



Periodic Review Report

Site No. C241108
Long Island City, New York

June 4, 2018

Prepared for:

CSC 4540 Property Co, LLC
757 Third Avenue, 17th Floor,
New York, New York 10017

Prepared by:

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EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan recently amended per the NYSDEC's letter dated January 12, 2018 (Appendix F):

Site Identification: Site Identification No. C241108
Paragon Paint and Varnish Corp.
5-43 to 5-49 46th Avenue and 45-38 to 45-40 Vernon Boulevard,
Long Island City, Queens, New York

Institutional Controls:	1. The property may be used for restricted residential, commercial and/or industrial use only.	
	2. Environmental Easement	
	3. Performance of soil vapor intrusion evaluation in event of redevelopment.	
	4. All ECs must be inspected at a frequency and in a manner defined in the SMP.	
Engineering Controls:	1. Cover system	
	2. Light Non-Aqueous Phase Liquid (LNAPL) Recovery System	
	3. <i>In-situ</i> Chemical Oxidation (ISCO) Injections	
Inspections:		Frequency
1. Cover inspection		Annually
2. LNAPL recovery system inspection		As Needed
Monitoring:		Frequency
1. Gauging of LNAPL recovery wells		Quarterly
2. Gauging of Monitoring wells - Groundwater		Quarterly
3. Sampling of Monitoring Wells – Groundwater		Annually (Can be increased if groundwater results support need to adjust frequency)
Maintenance:		Frequency
1. LNAPL pump maintenance		As Needed
2. LNAPL recovery drum change-out		As Needed
Reporting:		Frequency
1. Quarterly Progress Report (Ongoing)		Quarterly
2. Groundwater Monitoring Results		Annually
3. Periodic Review Report		Annually

1.0 INTRODUCTION

This Periodic Review Report (PRR) was prepared by Roux Environmental Engineering and Geology D.P.C. (Roux)¹ on behalf of CSC 4540 Property Co LLC (current Site Owner) and serves as a required element of the remedial program for the Former Paragon Paint and Varnish site located in Long Island City, New York (hereinafter referred to as the Site). A Site map is attached as Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241108, which is administered by the New York State Department of Environmental Conservation (NYSDEC).

On June 29, 2007, 549 46th Avenue LLC applied to the BCP as a Volunteer. Subsequent key dates related to the Volunteer's application to the BCP are below:

- September 4, 2008: The NYSDEC signed the Brownfield Cleanup Agreement ("BCA") with 549-46th Avenue LLC as Volunteer.
- July 6, 2010: Anable Beach Inc. applied to amend the BCA to be added as a Volunteer.
- August 17, 2010: The NYSDEC approved the BCA Amendment #1.
- July 18, 2011: Vernon 4540 Realty LLC applied to amend the BCA a second time to be added as a third Volunteer (BCA Amendment #2).
- July 29, 2011: The NYSDEC approved BCA Amendment #2.
- December 15, 2016: The NYSDEC issued a Certificate of Completion (COC) for the Site to 549-46th Avenue LLC, Anable Beach Inc. and Vernon 4540 Realty LLC.

As part of being in the BCP, a Site investigation was performed that revealed high levels of Benzene, Ethylbenzene, Isopropylbenzene (Cumene), and Xylene contamination in soil and groundwater at the Site. In addition, Roux also confirmed that there were two distinct LNAPL plumes located at the Site – one plume in the center of the courtyard and the other at the southwestern edge of the Site located within the driveway. A Track 4 cleanup was proposed and implemented in accordance with the Remedial Action Work Plan submitted to the NYSDEC on October 7, 2015.

The Site Management Plan (SMP), dated August 2015, was approved by NYSDEC on December 7, 2016 (refer to Appendix E). On January 12, 2018, NYSDEC approved of the following modifications:

1. All Site monitoring wells will be gauged for the presence of light non-aqueous phase liquid (LNAPL) on a quarterly basis in lieu of gauging select wells on a monthly basis. The first quarterly gauging event occurred in March 2018.
2. Monthly progress reports are no longer required. A quarterly report will be submitted that details the performance of gauging or sampling events performed at the Site.
3. The groundwater sampling frequency may be reduced to annual, with the next sampling event in June 2018.
4. A formal groundwater monitoring report will be replaced with a tabular summary of groundwater data and a short evaluation of conditions when data is generated. This may be applied to the recent groundwater sampling event performed at the Site in December 2017. The results should be discussed in greater detail in the subsequent Periodic Review Report (PRR).

¹ Prior to March 1, 2018, Roux Environmental Engineering and Geology, D.P.C. performed work as Remedial Engineering P.C. and Roux Associates, Inc. Remedial Engineering P.C. is a New York State professional service corporation organized primarily for the purpose of providing engineering services for clients of Roux Associates, Inc.

The required Site-wide inspection and monthly O&M inspections were completed during this SMP monitoring phase. The components, data, and rationale included in this PRR demonstrate that the engineering and institutional controls are performing as designed, are effective, and are compliant with specifications described in the SMP. No additional changes to the monitoring plan are recommended by Roux at this time.

Site Management activities, reporting, and Institutional Control (IC)/ Engineering Control (EC) certification are scheduled on a certification period basis. This certification is based on the submission of a PRR (included herein), submitted to the NYSDEC every year beginning fifteen months after the COC was issued. These PRRs will identify and assess all of the IC/ECs required by the remedy for the Site, any environmental monitoring data and/or information generated during the reporting period, and a complete Site evaluation which discusses the overall performance and effectiveness of the previous remedy.

2.0 SITE OVERVIEW

2.1 Site Description and History

The Site is located in Long Island City, Queens County, New York and is identified as Block 26 and Lot 4 on the Long Island City Tax Map. The Site is an approximately 0.76-acre area and is 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. The owner of the Site is CSC Vernon 4540 Property Co, LLC.

The Site consists of a four-story former paint factory, a three-story former garage and office, a three-story former warehouse, a concrete access road off 46th Avenue and a concrete rear courtyard that fronts approximately 50 feet of the Anable Basin. The Site is zoned industrial and is currently vacant. The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial and residential properties.

2.2 Summary of Remedial Action

Following the BCP Remedial Investigation, and the Department's approval of the Remedial Action Work Plan, Volunteer began remediation at the Site in 2015. Since then, Volunteer has fully implemented and completed the approved remedial program. All remedial work was done with oversight, understanding, and direction from the NYSDEC.

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

Remedial Action Objectives

Groundwater RAOs

RAOs for Public Health Protection

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

Soil RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

Soil Vapor RAOs

RAOs for Public Health Protection

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

The cleanup consisted of the following:

- Excavation and off-Site disposal of grossly contaminated soil in the courtyard LNAPL source area, including:
 - o Grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u)
 - o Soil containing LNAPL
 - o Soil containing total SVOCs exceeding 500 parts per million (ppm)
 - o Soils which exceeded the PoG SCOs as defined by 6 NYCRR Part 375-6.8 for those contaminants found in Site groundwater above standards
 - o Soils that created a nuisance condition, as defined in NYSDEC Commissioner Policy CP-51 Section G
- Closure of USTs by removal or, as a contingency, closure in place
- Excavation and disposal of subsurface piping
- Air monitoring of potential airborne VOCs and particulates during all ground intrusive and soil handling activities
- Implementation of erosion and sediment controls
- Installation of five autonomous LNAPL recovery pumps at property boundary areas where LNAPL plume extends off-Site
- Installation of a Site cover system
- *In situ* chemical oxidation (ISCO) injections for treatment of VOCs in soil and groundwater underneath the brick warehouse building on-Site.

2.3 Remaining Contamination

The Remedial Alternative (RA) was designed to reduce the concentration of Site contaminants in groundwater through excavation of grossly contaminated soil in the LNAPL source area within the courtyard followed by product recovery at the edges of the LNAPL plumes that extended off-site from the courtyard area and the driveway.

Due to limits of the Support of Excavation (SOE), structural engineering concerns associated with the onsite buildings and other Site constraints, all soil contamination was not removed as part of the performance of the remedial action. As a result, soil contamination remains at several locations across the Site that exceeds the NYSDEC PoG SCOs for one or more of the four VOCs of concern (benzene, ethylbenzene isopropylbenzene and total xylenes).

2.3.1 Soil

The RA addressed grossly contaminated soil in the LNAPL source areas within the courtyard and driveway through excavation, low-level VOCs underneath the Warehouse through ISCO, and limiting contact with potentially-contaminated soil by installing a composite cover over the rest of the Site. Though the grossly contaminated soil was removed from the LNAPL source areas in the courtyard and driveway, soil contamination remains to the east of the excavation towards the four-story paint factory building and within

the driveway excavation. This material, which potentially extends beneath Site buildings, could not be removed due to the SOE limitations.

The south extent of the excavation in the courtyard was extended to as near the warehouse and garage as a 1:1 slope would allow. Excavation and post-excavation sampling determined the presence of grossly contaminated material towards the three-story building and beneath the concrete slab where former 20,000 USTs had been staged on. The bottom sample collected from the middle of the driveway excavation at 17.5 ft showed evidence of gross contamination.

A total of 11 USTs were encountered during the RA, with five (5) in the southeast corner of the courtyard excavation and the remaining six (6) located inside the garage excavation footprint. All 11 tanks and their chambers encountered during the RA were emptied, cleaned and were either removed (the five (5) courtyard excavation USTs) or abandoned in place (the six (6) garage excavation USTs). Compliance UST samples were collected from the soil surrounding the courtyard and garage and the presence of residual contamination was present. This material could not be removed due to SOE limitations.

The residual soil contamination, as originally presented in the Final Engineering Report (FER) dated November 22, 2016, is also presented in this PRR as Figures 3 and 4. Further remedies to address this residual contamination will be evaluated in the Site redevelopment plan.

2.3.2 Groundwater

The RA addressed groundwater through removal and/or treatment of soil with VOCs above PoG SCOs. A component of the RAWP was an ISCO injection program to treat VOCs in groundwater and soil where excavation could not be completed during the RA, namely the soils under the basement of the Warehouse. As documented in the FER, the initial ISCO injection program marginally improved groundwater quality as all Site's contaminants of Concern (benzene, ethylbenzene, isopropylbenzene, m,p-xylene, and o-xylene) remain above their respective NYSDEC ambient water quality guidance and standard values (AWQSGV) at various monitoring well locations across the Site.

All post-remediation groundwater analytical results are summarized in Appendix C with COC-specific data depicted on Figure 1.

Based upon the continued presence of residual VOCs in groundwater following the initial injection treatment event in the warehouse area and residual VOCs in soil after excavation of impacted soil in the courtyard during the Remedial Action, additional ISCO treatment was performed during this reporting period. Further details concerning the performance of that injection event are discussed in Section 3.3.2.

2.3.3 Soil Vapor

The RA addressed soil vapor through removal and/or treatment of soil containing VOCs above the PoG SCOs. During redevelopment, the need for soil vapor mitigation in new structures will be evaluated. New buildings with occupancy and slab-on-grade design may require a vapor barrier and a sub-slab depressurization system.

2.4 Engineering and Institutional Controls

Since residual contamination remains beneath the Site, ICs/ECs have been incorporated into the Site remedy as part of the NYSDEC-approved SMP, to provide proper management of residual contamination in the future and ensure protection of public health and the environment.

2.4.1 Engineering Controls

The Site has ECs consisting of:

- Site Cover System (refer to Figure 1);
- ISCO Injections; and
- LNAPL Recovery System

The purpose of each EC is described below:

- The Site Cover System prevents exposure to remaining contamination in soil/ fill at the Site.
- The ISCO Injections, if effective, destroy the residual VOCs in groundwater and soil that were present after completion of the excavation remedy.
- The LNAPL Recovery System removes any residual LNAPL that may be present at the water table.

The LNAPL Recovery and Site Cover System ECs are fully in place and effective at meeting their objectives.

2.4.2 Institutional Controls

A Site-specific Environmental Easement has been recorded with the Queens County Clerk that provides an enforceable means to manage the remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. The ICs presented in the SMP consist of the following:

- The property may be used for: restricted residential, commercial or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;

- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

3.0 SMP REQUIREMENTS AND COMPLIANCE MONITORING

Since remaining contaminated soil and groundwater exists beneath the Site, ICs and ECs are required to protect human health and the environment. This section details the elements of the SMP including the inspection, monitoring, and reporting requirements, IC/ECs, whether the IC/EC requirements were met, and regulatory notification and certification requirements. The various subsections below also include an evaluation of the remedy performance, effectiveness, and protectiveness.

3.1 IC/EC Plan Compliance Report

Since remaining contamination exists beneath the Site, ICs and ECs are required to protect human health and the environment and are described in detail in Section 2.4. On an annual basis, required certifications must be made for these Site-specific ICs and ECs to ensure that the required IC/ ECs are in place, are performing properly, and remain effective; and to confirm that they are continuing to be protective of human health and the environment. The respective IC/EC Certification Form for the controls that are currently in place for the Site is provided in Appendix A.

3.1.1 Notifications

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

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, along with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

3.2 Inspections

All inspections were conducted at the frequency specified in the Executive Summary. Specific details of requirements and completed inspections are provided in the following sections. Inspections of remedial components are also conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as power interruption or fire that may affect the ECs. The inspections will determine and document the following:

- IC/ECs are in place, are performing properly, and remain effective;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

3.3 Monitoring Plan Compliance Report

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the Site cover system, and all affected Site media identified below. Components of the Monitoring Plan are:

- Sampling and analysis of all appropriate media (e.g., groundwater).
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil.
- Assessing achievement of the remedial performance criteria.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.
- Preparing the necessary reports for the various monitoring activities.

Monitoring of the performance of the remedy and overall reduction in contamination onsite will be conducted for the periods specified for each matrix listed in table below. The frequency is subject to change in consultation with NYSDEC and based on reports submitted showing contaminant trends.

Monitoring Program	Frequency	Matrix	Analysis
Site Cover System and Site-Wide Inspection	Annually. First inspection no more than 15 months after issuance of the COC.	Soil	Visual inspection of all cover system components
Groundwater in Monitoring Wells	Quarterly gauging and annual sampling*	Groundwater	VOCs (USEPA Method 8260) for NYSDEC Target Compound List compounds
Free Product in Monitoring Wells	Quarterly gauging	LNAPL	Check for presence of LNAPL and confirm thickness, if applicable. Manual recovery of LNAPL where present and practical
LNAPL Recovery System Inspection	As Needed	LNAPL	Visual Inspection of all system components

* Annual groundwater sampling frequency was proposed to the NYSDEC in a revised SMP draft submitted on February 15, 2018. At the time this report was written, approval of the SMP was not yet received.

A record of the findings of each monitoring/inspection event and maintenance activity performed as described above, where applicable, will be documented on the Site Inspection Checklists and the LNAPL Recovery System Monitoring Logs provided in Appendices B and C, respectively of the SMP. If at any time during the reporting period the Volunteer identifies a failure of one or more of the ECs or non-compliance with one or more of the ICs, the remedial party must notify NYSDEC and implement corrective measures, in accordance with a Corrective Measures Work Plan (CMWP) submitted to and approved by NYSDEC and provide a periodic certification of the IC/ECs.

3.3.1 Site Cover System

Exposure to remaining contamination at the Site is prevented by a non-mechanical engineered Site composite cover system that consists of:

- Existing concrete building slabs for the Paint Factory, 1-Story Brick Building, and 3-Story Warehouse;
- Existing concrete pavement;
- Installed asphalt cap; or
- Installed minimum 2 feet of recycled concrete aggregate (RCA).

The location and details of the Site cover system are shown on Figure 2. Monitoring of the Site cover system will occur on an annual basis as long as the Environmental Easement is in effect to ensure the system's integrity. Monitoring consists of visual inspection, which evaluates the structural integrity of the slab, pavement, and asphalt; and exposure of the demarcation barrier and direction of drainage for the RCA cap.

Roux performed Site cover system and Site-wide inspections on September 8, 2016, October 13, 2016, November 15, 2016, December 1, 2016, January 19, 2017, February 14, 2017, March 30, 2017, April 24,

2017, May 24, 2017, June 22, 2017, July 27, 2017, August 29, 2017, September 26, 2017, and March 20, 2018. The completed Site Inspection Checklists are provided in Appendix B. These inspections determined that all Site cover system elements described herein were observed to be performing as designed during the reporting period of the PRR and are protective of human health and the environment. Photographs taken during the most recent Site-wide inspection are provided in Appendix B.

3.3.2 Groundwater Monitoring and Sampling

Groundwater monitoring was performed monthly until modifications were made in January 2018 when the frequency changed to quarterly. Samples were collected quarterly from the monitoring wells within the SMP monitoring network for Target Compound List (TCL) of VOCs using United States Environmental Protection Agency (USEPA) SW846 Method 8260. Purge water and decontamination waste water generated during the groundwater sampling was containerized in a labeled 55-gallon drum stored onsite. Groundwater analysis results dating back to September 8, 2016 are provided in Appendix C. The sampling, sample handling, decontamination, and field instrument calibration procedures were performed in accordance with procedures detailed in the SMP.

