indeno[1,2,3-cd]pyrene	1600	2100	1700	ND	ND

B-14	12/19/13	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	10 - 12	17 - 18.5
SVOCs				
Benzo[a]anthracene	2200	1900	ND	ND
Benzo[a]pyrene	2100	1800	ND	ND
Benzo[b]fluoranthene	2400	2200	ND	ND
Chrysene	NE	NE	ND	ND
Dibenzo[a,h]anthracene	370	NE	ND	ND
Indeno[1,2,3-cd]pyrene	1300	1200	ND	ND

MW-7R	12/19/13	1/14/14
Depth (ft bls)	0 - 2	2 - 4
SVOCs		
Benzo[a]anthracene	3200 D	1200 JD
Benzo[a]pyrene	2800 JD	ND
Benzo[b]fluoranthene	3600 D	1300 JD
Indeno[1,2,3-cd]pyrene	1700 JD	ND

MW-20	12/19/13	1/15/14	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	12 - 14	18 - 19
SVOCs				DUP	
Benzo[a]anthracene	4400 D	ND	ND	ND	ND
Benzo[a]pyrene	4200 D	ND	ND	ND	ND
Benzo[b]fluoranthene	5900 D	ND	ND	ND	ND
Chrysene	5000 D	ND	ND	ND	ND
Dibenzo[a,h]anthracene	710 D	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	2700 D	ND	ND	ND	ND

B-10	12/20/13	12/20/13	12/20/13	12/20/13
Depth (ft bls)	0 - 2	5 - 7	10 - 12	17.5 - 18
SVOCs				
Benzo[a]anthracene	3000 D	1600	ND	ND
Benzo[a]pyrene	2600 D	1300	ND	ND
Benzo[b]fluoranthene	3200 D	1600	ND	ND
Dibenzo[a,h]anthracene	400 D	NE	ND	ND
Indeno[1,2,3-cd]pyrene	1500 D	800	ND	ND

MW-17	1/2/14	1/2/14	1/2/14	1/2/14
Depth (ft bls)	0 - 2	5 - 7	12 - 13	23 - 24
SVOCs				
Benzo[a]anthracene	1800	NE	ND	ND
Benzo[a]pyrene	1900	NE	ND	ND
Benzo[b]fluoranthene	2300	1100	ND	ND
Indeno[1,2,3-cd]pyrene	1400	770	ND	ND

B-27	1/14/14	1/14/14
Depth (ft bls)	0 - 2	4 - 6
SVOCs		
Benzo[a]anthracene	1700 JD	3200 D
Benzo[a]pyrene	1700 JD	3000 JD
Benzo[b]fluoranthene	2100 JD	3700 D
Indeno[1,2,3-cd]pyrene	1000 JD	1700 JD

B-11	1/2/14	1/6/14	1/6/14	1/6/14
Depth (ft bls)	0 - 2	8 - 10	11 - 13	15 - 17
SVOCs				
Benzo[b]fluoranthene	1200	1100	NE	ND
Indeno[1,2,3-cd]pyrene	780	580	NE	ND

MW-19	1/14/14	1/14/14
Depth (ft bls)	0 - 2	4 - 6
SVOCs		
Benzo[a]anthracene	5000 D	ND
Benzo[a]pyrene	4100 D	ND
Benzo[b]fluoranthene	5000 D	ND
Chrysene	5300 D	ND
Dibenzo[a,h]anthracene	660 D	ND
Indeno[1,2,3-cd]pyrene	2100 D	ND

B-26	1/14/14	1/14/14
Depth (ft bls)	0 - 2	4 - 6
SVOCs		
Benzo[a]anthracene	2600 D	1100 JD
Benzo[a]pyrene	2100 JD	ND
Benzo[b]fluoranthene	2800 D	1200 JD
Indeno[1,2,3-cd]pyrene	1200 JD	ND

B-24	1/14/14	1/14/14
Depth (ft bls)	0 - 2	2 - 4
SVOCs		
Benzo[a]anthracene	1800	ND
Benzo[a]pyrene	1800	ND
Benzo[b]fluoranthene	2000	ND
Indeno[1,2,3-cd]pyrene	940	ND

MW-21	1/6/14	1/6/14	1/6/14	1/6/14
Depth (ft bls)	0 - 2	5 - 7	7 - 8	18 - 20
SVOCs				
Benzo[a]anthracene	1300	NE	ND	ND
Benzo[a]pyrene	1800	NE	ND	ND
Benzo[b]fluoranthene	1800	NE	ND	ND
Indeno[1,2,3-cd]pyrene	1300	NE	ND	ND

LEGEND

- B-6 SOIL BORING LOCATION AND DESIGNATION
- MW-5 MONITORING WELL LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- CONCRETE VAULT

TYPICAL DATA BOX INFORMATION

SAMPLE ID → MW-7R; SAMPLE DATE → 12/19/13, 1/14/14; SAMPLE DEPTH → 0 - 2, 2 - 4; ANALYTES; CONCENTRATIONS IN ug/kg

MW-7R	12/19/13	1/14/14
Depth (ft bls)	0 - 2	2 - 4
SVOCs		
Benzo[a]anthracene	3200 D	1200 JD
Benzo[a]pyrene	2800 JD	ND
Benzo[b]fluoranthene	3600 D	1300 JD
Indeno[1,2,3-cd]pyrene	1700 JD	ND

Parameter	Standards* (µg/kg)
SVOCs	
Benzo[a]anthracene	1000
Benzo[a]pyrene	1000
Benzo[b]fluoranthene	1000
Benzo[k]fluoranthene	3900
Chrysene	3900
Dibenzo[a,h]anthracene	330
Indeno[1,2,3-cd]pyrene	500

µg/kg - Micrograms per kilogram
* - NYSDEC Part 375 Restricted Residential Standards
NYSDEC - New York State Department of Environmental Conservation
J - Estimated value
D - A secondary analysis after dilution due to exceedance
V - Value altered or qualifier added during data validation
DUP - Duplicate Sample
SVOCs - Semivolatile Organic Compounds
NE - No exceedance
ND - No detection
ft bls - Feet below land surface

20' 0 20'

Title:

SOIL DETECTIONS IN EXCESS OF NYSDEC RRSCOs FOR SVOCs

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.L.	Date: 15MAY15	PLATE
Prepared by: B.H.C.	Scale: AS SHOWN	4
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.02.DWG		

