de maximis, inc.
1550 Pond Road
Suite 120
Allentown, PA 18104
(610) 435-1151
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April 30, 2021

VL 4 Electronic Mail

Mr. Kyle Forster
Division of Environmental Remediation
Remedial Bureau B
New York State DEC
625 Broadway, 12th Floor
Albanv, New York 12233-7016

Reference: #C241005 - Review Avenue Development II Site (RAD II)
Long Island City, Queens, New York
Period Review Report #5 – April 1, 2020 through March 31, 2021

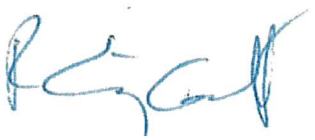
Dear Mr. Forster:

Attached please find the Periodic Review Report (PRR) and IC/EC Certification Submittal for the Review Avenue Development Site II (RAD II) Site #C241005. This is the fifth PRR submitted for the Site and covers the operating period of April 2020 through March 2021. As requested, all submittals are being provided in electronic format.

Should you have any questions or comments regarding this submittal or any other aspect of this project, please do not hesitate to contact me at (610) 435-1151.

Sincerely

de maximis, inc.



R Craig Coslett

Attachment
CC: J. Briody, Review Avenue 123, LLC
Patrick Foster, NYSDEC
Stephanie Selmer, New York State Department of Health
Brent O'Dell, Wood Group

Enclosure 2

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

Site Details **Box 1**

Site No.C241005

Site Name Review Avenue Development II (a.k.a. Quanta Resources)

Site Address: 37-80 Review Avenue Zip Code: 11101
City/Town: Long Island City
County: Queens County
Site Acreage: 1.8

Reporting Period: April 1, 2020 to March 31, 2021

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

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below?	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. C241005

Description of Institutional Controls

- The RAD II Site may only be used for restricted use as specified by the SMP;
- All ECs must be operated and maintained as specified in the 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 Queens County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC.
- Groundwater monitoring must be performed as defined in the SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;
- Access to the RAD II Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated.

Description of Engineering Controls

1. A cover system consisting of asphalt pavement
2. A LNAPL Recovery System – consisting of:
    a. A Vacuum Enhanced/Total Fluids (VER/TF) LNAPL recovery system
    b. A single-phase LNAPL recovery system
3. A packaged SVE, groundwater treatment, LNAPL Storage and Control system

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 compete.

YES	NO
X	☐

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
X	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C241089

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 R. Craig Coslett (print name) at 1550 Pond Road, Suite 120, Allentown, PA 18104, (print business address)

am certifying as Owner's Representative (Owner or Remedial Party)

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

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

04/30/2021
Date

IC/EC CERTIFICATIONS

Box 7

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 Brent O'Dell, P.E. at 51 Congress Street, Suite 200, Portland, ME 04112,
print name print business address

am certifying as an Engineer for the Remedial Party
(Owner or Remedial Party)

Digitally signed by Brent.ODell
DN: cn=Brent.ODell
Reason: I agree to the terms defined by the placement of my signature in this document
Location:
Date: 2021-04-30 12:39-04:00

Signature of the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

REVIEW AVENUE DEVELOPMENT (RAD) II
QUEENS COUNTY
LONG ISLAND CITY, NEW YORK

PERIODIC REVIEW REPORT No. 5
(APRIL 1, 2020 – MARCH 31, 2021)

NYSDEC Site Number: RAD II – BCP #C241005

Prepared by:

MACTEC Engineering and Geology, P.C.
7 Southside Drive - Suite 201
Clifton Park, NY 12065

and

Wood Environment & Infrastructure Solutions, Inc.
200 American Metro Boulevard – Suite 113
Hamilton, New Jersey 08619

APRIL 2021

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
DOT	Department of Transportation
EC	Engineering Control
EOR	Engineer of Record
FER	Final Engineering Report
IC	Institutional Control
LEL	Lower Explosive Limit
LGAC	Liquid Granular Activated Carbon
LNAPL	Light Non-Aqueous Phase Liquid
LRGTB	LNAPL Recovery and Groundwater Treatment Building
MSL	Mean Sea Level
ND	Not Detected
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operations and Maintenance
OM&M	Operations, Maintenance and Monitoring
PCB	Polychlorinated Biphenyl
POTW	Publicly-Owned Treatment Works
PRR	Periodic Review Report
RAD	Review Avenue Development
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
ROD	Record of Decision
SCGs	Standards, Criteria Goals
SMP	Site Management Plan
SVE	Soil-Vapor Extraction
TSCA	Toxic Substances Control Act
TF	Total Fluids
UST	Underground Storage Tank
VER	Vacuum-Enhanced Recovery

EXECUTIVE SUMMARY

This is the 5th Periodic Review Report being submitted for the Review Avenue Development II Site (RAD II). In 2020 an Amendment to Substitute the current Owner of the RAD II property, 37-80 Review 123 LLC, to be the Volunteer under the Brownfield Cleanup Agreement (BCA) was submitted to the NYSDEC. It was approved by the NYSDEC following termination of the previous RAD II Volunteers. An Amendment to the BCA was signed by Review 123 LLC and the NYSDEC, effective November 20, 2020. The Amendment established Review 123 LLC as the sole Volunteer and transferred the Site to Generation 3 under the Brownfield Cleanup Program (BCP). The NYSDEC then issued the Certificate of Completion for RAD II to 37-80 Review 123 LLC, on December 22, 2020.

The RAD II Site is located adjacent to the RAD I Site (BCA #C241089) and have the same physical setting. The RAD Sites have been investigated/remediated concurrently since the early 1980's but were entered into separate BCA and assigned different BCP numbers. The remedy selected by the NYSDEC for the RAD II Site is found in the Record of Decision (ROD) for the Quanta Resources Site (a.k.a. Review Avenue Development II) Long Island City, Queens, New York issued by the NYSDEC in February 2007.

The RAD II Site is identified as Block 312 and Lot 69 on the Long Island City Tax Map (refer to Figure 1). The RAD II Site is separated from the RAD I property by a right of way (located on RAD I) for Preston Street, which runs from Review Avenue to the Long Island Railroad. To the northeast is Review Avenue and the Calvary Cemetery and to the southwest is the Long Island Railroad and the South Capasso property and the Former Peerless Oil property. The boundaries of the RAD II Site and Site Features are shown on Figure 2.