As identified in the SMP, residual groundwater (as well as soil) contamination was going to be addressed by the completion of additional ISCO injections. A single round of additional ISCO injections at various locations across the Site was conducted in April 2017. Following completion of the injections, performance monitoring was conducted bi-weekly as field parameters (e.g. pH, oxidation-reduction potential, dissolved oxygen) and samples for TCL VOC EPA Method 8260 analysis were collected.

The most recent round of SMP groundwater monitoring indicated detections above NYSDEC AWQSGV for seven (7) compounds, excluding the exceedances in acetone that were most likely caused by laboratory preservative methods:

- 1,3,5-Trimethylbenzene concentrations ranged from 14 µg/L to 65 µg/L with the highest concentration detected in MW-47;
- Benzene concentrations ranged from 1.2 µg/L to 8.4 µg/L with the highest concentration detected in MW-40;
- Ethylbenzene concentrations ranged from 6.0 µg/L to 7.6 µg/L with the highest concentration detected in MW-47;
- Isopropylbenzene concentrations ranged from 5.2 µg/L to 63 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-19;
- m,p-Xylene concentrations ranged from 12 µg/L to 19 µg/L with the highest concentration detected in MW-47;
- n-Propylbenzene concentrations ranged from 6.8 µg/L to 120 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-19;
- o-Xylene (1,2-Dimethylbenzene) concentrations ranged from 6.4 µg/L to 12 µg/L with the highest concentration detected in MW-47;
- sec-Butylbenzene concentrations ranged from 8.6 µg/L to 41 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-19; and
- tert-Butylbenzene concentrations ranged from 5.6 µg/L (a laboratory diluted sample) to 14 µg/L (a laboratory diluted sample) with the highest concentration detected in MW-19.

As previously stated in the “Response to November 17, 2017 NYSDEC Comment Letter” submitted on January 9, 2018 (Appendix F), the chemical PersulfOx (under Regenesi’s recommendation) for this application resulted in some reduction of concentrations of the contaminants of concern. It was concluded that any further ISCO treatment will not dramatically improve the treatment goals beneath the onsite buildings. Roux does not believe ISCO or other applicable technologies, (i.e., bioventing, bioremediation, or air sparging) would effectively address groundwater and gross contamination in soil at the Site. As such, alternative treatment options (i.e., stabilization) would be further evaluated as Site redevelopment plans are finalized.

3.3.3 Soil Vapor Intrusion Monitoring

New buildings with occupancy and slab-on-grade design may require a vapor barrier and sub-slab depressurization system. Soil vapor intrusion sampling will be performed during redevelopment planning to assess the potential for intrusion into the new buildings. At this time no plans for redevelopment have been established.

3.4 Operation and Maintenance Plan Compliance Report

The O&M Plan provided in the SMP:

- Includes the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the LNAPL recovery system;
- Includes troubleshooting as referenced in the equipment manual(s); and
- Will be updated periodically to reflect changes in Site conditions or the manner in which the SSDS is operated and maintained;

The LNAPL recovery system consists of a Geotech AC Sipper connected to five recovery wells (RW-1 through RW-5). The system operates when product is present within the recovery well. To date, the Sipper has recovered approximately 3.3 gallons of LNAPL. Due to the lack of presence of detectable LNAPL, the recovery system has not been running since March 30, 2017. Complete details of the NYSDEC-approved LNAPL recovery system including as-built drawings and startup procedures are presented in the SMP.

3.4.1 LNAPL Recovery System Operation Monitoring

All mechanical aspects of the product recovery system are visibly inspected to ensure proper function. Inspection activities include making sure that power supply is functioning, verifying no leaks are present in any of the recovery tubing, hoses or connections. The 55-gallon product storage drum was also be checked during each visit to determine if disposal arrangements needed to be made.

Free product levels within the wells located in the area were monitored and recorded to determine if the system needed to be restarted. Wells were gauged approximately monthly until modifications were made to the SMP effective January 12, 2018. These modifications include changing the gauging frequency from monthly to quarterly and shutting off the LNAPL recovery system. The system will remain in-place in the event that future monitoring events identify recoverable LNAPL. The system will be decommissioned upon Site redevelopment.

Moving forward, any LNAPL that is observed in monitoring wells at the Site during routine gauging events that are not within the capture zone of these existing recovery wells will continue to be manually recovered, to the extent practical, on a quarterly basis.

The required monthly LNAPL Recovery System Monitoring Logs that were completed during the reporting period are provided in chronological order in Appendix D. O&M activities described herein determined that the O&M Plan was carried out as designed during the reporting period of the PRR and it is protective of human health and the environment.

4.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

The following section presents conclusions from inspections and monitoring activities and recommendations.

- The ICs and ECs are performing as designed, are effective, and are compliant with specifications described in the SMP. No changes to the monitoring plan are recommended at this time.

FIGURES

1. VOCs and LNAPL Detected in Groundwater
December 2016 to December 2017
2. Composite Cover System
3. Remaining Soil Sample Exceedances within Courtyard
4. Remaining Soil Sample Exceedances within Garage

MW-11	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.68	1	DUP	0.55	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-10	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-46	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-45	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	0.78 J	2.5 U	2.5 U	NS
Ethylbenzene	NS	39	22	22	NS
Isopropylbenzene (Cumene)	NS	51	38	41	NS
m,p-Xylene	NS	47	25	24	NS
O-Xylene (1,2-Dimethylbenzene)	NS	7.4	5.4 J	6.4 J	NS
Xylenes	NS	54	30 J	30 J	NS

MW-43	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.5 U	0.5 J	0.5 U	0.69	0.45 J
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	1.4 J	13	1.9 J	12	12
m,p-Xylene	1.3 J	15	1.7 J	18	12
O-Xylene (1,2-Dimethylbenzene)	0.8 J	7.2	0.87 J	10	6.4
Xylenes	2.1 J	22	2.6 J	28	18

MW-48	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	4	2.6	1.9 J	1.5 J	1.2 J
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-4	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	NS	1.6 J	1.7 J	0.89 J	0.74 J
Isopropylbenzene (Cumene)	NS	5.4	6.5	6.9	4.7
m,p-Xylene	NS	1.6 J	1.9 J	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	NS	1.6 J	1.9 J	2.5 U	2.5 U

MW-42	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	NS	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	NS	0.73 J	2.5 U	2.5 U	2.5 U
m,p-Xylene	NS	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	NS	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	NS	2.5 U	2.5 U	2.5 U	2.5 U

MW-7R	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	5 U	NS	2 U	NS
Ethylbenzene	NS	25 U	NS	10 U	NS
Isopropylbenzene (Cumene)	NS	25 U	NS	10 U	NS
m,p-Xylene	NS	25 U	NS	10 U	NS
O-Xylene (1,2-Dimethylbenzene)	NS	25 U	NS	10 U	NS
Xylenes	NS	25 U	NS	10 U	NS

MW-21	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs						
Benzene	0.5 U	0.5 U	1.4	0.5 U	0.5 U	0.5 U
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	0.73 J	2.5	1.1 J	1.4 J	1.4 J	1.4 J
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-41	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.5 U	0.62	0.43 J	0.62	1.2
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	0.73 J	2.5	1.1 J	1.4 J	1.4 J
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-47	12/01/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs						
Benzene	0.98	1.1	0.66	0.42 J	0.31 J	0.47 J
Ethylbenzene	11	11	15	9.4	5.2	7.6
Isopropylbenzene (Cumene)	9.2	9.9	16	13	9.1	11
m,p-Xylene	24	25	36	24	13	19
O-Xylene (1,2-Dimethylbenzene)	14	15	20	14	8.6	12
Xylenes	38	40	56	38	22	31

MW-44	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	1	0.63	0.19 J	0.37 J	0.36 J
Ethylbenzene	8.8	9.7	3.2	6	4.4
Isopropylbenzene (Cumene)	8.8	13	5.8	9.3	7.4
m,p-Xylene	24	30	9.5	15	13
O-Xylene (1,2-Dimethylbenzene)	17	22	8.8	13	10
Xylenes	41	52	18	28	23

MW-7	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	NS	2.5 U	NS	NS
Ethylbenzene	NS	NS	12 U	NS	NS
Isopropylbenzene (Cumene)	NS	NS	19	NS	NS
m,p-Xylene	NS	NS	12 U	NS	NS
O-Xylene (1,2-Dimethylbenzene)	NS	NS	12 U	NS	NS
Xylenes	NS	NS	12 U	NS	NS

MW-2R	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	NS	1.2 U	0.5 U	NS
Ethylbenzene	NS	NS	5.4 J	2.5 U	NS
Isopropylbenzene (Cumene)	NS	NS	17	11	NS
m,p-Xylene	NS	NS	6.7	1.1 J	NS
O-Xylene (1,2-Dimethylbenzene)	NS	NS	5.2 J	0.73 J	NS
Xylenes	NS	NS	12 J	1.8 J	NS

MW-19	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	NS	NS	1.2 U	NS	2.5 U
Ethylbenzene	NS	NS	3.4 J	NS	5.3 J
Isopropylbenzene (Cumene)	NS	NS	23	NS	63
m,p-Xylene	NS	NS	6.2 U	NS	12 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	6.2 U	NS	12 U
Xylenes	NS	NS	6.2 U	NS	12 U

MW-33	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.5 U	1 U	0.5 U	0.23 J	1.2 U
Ethylbenzene	0.76 J	2.3 J	2.5 U	1.3 J	1.9 J
Isopropylbenzene (Cumene)	1.3 J	4.2 J	0.87 J	4.2	6 J
m,p-Xylene	1.1 J	5 U	2.5 U	2.5 U	6.2 U
O-Xylene (1,2-Dimethylbenzene)	1.5 J	5 U	2.5 U	2.5 U	6.2 U
Xylenes	2.6 J	5 U	2.5 U	2.5 U	6.2 U

MW-38	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.28 J	0.5 U	0.43 J	0.62	0.36 J
Ethylbenzene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Xylenes	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

MW-34	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	0.26 J	0.5	0.23 J	NS	NS
Ethylbenzene	2.5 U	2.5 U	2.5 U	NS	NS
Isopropylbenzene (Cumene)	2.5 U	2.5 U	2.5 U	NS	NS
m,p-Xylene	2.5 U	2.5 U	2.5 U	NS	NS
O-Xylene (1,2-Dimethylbenzene)	2.5 U	2.5 U	2.5 U	NS	NS
Xylenes	2.5 U	2.5 U	2.5 U	NS	NS

MW-37	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	2.5 U	2.5 U	NS	NS	NS
Ethylbenzene	12 U	12 U	NS	NS	NS
Isopropylbenzene (Cumene)	12 U	12 U	NS	NS	NS
m,p-Xylene	12 U	12 U	NS	NS	NS
O-Xylene (1,2-Dimethylbenzene)	12 U	12 U	NS	NS	NS
Xylenes	12 U	12 U	NS	NS	NS

MW-40	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
COCs					
Benzene	8.6	9.3	5.8	NS	8.4
Ethylbenzene	2.5 U	2.5 U	2.5 U	NS	2.5 U
Isopropylbenzene (Cumene)	44	47	40	NS	32
m,p-Xylene	1 J	1 J	1.1 J	NS	0.8 J
O-Xylene (1,2-Dimethylbenzene)	0.78 J	0.72 J	0.79 J	NS	2.5 U
Xylenes	1.8 J	1.7 J	1.9 J	NS	0.8 J

LEGEND	
	LOCATION AND DESIGNATION OF MONITORING WELL (NO LNAPL PRESENT)
	LOCATION AND DESIGNATION OF MONITORING WELL (LNAPL PRESENT)
	LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL (LNAPL THICKNESS SHOWN IF PRESENT)
	LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT
	LOCATION OF FIRST ROUND ISCO INJECTION POINT
	LNAPL THICKNESS
	DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING
	FEET
	LIGHT NON-AQUEOUS PHASE LIQUID
	IN-SITU CHEMICAL OXIDATION
	CONCRETE VAULT
	PROPERTY BOUNDARY
	APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
	CONCRETE SLAB

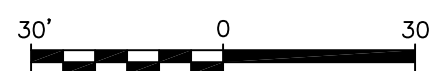
TYPICAL DATA BOX INFORMATION													
SAMPLE ID:	MW-48												
SAMPLE DATE:	12/01/2016												
ANALYTES:	<table><tr><td>Benzene</td><td>0.5 U</td></tr><tr><td>Ethylbenzene</td><td>2.5 U</td></tr><tr><td>Isopropylbenzene (Cumene)</td><td>4</td></tr><tr><td>m,p-Xylene</td><td>2.5 U</td></tr><tr><td>O-Xylene (1,2-Dimethylbenzene)</td><td>2.5 U</td></tr><tr><td>Xylenes</td><td>2.5 U</td></tr></table>	Benzene	0.5 U	Ethylbenzene	2.5 U	Isopropylbenzene (Cumene)	4	m,p-Xylene	2.5 U	O-Xylene (1,2-Dimethylbenzene)	2.5 U	Xylenes	2.5 U
Benzene	0.5 U												
Ethylbenzene	2.5 U												
Isopropylbenzene (Cumene)	4												
m,p-Xylene	2.5 U												
O-Xylene (1,2-Dimethylbenzene)	2.5 U												
Xylenes	2.5 U												
CONCENTRATIONS (IN µg/L)													

PARAMETER	STANDARDS*
Benzene	1
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylene	5
O-Xylene (1,2-Dimethylbenzene)	5
Xylenes	5

CONCENTRATIONS IN µg/L

- µg/L – MICROGRAMS PER LITER
- * – NYSDEC AWQSGVs
- NYSDEC – NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- AWQSGVs – AMBIENT WATER-QUALITY STANDARDS AND GUIDANCE VALUES
- NO NYSDEC AWQSGVs AVAILABLE
- DUP – DUPLICATE SAMPLE
- J – ESTIMATED VALUE
- NS – NOT SAMPLED
- U – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED
- BOLD – INDICATES THAT PARAMETER WAS DETECTED ABOVE THE NYSDEC AWQSGVs

- NOTES
- AN OBSERVABLE SHEEN WAS RECORDED DURING PURGE AT MONITORING WELLS MW-7, MW-34 AND MW-45, AND WERE NOT SAMPLED.
 - MONITORING WELLS MW-14 AND MW-15 WENT DRY DURING PURGE AND WERE NOT SAMPLED.



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NO.	DATE	REVISION DESCRIPTION	INT.

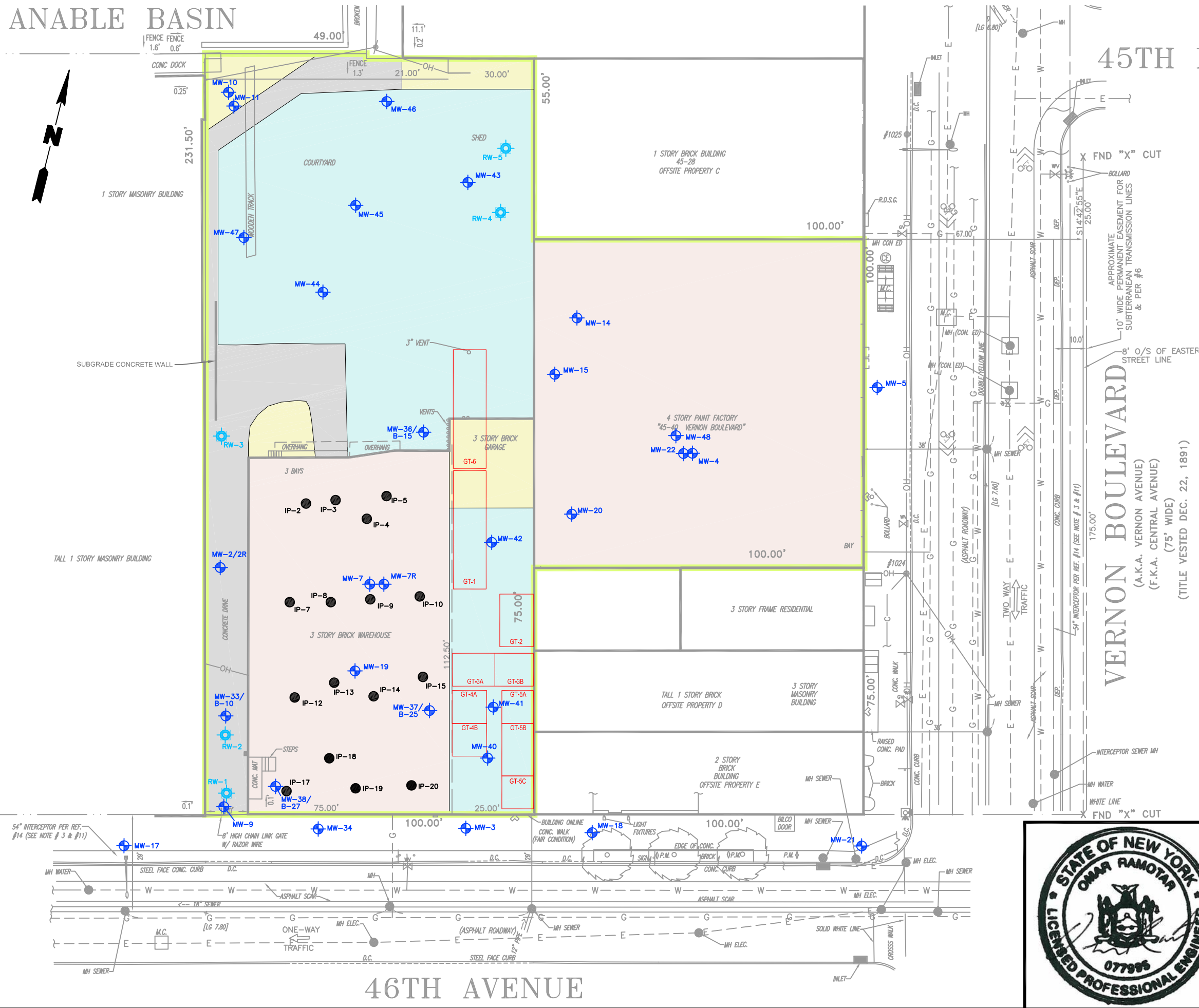
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DESIGNED BY: O.R.	CHECKED BY: O.R.
DRAWING SCALE: AS SHOWN	PLOT SCALE: 1:1
DRAWING DATE: 23APR18	PRINT TYPE: B&W
OFFICE: NY	PAPER SIZE: ARCH D
PROJECT NO.: 2051.0001Y002	
DRAWING FILE: 2051.0001Y2351.01.DWG	

REMEDIAL ENGINEERING, P.C.