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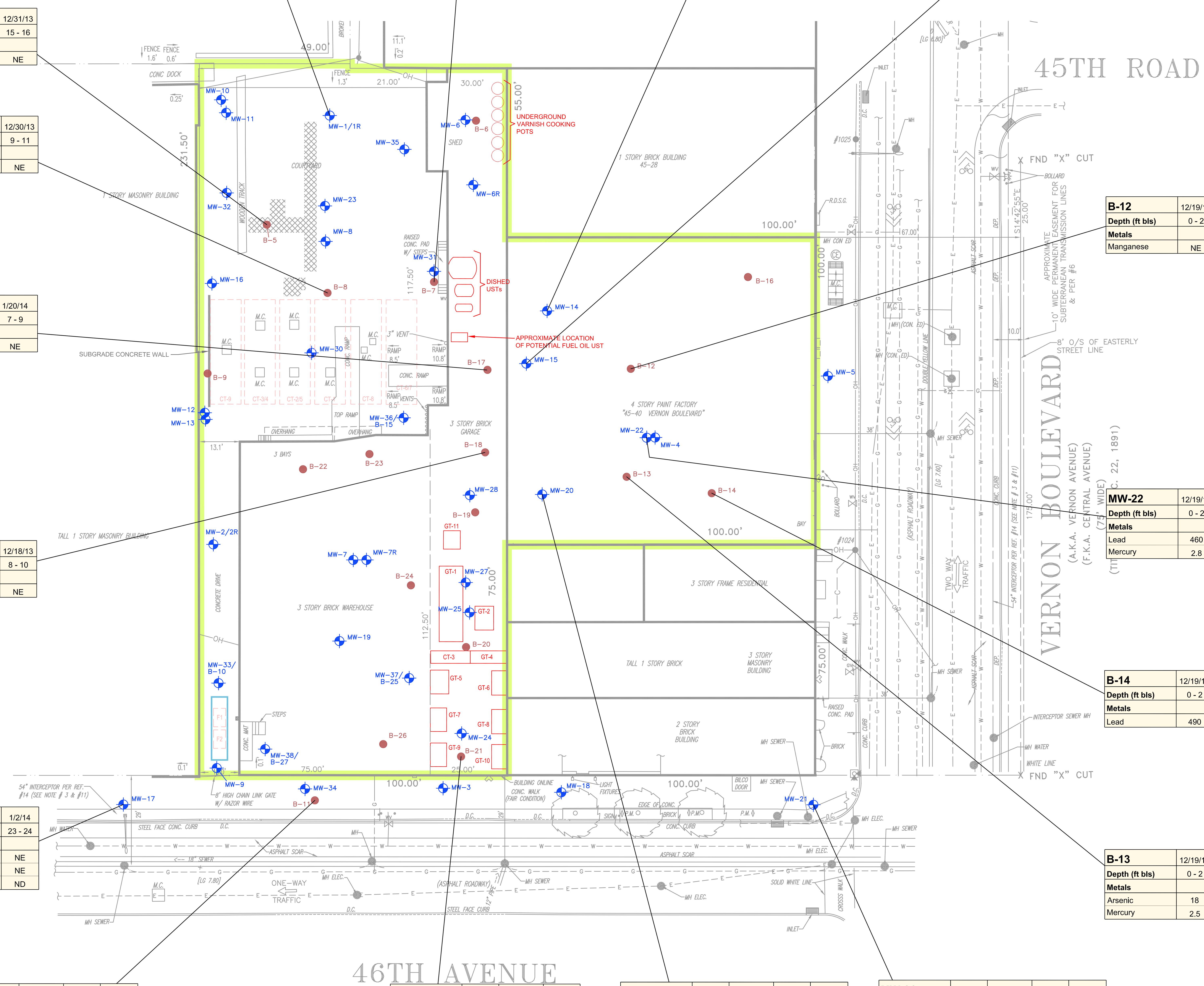
LEGEND

- B-6 — SOIL BORING LOCATION AND DESIGNATION
- MW-5 — MONITORING WELL LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- CONCRETE VAULT



TYPICAL DATA BOX INFORMATION

SAMPLE ID: B-17	1/20/14	1/20/14
Depth (ft bls)	0 - 2	7 - 9
Metals		
Copper	480	NE

SAMPLE DATE; SAMPLE DEPTH; ANALYTES; CONCENTRATIONS IN mg/kg

Parameter	Standards* (mg/kg)
Metals	
Arsenic	16
Barium	400
Copper	270
Lead	400
Manganese	2000
Mercury	0.81

mg/kg - Milligrams per kilogram
* - NYSDEC Part 375 Restricted Residential Standards
NYSDEC - New York State Department of Environmental Conservation
DUP - Duplicate Sample
NE - No exceedance
ND - No detection
ft bls - Feet below land surface

MW-1R	12/16/13	12/16/13	12/16/13	12/16/13
Depth (ft bls)	0 - 2	3 - 5	6 - 8	24 - 25
Metals				
Mercury	5.2	NE	NE	ND

B-7	12/30/13	12/30/13	12/30/13
Depth (ft bls)	0 - 2	5 - 7	14 - 15
Metals			
Barium	NE	530	NE
Lead	NE	950	NE

MW-14	12/19/13	12/19/13	1/17/14	1/17/14
Depth (ft bls)	0 - 2	0 - 2	7 - 9	10 - 12
Metals				
Barium	NE	NE	430	NE

MW-15	1/20/14	1/20/14	1/20/14
Depth (ft bls)	0 - 2	6 - 8	10 - 12
Metals			
Mercury	NE	1.6	ND

B-5	12/31/13	12/31/13	12/31/13	12/31/13
Depth (ft bls)	0 - 2	3 - 5	10 - 12	15 - 16
Metals				
Arsenic	29	NE	NE	NE

B-8	12/30/13	12/30/13	12/30/13
Depth (ft bls)	0 - 2	5 - 7	9 - 11
Metals			
Barium	530	NE	NE

B-17	1/20/14	1/20/14
Depth (ft bls)	0 - 2	7 - 9
Metals		
Copper	480	NE

B-12	12/19/13	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	21 - 22.5
Metals				
Manganese	NE	NE	NE	2500

MW-22	12/19/13	1/16/14	1/16/14	1/16/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	18 - 20
Metals				
Lead	460	NE	NE	NE
Mercury	2.8	ND	ND	ND

B-18	12/18/13	12/18/13	12/18/13
Depth (ft bls)	0 - 2	6 - 8	8 - 10
Metals			
Copper	1700	NE	NE

B-14	12/19/13	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	10 - 12	17 - 18.5
Metals				
Lead	490	NE	NE	NE

B-13	12/19/13	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	10 - 12	16 - 18
Metals				
Arsenic	18	NE	NE	NE
Mercury	2.5	ND	ND	ND

MW-17	1/2/14	1/2/14	1/2/14	1/2/14
Depth (ft bls)	0 - 2	5 - 7	12 - 13	23 - 24
Metals				
Copper	770	NE	NE	NE
Lead	790	NE	NE	NE
Mercury	1.2	NE	NE	ND

B-11	1/2/14	1/6/14	1/6/14	1/6/14
Depth (ft bls)	0 - 2	8 - 10	11 - 13	15 - 17
Metals				
Copper	480	390	NE	NE
Lead	790	550	NE	NE

B-21	12/17/13	12/17/13	12/17/13
Depth (ft bls)	0 - 2	5 - 7	7 - 8
Metals			
Mercury	NE	ND	3.2