The RAD Sites are being remediated via LNAPL extraction. LNAPL is extracted using a combination of skimmer (product only) pumps and dual-phase extraction (total fluids) pumps. LNAPL extracted by the skimmer pumps is conveyed through underground piping to a storage tank location on the RAD II Property. Liquid (water and LNAPL) extracted through dual-phase extraction is conveyed through underground piping to the treatment system located on the RAD II property. Liquids are then processed through an oil water separator, followed by bag and carbon filters to separate LNAPL from water. The collected LNAPL is pumped to a dedicated storage tank and the treated water is discharged to the sewer system. Construction of the remediation system was deemed complete on November 15, 2015 and NYSDEC approved the start of the operation and maintenance (O&M) period on November 16, 2015.

A Site Management Plan (SMP) was prepared by MACTEC Engineering and Consulting, P.C. (MACTEC) and Amec Foster Wheeler Environment and Infrastructure, Inc. (Amec Foster

Wheeler), on behalf of Cresswood Environmental Consultants, LLC and Review Ave. System, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated February 2013, and the guidelines provided by the NYSDEC. An Environmental Easement granted to NYSDEC and recorded with the County Clerk of Queens County requires compliance with the SMP and all ECs and ICs placed on the Site. The SMP addresses the means for implementing the ICs and ECs that are required by the Environmental Easement for the RAD II Site and outlines the controls established to meet the ROD requirements. Section 3.0 of this report summarizes the EC and IC requirements and compliance. IC/EC Certification has been bound to the front end of this report. In December 2020 the Site Management Plan was updated to include modifications that had been made to the extraction and treatment system and updated contact information for the new property owner and representatives of the Department.

The NYSDEC issued a Certificate of Completion for the RAD II Site on December 22, 2020 following receipt of the updated Site Management Plans and Final Engineering Reports updated contacts.

This is the 5th Periodic Review Report (PRR) for the RAD II Property. The 1st PRR was submitted to the NYSDEC in April 2017 and resubmitted on June 10, 2017 following comments received on the initial submittal. Approval of the 1st PRR was provided by the NYSDEC in a letter dated September 8, 2017. The 2nd PRR was submitted to the NYSDEC on April 27, 2018 and approval was provided by the NYSDEC on February 28, 2019. The 3rd PRR was submitted to the NYSDEC on April 30, 2019 and approval was provided by the NYSDEC on September 11, 2019. The 4th PRR was submitted to the NYSDEC on April 30, 2020 and approval was provided by the NYSDEC on November 6, 2020.

1.0 SITE OVERVIEW

1.1 INTRODUCTION

The RAD II Site is being remediated in accordance with the remedy selected by the NYSDEC in the ROD for the Quanta Resources (a.k.a. RAD II) Site, dated February 9, 2007. The factors considered during the selection of the remedy for the RAD II Site are those listed in 6NYCRR 375-1.8.

In 2008, an IRM was implemented at the RAD II Site for the demolition and removal of the remaining building and fourteen (14) remaining empty and decontaminated steel aboveground storage tanks (ASTs) along with debris piles, below grade foundations, concrete pads, sumps and vaults.

The components of the remedy proposed in the ROD included work elements from the design/investigation phase through remedial action completion. The following provides a summary of the remedy selected for the RAD II Site by media:

LNAPL

The remedy for light non-aqueous phase liquid (LNAPL) beneath the RAD II Site was recovery via a combination of single-phase skimmer pumps and vacuum enhanced (VER) recovery methods at locations where higher viscosity LNAPL is present.

In addition, a long-term monitoring program to monitor the effectiveness of the LNAPL recovery system has been implemented pursuant to the approved Site Management Plan.

Soil

Restricting contact with potentially impacted soils was accomplished by installing a paving system across the entire property. The paving system is composed primarily of at least six inches of asphalt and associated subgrade materials. Other components of the cover system include the LNAPL recovery well and piping vaults which are mostly comprised of concrete with secured metal lids to prevent unauthorized access. The Site Management Plan identifies restoration requirements for future development activities.

Groundwater

The remedy for groundwater was the establishment of an institutional control that restricts the use of untreated groundwater beneath the RAD II Site as a source of potable water.

Soil Vapor

The results of soil vapor investigations on the RAD II Site did not identify a threat for soil vapor beneath the RAD II Site.

Listed below are the primary elements of the selected remedy:

- Operation of the LNAPL recovery system;
- Installation of a paving system at least 6 inches thick to be protective of human health by restricting direct contact with compounds that exceed the soil objectives for restricted use;
- Establishment of an institutional control that restricts the use of untreated groundwater beneath the RAD II Site as a source of potable water;
- The execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the RAD II Site;
- Development and implementation of a SMP for long-term management of remaining contamination as required by the Environmental Easement, which includes plans for the following: (1) ECs and ICs, (2) monitoring, (3) operation and maintenance, and (4) reporting; and
- Periodic certification of the ECs and ICs listed above.

This is the fourth Periodic Review Report (PRR) for the RAD II Property. The 1st PRR was submitted to the MYSDEC in April 2017 and resubmitted on June 10, 2017 following comments received on the initial submittal. Approval of the 1st PRR was provided by the NYSDEC in a letter dated September 8, 2017. The second PRR was submitted to the NYSDEC on April 27, 2018 and approval was provided by the NYSDEC on February 28, 2019. The third PRR was submitted to the NYSDEC on April 30, 2020 and approval was provided by the NYSDEC on September 11, 2019. The 4th PRR was submitted to the NYSDEC on April 30, 2020 and approval was provided by the NYSDEC on November 6, 2020. This Periodic Review Report (PRR) covers the period of performance from April 1, 2020 to March 31, 2021 and includes:

- Required institutional control/engineering control (IC/EC) certification;
- Summary and documentation of site-related data to support IC/EC certification;
- A description of the LNAPL Recovery System performance; and
- Discharge monitoring data for the certification period.

1.2 SITE HISTORY AND DESCRIPTION

The RAD II Site is approximately 1.8 acres in size and located in a highly industrialized part of Long Island City, County of Queens, New York. The RAD II Site is identified as Block 312 and Lot 69 on the Long Island City Tax Map. The address of the RAD II Site is 37–80 Review Avenue. Figure 1 presents a Site Location Map. Zoning in this area is designated as heavy manufacturing. The RAD II Site is bounded by Review Avenue to the northeast, the Southern Line of the Long Island Railroad to the southwest, the Former Phoenix Beverage property to the southeast, and the RAD I property to the northwest (see Figure 2). To the northeast of Review Avenue is the Calvary Cemetery and to the southwest of the Long Island Railroad is the South Capasso property and Waste Management.