ANABLE BASIN

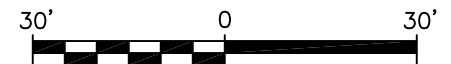


LEGEND

- | | | |
|-------|--|---|
| MW-5 | | LOCATION AND DESIGNATION OF MONITORING WELL |
| RW-1 | | LOCATION AND DESIGNATION OF LNAPL RECOVERY WELL |
| IP-2 | | LOCATION AND DESIGNATION OF PERMANENT ISCO INJECTION POINT |
| LNAPL | | LIGHT NON-AQUEOUS PHASE LIQUID |
| ISCO | | IN-SITU CHEMICAL OXIDATION |
| | | CONCRETE VAULT |
| | | PROPERTY BOUNDARY |
| | | APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE) |
| | | INSTALLED ASPHALT CAP |
| | | EXISTING CONCRETE PAVEMENT |
| | | INSTALLED RECYCLED CONCRETE AGGREGATE (MIN. 2 FT) |
| | | EXISTING BUILDING SLAB |

NOTE

REFER TO AS-BUILT DRAWINGS FOR ELEVATION
INFORMATION OF INSTALLED PORTIONS OF COVER
SYSTEM.



Title: **ENGINEERING CONTROL LOCATION -
COMPOSITE COVER SYSTEM**

SITE MANAGEMENT PERIODIC REVIEW REPORT
PARAGON PAINT AND VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

Prepared For:

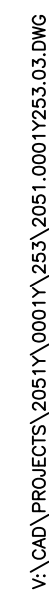
CSC 4540 PROPERTY CO LLC

Remedial
REMEDIAL ENGINEERING, P.C.

Compiled by: C.H.	Date: 23APR18	FIG
Prepared by: G.M.	Scale: AS SHOWN	
Project Mgr: R.M.	Project: 2051.0001Y002	
File: 2051.0001Y253.02.DWG		

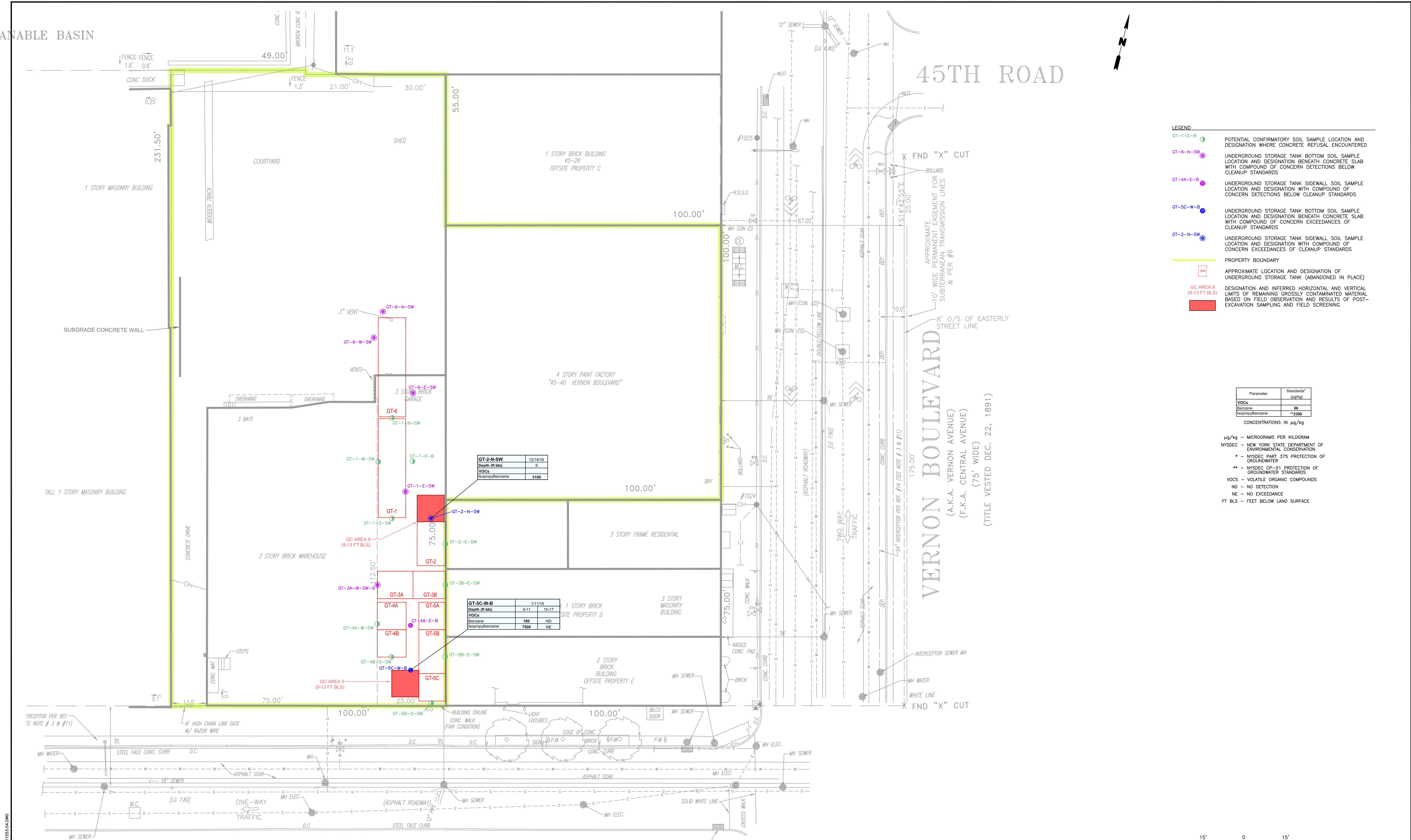
FIGURE

2 |



TITLE: CONTAMINATION REMAINING IN SOIL AFTER THE REMEDIAL ACTION WITHIN COURTYARD	FIGURE 3
---	-------------------------------

ANABLE BASIN



NO.	DATE	REVISION DESCRIPTION	INT.

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DESIGNED BY: C.H.	CHECKED BY: O.R.
DRAWING SCALE: AS SHOWN	PLOT SCALE: 1:1
DRAWING DATE: 07MAY18	PRINT TYPE: B&W
OFFICE: NY	PAPER SIZE: ARCH D
PROJECT NO.: 2051.0001Y002	
DRAWING FILE: 2051.0001Y253.04.DWG	

Remedial

REMEDIAL ENGINEERING, P.C.

209 SHAFTER STREET ISLANDIA NEW YORK 11749
(631) 232-2600

PROJECT NAME:

SITE MANAGEMENT PERIODIC REVIEW REPORT
PARAGON PAINT AND VARNISH CORPORATION

PROJECT FOR:

CSC 4540 PROPERTY CO LLC

TITLE:

CONTAMINATION REMAINING
IN SOIL AFTER THE REMEDIAL
ACTION WITHIN THE GARAGE

FIGURE

4

APPENDICES

- A. IC/EC Certification Form
- B. Site Inspection Checklists and Photo Log
- C. Groundwater Monitoring Results
- D. LNAPL Recovery System Monitoring Logs
- E. NYSDEC Site Management Plan Approval
- F. Response to November 17, 2017 NYDEC
Comment Letter
- G. NYSDEC Response Letter to SMP Modifications

Periodic Review Report
Site No. C241108 Long Island City, NY

APPENDIX A

IC/EC Certification Form



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



Site No.	C241108	Site Details		Box 1
Site Name Paragon Paint and Varnish Corp				
Site Address: 5-49 46th Avenue Zip Code: 11101-5214				
City/Town: Long Island City				
County: Queens				
Site Acreage: 0.8				
Reporting Period: December 15, 2016 to April 15, 2018				
				YES NO
1. Is the information above correct?				☒ ☐
If NO, include handwritten above or on a separate sheet.				
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?				☐ ☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?				☐ ☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?				☐ ☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.				
5. Is the site currently undergoing development?				☐ ☒

				Box 2
				YES NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial				☒ ☐
7. Are all ICs/ECs in place and functioning as designed?				☒ ☐

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

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

-----Omar Ramotar to sign and date when finalized-----

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

YES NO

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

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

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

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

SITE NO. C241108**Box 3****Description of Institutional Controls**

Parcel
4-26-4

Owner
CSC 4540 Property Co, LLC, c/o Simon Dev

Institutional Control

Ground Water Use Restriction
Soil Management Plan
Monitoring Plan
Site Management Plan
O&M Plan

IC/EC Plan

Site Management Plan (SMP)
Conduct groundwater monitoring
Compliance with a soil management plan
Prepare periodic review reports
Perform OM&M as per the SMP
Evaluate vapor intrusion before occupying buildings
No vegetable gardens

Site Owner to confirm
accuracy of Owner Description

Box 4**Description of Engineering Controls**

Parcel
4-26-4

Engineering Control

Cover System

Cover System for entire site 0.759 acres
LNAPL Recovery System
ISCO Injections as required

Periodic Review Report (PRR) Certification Statements

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

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

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

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

-----Omar Ramotar to sign and date when finalized-----

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS
SITE NO. C241108**

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I _____ at _____,
print name print business address

am certifying as _____ (Owner or Remedial Party)

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

-----Omar Ramotar to fill in blanks, sign and date when finalized-----

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

Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I _____ at _____
print name print business address

am certifying as a Professional Engineer for the _____
(Owner or Remedial Party)

-----Omar Ramotar to fill in blanks, sign and date when finalized-----

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

Stamp
(Required for PE)

Date

APPENDIX B

Site Inspection Checklists and Photo Log

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Thursday, September 08, 2016

Site Observations: Performed by (MS) on (9/8/16)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (9/8/16)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (9/8/16)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (9/8/16)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.

-Include sketches or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (9/8/16)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☒ ☐ Were all five (5) AC Sipper reels operating properly?
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **9/8/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

Sampling to be completed today from monitoring wells in SMP monitoring network

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Jordanna Kendrot
Date: Thursday, October 13, 2016

Site Observations: Performed by (JK) on (10/13/16)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (JK) on (10/13/16)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (JK) on (10/13/16)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (JK) on (10/13/16)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.

-Include sketched or photos of observations

Inspection of LNAPL Recovery System : Performed by (JK) on (10/13/16)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☒ ☐ Were all five (5) AC Sipper reels operating properly?
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Jordanna Kendrot**
Date: **10/13/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Tuesday, November 15, 2016

Site Observations: Performed by (MS) on (11/15/16)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (11/15/16)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (11/15/16)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (11/15/16)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (11/15/16)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? See pg. 2
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **11/15/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery System was turned off (breaker when hooked into system was shut off entirely). Brekaer turned back on and system restarted

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Thursday, December 01, 2016

Site Observations: Performed by (MS) on (12/1/16)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (12/1/16)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (12/1/16)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (12/1/16)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (12/1/16)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☒ ☐ Were all five (5) AC Sipper reels operating properly?
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **12/1/2016**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

Sampling to be completed today from monitoring wells in SMP monitoring network

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Thursday, January 19, 2017

Site Observations: Performed by (MS) on (1/19/17)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (1/19/17)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (1/19/17)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (1/19/17)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (1/19/17)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☒ ☐ Were all five (5) AC Sipper reels operating properly?
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **1/19/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Tuesday, February 14, 2017

Site Observations: Performed by (MS) on (2/14/17)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (2/14/17)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (2/14/17)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (2/14/17)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (2/14/17)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☒ ☐ Were all five (5) AC Sipper reels operating properly?
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **2/14/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Thursday, March 30, 2017

Site Observations: Performed by (MS) on (3/30/17)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations

Inspection of RCA Cap: Performed by (MS) on (3/30/17)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (3/30/17)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations

Inspection of Building Covers: Performed by (MS) on (3/30/17)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations

Inspection of LNAPL Recovery System : Performed by (MS) on (3/30/17)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☒ ☐ Were all five (5) AC Sipper reels operating properly?
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **3/30/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

Sampling to be completed today from monitoring wells in the SMP monitoring network.

Recovery system to be shut off due to lack of recoverable product. Continue to inspect recovery system going forward.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Monday, April 24, 2017

Site Observations: Performed by (MS) on (4/24/2017)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (4/24/2017)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (4/24/2017)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (4/24/2017)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (4/24/2017)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **4/24/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Wednesday, May 24, 2017

Site Observations: Performed by (MS) on (5/24/2017)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (5/24/2017)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (5/24/2017)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (5/24/2017)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (5/24/2017)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **5/24/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Thursday, June 22, 2017

Site Observations: Performed by (MS) on (6/22/2017)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (6/22/2017)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (6/22/2017)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (6/22/2017)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (6/22/2017)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **6/22/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Thursday, July 27, 2017

Site Observations: Performed by (MS) on (7/27/2017)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (7/27/2017)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (7/27/2017)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (7/27/2017)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (7/27/2017)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **7/27/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Tuesday, August 29, 2017

Site Observations: Performed by (MS) on (8/29/2017)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (8/29/2017)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (8/29/2017)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (8/29/2017)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (8/29/2017)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **8/29/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Tuesday, September 26, 2017

Site Observations: Performed by (MS) on (9/26/2017)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
☐ ☒ Has there been any maintenance activity impacting engineering controls?
☒ ☐ Are monitoring wells intact?

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (9/26/2017)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (9/26/2017)

Yes No

- ☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
-Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (9/26/2017)

Yes No

- ☒ ☐ Were all buildings inspected?
☐ ☒ Significant cracks observed?
☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
-Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (9/26/2017)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
☒ ☐ Were the fill alarm and spill alarms operating properly?
☒ ☐ Was the secondary containment pallet intact?
☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **9/26/2017**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: Vernon 4540 Realty LLC
Location: 5-49 46th Avenue, Long Island City, Queens, New York
Inspector: Michael Sarni
Date: Tuesday, March 20, 2018

Site Observations: Performed by (MS) on (3/20/2018)

Yes No

- ☐ ☒ Have any Site improvements been made since last inspection?
- ☐ ☒ Has there been any maintenance activity impacting engineering controls?
- ☐ ☒ Are monitoring wells intact? **See pg. 2**

-Include sketches or photos of observations (as necessary)

Inspection of RCA Cap: Performed by (MS) on (3/20/2018)

Yes No

- ☐ ☒ Underlying demarcation barrier exposed?
- ☒ ☐ Are soil caps sloped to allow for drainage away from the peak?

Inspection of Asphalt/Concrete Caps: Performed by (MS) on (3/20/2018)

Yes No

- ☐ ☒ Significant cracks observed?
- ☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
- Include sketches or photos of observations (as necessary)

Inspection of Building Covers: Performed by (MS) on (3/20/2018)

Yes No

- ☒ ☐ Were all buildings inspected?
- ☐ ☒ Significant cracks observed?
- ☐ ☒ Other damage observed? If yes, refer to Page 2 for additional clarification.
- ☐ ☒ Any new slab penetrations observed? If yes, include description on page 2.
- Include sketches or photos of observations (as necessary)

Inspection of LNAPL Recovery System : Performed by (MS) on (3/20/2018)

Yes No

- ☒ ☐ Were all five (5) Recovery wells intact?
- ☐ ☒ Were all five (5) AC Sipper reels operating properly? **See pg. 2**
- ☐ ☒ Were there any signs of corrosion on the 55 gallon drum?
- ☒ ☐ Were the fill alarm and spill alarms operating properly?
- ☒ ☐ Was the secondary containment pallet intact?
- ☒ ☐ Is the AC Sipper control panel intact?

ROUX ASSOCIATES, INC. / REMEDIAL ENGINEERING, P.C.
SITE-WIDE MONITORING, INSPECTION AND MAINTENANCE FORM

Client: **Vernon 4540 Realty LLC**
Location: **5-49 46th Avenue, Long Island City, Queens, New York**
Inspector: **Michael Sarni**
Date: **3/20/2018**

Site Observations

See pg. 1

Additional Comments or Clarification Where Corrective Actions May Be Required:

The concrete pad surrounding monitoring well MW-43 was damaged and removed. New pad will be constructed as soon as possible.