MW-20	12/19/13	1/15/14	1/15/14	1/15/14
Depth (ft bls)	0 - 2	7 - 9	12 - 14	12 - 14
Metals				DUP
Lead	1000	NE	NE	NE
Mercury	4.5	NE	ND	NE

MW-21	1/6/14	1/6/14	1/6/14	1/6/14
Depth (ft bls)	0 - 2	5 - 7	7 - 8	18 - 20
Metals				
Lead	440	530	NE	NE

N

20' 0 20'

Title:
SOIL DETECTIONS IN EXCESS OF NYSDEC RRSCOs FOR METALS

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:
VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.L.	Date: 15MAY15	PLATE
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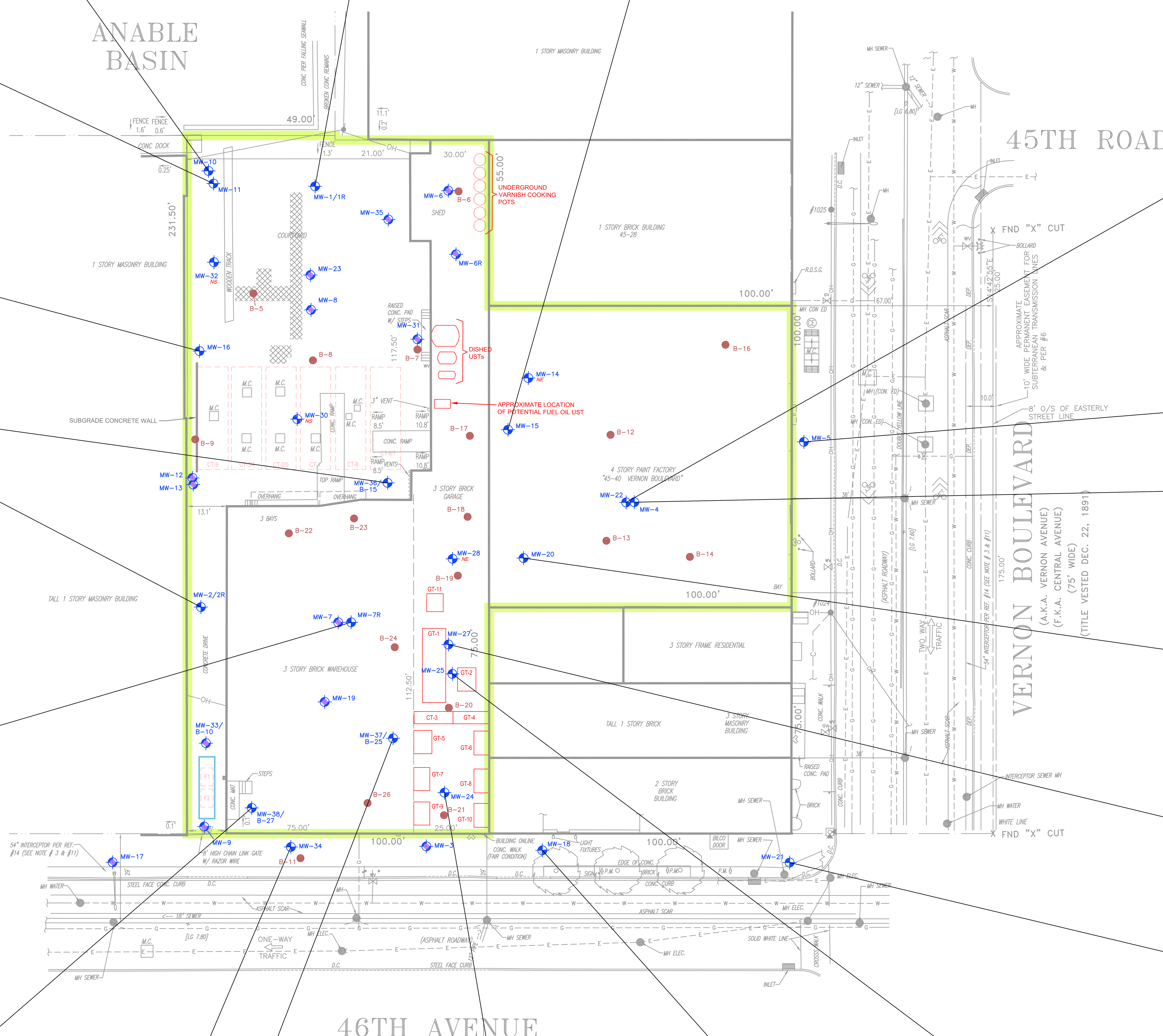

MW-10	3/20/13	1/30/14
VOCs	**NE**	**NE**
SVOCs	**NE**	**NE**
Metals		
Antimony	ND	3.25
Iron	490	NE
Sodium	3850000 D	7700000

MW-1R	3/20/13	3/20/13
VOCs		**DUP**
Isopropylbenzene	11.6	9.9
SVOCs	**NE**	**NE**
Metals		
Iron	23700	24900
Manganese	1280	1270
Sodium	1620000 D	1640000 D

MW-15	1/30/14
VOCs	**NE**
SVOCs	
Benzo[a]anthracene	2.2 D
Benzo[a]pyrene	1.7 D
Benzo[b]fluoranthene	2.6 D
Benzo[k]fluoranthene	1.4 D
Chrysene	2.2 D
Indeno[1,2,3-cd]pyrene	1.3 D
Metals	
Iron	2550
Lead	26.78
Sodium	358000

MW-11	3/20/13	1/30/14
VOCs	**NE**	**NE**
SVOCs	**NE**	**NE**
Metals		
Iron	1290	NE
Manganese	NE	411.3
Sodium	1300000 D	3280000

MW-16	1/29/14	1/29/14
VOCs		**DUP**
Isopropylbenzene	ND	20 JVD
m+p-Xylene	6.3 D	10 D
o-Xylene	6.2 D	6.7 D
Xylenes (total)	12.5 D	16.70 D
SVOCs		
Benzo[a]anthracene	0.08 J	0.1 J
Chrysene	0.07 J	0.09 J
Metals		
Iron	48400	43300
Manganese	5378	4874
Sodium	816000	755000

MW-36	1/22/15	1/22/15
VOCs		**DUP**
Isopropylbenzene	32	32
SVOCs	**NA**	**NA**
Metals	**NA**	**NA**

MW-2R	1/30/14
VOCs	**NE**
SVOCs	
Benzo[a]anthracene	0.33
Benzo[a]pyrene	0.31
Benzo[b]fluoranthene	0.41
Benzo[k]fluoranthene	0.28
Chrysene	0.33
Indeno[1,2,3-cd]pyrene	0.18 J
Metals	
Iron	30700
Manganese	6028
Sodium	225000