The RAD II Site was previously used for a variety of commercial and industrial purposes since at least 1898, including petroleum refining, waste oil recycling and more recently commercial vehicle and heavy equipment maintenance. Various companies currently lease portions of the RAD II Site for parking of equipment and vehicles. During the fourth reporting period, the RAD II property went under new ownership. The BCA was amended to add the new RAD II property owner, 37-80 Review 123 LLC. Figure 2 presents a Site Layout Map for the RAD II Site. All of the structures that previously existed on the RAD II Site were demolished since the property was abandoned in 1981. Much of the RAD II Site was reportedly covered by asphalt or concrete during its operation.

Completion of the remedy components identified in the ROD was documented in the Site Management Plan (SMP) and Final Engineering Report (FER) which were submitted to NYSDEC in December 2015. DEC provided approval of the SMP on September 2, 2016.

Note: the DEC found that the LNAPL extraction and treatment system was constructed in accordance with the approved design (as presented in the RAWP) and issued approval of the O&M start beginning November 16, 2015.

1.3 PHYSICAL SETTING

The RAD II Site and the RAD I Site are adjacent to each other and have the same physical setting. A description of the geology and hydrogeology beneath the RAD I Site is provided below.

1.3.1 Geology

The stratigraphy of the RAD II Site and the adjacent properties consists of urban fill overlying glacial deposits, which in turn overlies a clay layer that has been identified as the lower Cretaceous Raritan Formation. The urban fill generally consists of heterogeneous soil ranging from sub angular, loose and compact, silty, fine sand and gravel. Intermixed with the urban fill are debris

such as brick fragments, asphalt, wire, and plastic. Soil borings indicate that the urban fill ranges in thickness from 3 feet to 16 feet. The glacial deposits consist of two units distinguishable in color, but not in hydraulic characteristics. The upper section of the glacial deposits is gray to dark gray fine-to-coarse sand and fine-to-coarse gravel. There are local horizontal units of silt interbedded in the upper section of the glacial deposit. The upper section extends to approximately 30 feet below mean sea level (MSL).

The lower section of the glacial deposits is comprised of yellowish-brown, fine to coarse sand and gravel. This unit extends to 71 to 85 feet below MSL. Underlying the coarse sand and gravel is a clay unit referred to as the Lower Clay Unit. The Lower Clay Unit was identified as the Raritan Clay. The Raritan Clay or Lower Clay Unit has been described as a dark gray, finely laminated-to-thin bedded silty clay, silt and clay layer, and white to light gray clay. The clay unit appears to be laterally continuous beneath the Site and adjacent surrounding area.

1.3.2 Hydrogeology

The RAD II Site is located between a local topographic high to the northeast and Newtown Creek, which is a tidally influenced regional groundwater discharge area. Monitoring wells screened in the upper section of the glacial deposits (where LNAPL occurs) and monitoring wells screened in the lower section of the glacial deposits (and cased off from the upper section) have been installed on the RAD II Site and offsite (including the RAD I Site). The locations of the wells are depicted on Figure 2.

The depth to groundwater beneath the RAD II Site has ranged from approximately 15 feet bgs to 20 feet bgs. Groundwater contour maps prepared from the groundwater levels measured in groundwater wells installed in the upper and lower sections of the glacial deposits have indicated a general groundwater flow direction to the south - southwest towards Newtown Creek. A localized groundwater mound, presumably a result of the discontinuous silt and clay layers in the upper section of the glacial deposits, has also been observed to the southwest of the Site between the LIRR tracks and Newtown Creek. The mounding does not appear to influence the direction of groundwater flow at the RAD II site. Groundwater fluctuations of approximately 0.05 to 0.1 feet have been observed beneath the Site as a result of tidal influence in Newtown Creek.

Overall, the horizontal hydraulic gradient beneath the Site can be described as flat, at approximately 0.0015. Vertical gradients are minimal and localized. Slug test data indicates a range of hydraulic conductivity values for the glacial deposits above the Lower Clay Unit of 62.5 feet per day (ft/d) to 0.5 ft/d. A viscous LNAPL is present on the groundwater table across most of the RAD I and RAD II properties (Golder 2005a) with a maximum apparent thickness in monitoring wells of about 4 feet at the time of the Remedial Investigation (RI) and RAWP.

1.4 CLEANUP GOALS AND REMEDIAL PROGRESS

The remediation goals for the RAD II Site, as stipulated by the 2011 RAWP (Golder 2011) and the February 2007 ROD (NYSDEC 2007) are to eliminate or reduce to the extent practicable:

- The presence of LNAPL as a potential source of soil, groundwater and soil gas contamination;
- Potential further migration of LNAPL that could result in soil, groundwater or soil gas contamination;
- Exposures of persons at or around the site to VOCs or exceedances of the lower explosive level (LEL) in soil vapor;
- The potential for ingestion/direct contact with contaminated soil; and
- The release of contaminants from the urban soil and LNAPL into groundwater that may create exceedances of groundwater quality standards over time.

In addition, the remediation goals for the RAD II Site are to meet to the extent practicable:

- Ambient groundwater quality standards; and
- Standards, Criteria Goals (SCGs) for soil to the extent practicable.

The remedies selected for the RAD II site are listed below by media:

LNAPL

The remedy for LNAPL beneath the RAD II Site in areas of lower viscosity product is recovery using single-phase skimmer pumps installed in 15 recovery wells on the RAD II Site, or a total of 38 recovery wells on the combined RAD I and RAD II Sites. The remedy for higher viscosity LNAPL product is recovery using a Vacuum Enhanced Recovery/Total Fluids (VER/TF) technology at 20 recovery wells installed on the RAD II Site, or a total of 30 recovery wells on the combined RAD I and RAD II Sites. A long-term monitoring program to monitor the effectiveness of the LNAPL recovery system has been implemented.

Soil

The remedy for the soil at the RAD II Site was to cover residual contamination in soil and urban fill using materials consistent with the development of the RAD II Site. The RAD II Site was paved with asphalt to serve as a soil cover system to prevent exposure to possible near surface remaining contamination in urban fill/soil. This cover system is

comprised of a minimum of 6 inches of asphalt pavement. Development beyond restricted use, as further described in the SMP, is prohibited.