LNAPL Recovery system has been off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Photos of inspection attached.



Photograph 1: Condition of driveway looking south



Photograph 2: Conditions of paint factory, garage, and warehouse looking southeast



Photograph 3: Condition of paint factory looking east



Photograph 4: Aerial view of courtyard



Photograph 5: Aerial view of east end of courtyard and paint factory



Photograph 6: Aerial view of courtyard leading into warehouse



Photograph 7: Aerial view of intersection between driveway and courtyard



Photograph 8: Condition of courtyard and entrance to paint factory



Photograph 9: Intersection of driveway and courtyard looking west



Photograph 10: Condition of driveway and warehouse looking west



Photograph 11: Designated drum storage area with secondary containment pad



Photograph 12: Geotech AC Sipper control panel



Photograph 13: Condition of warehouse basement



Photograph 14: One of five Geotech AC Sipper pumps installed in recovery wells

APPENDIX C

Groundwater Monitoring Results

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-2R	MW-2R	MW-4	MW-4	MW-4	MW-4	MW-4
Sample Date:			06/22/2017	09/26/2017	03/30/2017	06/22/2017	09/26/2017	09/26/2017	12/21/2017
Normal or Field Duplicate:			N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	3.8 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	5 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	76	39	14	14	8.2	6.8	4.8
1,3-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	620 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	6.2 J	7.6	5 U	5 U	4.1 J	3.9 J	5 U
Benzene	1	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	23	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	12 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-2R	MW-2R	MW-4	MW-4	MW-4	MW-4	MW-4
Sample Date:			06/22/2017	09/26/2017	03/30/2017	06/22/2017	09/26/2017	09/26/2017	12/21/2017
Normal or Field Duplicate:			N	N	N	N	N	FD	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	5.4 J	2.5 U	1.6 J	1.7 J	0.89 J	0.73 J	0.74 J
Isopropylbenzene (Cumene)	5	UG/L	17	11	5.4	6.5	6.9	6.2	4.7
m,p-Xylene	5	UG/L	6.7	1.1 J	1.6 J	1.9 J	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	7.6 J	3.3 J	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	12 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	29	18	5.8	7.6	5.8	4.9	3.7
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	5.2 J	0.73 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	8.5	4.9	6.6	6.7	11	10	8.6
Styrene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	5 J	3	7.3	5.7	8.6	8.4	7.6
Tert-Butyl Methyl Ether	10	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	6.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	12 J	1.8 J	1.6 J	1.9 J	2.5 U	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-5	MW-7	MW-7R	MW-7R	MW-7R	MW-10	MW-10
Sample Date:			09/08/2016	06/22/2017	09/08/2016	03/30/2017	09/26/2017	09/08/2016	12/01/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	7.5 U	1.5 U	15 U	6 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	10 U	2 U	20 U	8 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	5 U	1 U	10 U	4 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	1200 U	250 U	2500 U	1000 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	25 U	5 U	50 U	20 U	5 U	5 U
Acetone	50	UG/L	5 U	25 U	14	50 U	19 J	5 U	5 U
Benzene	1	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	10 U	2 U	20 U	8 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	8.6 J	5 U	50 U	20 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	25 U	5 U	50 U	20 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-5	MW-7	MW-7R	MW-7R	MW-7R	MW-10	MW-10
Sample Date:			09/08/2016	06/22/2017	09/08/2016	03/30/2017	09/26/2017	09/08/2016	12/01/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	2.5 U	19	11	14 J	19	2.5 U	2.5 U
m,p-Xylene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	25 U	5.5	50 U	20 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	25 U	5 U	50 U	20 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	2.5 U	21	19	25	34	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	2.5 U	23	12	12 J	15	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	2.5 U	16	6	7 J	9.1 J	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	1.6 J	0.5 U	5 U	2 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	12 U	0.99 J	25 U	10 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	2.5 U	0.5 U	5 U	2 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	5 U	1 U	10 U	4 U	1 U	1 U
Xylenes	5	UG/L	2.5 U	12 U	2.5 U	25 U	10 U	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-10	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11
Sample Date:			03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/21/2017	09/08/2016	12/01/2016
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	5 U	5 U	4.5 J	5 U	5 U	5 U	5 U
Benzene	1	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.64	0.68
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-10	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11
Sample Date:			03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/21/2017	09/08/2016	12/01/2016
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	4.7	4.1
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-11	MW-11	MW-11	MW-11	MW-11	MW-19	MW-19
Sample Date:			03/30/2017	03/30/2017	06/22/2017	09/26/2017	12/21/2017	09/08/2016	06/22/2017
Normal or Field Duplicate:			N	FD	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.8 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	5 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	7	6.2 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	620 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	12 U
Acetone	50	UG/L	2.2 J	1.9 J	1.7 J	4.1 J	5 U	5.6	8.8 J
Benzene	1	UG/L	1	1	0.55	0.5 U	0.5 U	0.46 J	1.2 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	12 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	12 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-11	MW-11	MW-11	MW-11	MW-11	MW-19	MW-19
Sample Date:			03/30/2017	03/30/2017	06/22/2017	09/26/2017	12/21/2017	09/08/2016	06/22/2017
Normal or Field Duplicate:			N	FD	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.4 J
Isopropylbenzene (Cumene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25	23
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	5 U	5 U	5	5.4 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	12 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
N-Propylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	33	36
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Sec-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	23	14
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
T-Butylbenzene	5	UG/L	4.4	4.5	4	5.1	3.9	13	8.6
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2 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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-19	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
Sample Date:			12/21/2017	09/08/2016	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
Normal or Field Duplicate:			N	N	FD	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	10 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	5 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	14	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	1200 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	21 J	5 U	5 U	5 U	5 U	5 U	3.8 J
Benzene	1	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U	0.5 U
Bromochloromethane	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	10 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	25 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-19	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
Sample Date:			12/21/2017	09/08/2016	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
Normal or Field Duplicate:			N	N	FD	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	5.3 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	63	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m,p-Xylene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	120	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	41	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	14	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	2.5 U	0.5 U	0.5 U	0.46 J	0.5 U	0.35 J	0.5 U
Toluene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-21	MW-33	MW-33	MW-33	MW-33	MW-33	MW-34
Sample Date:			12/21/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017	09/08/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	3 U	1.5 U	1.5 U	3.8 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	4 U	2 U	2 U	5 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	2 U	1 U	1 U	2.5 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	3	5 U	2.5 U	2.5 U	6.2 U	1.3 J
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	500 U	250 U	250 U	620 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	10 U	5 U	5 U	12 U	5 U
Acetone	50	UG/L	5 U	23	5.7 J	5 U	5.6	12 U	5 U
Benzene	1	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.23 J	1.2 U	0.42 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	4 U	2 U	2 U	5 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	10 U	5 U	5 U	12 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	10 U	5 U	5 U	12 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-21	MW-33	MW-33	MW-33	MW-33	MW-33	MW-34
Sample Date:			12/21/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017	09/08/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	0.76 J	2.3 J	2.5 U	1.3 J	1.9 J	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	2.5 U	1.3 J	4.2 J	0.87 J	4.2	6 J	30
m,p-Xylene	5	UG/L	2.5 U	1.1 J	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	3.2 J	9.9 J	5 U	5 U	12 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	10 U	5 U	5 U	12 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
N-Propylbenzene	5	UG/L	2.5 U	2.2 J	8.2	1.5 J	8.2	12	39
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	1.5 J	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Sec-Butylbenzene	5	UG/L	2.5 U	2.6	4.6 J	1.4 J	5.2	7.5	16
Styrene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
T-Butylbenzene	5	UG/L	2.5 U	1.8 J	2.3 J	0.89 J	2.3 J	2.8 J	7
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	1 U	0.5 U	1.2	1.2 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	1 U	0.5 U	1.2	1.2 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.2 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.2 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	2 U	1 U	1 U	2.5 U	1 U
Xylenes	5	UG/L	2.5 U	2.6 J	5 U	2.5 U	2.5 U	6.2 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-34	MW-34	MW-34	MW-37	MW-37	MW-37	MW-38
Sample Date:			12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	7.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	0.74 J	12 U	12 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	10 U	10 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	5 U	5 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	0.98 J	0.94 J	0.86 J	2.5 U	3.6 J	12 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	1200 U	1200 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	25 U	25 U	5 U
Acetone	50	UG/L	5 U	2.4 J	2.2 J	3.4 J	39	25 U	3.5 J
Benzene	1	UG/L	0.26 J	0.5	0.23 J	0.19 J	2.5 U	2.5 U	0.27 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	10 U	10 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	1.4 J	5 U	25 U	25 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	25 U	25 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-34	MW-34	MW-34	MW-37	MW-37	MW-37	MW-38
Sample Date:			12/01/2016	03/30/2017	06/22/2017	09/08/2016	12/01/2016	03/30/2017	09/08/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	22	18	23	14	28	34	15
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	3 J	5 U	7.4	25 U	25 U	6.8
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	1.2 J	5 U	5 U	25 U	25 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
N-Propylbenzene	5	UG/L	33	25	32	20	50	68	16
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Sec-Butylbenzene	5	UG/L	15	13	14	5.1	21	30	5
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
T-Butylbenzene	5	UG/L	6.9	7.2	6.6	2.8	7.1 J	8.8 J	2.5
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	1.2 J	12 U	12 U	1 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	5 U	5 U	1 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	12 U	12 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-38	MW-38	MW-38	MW-38	MW-38	MW-40	MW-40
Sample Date:			12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/01/2016	03/30/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	1.6 J	5 U	53	12	14	2 J	2.3 J
Benzene	1	UG/L	0.28 J	0.5 U	0.43 J	0.62	0.36 J	8.6	9.3
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	2.8 J	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	1.2 J	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-38	MW-38	MW-38	MW-38	MW-38	MW-40	MW-40
Sample Date:			12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/01/2016	03/30/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	26	36	24	25	10	44	47
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 J	1 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	16	5 U	18	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	1.7 J	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	34	55	31	34	12	69	38
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.78 J	0.72 J
Sec-Butylbenzene	5	UG/L	11	16	8.2	14	10	16	20
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	4.3	6.8	4.2	5.4	5.6	3.5	5.3
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	0.97 J	2.5 U	2.5 U	0.74 J	2.5 U	1.7 J	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.8 J	1.7 J

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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-40	MW-40	MW-41	MW-41	MW-41	MW-41	MW-41
Sample Date:			06/22/2017	12/21/2017	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	1.2	0.34 J	0.5 U	0.5 U	0.5 U	0.74	0.48 J
1,2-Dichloropropane	1	UG/L	0.27 J	0.38 J	1 U	1 U	1 U	0.52 J	0.29 J
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	260	3.1 J	5 U	5 U	5 U	96	10
Benzene	1	UG/L	5.8	8.4	0.26 J	0.5 U	0.62	0.43 J	0.62
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	4.6 J	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	4.2	2.5 U	2.5 U	2.5 U	2.5 U	2.8	0.76 J
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-40	MW-40	MW-41	MW-41	MW-41	MW-41	MW-41
Sample Date:			06/22/2017	12/21/2017	09/08/2016	12/01/2016	03/30/2017	06/22/2017	09/26/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	40	32	1.3 J	0.73 J	2.5	1.1 J	1.4 J
m,p-Xylene	5	UG/L	1.1 J	0.8 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	39	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	1.5 J	2.5 U	2.5 U	2.5 U	2.5 U	1.2 J	2.5 U
N-Propylbenzene	5	UG/L	64	6.8	1.7 J	0.8 J	3.1	1.3 J	1.5 J
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	0.79 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	19	15	2.3 J	1.1 J	3.9	1.7 J	2.2 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	4.2	4.5	1.2 J	0.78 J	2.4 J	1.3 J	2.1 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	0.72 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	1.9 J	0.8 J	2.5 U	2.5 U	2.5 U	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-41	MW-42	MW-42	MW-42	MW-42	MW-42	MW-43
Sample Date:			12/21/2017	09/08/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/01/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	0.23 J	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	19	5 U	5 U	5 U	2.5 J	5 U	7.4
Benzene	1	UG/L	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-41	MW-42	MW-42	MW-42	MW-42	MW-42	MW-43
Sample Date:			12/21/2017	09/08/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/01/2016
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	1.4 J	4.7	0.73 J	2.5 U	2.5 U	2.5 U	1.4 J
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.3 J
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	4.4 J	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	1 J	3.5	2.5 U	2.5 U	2.5 U	2.5 U	1.9 J
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8 J
Sec-Butylbenzene	5	UG/L	2.2 J	2.9	1.4 J	1.1 J	2.5 U	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	1.8 J	1.2 J	1.7 J	1.2 J	1.2 J	1.2 J	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.1 J

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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-43	MW-43	MW-43	MW-43	MW-44	MW-44	MW-44
Sample Date:			03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/01/2016	03/30/2017	06/22/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	4 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	78	7.1	49	47	41	81	42
1,3-Dichlorobenzene	3	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	500 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	10 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	28	7	57	41	98	53	61
Benzene	1	UG/L	0.5 J	0.5 U	0.69	0.45 J	1	0.63	0.19 J
Bromochloromethane	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	4 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	10 U	5 U	1.3 J	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	10 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-43	MW-43	MW-43	MW-43	MW-44	MW-44	MW-44
Sample Date:			03/30/2017	06/22/2017	09/26/2017	12/21/2017	12/01/2016	03/30/2017	06/22/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	6.8	0.82 J	5.9	5.4	9.9	9.7	3.2
Isopropylbenzene (Cumene)	5	UG/L	13	1.9 J	12	12	6.8	13	5.8
m,p-Xylene	5	UG/L	15	1.7 J	18	12	24	30	9.5
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	10 U	5 U	9	6.5	12	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	10 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	22	2.9	18	18	8.5	19	9.6
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	7.2	0.87 J	10	6.4	17	22	8.8
Sec-Butylbenzene	5	UG/L	5.8	0.83 J	4	4.9	1.8 J	6.2	3.9
Styrene	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.1 J	2.5 U
T-Butylbenzene	5	UG/L	2.4 J	2.5 U	2.1 J	2 J	1.2 J	2.4 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.23 J	0.5 U
Toluene	5	UG/L	5 U	2.5 U	1.3 J	0.95 J	3.8	3.6	0.99 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	22	2.6 J	28	18	41	52	18

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AWQSGVs - Ambient Water-Quality Standards and Guidance Values

µg/L - Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-44	MW-44	MW-45	MW-45	MW-45	MW-46	MW-46
Sample Date:			09/26/2017	12/21/2017	03/30/2017	06/22/2017	06/22/2017	12/01/2016	03/30/2017
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	3.8 U	7.5 U	7.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	5 U	10 U	10 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	2.5 U	5 U	5 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	57	48	230	150	180	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	620 U	1200 U	1200 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	12 U	25 U	25 U	5 U	5 U
Acetone	50	UG/L	11	56	32	45	31	4.2 J	5 U
Benzene	1	UG/L	0.37 J	0.36 J	0.78 J	2.5 U	2.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	5 U	10 U	10 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	12 U	25 U	25 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	12 U	25 U	25 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-44	MW-44	MW-45	MW-45	MW-45	MW-46	MW-46
Sample Date:			09/26/2017	12/21/2017	03/30/2017	06/22/2017	06/22/2017	12/01/2016	03/30/2017
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	6	4.4	39	22	22	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	9.3	7.4	51	38	41	2.5 U	2.5 U
m,p-Xylene	5	UG/L	15	13	47	25	24	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	2.6 J	7.8	12 U	25 U	25 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	12 U	25 U	25 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	15	11	88	59	63	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	13	10	7.4	5.4 J	6.4 J	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	4.2	4.1	16	12	12	2.5 U	2.5 U
Styrene	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	1.9 J	1.8 J	4.8 J	3.9 J	4 J	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Toluene	5	UG/L	1.6 J	1.8 J	6.2 U	12 U	12 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	1.2 U	2.5 U	2.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	6.2 U	12 U	12 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	2.5 U	5 U	5 U	1 U	1 U
Xylenes	5	UG/L	28	23	54	30 J	30 J	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-47
Sample Date:			06/22/2017	09/26/2017	12/21/2017	12/01/2016	12/01/2016	03/30/2017	06/22/2017
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	2 J	0.88 J	2.5 U	40	41	78	67
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	500 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	1.1 J	5 U	10 U
Acetone	50	UG/L	4.2 J	2.7 J	4.8 J	110	110	39	27
Benzene	1	UG/L	0.5 U	0.5 U	0.5 U	0.98	1.1	0.66	0.42 J
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	4 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	1.2 J	2.5 U	5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	10 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-46	MW-46	MW-46	MW-47	MW-47	MW-47	MW-47
Sample Date:			06/22/2017	09/26/2017	12/21/2017	12/01/2016	12/01/2016	03/30/2017	06/22/2017
Normal or Field Duplicate:			N	N	N	N	FD	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Ethylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	11	11	15	9.4
Isopropylbenzene (Cumene)	5	UG/L	2.5 U	2.5 U	2.5 U	9.2	9.9	16	13
m,p-Xylene	5	UG/L	2.5 U	2.5 U	2.5 U	24	25	36	24
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	5 U	5 U	14	16	5 U	4.2 J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	1.1 J	5 U	5 U	10 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
N-Propylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	13	14	23	20
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	2.5 U	2.5 U	2.5 U	14	15	20	14
Sec-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.1 J	2.2 J	4.6	4.2 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.1 J	5 U
T-Butylbenzene	5	UG/L	2.5 U	2.5 U	2.5 U	0.95 J	0.99 J	2 J	1.7 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Toluene	5	UG/L	2.5 U	2.5 U	2.5 U	3.8	4	2.9	2.2 J
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Xylenes	5	UG/L	2.5 U	2.5 U	2.5 U	38	40	56	38