MW-7R	1/30/14
VOCs	
Isopropylbenzene	6 JD
SVOCs	
Benzo[a]anthracene	18 D
Benzo[a]pyrene	14 D
Benzo[b]fluoranthene	16 D
Benzo[k]fluoranthene	9.2 D
Bis(2-ethylhexyl) phthalate	29 JD
Chrysene	16 D
Fluoranthene	55 D
Indeno[1,2,3-cd]pyrene	9.5 D
Naphthalene	76 D
Phenanthrene	51 D
Metals	
Cadmium	13.74
Iron	17100
Lead	31.99
Manganese	564
Sodium	174000

MW-38	1/22/15
VOCs	
Isopropylbenzene	14
SVOCs	**NA**
Metals	**NA**

MW-34	1/22/15
VOCs	
Ethylbenzene	5.9
Isopropylbenzene	45
SVOCs	**NA**
Metals	**NA**

MW-37	1/22/15
VOCs	
Isopropylbenzene	42
SVOCs	**NA**
Metals	**NA**

MW-24	1/21/15
VOCs	
Benzene	1.1
Isopropylbenzene	22
SVOCs	**NA**
Metals	**NA**

MW-18	1/30/14
VOCs	
Isopropylbenzene	6.8
SVOCs	**NE**
Metals	
Iron	12300
Manganese	2012
Sodium	38400

MW-25	1/21/15
VOCs	
Isopropylbenzene	12 D
SVOCs	**NA**
Metals	**NA**

MW-22	1/30/14
VOCs	
Isopropylbenzene	8
SVOCs	
Benzo[a]anthracene	0.08 J
Chrysene	0.07 J
Metals	
Iron	17300
Manganese	11040
Sodium	35000

MW-5	3/20/13	1/30/14
VOCs	**NE**	**NE**
SVOCs		
Benzo[a]anthracene	ND	0.42
Benzo[a]pyrene	ND	0.45
Benzo[b]fluoranthene	ND	0.54
Benzo[k]fluoranthene	ND	0.3
Chrysene	ND	0.36
Indeno[1,2,3-cd]pyrene	ND	0.38
Metals		
Iron	1590	5190
Manganese	620	1378
Sodium	725000 D	706000

MW-4	3/20/13	1/30/14
VOCs	**NE**	**NE**
SVOCs	**NE**	**NE**
Metals		
Iron	7800	22100
Manganese	2470	7530
Sodium	ND	88300

MW-20	1/30/14
VOCs	
Isopropylbenzene	21 D
SVOCs	**NE**
Metals	
Iron	16200
Manganese	3694
Sodium	446000

MW-27	1/21/15
VOCs	
Isopropylbenzene	14 D
SVOCs	**NA**
Metals	**NA**

MW-21	1/30/14
VOCs	
Acetone	190 E
SVOCs	**NE**
Metals	
Barium	1018
Iron	71000
Manganese	3012
Sodium	1790000

LEGEND

- B-6 SOIL BORING LOCATION AND DESIGNATION
- MW-5 MONITORING WELL LOCATION AND DESIGNATION
- MW-3 MONITORING WELL LOCATION AND DESIGNATION THAT WAS NOT SAMPLED DUE TO PRESENCE OF LNAPL
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- APPROXIMATE TEST PIT LOCATIONS
- CONCRETE VAULT

TYPICAL DATA BOX INFORMATION

SAMPLE ID — SAMPLE DATE — ANALYTES — CONCENTRATIONS IN ug/L

MW-11	3/20/13	1/30/14
VOCs	NE	NE
SVOCs	NE	NE
Metals		
Iron	1290	NE
Manganese	NE	411.3
Sodium	1300000 D	3280000

Parameter	Standards* (µg/L)
VOCs	
Acetone	50
Benzene	1
Ethylbenzene	5
Isopropylbenzene	5
m+p-Xylene	5
Methylene chloride	5
o-Xylene	5
Xylenes (total)	5
SVOCs	
Benzo[a]anthracene	0.002
Benzo[a]pyrene	0
Benzo[b]fluoranthene	0.002
Benzo[k]fluoranthene	0.002
Bis(2-ethylhexyl) phthalate	5
Chrysene	0.002
Fluoranthene	50
Indeno[1,2,3-cd]pyrene	0.002
Naphthalene	10
Phenanthrene	50
Metals	
Antimony	3
Barium	1000
Cadmium	5
Iron	300
Lead	25
Manganese	300
Sodium	20000
PCBs	**NE**
Pesticides	**NE**

µg/L - Micrograms per liter
* - NYSDEC Ambient Water-Quality Standards and Guidance Values (Class GA)
NYSDEC - New York State Department of Environmental Conservation
J - Estimated value
V - Value altered or qualifier added during data validation
D - A secondary analysis after dilution due to exceedance
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument
DUP - Duplicate Sample
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
NE - No exceedance
ND - No detection
NA - Not analyzed for by laboratory
NS - Not Sampled
LNAPL - Light Non-Aqueous Phase Liquid

NOTES

1. MONITORING WELL MW-14 COULD ONLY BE ANALYZED FOR VOC's DUE TO SAMPLE DEPLETION.
2. UNDERGROUND STORAGE TANK REMOVAL ACTIVITIES PREVENTED ACCESS TO MONITORING WELLS MW-30 AND MW-32.

20' 0 20'

N

Title:

GROUNDWATER DETECTIONS IN EXCESS OF NYSDEC TOGS 1.1.1 AWQGVs

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.L.	Date: 15MAY15	PLATE
Prepared by: J.A.D	Scale: AS SHOWN	6
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.02.DWG		