Groundwater

The remedy for groundwater is the establishment of an institutional control that restricts the use of untreated groundwater beneath the RAD II Site as a source of potable water. Groundwater is monitored pursuant to requirements outlined in the Site Management Plan.

Soil Vapor

The results of soil vapor investigations on the RAD II Site have not identified a threat for migration of soil vapor laterally from the limits of the LNAPL beneath the RAD II Site. As such, no specific soil vapor remedy is being implemented other than the benefit of the existing site pavement system and recovery of LNAPL from the site.

Remedial Progress is summarized as follows:

- The LNAPL Recovery System, consisting of both the single-phase skimming and VER/TF recovery technologies, has been implemented and operational for 64-1/2 months. The LNAPL Recovery System has recovered 461,144 gallons of LNAPL as of March 31, 2021 after the first 64-1/2 months of operation (for both RAD I and RAD II). The volume is based on the amount of liquids disposed and includes LNAPL but also includes degraded product and water.
- All areas of existing asphalt pavement disturbance due to the LNAPL recovery system installation have been restored.
- The Institutional Controls established for the RAD II site have been maintained per the SMP and FER.

2.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

This section describes the required activities under the SMP, including ICs and ECs, the ongoing monitoring program and the implementation of the Site Operations, Maintenance and Monitoring (OM&M) Plan. A comprehensive SMP has been developed for the Site and includes plans for ICs/ECs, operations and maintenance (O&M), long term monitoring, and associated reporting (MACTEC, 2015).

2.1 SITE MANAGEMENT STATUS

During this reporting period, MACTEC performed O&M for the LNAPL recovery and groundwater treatment system, performed quarterly treated water discharge sampling and reporting, prepared monthly O&M monitoring reports and an Annual Inspection Report. The monthly monitoring reports, which include a summary of site activities for both the RAD I and RAD II sites, are included as Appendix A. The Annual Inspection Report is included in Appendix B and the treated water quarterly compliance sampling reports have been provided in Appendix C. This PRR was completed using site-specific documentation including the Site's ROD (NYSDEC, 2015), annual site inspection and monthly monitoring reports, and the SMP. This review was conducted to confirm that established controls according to the SMP are operational and effective, that the SMP is being implemented and conducted accordingly, and that the remedy remains protective of the environment and/or public health. A summary of Site Management activities completed during this reporting period and an evaluation of the performance, protectiveness, and effectiveness of the remedy is provided below.

2.2 INSTITUTIONAL CONTROLS

A series of ICs are required to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Track 4 restricted uses only. Adherence to these ICs on the RAD II Site is required by the Environmental Easement and is implemented under the SMP. These ICs are as follows:

- The RAD II Site may only be used for restricted use as specified by the SMP;
- All ECs must be operated and maintained as specified in the 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 Queens County Department of

Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC.

- Groundwater monitoring must be performed as defined in the SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;
- Access to the RAD II Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated.

2.3 ENGINEERING CONTROLS

The following ECs have been implemented at the RAD II Site:

1. A cover system consisting of asphalt pavement
2. A LNAPL Recovery System – consisting of:
    a. A Vacuum Enhanced/Total Fluids (VER/TF) LNAPL recovery system
    b. A single-phase LNAPL recovery system
3. A packaged VER, groundwater treatment, LNAPL Storage and Control system.

2.3.1 Asphalt Cover System

The RAD II Site was paved with asphalt to serve as a cover system to prevent exposure to possible near surface remaining contamination in urban fill/soil. The extent of the cover system is documented in the as-built drawing included as Figure 2 of the SMP (MACTEC, 2015). The cover system was observed during the reporting period to be intact and continuing to function as a cover system but will require some maintenance in 2020 in order to ensure continued function.

2.3.2 LNAPL Recovery System

LNAPL recovery on the RAD II property is being conducted via single-phase skimmer pump recovery wells and VER/TF recovery well subsystems. The primary purposes of using the skimmer pump and VER subsystems is to recover LNAPL to the extent practical and support the achievement of the remediation goals for the Site. The LNAPL recovery system has recovered and disposed of 461,144 gallons of LNAPL (the term LNAPL is being used for simplicity, actual material includes degraded product and water), or an average of 235 gallons per calendar day, (from both RAD I and RAD II) through March 31, 2021 or 64-1/2 months of operation. A total of 34,295 gallons of LNAPL, or an average of 94 gallons per calendar day, has been recovered and disposed of for the current 12-month reporting period. The current 94 gallon per calendar day average production rate represents a 74% decrease from the 355 gallon per calendar day average production rate realized during the first 16-1/2 month reporting period. When taking into account system uptime and normalizing the production per equivalent system run-day, the LNAPL recovery system averaged 106 gallons per run-day for the current period which represents a 82% decrease from the 604 gallon per run-day average realized during the first 16-1/2 month reporting period. This reduction in production rate is attributed to significant depletion of remaining recoverable LNAPL volume and associated decreasing LNAPL transmissivity as evidenced by the substantial decrease in apparent product thickness (see paragraph 2.4.1 for more detail).

Peak LNAPL recovery rates have exceeded 700 gallons per day during the first reporting period, 500 gallons per day during the second reporting period, 400 gallons during the third reporting period, and 300 gallons per day during the 4th reporting period. During the later parts of the 4th reporting period and all of the 5th reporting period the quality of the product being recovered is vastly different from the initial recovered product. The current material can be best described as degraded LNAPL with entrained water. Using a representative specific gravity of 0.90, according to data provided in the RAWP, this represents a total recovered LNAPL mass of 3,461,347 pounds after the first 64-1/2 months of operation or an average of 1,764 pounds per day.

During the first reporting period (16-1/2 months of operation), the specific energy consumption of the product recovery operation averaged approximately 1.0 kWh/Gal of product recovered. During reporting period 2, when VER operations were implemented, specific energy consumption rose to 2.6 kWh/Gal. Specific energy consumption further increased to 2.9 kWh/Gal during reporting period 3 and 3.4 kWh/Gal during reporting period 4 as product recovery production continued to decrease with continued VER operation. Specific energy consumption increased to 7.5 kWh/Gal during reporting period 5. As such, a commensurate increase in specific greenhouse gas emissions has also occurred (lbs/Gal) associated with the generated grid energy utilized to

power the system (i.e. 8.78 lbs CO2/Gal of product recovered for reporting period 5 as compared to 4.0 lbs CO2/Gal for period 4).