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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-47	MW-47	MW-48	MW-48	MW-48	MW-48	MW-48
Sample Date:			09/26/2017	12/21/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
1,1,1-Trichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	1	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	--	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	UG/L	49	65	2.2 J	0.92 J	2.8	2.5 U	2.5 U
1,3-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane (P-Dioxane)	--	UG/L	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Hexanone	50	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	UG/L	13	47	5 U	5 U	5 U	3.9 J	5 U
Benzene	1	UG/L	0.31 J	0.47 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	--	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Appendix C. Summary of Volatile Organic Compounds in Groundwater

Vernon 4540 Realty, LLC-Former Paragon Paint Varnish Co., 46th Ave Vernon Blvd., Long Island City, New York

Sample Designation:			MW-47	MW-47	MW-48	MW-48	MW-48	MW-48	MW-48
Sample Date:			09/26/2017	12/21/2017	12/01/2016	03/30/2017	06/22/2017	09/26/2017	12/21/2017
Normal or Field Duplicate:			N	N	N	N	N	N	N
Parameter	NYSDEC AWQSGVs	Units							
Dichloroethylenes	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	UG/L	5.2	7.6	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	UG/L	9.1	11	4	2.6	1.9 J	1.5 J	1.2 J
m,p-Xylene	5	UG/L	13	19	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	UG/L	5 U	8	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	--	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	UG/L	15	17	3.1	2.4 J	2.1 J	0.81 J	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	UG/L	8.6	12	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	UG/L	3.5	4.3	4.7	4.3	3	2.3 J	1.7 J
Styrene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	UG/L	1.5 J	2 J	4.1	3.1	1.8 J	1.5 J	1.4 J
Tert-Butyl Methyl Ether	10	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	UG/L	1.7 J	2.2 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	--	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene (TCE)	5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Chloride	2	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	5	UG/L	22	31	2.5 U	2.5 U	2.5 U	2.5 U	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

FD - Duplicate

-- No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

APPENDIX D

LNAPL Recovery System Monitoring Logs

LNAPL Recovery System Monitoring Log, Former Paragon Paint Varnish Factory, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	Trace amount; cannot be recovered by system
Recovery Well RW-1	N	--	6.71	--	
Recovery Well RW-2	N	--	7.34	--	
Recovery Well RW-3	Y	8.36	8.38	0.02	
Recovery Well RW-4	Y	8.65	8.66	0.01	
Recovery Well RW-5	N	--	8.45	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				0 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? System startup; program LNAPL recovery system to pull from RW-3 and RW-4 only

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log, Former Paragon Paint Varnish Factory - October 13, 2016, Long Island City, New York

Source of Reading	Value	Recovery Well Gauging Data			Comments
Recovery Well Network -Presence of Product	Product Present?	DTW	DTP	FTP	
Recovery Well RW-1	N	--	6.71	--	
Recovery Well RW-2	N	--	7.34	--	
Recovery Well RW-3	Y	8.36	8.38	0.02	
Recovery Well RW-4	Y	8.65	8.66	0.01	Trace amount; cannot be recovered by system
Recovery Well RW-5	N	--	8.45	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				2.4 Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? N/A

Form Completed By: _____

Jordanna Kendrot

LNAPL Recovery System Monitoring Log, Former Paragon Paint Varnish Factory - October 26, 2016, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.84	--	
Recovery Well RW-2	N	--	7.4	--	
Recovery Well RW-3	N	--	8.04	--	No product present
Recovery Well RW-4	N	--	8.3	--	No product present
Recovery Well RW-5	Y	8.1	8.12	0.02	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			2.6 Gallons		

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? Modify system so no longer removing product from RW-3/RW-4; program system to begin removal from
RW-5

Form Completed By:

Michael Sarnie

LNAPL Recovery System Monitoring Log, Former Paragon Paint Varnish Factory - November 15, 2016, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	7.2	--	
Recovery Well RW-2	N	--	7.6	--	
Recovery Well RW-3	N	--	7.29	--	
Recovery Well RW-4	N	--	8.68	--	
Recovery Well RW-5	N	--	8.46	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.1 Gallons	

Is the system operating within the acceptable conditions? No; system breaker had been turned off

If no, was the condition corrected and how? Turn on breaker to building and turn system back on; resume settings from 10/26/16

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log, Former Paragon Paint Varnish Factory - December 01, Long Island City, New York

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.51	--	
Recovery Well RW-2	N	--	6.54	--	
Recovery Well RW-3	N	--	6.67	--	
Recovery Well RW-4	N	--	6.98	--	
Recovery Well RW-5	Y	6.74	6.75	0.01	Trace amount; cannot be recovered by system
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.1 Gallons	

Is the system operating within the acceptable conditions? Yes

If no, was the condition corrected and how? N/A

Form Completed By:

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - January 19, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value		Unit		Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.63	--	
Recovery Well RW-2	N	--	7.38	--	
Recovery Well RW-3	N	--	7.87	--	
Recovery Well RW-4	N	--	8.20	--	
Recovery Well RW-5	Y	7.94	7.95	0.01	Trace amount; cannot be recovered by system
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3 Gallons		

Is the system operating within the acceptable condition Yes

If no, was the condition corrected and how? _____

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - February 14, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.65	--	
Recovery Well RW-2	N	--	7.29	--	
Recovery Well RW-3	Y	--	7.78	--	
Recovery Well RW-4	Y	--	7.84	--	
Recovery Well RW-5	N	7.64	7.65	0.01	Trace amount; cannot be recovered by system
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum			3.3 Gallons		

Is the system operating within the acceptable condition? Yes

If no, was the condition corrected and how? _____

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - March 30, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.66	--	
Recovery Well RW-2	N	--	7.02	--	
Recovery Well RW-3	N	--	7.48	--	
Recovery Well RW-4	N	--	7.69	--	
Recovery Well RW-5	Y	--	7.50	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions: Yes

If no, was the condition corrected and how? No product present in recovery wells, turn off system until reportable levels of product become
present in the recovery system wells.

Form Completed By: _____

Michael Sami

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - April 24, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.48	--	
Recovery Well RW-2	N	--	6.77	--	
Recovery Well RW-3	N	--	7.51	--	
Recovery Well RW-4	N	--	7.82	--	
Recovery Well RW-5	N	--	7.59	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - May 25, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.05	--	
Recovery Well RW-2	N	--	6.39	--	
Recovery Well RW-3	N	--	6.82	--	
Recovery Well RW-4	N	--	7.24	--	
Recovery Well RW-5	N	--	7.01	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - June 22, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.29	--	
Recovery Well RW-2	N	--	6.79	--	
Recovery Well RW-3	N	--	6.92	--	
Recovery Well RW-4	N	--	7.70	--	
Recovery Well RW-5	N	--	6.98	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells

Form Completed By: _____

Michael Sarni

Long Island City, New York, NYSDEC Site No. C241108

j.

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - July 27, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.24	--	
Recovery Well RW-2	N	--	6.52	--	
Recovery Well RW-3	N	--	7.01	--	
Recovery Well RW-4	N	--	7.31	--	
Recovery Well RW-5	N	--	7.10	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - August 29, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.07	--	
Recovery Well RW-2	N	--	6.38	--	
Recovery Well RW-3	N	--	6.80	--	
Recovery Well RW-4	N	--	7.30	--	
Recovery Well RW-5	N	--	7.10	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - September 26, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.87	--	
Recovery Well RW-2	N	--	7.16	--	
Recovery Well RW-3	N	--	7.99	--	
Recovery Well RW-4	N	--	8.19	--	
Recovery Well RW-5	N	--	7.96	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - October 31, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.15	--	
Recovery Well RW-2	N	--	6.42	--	
Recovery Well RW-3	N	--	6.98	--	
Recovery Well RW-4	N	--	7.47	--	
Recovery Well RW-5	N	--	7.30	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - November 14, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.35	--	
Recovery Well RW-2	N	--	6.60	--	
Recovery Well RW-3	N	--	7.12	--	
Recovery Well RW-4	N	--	7.50	--	
Recovery Well RW-5	N	--	7.34	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - December 21, 2017

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	7.22	--	
Recovery Well RW-2	N	--	7.78	--	
Recovery Well RW-3	N	--	8.51	--	
Recovery Well RW-4	N	--	8.70	--	
Recovery Well RW-5	N	--	8.52	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - January 4, 2018

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	7.30	--	
Recovery Well RW-2	N	--	7.83	--	
Recovery Well RW-3	N	--	8.60	--	
Recovery Well RW-4	N	--	8.82	--	
Recovery Well RW-5	N	--	8.61	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. Operation and maintenance activities will resume upon presence of LNAPL in recovery wells.

Form Completed By: _____

Michael Sarni

LNAPL Recovery System Monitoring Log Former Paragon Paint Varnish Corp - March 20, 2018

5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.

Long Island City, New York, NYSDEC Site No. C241108

Source of Reading	Value	Unit			Comments
Recovery Well Network -Presence of Product	Product Present?	DTP	DTW	FTP	
Recovery Well RW-1	N	--	6.10	--	
Recovery Well RW-2	N	--	6.43	--	
Recovery Well RW-3	N	--	6.98	--	
Recovery Well RW-4	N	--	7.28	--	
Recovery Well RW-5	N	--	7.07	--	
Product Volume in Recovery Drum					
0-55 gallons in Recovery Drum				3.3 Gallons	

Is the system operating within the acceptable conditions? N/A

If no, was the condition corrected and how? _____

LNAPL Recovery system has been shut off since March 30, 2017. The system was shut off effective January 12, 2018, however the system will remain in-place in the event that future monitoring events detect LNAPL.

Form Completed By:

Michael Sarni

APPENDIX E

NYSDEC Site Management Plan Approval

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4995

www.dec.ny.gov

December 7, 2016

Mr. Brent Carrier
4540 Vernon Realty LLC
45 Carleon Ave
Larchmont NY 10538

RE Paragon Paint and Varnish Corp.
5-49 46th Avenue, Long Island City, NY
Brownfield Cleanup Program, Site ID C241108, Queens County
Site Management Plan

Dear Ms. Carrier:

The New York State Department of Environmental Conservation has reviewed the Site Management Plan (SMP) dated November 2016, for the referenced site, NYSDEC BCP Site No. C241108, NYSDEC BCA Index No. W2-1119-08-03, prepared by Remedial Engineering P.C. on behalf of 4540 Vernon Realty LLC.

This SMP was prepared as a requirement of the New York State Brownfield Cleanup Program. The SMP contains a comprehensive plan that provides detailed maintenance and monitoring discussions of the Institutional and Engineering Controls developed for the site, as well as provisions for the annual certification of these controls. The SMP is hereby approved.

The approved SMP must be placed in all publicly accessible repositories for the Site within five business days. A certification that this document has been placed, and that the repositories are complete with all project documents, must be submitted to the NYSDEC project manager.

If you have any questions or comments, please feel free to contact me at (718) 482-4891.

Sincerely,

Sondra Martinkat
Environmental Engineer



ec: Jane O'Connell, Karen Mintzer – NYSDEC
Justin Deming, Anthony Perretta – NYSDOH
Michael Bogin – Sive Paget Riesel
Omar Ramotar – Remedial Engineering, P.C.

cc: Angela Krevey – Anable Beach Inc
Donald Rattner – 549 46th Ave LLC

APPENDIX F

Response to November 17, 2017 NYDEC Comment Letter

REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

209 SHAFTER STREET
ISLANDIA, NEW YORK 11749
TEL: 631-232-2600
FAX: 631 232-9898

January 9, 2018

Ms. Sondra Martinkat
Project Manager
Division of Environmental Remediation
New York State Department of Environmental Conservation
Region Two
47-40 21st Street
Long Island City, New York 11101

Re: Response to November 17, 2017 NYSDEC Comment Letter
Paragon Paint and Varnish Corp., Long Island, New York, Site No. C241108

Dear Ms. Martinkat:

Roux Associates, Inc. (Roux Associates) and Remedial Engineering, P.C. (Remedial Engineering), on behalf of CSC 4540 Property Co. LLC, have generated this response to comments raised in the November 17, 2017 New York State Department of Environmental Conservation ("NYSDEC") comment letter (Attachment 1) and as a follow-up to what was discussed in the recent meeting that took place at the NYSDEC's offices in Long Island City, New York on December 1, 2017. The minutes for the meeting between the NYSDEC, Quadrum Global, Simon Baron Development and Roux Associates, Inc. are presented in Attachment 2. The specific NYSDEC's comments on the conclusions and recommendations presented in the Quarterly Inspection and Monitoring Report submitted to the NYSDEC on August 23, 2017 are presented below in italics followed by Roux Associates' responses.

Comment No. 1:

Since the results have not been satisfactory, some design parameters may need to be adjusted. Update the Conceptual Site Model as more information is collected. The geology, hydrogeology and contaminant mass may need to be understood better as well. In addition, a pilot study would provide information needed to better treat the residual grossly contamination soil and would help to determine optimal design/inputs.

Response:

The equivalent of a pilot study was in fact conducted from April 24th to 26th, 2017, as Regenesys PersulfOx was injected across 17 points covering areas that had either residual gross contamination in soil or NYSDEC Ambient Water Quality Standards and Guidance Values ("AWQSGVs") exceedances in groundwater. Proposed areas of treatment were also selected based on varying site conditions and lithology as well. Note, as the post-remediation design plan to treat all residual soil and groundwater contamination at the Site was being developed, Roux Associates elected to perform an

injection event at several representative areas across the project Site in lieu of treating all areas at the same time. The injection design was described, in detail, in the Phase I In-Situ Chemical Oxidation (“ISCO”) Design Plan (Design Plan) that was submitted to the NYSDEC on April 11, 2017 two weeks prior to performing the injection event that was conducted on April 25, 26 and 27, 2017. The submitted Design was based on a review of all historic and recent soil and groundwater data for the Site that was shared, reviewed and discussed with Regenesi. As such, there is no need to update the conceptual Site model as the design of the limited injection event, which Roux considers the equivalent of a pilot study, was based on all known conditions at the Site.

Based on Regenesi’s evaluation of the data, design recommendations for the focused injection event performed in April were developed, reviewed and updated in consultation with Roux. The final design recommendations provided by Regenesi were previously provided to the NYSDEC, at their request, in an e-mail on May 4, 2017 (Attachment 3). It is important to note that conservative assumptions were made when estimating the quantity of material needed at each proposed injection location as well as the required spacing for each injection point. Also, prior experience with regards to performing ISCO at the Warehouse in 2015 was used to determine the maximum amount of chemicals that could be effectively injected into the ground at each proposed treatment area during the performance of the injection event discussed herein. It is important to note that “daylighting” of injected chemicals at the surface was specifically observed at several injection points in the Warehouse footprint during the prior injection event performed in 2015. These observations were used to determine the maximum, yet effective amount of chemicals that could be injected at each treatment location during the April 2017 event.

Following completion of the initial injection round and subsequent groundwater sampling event, the lab data showed that PersulfOx, the chemical Regenesi recommended for this application, fell short of reducing concentrations of the contaminants of concern (“COCs”) than what was anticipated. It was concluded from this treatment event that any further ISCO treatment will not dramatically improve the groundwater quality and, in turn, not achieve treatment goals to below NYSDEC AWQSGVs.

In addition, Light Non-Aqueous Phase Liquid (“LNAPL”) releases were not observed at any monitoring well (MW-40, MW-41, MW-42 and MW-44) or recovery well (RW-3) in close proximity to grossly contaminated areas in unsaturated soil (GC Area 5) and saturated soil (GC Areas 2, 3, 4, 8 and 9) that were specifically targeted for treatment. Accordingly, these observations do not support the need to perform ISCO treatment in all remaining grossly contaminated areas, which exhibit similar characteristics in terms of product type (i.e., mineral spirits) and lithology, that were not included in this first-phase of ISCO treatment (GC Areas 1, 6 and 7) conducted in April of 2017.

As discussed in greater detail in the August 23, 2017 inspection report and subsequently conveyed to the NYSDEC in person on December 1, 2017, Roux recommends further

treatment, as warranted, be determined **after** an established plan for Site redevelopment is generated.

Comment No. 2:

Conditions have changed since the SMP was approved, with LNAPL appearing in wells in both the warehouse and the factory. LNAPL has been found in MW-19 and MW-7 in the warehouse, and in MW-4 and MW-22 in the factory. Well construction logs for MW-4 and MW-22, which are in close proximity to MW-48, indicate the presence of residual soil contamination in the factory. Please clarify how this is proposed to be addressed. If not already part of the periodic gauging, please add monitoring wells MW-4, MW-7, MW-19, and MW-22 to the gauging events.