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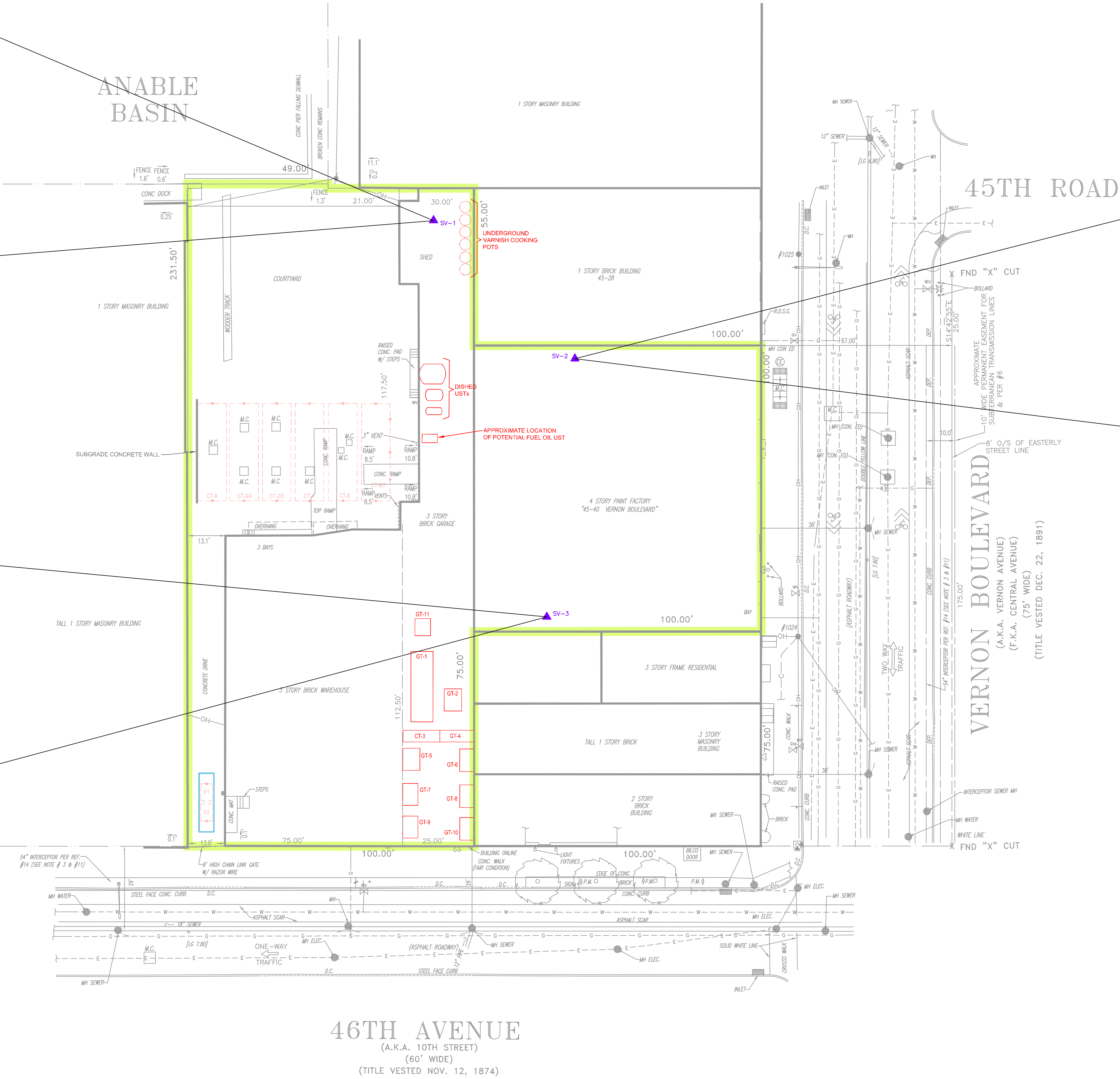
SV-1 (AA)	5/3/07
Analyte	
VOCs	
Carbon tetrachloride	3.14 U
Trichloroethene	2.68 U
Vinyl chloride	1.28 U
1,1-Dichloroethene	1.98 U
cis-1,2-Dichloroethene	1.98 U
Tetrachloroethene	3.39 U
1,1,1-Trichloroethane	2.72 U
1,2,4-Trimethylbenzene	**4.35**
2-Butanone	**5.42**
Acetone	**13.5**
Carbon disulfide	**5.15**
Chloromethane	**1.09**
Ethanol	**6.57**
m+p-Xylene	**6.27**
Methylene chloride	**14.4**
o-Xylene	**2.4**
Toluene	**8.29**

SV-1 (SS)	5/3/07	5/3/07
Analyte		DUP
VOCs		
Carbon tetrachloride	6.82 U	3.14 U
Trichloroethene	5.82 U	2.68 U
Vinyl chloride	2.77 U	1.28 U
1,1-Dichloroethene	4.3 U	1.98 U
cis-1,2-Dichloroethene	4.3 U	1.98 U
Tetrachloroethene	7.35 U	3.39 U
1,1,1-Trichloroethane	5.92 U	2.72 U
1,2,4-Trimethylbenzene	**13.2**	**8.22**
2-Butanone	3.2 U	**3.23**
Acetone	**28.9**	**29.2**
Carbon disulfide	**6.77**	**7.36**
Ethanol	**92.4**	**91.1**
Ethylbenzene	4.71 U	**2.64**
m+p-Xylene	**14.9**	**9.64**
Isopropanol	**8.68**	**3.98**
Methyl tert butyl ether	**26.8**	**13.7**
Methylene chloride	**16.3**	**36.3**
o-Xylene	**6.38**	**4.41**
Tetrahydrofuran	3.2 U	**3.3**
Toluene	**11.1**	**6.9**

SV-3 (AA)	5/3/07
Analyte	
VOCs	
Carbon tetrachloride	3.14 U
Trichloroethene	2.68 U
Vinyl chloride	1.28 U
1,1-Dichloroethene	1.98 U
cis-1,2-Dichloroethene	1.98 U
Tetrachloroethene	3.39 U
1,1,1-Trichloroethane	2.72 U
1,2,4-Trimethylbenzene	**3.93**
2-Butanone	**19.6**
Acetone	**30**
Carbon disulfide	**3.82**
Ethanol	**9.91**
m+p-Xylene	**6.69**
Methylene chloride	**28**
n-Heptane	**2.34**
o-Xylene	**2.58**
Toluene	**17.1**

SV-3 (SS)	5/3/07
Analyte	
VOCs	
Carbon tetrachloride	3.14 U
Trichloroethene	2.68 U
Vinyl chloride	1.28 U
1,1-Dichloroethene	1.98 U
cis-1,2-Dichloroethene	1.98 U
Tetrachloroethene	3.39 U
1,1,1-Trichloroethane	2.72 U
1,2,4-Trimethylbenzene	**7.07**
2-Butanone	**3.42**
Acetone	**24.3**
Carbon disulfide	**10.2**
Ethanol	**13.7**
Ethylbenzene	**2.78**
m+p-Xylene	**9.97**
Isopropanol	**9.15**
Methyl tert butyl ether	**37.8**
Methylene chloride	**69.2**
n-Heptane	**3.07**
o-Xylene	**4.48**
Tetrahydrofuran	**2.89**
Toluene	**12.8**



LEGEND

- SV-1 ▲ SOIL VAPOR SAMPLE LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- CONCRETE VAULT

SV-2 (AA)	5/3/07
Analyte	
VOCs	
Carbon tetrachloride	3.14 U
Trichloroethene	2.68 U
Vinyl chloride	1.28 U
1,1-Dichloroethene	1.98 U
cis-1,2-Dichloroethene	1.98 U
Tetrachloroethene	3.39 U
1,1,1-Trichloroethane	2.72 U
1,2,4-Trimethylbenzene	**2.57**
2-Butanone	**5.23**
Acetone	**16.7**
Carbon disulfide	**3.78**
Chloromethane	**1.19**
Ethanol	**5.49**
Isopropanol	**1.3**
Methylene chloride	**65.6**
Toluene	**7.5**

TYPICAL DATA BOX INFORMATION

SAMPLE ID → SV-3 (AA); SAMPLE DATE → 5/3/07; ANALYTES; COMPOUNDS WITH NYSDOH GUIDANCE; CONCENTRATIONS IN µg/kg

SV-3 (AA)	5/3/07
Analyte	
VOCs	
Carbon tetrachloride	3.14 U
Trichloroethene	2.68 U
Vinyl chloride	1.28 U
1,1-Dichloroethene	1.98 U
cis-1,2-Dichloroethene	1.98 U
Tetrachloroethene	3.39 U
1,1,1-Trichloroethane	2.72 U
1,2,4-Trimethylbenzene	**3.93**
2-Butanone	**19.6**
Acetone	**30**
Carbon disulfide	**3.82**
Ethanol	**9.91**
m+p-Xylene	**6.69**
Methylene chloride	**28**
n-Heptane	**2.34**
o-Xylene	**2.58**
Toluene	**17.1**

Concentrations in µg/m³

µg/m³ - Micrograms per cubic meter

VOCs - Volatile Organic Compounds

D - A secondary analysis after dilution due to exceedance of the calibration range in the original sample.