Monthly monitoring reports are prepared and have been included in Appendix A. A summary of offsite LNAPL disposal is included in Table 4.

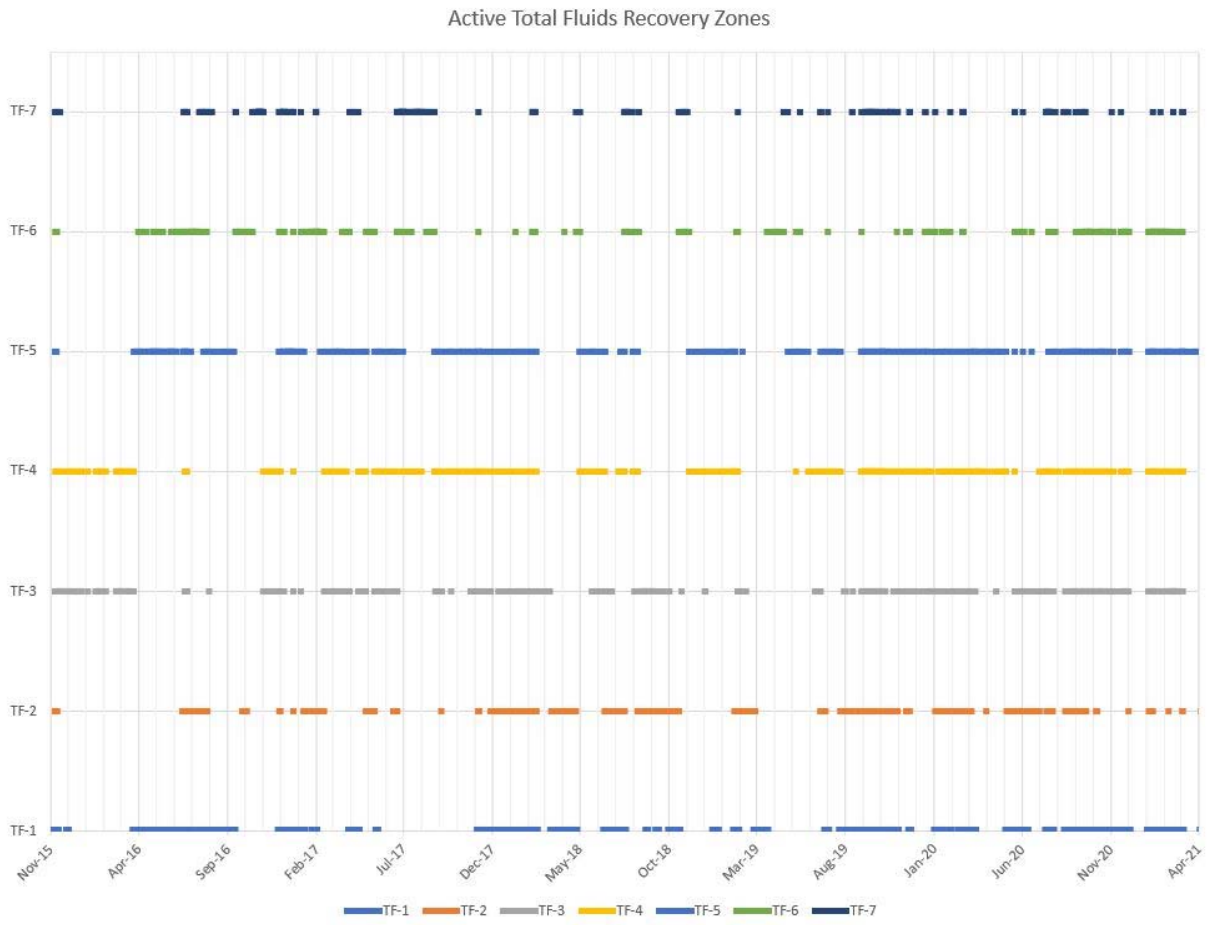
2.3.2.1 Single-Phase Skimming

Twenty-three (23) single-phase skimmer pump wells are installed on RAD I and fifteen (15) single-phase skimmer pump wells are installed on the RAD II Site. Single-phase skimming wells are located in areas with lower viscosity LNAPL. Of the total recovered and disposed of LNAPL volume, 112,207 gallons have been recovered by the single-phase skimming system to date and 9,723 gallons for the reporting period. The skimming system had a monthly average production rate of 36 gallons per calendar day which represents a 60% decrease from the 91 gallons per calendar day average production rate realized during the first 16-1/2 month reporting period. During the reporting period, the skimmer system produced an average monthly peak average of 104 gallons per day and a minimum monthly average of 0.5 gallons per day. The skimming system has been operating a total of 27,994 run hours to date and 2,610 hours for the reporting period. For the reporting period, the skimmer system has been programmed to operate at 8 hours per day, rather than continuous, in an effort to maintain maximum product recovery while minimizing unnecessary equipment wear and energy consumption. Actual system uptime averaged 97.5% for the reporting period under these operational parameters.

2.3.2.2 VER/TF Recovery

Ten (10) VER/TF wells are installed on RAD I and twenty (20) VER/TF wells are installed on the RAD II Site. VER applies a vacuum at the extraction well head, creating a pneumatic gradient causing air flow and enhanced product flow through the formation towards the extraction well. TF pumping creates a hydraulic cone of depression to further enhance the recovery of LNAPL, along with the VER, in areas where higher viscosity LNAPL present. Thirty (30) VER wells were installed and associated control systems on RAD I and RAD II. Of the total recovered and disposed of LNAPL volume, 348,937 gallons were recovered by the VER/TF recovery system to date and 24,572 gallons for the reporting period. The VER/TF system had a monthly average production of 70 gallons per calendar day with a peak monthly average of 128 gallons per calendar day and a minimum monthly average of 26 gallons per calendar day for the reporting period. When taking into account system uptime and normalizing the production per equivalent system run-day, the VER/TF recovery system averaged 104 gallons per run-day which represents a 81% decrease from the 549 gallon per run-day average production rate realized during the first 16-1/2 month reporting period. The VER/TF recovery system had a total of 35,197 run hours to date and 6,053 hours for

the reporting period. Actual system uptime averaged 86.2% for the year ranged from a low of 55.8% to a high of 96.8%. The following table provides a graphic summary of extraction zone operations during the reporting period.