Response:

The presence of LNAPL at the Site has generally been consistent in both the warehouse and the factory following the approval of the SMP.

For clarification purposes, LNAPL was present at the warehouse in MW-7 dating back to March 15, 2015 prior to the performance of the remedial action and continued to be observed at this well during the post-remediation phase. Attachment 4 includes the gauging logs from the March 15, 2015 gauging event that was also submitted to the NYSDEC in a monthly progress report on April 10, 2015. While Roux understands that there has been a new detection of LNAPL at MW-19 in 2017 in the warehouse area, the most recent detections were minimal (<0.01 feet) during the September gauging event to no detection at all during the recent December 1, 2017 gauging event.

With regards to the wells in the factory, a new well (MW-48) was installed in the vicinity of MW-4 and MW-22 in the Paint Factory Building as part of the remedial action. This well was installed at the request of the NYSDEC to further understand the level of source area soil contamination, if any, in the vicinity of historical monitoring wells MW-4 and MW-22. While it is understood that the boring logs for adjacent wells MW-4 and MW-22 indicated the presence of localized soil contamination, the lack of LNAPL and AWQSGV exceedances at MW-48 proves those impacts are minor and more importantly, do not appear to be a continuing source of groundwater contamination.

MW-4, MW-7, MW-19, and MW-22 are already part of the periodic gauging events. In addition MW-4, MW-7, and MW-19 are part of the NYSDEC-approved sampling network. Moving forward, Roux suggests that the site monitoring wells within the monitoring network will be gauged and sampled on a quarterly basis as discussed during the December 1, 2017 meeting. Roux will follow the monitoring data more closely with regards to these wells moving forward and notify the NYSDEC of any significant changes. For the record, MW-4, MW-7, MW-19, and MW-22 did not have product detections during the recent December 1, 2017 sampling event.

Comment No. 3:

Other methods to treat grossly contaminated soils may be proposed. Grossly contaminated soil areas are considered source areas and must be addressed. Alternative approaches, such as but not limited to bioventing, bioremediation or air sparging, must be evaluated if it is determined that ISCO is not effective.

Response:

Roux believes that grossly contaminated soil at the Site is relatively stable and residual LNAPL is not mobile at the Site in its current condition. While we understand that there is a potential that bound LNAPL could potentially be released and become mobile as the subsurface is disturbed in the future as the Site is redeveloped, the plan for redevelopment has not been identified yet and may not be finalized for some time. In the meantime, the Site Owners are committed to addressing mobile LNAPL observed in the post-remediation monitoring phase as well as during any future remedial activities.

Furthermore, the Site Owner agrees to develop a plan to proactively address residual grossly contaminated areas that could be impacted by future Site redevelopment activities, where applicable, when those redevelopment activities are confirmed. These efforts could relate to removal, encapsulation or treatment. As such, alternative treatment options (i.e., bioventing, bioremediation, air sparging or stabilization) would be further evaluated as Site development plans are finalized. In the interim, subsurface gross contamination is stable and, as such, no further remediation is warranted at this time. The site will be continued to be monitored for LNAPL on a quarterly basis and observed LNAPL will be manually removed by bailing or use of absorbent socks or pads.

If you would like to discuss these responses or have any questions or concerns with regards to what has been conveyed herein, please don't hesitate to contact our office.

Sincerely,

REMEDIAL ENGINEERING, P.C.



Omar Ramotar, P.E.
Principal Engineer

Attachments

cc: Jane O'Connell, NYSDEC
Andrew Till, Simon Baron Development
Robert Hendrickson, Quadrum Global
Lawrence Schnapf, Esq., Schnapf LLC
Joseph Duminuco, Roux Associates, Inc.
Christian Hoelzli, Roux Associates, Inc.

NYSDEC Comment Letter Dated November 15, 2017

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4995

www.dec.ny.gov

November 15, 2017

Mr. Brent Carrier
4540 Vernon Realty LLC
45 Carleon Ave
Larchmont NY 10538

Re: Paragon Paint and Varnish Company
Queens County, BCP # C241108
Phase I In-Situ Chemical Oxidation (ISCO)

Dear Mr. Carrier:

The New York State Department of Environmental Conservation (the Department) has reviewed the Quarterly Inspection and Monitoring Report submitted on August 23, 2017 and the supplemental drawings and charts provided on October 6, 2017 by Roux Associates, Inc. (Roux) for the Paragon Paint and Varnish Site (the Site). This work was done in accordance with the approved Site Management Plan (SMP) dated December 2015 and the Phase I In-Situ Chemical Oxidation (ISCO) Design Plan dated April 11, 2017. The quarterly report presented conclusions and recommendations based upon the ISCO treatments performed on the site in April 2017. The Department offers the following comments:

- Since the results have not been satisfactory, some design parameters may need to be adjusted. Update the Conceptual Site Model as more information is collected. The geology, hydrogeology and contaminant mass may need to be understood better as well. In addition, a pilot study would provide information needed to better treat the residual grossly contamination soil and would help to determine optimal design/inputs.
- Conditions have changed since the SMP was approved, with LNAPL appearing in wells in both the warehouse and the factory. LNAPL has been found in MW-19 and MW-7 in the warehouse, and in MW-4 and MW-22 in the factory. Well construction logs for MW-4 and MW-22, which are in close proximity to MW-48, indicate the presence of residual soil contamination in the factory. Please clarify how this is proposed to be addressed. If not already part of the periodic gauging, please add monitoring wells MW-4, MW-7, MW-19, and MW-22 to the gauging events.
- Other methods to treat grossly contaminated soils may be proposed. Grossly contaminated soil areas are considered source areas and must be addressed.



Department of
Environmental
Conservation

Alternative approaches, such as but not limited to bioventing, bioremediation or air sparging, must be evaluated if it is determined that ISCO is not effective.

In sum, a more robust application of ISCO may be necessary since results have not been positive, or another method to remediate the residual contamination should be proposed.

Please provide a written response to this letter within 30 days. If you have any questions or would like to schedule a meeting to discuss this letter, please contact me at (718) 482-4891 or sondra.martinkat@dec.ny.gov.

Sincerely,

Sondra Martinkat
Project Manager

ec: Jane O'Connell, Gerard Burke, Karen Mintzer – NYSDEC
Matthew Baron – CSC Realty LLC
Omar Ramotar – Roux Associates/Remedial Engineering PC
Michael Bogin – Sive Paget & Riesel

cc: Angela Krevey – Anabel Beach, Inc.
Donald Rattner – 549 46th Ave LLC

Minutes from December 1, 2017 Meeting with the NYSDEC

REMEDIAL ENGINEERING, P.C.

ENVIRONMENTAL ENGINEERS

209 SHAFTER STREET

ISLANDIA, NY 11749

TEL: 631-232-2600

FAX: 631-232-9898

WEBSITE: rouxinc.com

TO: Jane O'Connell – NYSDEC
Sondra Martinkat – NYSDEC

FROM: Omar Ramotar, P.E., Remedial Engineering, P.C.

CC: Robert Hendrickson, Quadrum Global
Jared White – Quadrum Global
Andrew Till – Simon Baron Development
Joseph Duminuco – Roux Associates, Inc.
Christian Hoelzli – Roux Associates, Inc

DATE: December 8, 2017

RE: Minutes from December 1, 2017 NYSDEC Meeting
NYSDEC Site No. C241108, Long Island City, New York

1. Attendance:

- a. Jane O'Connell, NYSDEC
- b. Sondra Martinkat, NYSDEC
- c. Robert Hendrickson, Quadrum Global
- d. Jared White, Quadrum Global
- e. Andrew Till, Simon Baron Development
- f. Joseph Duminuco, Roux Associates, Inc.
- g. Omar Ramotar, P.E., Remedial Engineering, P.C.

2. Key Points Discussed:

- a. **Ownership:** Representatives of ownership (Quadrum Global ["Quadrum"] and Simon Baron Development ["Simon Baron"]) gave a brief background on their involvement at NYSDEC Site No. C241108 ("the Site"). They specifically noted that they are the majority owners of the Site. They also highlighted their involvement on the project over the past year since the Site Certificate of Completion ("COC") was issued and committed to complying with NYSDEC requirements in the post-remediation phase as Site redevelopment plans are finalized in the future and eventually implemented. Ownership conveyed that Brent Carrier is still a silent, minority owner on the project. Moving forward, the NYSDEC suggested that the majority owners file a request to update the project contact list currently on file with the NYSDEC for the project to clarify and make clear who should also be contacted on this project moving forward whenever any future correspondence is issued by the NYSDEC. The NYSDEC also provided the following information regarding other owners cited on the COC:
 - i. Angela Krevey
Anable Beach, Inc.
375 South End Avenue, Apartment 6S
New York, New York 10280

- ii. Donald Rattner
549 46th Avenue LLC
116 Ferncliff Road
Cos Cob, Connecticut 06807
- b. **Ownership's Counsel:** Michael S. Bogin, Esq. with Sive, Paget and Riesel is no longer the attorney of record of the project. Larry Schnapf, Esq. with Schnapf LLC is now the attorney of record.
- c. **NYSDEC November 15, 2017 Letter:** Roux Associates, Inc. (Roux) briefly reviewed what was requested by the NYSDEC in its' November 15, 2017 Letter that was sent in response to what was conveyed in Roux's Quarterly Inspection and Monitoring Report dated August 23, 2017 ("2nd Quarterly Report for 2017"). Roux committed to providing a response to the issues and concerns raised as requested.
- d. **Redevelopment Plan Issues:** The Ownership team conveyed there has been a variety, but related issues with regards to finalizing Site redevelopment plans for the project Site. These issues are primarily related to complying with and addressing requirements of the New York City Board of Standards and Appeals ("BSA"), City Planning and Uniform Land Use Review Procedures ("ULURP"). As such, a plan for redeveloping the site has not been finalized and is not expected to be developed in the short-term.
- e. **Effectiveness of ISCO:** Roux reiterated its position that ISCO does not appear to be effective at treating residual groundwater or gross contamination soil areas as originally presented in the 2nd Quarterly Report for 2017. Roux will present its rationale in greater detail within the next two weeks in response to the NYSDEC November 15, 2017 letter.
- f. **Additional Treatment Options:** Roux conveyed that it will not recommend further treatment, of any kind, until a confirmed overall plan for Site redevelopment is generated. The NYSDEC was generally in agreement with this recommendation based on current conditions and the understanding that there are no known subsurface disturbances planned to occur at the Site prior to performing any future redevelopment. Note, when there is an actual confirmed plan for redevelopment, options to address residual gross contamination areas, if and where applicable, will be identified.
- g. **Short-term Groundwater Monitoring Requirements:** Roux conveyed that it will initiate gauging site monitoring wells for Light Non-Aqueous Phase Liquid ("LNAPL") on a quarterly basis instead of a monthly basis in 2018.
- h. **Short-term Groundwater Sampling Requirements:** The NYSDEC conveyed that after the December 2017 event has been performed, Roux can plan on sampling in six months (June 2018) and potentially annually after that. However, the actual timing for the next sampling event would be discussed with the NYSDEC after the June 2018 sampling event has been performed.

i. **Short-term Reporting Requirements:**

- i. Roux will no longer submit monthly progress reports. Instead, quarterly progress reports will be submitted and coincide with the performance of gauging or sampling events performed at the Site.
- ii. The NYSDEC conveyed that formal groundwater monitoring reports will not be required. After a groundwater monitoring round is performed in the future, Roux can simply provide a tabular summary of groundwater data when generated. The respective results would then be discussed in greater detail in the follow-up annual Periodic Review Report ("PRR").
- iii. The NYSDEC conveyed that the first annual PRR is expected to be submitted during the second quarter of 2018.

j. **Short-term Operation and Maintenance (O&M) Requirements:** Roux conveyed that the onsite LNAPL recovery system will be permanently shut down as no LNAPL has been recovered by this system in the past year. The system, however, is not anticipated to be decommissioned until the Site is redeveloped. It was noted that Roux anticipates that it will continue to manually recover LNAPL with bailers and oil absorbing socks/pads on a quarterly basis.

k. **COC Issues:** Ownership discussed concerns over the amended COC which lists 4540 Vernon Realty LLC and two other entities as certificate holders while CSC 4540 Property Co, LLC which incurred all of the site preparation costs was identified as the Owner of the Site but not a certificate holder. Thus, none of the named Certificate Holders nor ownership can claim the site preparation tax credit. After some discussion, Ms. Jane O'Connell discussed possible administrative actions with the Owner's counsel to address Owner's concerns, if possible.

l. **NYSDEC Discussion with Owner's Counsel:** The NYSDEC spoke with the Owner's counsel directly regarding the issue cited above.

m. **Next Steps Were Generally Reviewed:**

- i. Ms. Jane O'Connell, to the extent practical, will work with the Owner's counsel (Larry Schnapf, Esq.) and Andrew Gugliemi, NYSDEC counsel, to amend the COC so that CSC 4540 Property Co, LLC would be identified as a Certificate Holder. Time is of essence since the COC is dated December 2016 which means ownership would need to file an amended return to claim the site prep tax credit by the end of this month. .
- ii. Roux will provide a formal response to the NYSDEC's November 15, 2017 letter discussing Roux's position on eliminating future ISCO treatments as well as other key issues of concern.
- iii. Roux to perform quarterly sampling and gauging round in December 2017.
- iv. Owners conveyed that they would like to meet with the NYSDEC again in June 2018 to provide another status update.

----- **End of Minutes** -----

Regenesis Design Recommendations

Omar Ramotar

From: Jordanna Kendrot
Sent: Thursday, May 04, 2017 1:06 PM
To: Martinkat, Sondra (DEC); Omar Ramotar; O'Connell, Jane H (DEC)
Cc: Andrew Till (atill@simonbaron.com); Robert Hendrickson (rhendrickson@quadrumglobal.com); mbogin@sprlaw.com; Joe Duminuco; Glenn Netuschil
Subject: RE: Paragon RAWP Implementation (Site No. C241108): SMP Phase 1 In-Situ Chemical Oxidation Design Plan
Attachments: Area Surrounding MW-47.pdf; GC Area 2 & MW-44.pdf; GC Areas 4&5.pdf; GC Area 3.pdf; Preexisting IPs in Basment (Only IP-17 to IP-19).pdf; GC Area 8.pdf; GC Area 9.pdf

Afternoon Sondra,

Please find attached the dosing calculations from Regenesys for the most recent treatment detailed in this Design Plan.

Please feel free to call or email if you have any concerns.

Thank you,

Jordanna Kendrot | Project Engineer | Roux Associates, Inc.

209 Shafter Street Islandia, New York 11749

Main: 631.232.2600 | Direct: 631.630.2356 | Mobile: 631.741.7142

Email: jkendrot@rouxinc.com | Website: www.rouxinc.com



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& Management*

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From: Martinkat, Sondra (DEC) [mailto:sondra.martinkat@dec.ny.gov]

Sent: Wednesday, April 26, 2017 3:39 PM

To: Omar Ramotar; O'Connell, Jane H (DEC)

Cc: Andrew Till (atill@simonbaron.com); Robert Hendrickson (rhendrickson@quadrumglobal.com); mbogin@sprlaw.com; Joe Duminuco; Jordanna Kendrot; Glenn Netuschil

Subject: RE: Paragon RAWP Implementation (Site No. C241108): SMP Phase 1 In-Situ Chemical Oxidation Design Plan

Please provide the dosing calculations from Regenesys for the treatment and other worksheets they provide.

Sondra Martinkat

Environmental Engineer 2, Environmental Remediation

New York State Department of Environmental Conservation

47-40 21st St, Long Island City, NY 11101

P: 718-482-4891 | F: 718-482-6358 | sondra.martinkat@dec.ny.gov

www.dec.ny.gov |  | 

From: Omar Ramotar [<mailto:oramotar@rouxinc.com>]

Sent: Tuesday, April 11, 2017 3:26 PM

To: Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>; O'Connell, Jane H (DEC) <jane.oconnell@dec.ny.gov>

Cc: Andrew Till (atill@simonbaron.com) <atill@simonbaron.com>; Robert Hendrickson

(rhendrickson@quadrunglobal.com) <rhendrickson@quadrunglobal.com>; mbogin@sprlaw.com; Joe Duminuco

<jduminuco@rouxinc.com>; Jordanna Kendrot <jkendrot@rouxinc.com>; Glenn Netuschil <gnetuschil@rouxinc.com>

Subject: Paragon RAWP Implementation (Site No. C241108): SMP Phase 1 In-Situ Chemical Oxidation Design Plan

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Sondra and Jane,

Roux Associates, on behalf of Vernon 4540 Realty, LLC, has prepared the attached ISCO injection design plan to continue to address VOCs in groundwater and grossly contaminated soil following implementation of the RAWP at the Paragon Paint and Varnish Corporation 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, New York.

Implementation of the proposed Design Plan is anticipated to require five (5) work days, and will commence on April 24, 2017. Prior to field mobilization, Roux Associates will submit Form 7250-16 ("Inventory of Injection Wells") to the USEPA in accordance with the Code of Federal Regulations Title 40 Part 144 of the USEPA's Underground Injection Program.