ND - No detection

SV-2 (SS)	5/3/07
Analyte	
VOCs	
Carbon tetrachloride	3.14 U
Trichloroethene	2.68 U
Vinyl chloride	1.28 U
1,1-Dichloroethene	1.98 U
cis-1,2-Dichloroethene	1.98 U
Tetrachloroethene	3.39 U
1,1,1-Trichloroethane	2.72 U
1,2,4-Trimethylbenzene	**6.97**
1,2,4-Trimchlorobenzene	**6.07**
Acetone	**15.1**
Carbon disulfide	**23.3**
Ethanol	**15.6**
Ethylbenzene	**2.8**
m+p-Xylene	**10.2**
Isopropanol	**10.6**
Methyl tert butyl ether	**39.5**
Methylene chloride	**8.55**
n-Heptane	**3.87**
o-Xylene	**4.42**
Propylene	**5.04**
Tetrahydrofuran	**2.61**
Toluene	**10.3**

20' 0 20'

Title:

SUMMARY OF ONSITE SOIL VAPOR ANALYTICAL DATA

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: R.L.	Date: 30SEPT15	PLATE 7
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr: R.M.	Project: 2051.0001Y000	
	File: 2051.0001Y180.01.DWG		

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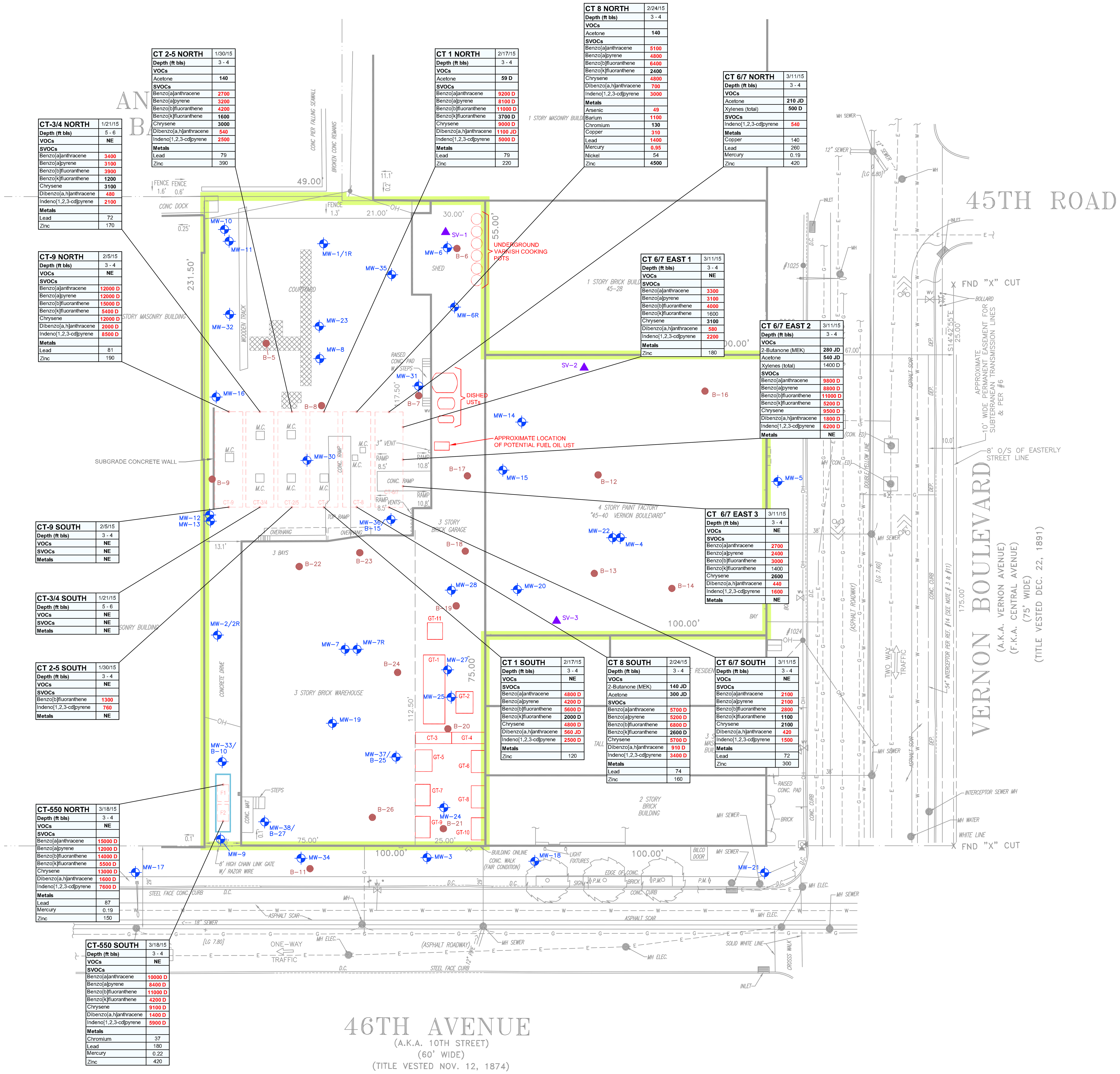

CT-3/4 NORTH	1/21/15
Depth (ft bls)	5 - 6
VOCs	NE
SVOCs	
Benzo[a]anthracene	3400
Benzo[a]pyrene	3100
Benzo[b]fluoranthene	3900
Benzo[k]fluoranthene	1200
Chrysene	3100
Dibenzo[a,h]anthracene	480
Indeno[1,2,3-cd]pyrene	2100
Metals	
Lead	72
Zinc	170

CT 2-5 NORTH	1/30/15
Depth (ft bls)	3 - 4
VOCs	
Acetone	140
SVOCs	
Benzo[a]anthracene	2700
Benzo[a]pyrene	3200
Benzo[b]fluoranthene	4200
Benzo[k]fluoranthene	1600
Chrysene	3000
Dibenzo[a,h]anthracene	540
Indeno[1,2,3-cd]pyrene	2500
Metals	
Lead	79
Zinc	390