2.3.3 Groundwater Treatment System

Groundwater and LNAPL pumped from RAD II (and RAD I) flows through the LNAPL Recovery and Groundwater Treatment Building (LRGTB) located on RAD II. The LNAPL is collected and stored in one of two 6,000-gallon steel aboveground storage tanks located in a secondary containment dikes outside of the LRGTB on RAD II. One storage tank is configured to receive LNAPL recovered from the VER/TF System and the second storage tank is configured to receive LNAPL recovered from the Skimmer System. Since LNAPL Recovery System startup on November 16, 2015, the groundwater treatment system has processed and discharged 13,738,866 gallons of process water (extracted by the VER/TF System) or an average of 7,003 gallons per

calendar day. The peak process water treatment/discharge rate exceeded 10,000 gallons per day. The treated groundwater is sampled in accordance with the site discharge permit and discharged to the New York City Bowery Bay Publicly Owned Treatment Works (POTW). Quarterly discharge compliance sampling results have been provided in Appendix C.

The extracted groundwater/LNAPL mixture, or Total Fluids (TF) influent, produced by the VER/TF System during the current 12-month reporting period (April 1, 2020 through March 31, 2021) had an average extracted oil/water ratio of 1.36% which is less than the 4.18% average oil/water ratio observed during the first 16-1/2 months of operation (first reporting period). This represents a 67% reduction in extracted oil/water ratio between the 1st and 5th reporting periods despite the addition of full time VER operation. Furthermore, the monthly average oil/water ratio ranged from 0.84% to 1.78% in the TF/VER zones. The variability in monthly oil/water ratios is largely due to rotating TF/VER operations between various extraction zones which have different amounts of product present on the groundwater and differences in the types of product present (viscosity, slight changes in specific gravity, amount of iron bacteria, etc.). Varying groundwater elevations due to precipitation events also impacts the extracted oil/water ratio.

Recovered LNAPL, stored in both T-1401 (single-phase skimmer wells) and T-801 (VER/TF wells) is analyzed approximately once every 2 – 3 months for PCB concentrations. PCB concentrations in LNAPL recovered from the single-phase skimming wells ranged from ND to 3.69 ppm for this reporting period, while PCB concentrations in LNAPL recovered from the VER/TF system have varied between 5.40 and 21.06 ppm during this reporting period. See Table 1 for a summary of recovered LNAPL PCB concentrations.

2.3.4 SVE System

The SVE system is used to employ VER technology along with hydraulic enhancement to further increase radius of influence and recoverability of higher viscosity LNAPL. The SVE system, or VER enhancement, was operated during the reporting period to counter diminishing product recovery rates from each of the seven (7) TF Zones. VER enhancement operated for a total of 6,053 hours during the reporting period through March 2021.

2.3.5 System Operational Challenges and Actions

- Phased out the use of emulsion breaker since installing the tube skimmer (December 2016) as part of our Oil/Water Separation process. Periodic QC testing indicates that we generally meet

sewer discharge compliance for SGT-HEM (< or = 50 ppm SGT-HEM) upstream of our liquid phase carbon treatment.

- Increased VER activity to enhance TF product recovery – have switched to full time VER operation since mid-September 2017. VER enhancement has been operated continuously during the fifth reporting period.
- In 2017 installed additional auto air relief vents in the skimmer system header network at key high point locations (S-4A, S-5A and 5B) in order to eliminate air lock and improve product flow through the skimmer system process lines.
- The recovery pumps within two of the TF wells (TF-7A and B) were determined to be stuck and unremovable with heavy duty hoist equipment. In addition, a significant amount of coarse sand is delivered to the GWTS when these pumps are operated. As such, we have concluded that the screens may have failed in these wells. Additional stuck recovery pumps were identified during the fifth reporting period at wells TF-1C, TF-2B and D, TF-5A and TF-6A.
- ***High iron in groundwater –*** Shortly after commencement of VER/TF system operations, the presence of >20ppm Total Iron was detected in the influent to the groundwater treatment system. Prior to the injection of sequestering agent (Redux 330) during the first year of operation, the high iron concentrations caused rapid fouling of the bag filters, LGAC treatment units and strainers which resulted in reduced system uptime. Since implementing, sequestering agent chemical injection has successfully controlled high iron concentrations and maintained high system uptime by allowing for iron mass transfer and minimizing pre-mature fouling of the bag filters and carbon filtration units. The sequestering agent injection has continued to be effective during this reporting period.
- ***Biological growth/Grey Matter –*** Iron related bacteria growth is rapid during warm weather operation and is controlled adequately with the use of biocide. Without biocide, fouling of the bag filters, the LGAC treatment units and the strainers cause significantly reduced run-time. During cooler weather operations, the biocide has not been needed. A new biocide (Redux 620) was employed during the Spring of 2017 (replacing the Verox 8 Biocide) and is designed to limit negative impact to the sequestering agent effectiveness. The new biocide has proven to work effectively during the warmer weather months of 2017, 2018, 2019 and 2020 with no significant grey matter formation and impact to the iron sequestration process. As such, the biological growth was successfully controlled and high system up-time was maintained throughout the warmer months of 2017, 2018, 2019 and 2020.
- ***Variable LNAPL characteristics*** **-** Different product characteristics and associated separation difficulties were resolved in late 2016 with the addition of a tube skimmer in the primary separation tank of the two-stage oil water separation process. The addition of the tube skimmer has allowed for excellent oil/water separation at varied flow rates and LNAPL consistencies

and has continued to operate extremely well through this reporting period. Operational uptime for the VER/TF and groundwater treatment system has improved to >95% uptime since installing and optimizing the tube skimmer on December 22, 2016. In addition, product recovered from the TF Zones during 2017 has begun to change from a mostly dark colored, medium viscosity product to a mostly light brown colored product with significantly higher viscosity. Viscosity has increased to a level near and above typical petroleum industry pumpability standards based on laboratory and field viscosity testing. We believe this is an indication that most of the more mobile (darker, less viscous) product has been recovered and more of the less mobile (light brown, more viscous) product is now being recovered with the help of the VER. Since August of 2018 we have noticed that a significantly greater portion of the recovered product appears to be highly degraded with a smaller portion of pure product. The degraded product also has a high-water content which then phases out into the product storage tank (T-801) and has to be pumped out and back into the treatment system. This phenomenon has been ongoing through the 5th reporting period.