If you have any questions or concerns on the planned injection event, please don't hesitate to call or e-mail.

Kind Regards,

Omar

Omar Ramotar

Principal Engineer

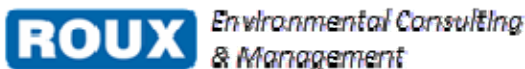
P.E. - NY, AZ, NV

Omar Ramotar | Principal Engineer | Roux Associates, Inc.

209 Shafter Street, Islandia, NY 11749

Main: 631-232-2600 | Direct: 631-630-2339 | Cell: 631-553-9274

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Project Information			RegenOx® Application Design Summary		
Paragon Pain Varnish					
Long island city NY					
Area 3					
Prepared For:			Area 3		Field App. Instructions
Roux			Application Method	Direct Push	Add RegenOx Part A to water, mix until dissolved, then add Part B and mix until dissolved.
			Spacing Within Rows (ft)	8	
			Spacing Between Rows (ft)	10	
			Injection Points (per app.)	3	
Target Treatment Zone (TTZ) Info	Unit	Value	Number of Applications	3	
Treatment Area	ft ²	200	Areal Extent (square ft)	200	Field Mixing Ratios
Top Treat Depth	ft	8.0	Top Application Depth (ft bgs)	8	Water per Pt per App (gals)
Bot Treat Depth	ft	13.0	Bottom Application Depth (ft bgs)	13	40
Vertical Treatment Interval	ft	5.0	Total RegenOx to be Applied (lbs)	280	RegenOx Part A per Pt per App (lbs)
Treatment Zone Volume	ft ³	1,000	RegenOx Part A (lbs)	160	18
Treatment Zone Volume	cy	37	RegenOx Part B (lbs)	120	RegenOx Part B per Pt per App (lbs)
Soil Type	---	silty sand	RegenOx Part A Solution %	5%	13
Porosity	cm ³ /cm ³	0.40	Volume Water (gals)	364	Total Volume per Pt per App (gals)
Effective Porosity	cm ³ /cm ³	0.20	Total Solution Volume (gals)	385	43
Treatment Zone Pore Volume	gals	2,992	<i>Per Application Totals</i>		
Treatment Zone Effective Pore Volume	gals	1,496	Total RegenOx per App (lbs)	93	Volume per vertical ft (gals)
Fraction Organic Carbon (foc)	g/g	0.003	RegenOx Part A Per App (lbs)	53	9
Soil Density	g/cm ³	1.6	RegenOx Part B Per App (lbs)	40	
Soil Density	lb/ft ³	100	Water per App (gals)	121	
Soil Weight	lbs	1.0E+05	Injection Volume per App (gals)	128	
Hydraulic Conductivity	ft/day	10.0	Technical Notes/Discussion		
Hydraulic Conductivity	cm/sec	3.53E-03	Prepared By: 1/0/1900 Date: 3/28/2017		
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand	Unit	Value	Assumptions/Qualifications		
Sorbed Phase Contaminant Mass	lbs	1	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		
Dissolved Phase Contaminant Mass	lbs	0.3			
Total Contaminant Mass	lbs	1			
Stoichiometric RegenOx Oxidant Demand	lbs	24			
Engineering/Safety Factor	---	1.0			
Stoichiometric RegenOx Required	lbs	24			
Additional Soil Oxidant Demand (SOD)	g/kg	1.0			
RegenOx Required for Additional SOD	lbs	100			
Total RegenOx Oxidant Required	lbs	124			
Application Dosing					
RegenOx to be Applied	lbs	280			
RegenOx Part A to be Applied	lbs	160			
RegenOx Part B to be Applied	lbs	120			



Project Information			RegenOx® Application Design Summary		
Paragon Pain Varnish					
Long island city NY					
Area 4			Area 4		Field App. Instructions
Prepared For:			Application Method	Direct Push	Add RegenOx Part A to water, mix until dissolved, then add Part B and mix until dissolved.
Roux			Spacing Within Rows (ft)	10	
			Spacing Between Rows (ft)	10	
			Injection Points (per app.)	3	
Target Treatment Zone (TTZ) Info	Unit	Value	Number of Applications	3	
Treatment Area	ft ²	250	Areal Extent (square ft)	250	Field Mixing Ratios
Top Treat Depth	ft	5.0	Top Application Depth (ft bgs)	5	Water per Pt per App (gals)
Bot Treat Depth	ft	13.0	Bottom Application Depth (ft bgs)	13	71
Vertical Treatment Interval	ft	8.0	Total RegenOx to be Applied (lbs)	440	RegenOx Part A per Pt per App (lbs)
Treatment Zone Volume	ft ³	2,000	RegenOx Part A (lbs)	280	31
Treatment Zone Volume	cy	74	RegenOx Part B (lbs)	160	RegenOx Part B per Pt per App (lbs)
Soil Type	---	silty sand	RegenOx Part A Solution %	5%	18
Porosity	cm ³ /cm ³	0.40	Volume Water (gals)	638	Total Volume per Pt per App (gals)
Effective Porosity	cm ³ /cm ³	0.20	Total Solution Volume (gals)	668	74
Treatment Zone Pore Volume	gals	5,984	<i>Per Application Totals</i>		
Treatment Zone Effective Pore Volume	gals	2,992	Total RegenOx per App (lbs)	147	Volume per vertical ft (gals)
Fraction Organic Carbon (foc)	g/g	0.003	RegenOx Part A Per App (lbs)	93	9
Soil Density	g/cm ³	1.6	RegenOx Part B Per App (lbs)	53	
Soil Density	lb/ft ³	100	Water per App (gals)	213	
Soil Weight	lbs	2.0E+05	Injection Volume per App (gals)	223	
Hydraulic Conductivity	ft/day	10.0	Technical Notes/Discussion		
Hydraulic Conductivity	cm/sec	3.53E-03	Prepared By: 1/0/1900 Date: 3/28/2017		
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand	Unit	Value	Assumptions/Qualifications		
Sorbed Phase Contaminant Mass	lbs	2	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		
Dissolved Phase Contaminant Mass	lbs	0.5			
Total Contaminant Mass	lbs	3			
Stoichiometric RegenOx Oxidant Demand	lbs	48			
Engineering/Safety Factor	---	1.0			
Stoichiometric RegenOx Required	lbs	48			
Additional Soil Oxidant Demand (SOD)	g/kg	1.0			
RegenOx Required for Additional SOD	lbs	200			
Total RegenOx Oxidant Required	lbs	248			
Application Dosing					
RegenOx to be Applied	lbs	440			
RegenOx Part A to be Applied	lbs	280			
RegenOx Part B to be Applied	lbs	160			



Project Information			RegenOx® Application Design Summary		
Paragon Pain Varnish					
Long island city NY					
Area 7			Area 7		Field App. Instructions
Prepared For:			Application Method	Direct Push	Add RegenOx Part A to water, mix until dissolved, then add Part B and mix until dissolved.
Roux			Spacing Within Rows (ft)	12	
			Spacing Between Rows (ft)	12	
			Injection Points (per app.)	1	
Target Treatment Zone (TTZ) Info	Unit	Value	Number of Applications	1	
Treatment Area	ft ²	100	Areal Extent (square ft)	100	Field Mixing Ratios
Top Treat Depth	ft	17.0	Top Application Depth (ft bgs)	17	Water per Pt per App (gals)
Bot Treat Depth	ft	20.0	Bottom Application Depth (ft bgs)	20	75
Vertical Treatment Interval	ft	3.0	Total RegenOx to be Applied (lbs)	80	RegenOx Part A per Pt per App (lbs)
Treatment Zone Volume	ft ³	300	RegenOx Part A (lbs)	40	40
Treatment Zone Volume	cy	11	RegenOx Part B (lbs)	40	RegenOx Part B per Pt per App (lbs)
Soil Type	---	silty sand	RegenOx Part A Solution %	6%	40
Porosity	cm ³ /cm ³	0.40	Volume Water (gals)	75	Total Volume per Pt per App (gals)
Effective Porosity	cm ³ /cm ³	0.20	Total Solution Volume (gals)	81	81
Treatment Zone Pore Volume	gals	898	<i>Per Application Totals</i>		
Treatment Zone Effective Pore Volume	gals	449	Total RegenOx per App (lbs)	80	Volume per vertical ft (gals)
Fraction Organic Carbon (foc)	g/g	0.003	RegenOx Part A Per App (lbs)	40	27
Soil Density	g/cm ³	1.6	RegenOx Part B Per App (lbs)	40	
Soil Density	lb/ft ³	100	Water per App (gals)	75	
Soil Weight	lbs	3.0E+04	Injection Volume per App (gals)	81	
Hydraulic Conductivity	ft/day	10.0	Technical Notes/Discussion		
Hydraulic Conductivity	cm/sec	3.53E-03	Prepared By: 1/0/1900 Date: 3/28/2017		
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand	Unit	Value	Assumptions/Qualifications		
Sorbed Phase Contaminant Mass	lbs	0	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		
Dissolved Phase Contaminant Mass	lbs	0.1			
Total Contaminant Mass	lbs	0			
Stoichiometric RegenOx Oxidant Demand	lbs	7			
Engineering/Safety Factor	---	1.0			
Stoichiometric RegenOx Required	lbs	7			
Additional Soil Oxidant Demand (SOD)	g/kg	1.0			
RegenOx Required for Additional SOD	lbs	30			
Total RegenOx Oxidant Required	lbs	37			
Application Dosing					
RegenOx to be Applied	lbs	80			
RegenOx Part A to be Applied	lbs	40			
RegenOx Part B to be Applied	lbs	40			



Project Information			RegenOx® Application Design Summary		
Paragon Pain Varnish					
Long island city NY					
Area 11					
Prepared For:			Area 11		Field App. Instructions
Roux			Application Method	Direct Push	Add RegenOx Part A to water, mix until dissolved, then add Part B and mix until dissolved.
			Spacing Within Rows (ft)	12	
			Spacing Between Rows (ft)	12	
			Injection Points (per app.)	3	
Target Treatment Zone (TTZ) Info	Unit	Value	Number of Applications	1	
Treatment Area	ft ²	370	Areal Extent (square ft)	370	Field Mixing Ratios
Top Treat Depth	ft	8.0	Top Application Depth (ft bgs)	8	Water per Pt per App (gals)
Bot Treat Depth	ft	13.0	Bottom Application Depth (ft bgs)	13	150
Vertical Treatment Interval	ft	5.0	Total RegenOx to be Applied (lbs)	400	RegenOx Part A per Pt per App (lbs)
Treatment Zone Volume	ft ³	1,850	RegenOx Part A (lbs)	240	80
Treatment Zone Volume	cy	69	RegenOx Part B (lbs)	160	RegenOx Part B per Pt per App (lbs)
Soil Type	---	silty sand	RegenOx Part A Solution %	6%	53
Porosity	cm ³ /cm ³	0.40	Volume Water (gals)	451	Total Volume per Pt per App (gals)
Effective Porosity	cm ³ /cm ³	0.20	Total Solution Volume (gals)	479	160
Treatment Zone Pore Volume	gals	5,536	<i>Per Application Totals</i>		
Treatment Zone Effective Pore Volume	gals	2,768	Total RegenOx per App (lbs)	400	Volume per vertical ft (gals)
Fraction Organic Carbon (foc)	g/g	0.003	RegenOx Part A Per App (lbs)	240	32
Soil Density	g/cm ³	1.6	RegenOx Part B Per App (lbs)	160	
Soil Density	lb/ft ³	100	Water per App (gals)	451	
Soil Weight	lbs	1.8E+05	Injection Volume per App (gals)	479	
Hydraulic Conductivity	ft/day	10.0	Technical Notes/Discussion		
Hydraulic Conductivity	cm/sec	3.53E-03	Prepared By: 1/0/1900 Date: 3/28/2017		
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand	Unit	Value	Assumptions/Qualifications		
Sorbed Phase Contaminant Mass	lbs	2	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		
Dissolved Phase Contaminant Mass	lbs	0.5			
Total Contaminant Mass	lbs	3			
Stoichiometric RegenOx Oxidant Demand	lbs	45			
Engineering/Safety Factor	---	1.0			
Stoichiometric RegenOx Required	lbs	45			
Additional Soil Oxidant Demand (SOD)	g/kg	1.0			
RegenOx Required for Additional SOD	lbs	185			
Total RegenOx Oxidant Required	lbs	229			
Application Dosing					
RegenOx to be Applied	lbs	400			
RegenOx Part A to be Applied	lbs	240			
RegenOx Part B to be Applied	lbs	160			



Project Information			RegenOx® Application Design Summary		
Paragon Pain Varnish					
Long island city NY					
Area 12			Area 12		Field App. Instructions
Prepared For:			Application Method	Direct Push	Add RegenOx Part A to water, mix until dissolved, then add Part B and mix until dissolved.
Roux			Spacing Within Rows (ft)	12	
			Spacing Between Rows (ft)	12	
			Injection Points (per app.)	2	
Target Treatment Zone (TTZ) Info	Unit	Value	Number of Applications	1	
Treatment Area	ft ²	320	Areal Extent (square ft)	320	Field Mixing Ratios
Top Treat Depth	ft	5.0	Top Application Depth (ft bgs)	5	Water per Pt per App (gals)
Bot Treat Depth	ft	13.0	Bottom Application Depth (ft bgs)	13	300
Vertical Treatment Interval	ft	8.0	Total RegenOx to be Applied (lbs)	520	RegenOx Part A per Pt per App (lbs)
Treatment Zone Volume	ft ³	2,560	RegenOx Part A (lbs)	320	160
Treatment Zone Volume	cy	95	RegenOx Part B (lbs)	200	RegenOx Part B per Pt per App (lbs)
Soil Type	---	silty sand	RegenOx Part A Solution %	6%	100
Porosity	cm ³ /cm ³	0.40	Volume Water (gals)	601	Total Volume per Pt per App (gals)
Effective Porosity	cm ³ /cm ³	0.20	Total Solution Volume (gals)	637	319
Treatment Zone Pore Volume	gals	7,660	Per Application Totals		
Treatment Zone Effective Pore Volume	gals	3,830	Total RegenOx per App (lbs)	520	Volume per vertical ft (gals)
Fraction Organic Carbon (foc)	g/g	0.003	RegenOx Part A Per App (lbs)	320	40
Soil Density	g/cm ³	1.6	RegenOx Part B Per App (lbs)	200	
Soil Density	lb/ft ³	100	Water per App (gals)	601	
Soil Weight	lbs	2.6E+05	Injection Volume per App (gals)	637	
Hydraulic Conductivity	ft/day	10.0			
Hydraulic Conductivity	cm/sec	3.53E-03			
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand	Unit	Value	Technical Notes/Discussion		
Sorbed Phase Contaminant Mass	lbs	3			
Dissolved Phase Contaminant Mass	lbs	0.7			
Total Contaminant Mass	lbs	4			
Stoichiometric RegenOx Oxidant Demand	lbs	62			
Engineering/Safety Factor	---	1.0			
Stoichiometric RegenOx Required	lbs	62			
Additional Soil Oxidant Demand (SOD)	g/kg	1.0			
RegenOx Required for Additional SOD	lbs	256			
Total RegenOx Oxidant Required	lbs	318	Prepared By: 1/0/1900		
			Date: 3/28/2017		
Application Dosing			Assumptions/Qualifications		
RegenOx to be Applied	lbs	520	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		
RegenOx Part A to be Applied	lbs	320			
RegenOx Part B to be Applied	lbs	200			



Project Information			RegenOx® Application Design Summary		
Paragon Pain Varnish					
Long island city NY					
Area 6			Area 6		Field App. Instructions
Prepared For:			Application Method	Direct Push	Add RegenOx Part A to water, mix until dissolved, then add Part B and mix until dissolved.
Roux			Spacing Within Rows (ft)	8	
			Spacing Between Rows (ft)	8	
			Injection Points (per app.)	2	
Target Treatment Zone (TTZ) Info	Unit	Value	Number of Applications	3	Field Mixing Ratios
Treatment Area	ft ²	100	Areal Extent (square ft)	100	
Top Treat Depth	ft	5.0	Top Application Depth (ft bgs)	5	
Bot Treat Depth	ft	13.0	Bottom Application Depth (ft bgs)	13	
Vertical Treatment Interval	ft	8.0	Total RegenOx to be Applied (lbs)	200	Water per Pt per App (gals)
Treatment Zone Volume	ft ³	800	RegenOx Part A (lbs)	120	38
Treatment Zone Volume	cy	30	RegenOx Part B (lbs)	80	RegenOx Part A per Pt per App (lbs)
Soil Type	---	silty sand	RegenOx Part A Solution %	6%	20
Porosity	cm ³ /cm ³	0.40	Volume Water (gals)	225	RegenOx Part B per Pt per App (lbs)
Effective Porosity	cm ³ /cm ³	0.20	Total Solution Volume (gals)	240	13
Treatment Zone Pore Volume	gals	2,394	<i>Per Application Totals</i>		Total Volume per Pt per App (gals)
Treatment Zone Effective Pore Volume	gals	1,197	Total RegenOx per App (lbs)	67	40
Fraction Organic Carbon (foc)	g/g	0.003	RegenOx Part A Per App (lbs)	40	5
Soil Density	g/cm ³	1.6	RegenOx Part B Per App (lbs)	27	
Soil Density	lb/ft ³	100	Water per App (gals)	75	
Soil Weight	lbs	8.0E+04	Injection Volume per App (gals)	80	
Hydraulic Conductivity	ft/day	10.0	Technical Notes/Discussion		
Hydraulic Conductivity	cm/sec	3.53E-03	Prepared By: 1/0/1900 Date: 3/28/2017		
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand	Unit	Value	Assumptions/Qualifications		
Sorbed Phase Contaminant Mass	lbs	1	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		
Dissolved Phase Contaminant Mass	lbs	0.2			
Total Contaminant Mass	lbs	1			
Stoichiometric RegenOx Oxidant Demand	lbs	19			
Engineering/Safety Factor	---	1.0			
Stoichiometric RegenOx Required	lbs	19			
Additional Soil Oxidant Demand (SOD)	g/kg	1.0			
RegenOx Required for Additional SOD	lbs	80			
Total RegenOx Oxidant Required	lbs	99			
Application Dosing					
RegenOx to be Applied	lbs	200			
RegenOx Part A to be Applied	lbs	120			
RegenOx Part B to be Applied	lbs	80			