CT 1 NORTH	2/17/15
Depth (ft bls)	3 - 4
VOCs	
Acetone	59 D
SVOCs	
Benzo[a]anthracene	9200 D
Benzo[a]pyrene	8100 D
Benzo[b]fluoranthene	11000 D
Benzo[k]fluoranthene	3700 D
Chrysene	9000 D
Dibenzo[a,h]anthracene	1100 JD
Indeno[1,2,3-cd]pyrene	5000 D
Metals	
Lead	79
Zinc	220

CT 8 NORTH	2/24/15
Depth (ft bls)	3 - 4
VOCs	
Acetone	140
SVOCs	
Benzo[a]anthracene	5100
Benzo[a]pyrene	4800
Benzo[b]fluoranthene	6400
Benzo[k]fluoranthene	2400
Chrysene	4800
Dibenzo[a,h]anthracene	700
Indeno[1,2,3-cd]pyrene	3000
Metals	
Arsenic	49
Barium	1100
Chromium	130
Copper	310
Lead	1400
Mercury	0.95
Nickel	54
Zinc	4500

CT 6/7 NORTH	3/11/15
Depth (ft bls)	3 - 4
VOCs	
Acetone	210 JD
Xylenes (total)	500 D
SVOCs	
Indeno[1,2,3-cd]pyrene	540
Metals	
Copper	140
Lead	260
Mercury	0.19
Zinc	420

CT-9 NORTH	2/5/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	12000 D
Benzo[a]pyrene	12000 D
Benzo[b]fluoranthene	15000 D
Benzo[k]fluoranthene	5400 D
Chrysene	12000 D
Dibenzo[a,h]anthracene	2000 D
Indeno[1,2,3-cd]pyrene	8500 D
Metals	
Lead	81
Zinc	190

CT 6/7 EAST 1	3/11/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	3300
Benzo[a]pyrene	3100
Benzo[b]fluoranthene	4000
Benzo[k]fluoranthene	1600
Chrysene	3100
Dibenzo[a,h]anthracene	580
Indeno[1,2,3-cd]pyrene	2200
Metals	
Zinc	180

CT 6/7 EAST 2	3/11/15
Depth (ft bls)	3 - 4
VOCs	
2-Butanone (MEK)	280 JD
Acetone	540 JD
Xylenes (total)	1400 D
SVOCs	
Benzo[a]anthracene	9800 D
Benzo[a]pyrene	8800 D
Benzo[b]fluoranthene	11000 D
Benzo[k]fluoranthene	5200 D
Chrysene	9500 D
Dibenzo[a,h]anthracene	1800 D
Indeno[1,2,3-cd]pyrene	6200 D
Metals	NE

CT 6/7 EAST 3	3/11/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	2700
Benzo[a]pyrene	2400
Benzo[b]fluoranthene	3000
Benzo[k]fluoranthene	1400
Chrysene	2600
Dibenzo[a,h]anthracene	440
Indeno[1,2,3-cd]pyrene	1600
Metals	NE

CT-9 SOUTH	2/5/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	NE
Metals	NE

CT-3/4 SOUTH	1/21/15
Depth (ft bls)	5 - 6
VOCs	NE
SVOCs	NE
Metals	NE

CT 2-5 SOUTH	1/30/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[b]fluoranthene	1300
Indeno[1,2,3-cd]pyrene	760
Metals	NE

CT 1 SOUTH	2/17/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	4800 D
Benzo[a]pyrene	4200 D
Benzo[b]fluoranthene	5600 D
Benzo[k]fluoranthene	2000 D
Chrysene	4800 D
Dibenzo[a,h]anthracene	560 JD
Indeno[1,2,3-cd]pyrene	2500 D
Metals	
Zinc	120

CT 8 SOUTH	2/24/15
Depth (ft bls)	3 - 4
VOCs	
2-Butanone (MEK)	140 JD
Acetone	300 JD
SVOCs	
Benzo[a]anthracene	5700 D
Benzo[a]pyrene	5200 D
Benzo[b]fluoranthene	6800 D
Benzo[k]fluoranthene	2600 D
Chrysene	5700 D
Dibenzo[a,h]anthracene	910 D
Indeno[1,2,3-cd]pyrene	3400 D
Metals	
Lead	74
Zinc	160

CT 6/7 SOUTH	3/11/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	2100
Benzo[a]pyrene	2100
Benzo[b]fluoranthene	2800
Benzo[k]fluoranthene	1100
Chrysene	2100
Dibenzo[a,h]anthracene	420
Indeno[1,2,3-cd]pyrene	1500
Metals	
Lead	72
Zinc	300

CT-550 NORTH	3/18/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	15000 D
Benzo[a]pyrene	12000 D
Benzo[b]fluoranthene	14000 D
Benzo[k]fluoranthene	5500 D
Chrysene	13000 D
Dibenzo[a,h]anthracene	1600 D
Indeno[1,2,3-cd]pyrene	7600 D
Metals	
Lead	87
Mercury	0.19
Zinc	150

CT-550 SOUTH	3/18/15
Depth (ft bls)	3 - 4
VOCs	NE
SVOCs	
Benzo[a]anthracene	10000 D
Benzo[a]pyrene	8400 D
Benzo[b]fluoranthene	11000 D
Benzo[k]fluoranthene	4200 D
Chrysene	9100 D
Dibenzo[a,h]anthracene	1400 D
Indeno[1,2,3-cd]pyrene	5900 D
Metals	
Chromium	37
Lead	180
Mercury	0.22
Zinc	420

LEGEND

- B-6 SOIL BORING LOCATION AND DESIGNATION
- MW-5 MONITORING WELL LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK REMOVED BETWEEN JANUARY 2015 AND MARCH 2015
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT
- CONCRETE VAULT

Parameter	Standards*	Standards**
VOCs	(ug/kg)	(ug/kg)
2-Butanone (MEK)	120	100000
Acetone	50	100000
Xylenes (total)	260	100000
SVOCs	(ug/kg)	(ug/kg)
Benzo[a]anthracene	1000	1000
Benzo[a]pyrene	1000	1000
Benzo[b]fluoranthene	1000	1000
Benzo[k]fluoranthene	800	3900
Chrysene	1000	3900
Dibenzo[a,h]anthracene	330	330
Indeno[1,2,3-cd]pyrene	500	500
Metals	(mg/kg)	(mg/kg)
Arsenic	13	16
Barium	350	400
Chromium	30	180
Copper	50	270
Lead	63	400
Mercury	0.18	0.81
Nickel	30	310
Zinc	109	10000

Concentrations in µg/kg
µg/kg -Micrograms per kilogram
*NYSDEC Part 375 Unrestricted Use Standards
**NYSDEC Part 375 Restricted Residential Standards
NYSDEC - New York State Department of Environmental Conservation
-- - No Standard
J - Estimated value
D - A secondary analysis after dilution due to exceedance
DUP - Duplicate Sample
VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
NE - No exceedance
ND - No detection
NA - Not analyzed for by laboratory
ft bls - Feet below land surface