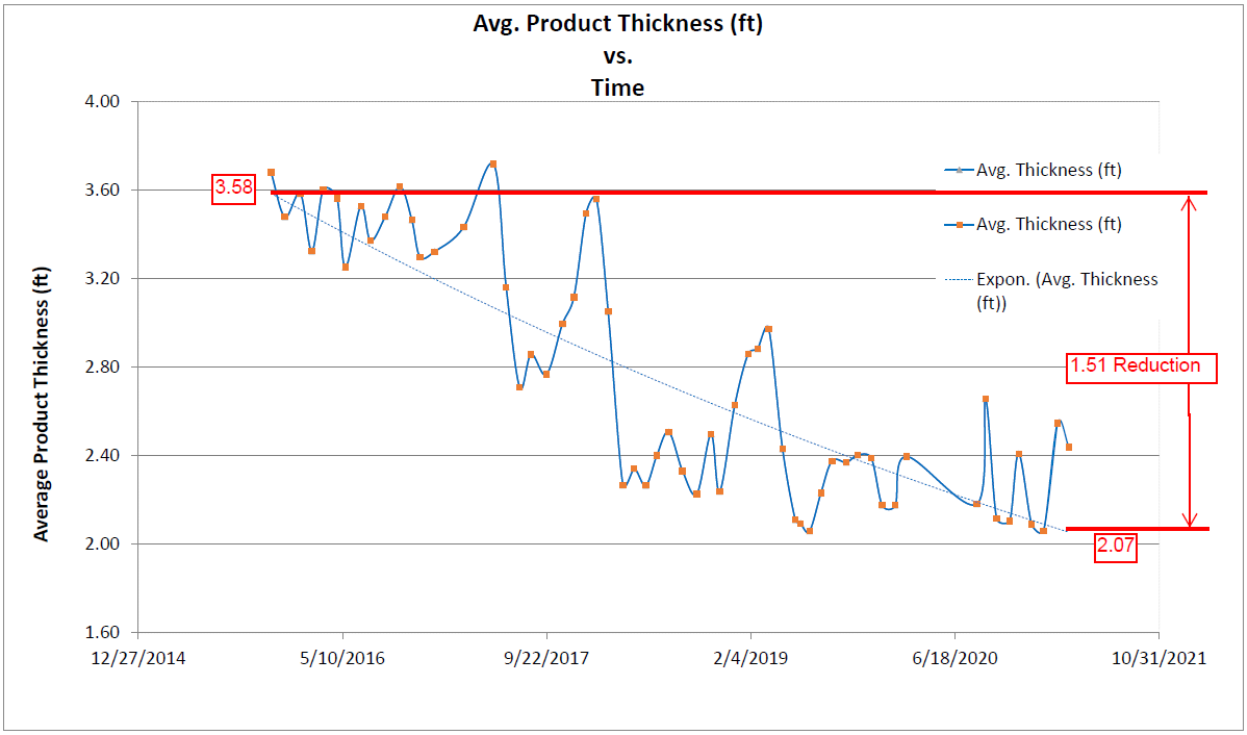
- ***Recovery Well LNAPL PCB Sampling* – Completed February 2018** - All four (4) identified TSCA PCB impacted recovery wells (TF-3D, 4D, 5D and 6D) were managed separately by pumping and collecting the high PCB product (>50 PPM) independently from the automated Total Fluids system via a Specific Gravity Skimmer Pump into a 55-gallon DOT shippable drum. This process continued at each of the four recovery wells until PCB concentrations in the recovered product was reduced to < 50 PPM for three consecutive rounds of pumping and sampling. The process of managing this LNAPL separate from the rest of the recovery system was approved in the SMP and completed including disposal in February 2018.
- ***Fouling of TF discharge lines with mud and sand* –** TF recovery pump discharge lines, manifolds and groundwater treatment system influent lines have been accumulating and clogging with mud, sand and fine gravel. Recovery well screen degradation and failure is suspected. Line cleaning and line replacement work was completed during the reporting period in order to address impacts. As such, a program of recovery well assessment, redevelopment and replacement is being implemented going forward to maximize well efficiency and TF/SVE productivity and uptime.
- ***Aging Equipment and Recovery Wells* –** Aging equipment with significant run-hours such as recovery pumps, the air compressor requires increasing effort maintain and has impacted system uptime. Several wells are suspected to be damaged causing pumps to become stuck which prevents them from being pulled for cleaning and maintenance. Several TF/VER recovery wells may require re-development and/or replacement if continued aggressive recovery is warranted from these wells.

2.4 ADDITIONAL ACTIVITIES

In addition to system operation activities, other SMP required activities are also underway to monitor remediation progress and effectiveness as outlined below.

2.4.1 LNAPL Gauging

Site wide LNAPL gauging events at thirty-three (33) LNAPL monitoring wells on RAD I and RAD II provide evidence that average LNAPL thickness is trending downwards across the site and has decreased by approximately 1.51 feet (on average) at the end of March 2021 as illustrated in the figure below (note that the March through June 2020 gauging events were canceled due to COVID 19 safety concerns). This average thickness decrease is significantly greater than the 0.17 feet average decrease presented approximately four (4) years earlier at the end of March 2017, 0.68 feet average decrease presented three (3) years earlier at the end of March 2018, 1.44 feet average decrease presented two (2) years earlier at the end of March 2019. Although the average decrease at the end of March 2021 does not show a reduction as compared to 1 year earlier, a recent sudden drop in groundwater elevations may have contributed to a temporary increase in apparent product thickness during February, 2021. We believe that this apparent product thickness increase will reverse as it has already begun to do so based on the March 2021 gauging data. We also believe that the overall downward product thickness trend will continue during the 6th reporting period.



2.4.2 LNAPL Disposal Summary

The total volume of RCRA Nonhazardous LNAPL with PCBs <50 ppm disposed offsite from RAD I and RAD II combined was 461,144 gallons through March 31, 2021. This waste stream was transported by Cycle Chem, Inc. to their facility in Elizabeth, NJ for solidification then was transported by Cycle Chem, Inc. to Conestoga Landfill in New Morgan Borough, Pennsylvania for disposal. No product with greater than 50 ppm PCBs has been removed from the Site since the 2nd reporting period-2016.

2.4.3 Groundwater Monitoring

The seventh groundwater monitoring event occurred on December 16th through 19th, 2020. A groundwater monitoring event, originally scheduled for June, 2020 was cancelled due to COVID 19 safety concerns as discussed with NYSDEC. The results of the eighth sampling event were found to be consistent with historic results and were submitted under separate cover in advance of this report.