Project Information			PersulfOx® Application Design Summary		
Paragon Pain Varnish Long island city NY Area 9A Prepared For: Roux			Area 9A		Field App. Instructions
			Application Method	Direct Push	
			Spacing Within Rows (ft)	15	
			Spacing Between Rows (ft)	20	
			Injection Points (per app.)	3	
Number of Applications	1	Field Mixing Ratios			
Areal Extent (square ft)	800				
Top Application Depth (ft bgs)	0				
Bottom Application Depth (ft bgs)	5				
PersulfOx to be Applied (lbs)	331				
PersulfOx Solution %	15%	110			
Volume Water (gals)	224	Total Volume per Pt per app (gals)			
Total Volume (gals)	241	80			
Target Treatment Zone (TTZ) Info			Unit	Value	
Treatment Area	ft²	800			
Top Treat Depth	ft	0.0			
Bot Treat Depth	ft	5.0			
Vertical Treatment Interval	ft	5.0			
Treatment Zone Volume	ft³	4,000			
Treatment Zone Volume	cy	148			
Soil Type	---	silty sand			
Porosity	cm³/cm³	0.40			
Effective Porosity	cm³/cm³	0.20			
Treatment Zone Pore Volume	gals	11,969			
Treatment Zone Effective Pore Volume	gals	5,984			
Fraction Organic Carbon (foc)	g/g	0.003			
Soil Density	g/cm³	1.6			
Soil Density	lb/ft³	100			
Soil Weight	lbs	4.0E+05			
Hydraulic Conductivity	ft/day	10.0			
Hydraulic Conductivity	cm/sec	3.53E-03			
Hydraulic Gradient	ft/ft	0.005			
GW Velocity	ft/day	0.25			
GW Velocity	ft/yr	91			
Sources of Oxidant Demand			Unit	Value	
Sorbed Phase Contaminant Mass	lbs	0			
Dissolved Phase Contaminant Mass	lbs	0.5			
Total Contaminant Mass	lbs	1			
Stoichiometric PersulfOx Demand	lbs	96			
Engineering/Safety Factor	---	1.0			
Stoichiometric PersulfOx Required	lbs	96			
Additional Soil Oxidant Demand	g/kg	2.0			
SOD PersulfOx Required	lbs	888			
Total PersulfOx Required	lbs	983			
Application Dosing			Assumptions/Qualifications		
PersulfOx Required	lbs	331	In generating this preliminary estimate, Regenesiis relied upon professional judgment and site specific information provided by others. Using this information as input, we performed calculations based upon known chemical and geologic relationships to generate an estimate of the mass of product and subsurface placement required to affect remediation of the site.		

Prepared By: 1/0/1900
Date: 4/27/2017

March 15, 2015 Gauging Logs

**Table 1. LNAPL Recovery IRM Summary Table, Former Paragon Paint Varnish Corp
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108**

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	PID (ppm)	Product Thickness (ft)	Purged (g)	Cumulative (g)
3/5/2015	MW-1R ¹	NG	NG	4	NM	NA	0	0
3/19/2015	MW-1R1	NG	NG	4	NM	NA	0	0
3/30/2015	MW-1R ¹	NG	NG	4	NM	NA	0	0
3/5/2015	MW-2R	ND	7.92	4	NM	0	0	0.66
3/19/2015	MW-2R	ND	7.23	4	1.2	0	0	0.66
3/30/2015	MW-2R	ND	6.88	4	0.6	0	0	0.66
3/5/2015	MW-3	6.91	7.03	2	NM	0.12	0.01	21.28
3/19/2015	MW-3	6.54	6.69	2	24.3	0.15	0.01	21.29
3/30/2015	MW-3	6.94	7.08	2	49.8	0.14	0.10	21.39
3/5/2015	MW-4	ND	9.70	2	NM	0	0	0
3/19/2015	MW-4	ND	9.39	2	0.0	0	0	0
3/30/2015	MW-4	ND	9.46	2	0.0	0	0	0
3/5/2015	MW-5	ND	5.48	2	NM	0	0	0
3/19/2015	MW-5	ND	5.48	2	0.0	0	0	0
3/30/2015	MW-5	ND	5.53	2	0.0	0	0	0
3/5/2015	MW-6	10.65	13.34	1	NM	2.69	0.50	52.96
3/19/2015	MW-6	10.21	13.42	1	20.8	3.21	0.50	53.46
3/30/2015	MW-6	9.77	13.11	1	22.3	3.34	0.50	53.96
3/5/2015	MW-6R	10.47	12.13	2	NM	1.66	0.75	20.60
3/19/2015	MW-6R	9.94	12.02	2	137	2.08	0.50	21.10
3/30/2015	MW-6R	9.64	11.82	2	39.9	2.18	0.50	21.60
3/5/2015	MW-7	2.99	3.28	1	NM	0.29	0.10	20.37
3/19/2015	MW-7	1.52	1.62	1	49.7	0.10	0.10	20.47
3/30/2015	MW-7	1.36	1.47	1	42.6	0.11	0.10	20.57
3/5/2015	MW-7R	ND	2.56	2	NM	0	0	0.14
3/19/2015	MW-7R	ND	1.15	2	1.3	0	0	0.14
3/30/2015	MW-7R	ND	0.83	2	57.4	0	0	0.14
3/5/2015	MW-8 ¹	NG	NG	2	NM	NA	0	1298.50
3/19/2015	MW-8 ¹	NG	NG	2	NM	NA	0	1298.50
3/30/2015	MW-8 ¹	NG	NG	2	NM	NA	0	1298.50
3/5/2015	MW-9	7.46	8.18	2	NM	0.72	0.25	60.35
3/19/2015	MW-9 ²	NG	NG	NA	NM	NM	NA	60.35
3/30/2015	MW-9 ²	NG	NG	NA	NM	NM	NA	60.35
3/5/2015	MW-10 ¹	NG	NG	2	NM	NA	0	0
3/19/2015	MW-10	ND	7.33	2	0.0	0	0	0
3/30/2015	MW-10	ND	7.20	2	0.0	0	0	0
3/5/2015	MW-11 ¹	NG	NG	2	NM	NA	0	0
3/19/2015	MW-11 ¹	NG	NG	2	NM	NA	0	0
3/30/2015	MW-11 ¹	NG	NG	2	NM	NA	0	0
3/5/2015	MW-12 ³	NG	NG	2	NM	NA	0	42.46
3/19/2015	MW-12	7.78	9.29	2	134	1.51	0.50	42.96
3/30/2015	MW-12	7.10	10.23	2	3.13	42.40	0.75	43.71
3/5/2015	MW-13	8.26	9.47	2	NM	1.21	0.50	156.99
3/19/2015	MW-13	8.99	13.22	2	112	4.23	1.25	158.24
3/30/2015	MW-13	7.48	8.57	2	42.6	1.09	0.25	158.49

**Table 1. LNAPL Recovery IRM Summary Table, Former Paragon Paint Varnish Corp
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108**

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	PID (ppm)	Product Thickness (ft)	Purged (g)	Cumulative (g)
3/5/2015	MW-14	ND	9.95	2	NM	0	0	0
3/19/2015	MW-14	ND	9.09	2	0.2	0	0	0
3/30/2015	MW-14	ND	9.06	2	1.6	0	0	0
3/5/2015	MW-15	ND	9.80	2	NM	0	0	0
3/19/2015	MW-15	ND	9.00	2	0.3	0	0	0
3/30/2015	MW-15	ND	9.00	2	0.7	0	0	0
3/5/2015	MW-16 ¹	NG	NG	4	NM	NA	0	0
3/19/2015	MW-16 ¹	NG	NG	4	NM	NA	0	0
3/30/2015	MW-16 ¹	NG	NG	4	NM	NA	0	0
3/5/2015	MW-17 ⁴	7.08	7.12	4	NM	0.04	0.01	43.76
3/19/2015	MW-17 ⁴	6.70	6.72	4	61.6	0.02	0.01	43.77
3/30/2015	MW-17 ⁴	6.46	6.48	4	78.2	0.02	0.01	43.78
3/5/2015	MW-18	ND	6.59	4	NM	0	0	0
3/19/2015	MW-18	ND	6.56	4	0.0	0	0	0
3/30/2015	MW-18	ND	6.51	4	0.0	0	0	0
3/5/2015	MW-19	2.36	2.37	2	NM	0.01	0.01	0.19
3/19/2015	MW-19	2.02	2.02	2	78.2	0	0.01	0.20
3/30/2015	MW-19	ND	1.60	2	94.3	0	0.00	0.20
3/5/2015	MW-20	ND	9.91	2	NM	0	0	0
3/19/2015	MW-20	ND	9.51	2	0.0	0	0	0
3/30/2015	MW-20	ND	9.59	2	0.0	0	0	0
3/5/2015	MW-21	ND	4.45	4	NM	0	0	0
3/19/2015	MW-21	ND	5.84	4	0.0	0	0	0
3/30/2015	MW-21	ND	5.76	4	0.0	0	0	0
3/5/2015	MW-22	ND	9.79	2	NM	0	0	0
3/19/2015	MW-22	ND	9.44	2	0.0	0	0	0
3/30/2015	MW-22	ND	9.52	2	0.0	0	0	0
3/5/2015	MW-23 ¹	NG	NG	4	NM	NA	0	368.00
3/19/2015	MW-23 ¹	NG	NG	4	NM	NA	0	368.00
3/30/2015	MW-23	5.89	7.90	4	168	2	4	372.00
3/5/2015	MW-24	ND	6.98	2	NM	0	0	0
3/19/2015	MW-24	ND	6.42	2	4.2	0	0	0
3/30/2015	MW-24	ND	6.10	2	0.0	0	0	0
3/5/2015	MW-25	ND	7.60	2	NM	0	0	0
3/19/2015	MW-25	ND	6.39	2	7.4	0	0	0
3/30/2015	MW-25	ND	6.71	2	2.1	0	0	0
3/5/2015	MW-27	ND	7.74	2	NM	0	0	0
3/19/2015	MW-27	ND	7.20	2	6.1	0	0	0
3/30/2015	MW-27	ND	7.13	2	0.6	0	0	0

**Table 1. LNAPL Recovery IRM Summary Table, Former Paragon Paint Varnish Corp
5-43 to 5-49 46th Ave. and 45-38 to 45-40 Vernon Blvd.
Long Island City, New York, NYSDEC Site No. C241108**

Date	Well	Depth to Product (ft)	Depth to Water (ft)	Well Diameter (inch)	PID (ppm)	Product Thickness (ft)	Purged (g)	Cumulative (g)
3/5/2015	MW-28	ND	7.39	2	NM	0	0	0
3/19/2015	MW-28	ND	6.64	2	0.2	0	0	0
3/30/2015	MW-28	ND	6.59	2	3.5	0	0	0
3/5/2015	MW-30 ²	NG	NG	4	NM	NA	NA	0
3/19/2015	MW-30 ²	NG	NG	4	NM	NA	NA	0
3/30/2015	MW-30 ²	NG	NG	4	NM	NA	NA	0
3/5/2015	MW-31 ²	NG	NG	4	NM	NA	NA	43.20
3/19/2015	MW-31 ²	NG	NG	4	NM	NA	NA	43.20
3/30/2015	MW-31 ²	NG	NG	4	NM	NA	NA	43.20
3/5/2015	MW-32	ND	6.79	4	NM	0	0	0
3/19/2015	MW-32	ND	5.98	4	1.3	0	0	0
3/30/2015	MW-32	ND	5.91	4	1.6	0	0	0
3/5/2015	MW-33	8.04	8.16	4	NM	0.12	0.10	2.40
3/19/2015	MW-33	7.46	7.49	4	58.6	0.03	0.10	2.50
3/30/2015	MW-33	7.14	7.16	4	64.6	0.02	0.10	2.60
3/5/2015	MW-34	ND	7.56	4	NM	0	0	0
3/19/2015	MW-34	ND	6.86	4	129	0	0	0
3/30/2015	MW-34	ND	6.53	4	69.3	0	0	0
3/5/2015	MW-35 ¹	NG	NG	4	NM	NA	NA	0.10
3/19/2015	MW-35 ¹	NG	NG	4	NM	NA	NA	0.10
3/30/2015	MW-35 ¹	NG	NG	4	NM	NA	NA	0.10
3/5/2015	MW-36 ²	NG	NG	NA	NM	NA	NA	0
3/19/2015	MW-36 ²	NG	NG	NA	NM	NA	NA	0
3/30/2015	MW-36 ²	NG	NG	NA	NM	NA	NA	0
3/5/2015	MW-37	ND	2.23	2	NM	0	0	0
3/19/2015	MW-37	ND	1.14	2	45.8	0	0	0
3/30/2015	MW-37	ND	1.85	2	30.6	0	0	0
3/5/2015	MW-38	ND	2.90	2	NM	0	0	0
3/19/2015	MW-38	ND	1.71	2	23.4	0	0	0
3/30/2015	MW-38	ND	1.52	2	55.1	0	0	0
Notes:							Total:	2141.25

PID - Photo ionization detector (well headspace reading)

ft - Feet

ppm - Parts per million

g - Gallons

ND - Not detected

NM - Not measured

NR - Not recorded

NA - Not applicable

1- Could not access well due to ongoing underground storage tank removal activities

2 - Monitoring well destroyed during underground storage tank removal activities

3 - Could not access well due to an accumulation of snow and ice

4 - Monitoring well MW-17 was observed to be damaged

APPENDIX G

NYSDEC Response Letter to SMP Modifications

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

January 12, 2018

Robert Hendrickson
Quadrum Global
757 3rd Avenue
New York NY 10017

Re: Paragon Paint and Varnish Company
Queens County, BCP # C241108
Modifications to the Site Management Plan (SMP)

Dear Mr. Hendrickson:

On December 1, 2017, the New York State Department of Environmental Conservation (the Department) met with Quadrum Global and Roux Associates to review the project. As a follow-up to that discussion, Roux Associates provided an email on January 9, 2018 which included a summary of proposed changes regarding monitoring, sampling, operation, maintenance and reporting activities. These proposed changes constitute modifications to the Site Management Plan (SMP).

The following SMP modifications are approved:

1. All Site monitoring wells will be gauged for the presence of light non-aqueous phase liquid (LNAPL) on a quarterly basis in lieu of gauging select wells on a monthly basis. The first quarterly gauging event will occur in March 2018.
2. Monthly progress reports are no longer required. A quarterly report will be submitted that details the performance of gauging or sampling events performed at the Site.
3. The groundwater sampling frequency may be reduced to annual, with the next sampling event in June 2018.
4. A formal groundwater monitoring report will be replaced with a tabular summary of groundwater data and a short evaluation of conditions when data is generated. This may be applied to the recent groundwater sampling event performed at the Site in December 2017. The results should be discussed in greater detail in the subsequent Periodic Review Report (PRR). The first PRR for the Site is due April 15, 2018.



Department of
Environmental
Conservation

5. Since no LNAPL has been recovered by the on-site system in the past year, the LNAPL recovery system may be shut down. The system should remain in-place in the event that future monitoring events identify recoverable LNAPL. The system may be decommissioned when the Site is redeveloped. LNAPL recovery will continue manually with bailers and/or oil absorbing socks/pads on a quarterly basis, as needed.

Within 30 days of the date of this letter, please submit revised sections of the SMP for the approvals listed above. Upon approval of these sections, a revised SMP must be submitted to the Department.

If you have any questions or would like to schedule a meeting to discuss this letter, please contact me at (718) 482-4891 or sondra.martinkat@dec.ny.gov.

Sincerely,

Sondra Martinkat
Project Manager

ec: Jane O'Connell, Gerard Burke, Karen Mintzer – NYSDEC
Anthony Perretta – NYSDOH
Matthew Baron – CSC Realty LLC
Omar Ramotar – Roux Associates/Remedial Engineering PC
Larry Schnapf – Schnapf Law
Brent Carrier – Vernon 4540 Realty LLC

cc: Angela Krevey – Anabel Beach, Inc.
Donald Rattner – 549 46th Ave LLC