20' 0 20'

Title:

ANALYTICAL RESULTS OF FORMER UNDERGROUND STORAGE TANKS POST-EXCAVATION SOIL SAMPLES

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: R.L.	Date: 15MAY16	PLATE
Prepared by: J.A.D.	Scale: AS SHOWN	8
Project Mgr: R.M.	Project: 2051.0001Y000	
File: 2051.0001Y180.01.DWG		

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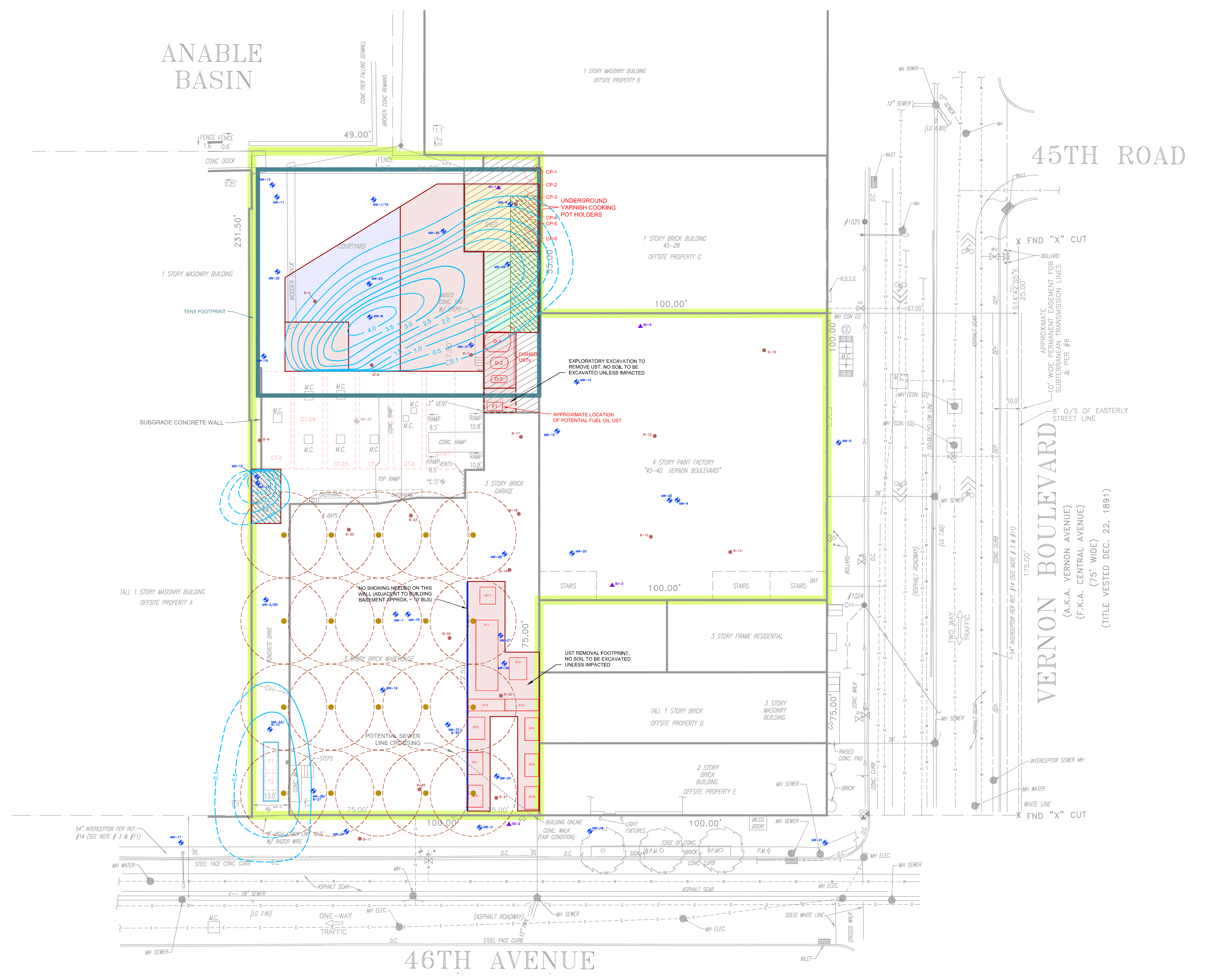

LEGEND

- SOIL BORING LOCATION AND DESIGNATION
- MONITORING WELL LOCATION AND DESIGNATION
- DESTROYED MONITORING WELL LOCATION AND DESIGNATION
- SOIL VAPOR SAMPLE LOCATION AND DESIGNATION
- PROPERTY BOUNDARY
- LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID
- 0.5 — APPROXIMATE LINE OF EQUAL LNAPL THICKNESS (FEET)
- APPROXIMATE LOCATION OF UNDERGROUND STORAGE TANK (UST)
- APPROXIMATE FORMER LOCATION OF UNDERGROUND STORAGE TANK (UST)
- APPROXIMATE LOCATION OF DISHED UNDERGROUND STORAGE TANK
- CP-1 — APPROXIMATE LOCATION OF UNDERGROUND VARNISH COOKING POT HOLDER
- CONCRETE VAULT (REMOVED)
- TO BE DEMOLISHED DURING RA
- BACKFILL WITH CLEAN STONE
- PROPOSED 9' BLS EXCAVATION FOOTPRINT
- PROPOSED 13' BLS EXCAVATION FOOTPRINT
- PROPOSED 19' BLS EXCAVATION FOOTPRINT
- PROPOSED 20' BLS EXCAVATION FOOTPRINT
- TENT BOUNDARY (APPROXIMATE)
- PROPOSED ISCO SOIL CONFIRMATION SAMPLE LOCATION (APPROXIMATE)
- APPROXIMATE ISCO INJECTION POINT RADIUS OF INFLUENCE

GARAGE TANK INFO

TANK	DEPTH TO BOTTOM (FT)	REPORTED CAPACITY (GAL)
GT-1	10	20,000
GT-2	10	<1,000
GT-3	10	<1,000
GT-4	10	<1,000
GT-5	10	<1,000
GT-6	10	<1,000
GT-7	10.08	<1,000
GT-8	10	<1,000
GT-9	10.21	<1,000
GT-10	10	<1,000
GT-11	10.01	<1,000
D-1	~10	<1,000
D-2	~10	<1,000
D-3	~10	<1,000
F-1	~10	<1,000

15' 0 15'

Title:

PROPOSED REMEDIAL ACTION
REMEDIAL ALTERNATIVE 2

FORMER PARAGON PAINT & VARNISH FACTORY
LONG ISLAND CITY, NEW YORK

Prepared For:

VERNON 4540 REALTY LLC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: K.C.	Date: 30SEP15	PLATE
Prepared by: B.H.C.	Scale: AS SHOWN	9
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