3.0 IC/EC PLAN COMPLIANCE

3.1 IC/EC REQUIREMENTS AND COMPLIANCE

3.1.1 IC/EC Requirements Summary

A summary of the ICs and ECs implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by the Site Management Plan are outlined below.

Site Identification: RAD II - BCP #C241005, Long Island City, Queens, NY

Institutional Controls:	The property may be used for commercial use;
	• The RAD II Site may only be used for restricted use. • All EC's must be operated and maintained as specified in the SMP. All EC's 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 Queens County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC. This IC is outlined in the deed restriction recorded on 10/21/15 paragraph 2.A.(4). Groundwater monitoring must be performed as defined in the SMP. • Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP. • All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP. • Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP. • Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP. • Access to the RAD II Site must be provided to agents, employees or other representatives of the State of New York

Site Identification: RAD II - BCP #C241005, Long Island City, Queens, NY

	with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement. This IC is outlined in the above referenced deed restriction paragraph 2.A.(10). • The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated. • All ECs must be inspected at a frequency and in a manner defined in the SMP.
Engineering Controls:	Cover system – 6-inch asphalt paving system
	LNAPL Recovery and Treatment System • Two 6,000 gallon LNAPL Storage Tanks • Two 8’ x 40’ Equipment Enclosures • 38 Skimmer well pumps and piping • 30 VER Well pumps, SVE blower air treatment and piping, liquid treatment equipment and discharge piping.

Inspections:	Frequency
Cover inspection	Annually
Treatment System and Equipment Inspections per OM&M Manual	Monthly, Quarterly and Semi-Annual Per OM&M Manual
Monitoring:	
Presence and Absence of LNAPL in Wells Identified on Table 3 of SMP for RAD II	Monthly, Quarterly and Semi-Annual as indicated on Table 3 of SMP for RAD II
Groundwater Monitoring/Sampling of Monitoring Wells Identified on Table 3 of the SMP for RAD II	Semi-Annual as indicated on Table 3 of SMP for RAD II
Maintenance:	
Equipment maintenance per Table of SMP	Per Table 4 of SMP

Site Identification: RAD II - BCP #C241005, Long Island City, Queens, NY

Reporting:	
LNAPL Monitoring	Per Table 3 of SMP
Treated Water Discharge Sampling and Reporting	Quarterly
Periodic Review Report	Annually

3.1.2 Status of IC/ECs

All ICs and ECs have been implemented and are being monitored and maintained in accordance with the SMP. The LNAPL Recovery and Treatment system will continue to be operated, monitored and maintained until such time that the remedial objectives as outlined in the SMP have been achieved. Treated Water quarterly compliance sampling reports are provided in Appendix C. As described above in section 2.4.1, monthly LNAPL gauging events indicate that the LNAPL Recovery System is effective.

3.1.3 Corrective Measures

- ***Treatment Compound Fence –*** The treatment compound fence between the west perimeter of the treatment compound and RAD II has been damaged by the tenant numerous times which required repairs in order to maintain site security. Some repairs were implemented, and the addition of concrete barricades were added by the property owner during 2018 on the west side of the treatment compound. Further fence repairs are needed between RAD II and Phoenix Beverage. Fencing on the west side of the treatment compound must be repaired or replaced. Fence maintenance continues to be an ongoing process and inspections are conducted during each maintenance visit.
- ***Cap/Pavement system on RAD II –*** Per the December 21, 2020 inspection, signs of pavement wear have been identified including cracks which have formed in the cap main area. The cracks do not completely penetrate the pavement profile but should be sealed.

3.1.4 Conclusions and Recommendations for Changes

- Section 4.3 outlines several identified recommended actions in order to ensure ongoing effective protection for site occupants as well as to enhance, optimize and minimize the duration of the remedy.

- The addition of concrete barriers has improved the fence integrity with fewer repairs needed in the treatment compound since installation. The integrity of fence in other areas of the site needs attention and repairs.
- TF/VER Recovery well integrity is questionable in certain areas of RAD I and II which may be the cause of TF pump discharge line fouling and clogging. A program of well re-development is being evaluated.
- Additional bailing or redevelopment of monitoring wells associated with the long term LNAPL Monitoring plan is also being evaluated to confirm apparent product thickness measurements.
- Recommend crack sealing in some areas of the site where cracks have started to appear.
- The fence between RAD II and Phoenix in the back needs repair. Fence along west side of treatment compound needs to be repaired or replaced.

3.1.5 IC/EC Certification

The NYSDEC Site Management PRR IC/EC Certification Form has been completed and provided and attached at the front this report.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on this review, the remedy continues to be protective of the public health and the environment and is compliant with the Site Management Plan.

4.1 INSTITUTIONAL CONTROLS

The current ICs are adequate to achieve the objective for protection of human health and the environment based on current site use.

4.2 ENGINEERING CONTROLS

The current ECs are adequate to achieve the objectives for protection of human health and the environment based on current site use.

4.3 OTHER SITE-RELATED ACTIVITIES

Based on the information presented in this PRR, the following activities are recommended to be completed within the next annual reporting period in efforts to maintain the asphalt cover system, optimize LNAPL recovery system operations and accelerate the timeframe to site delisting.

- RAD II west side fence along Preston Avenue repair/completion.
- Additional fence repairs or replacement are warranted around the treatment system compound perimeter.
- Continue to optimize production by adjusting the duration and rotation of active VER/TF system zones to maximize product recovery rates while minimizing groundwater discharge to sewer and energy consumption.
- A program of well re-development should be evaluated.
- Revisit the proposed Pilot Study to evaluate the installation of skimmer pumps along the downgradient property boundaries as an alternate to total fluids pumping.in light of the increasing carbon footprint arising from the inefficiency of the LNAPL recovery using TF/VER.

5.0 REFERENCES

Golder Associates, Inc. (Golder), 2005. *Remedial Investigation Report, Quanta Resources Site, Long Island City, New York, June 2005*

Golder Associates, Inc. (Golder), 2011. *Remedial Action Work Plan, Review Avenue Development, Long Island City, Queens, New York, November, 2011*

MACTEC Engineering and Consulting, P.C. (MACTEC), 2015. *Site Management Plan, Review Avenue Development (RAD) I, Queens County, Long Island City, New York, December, 2015.*

New York State Department of Environmental Conservation (NYSDEC), 2007. *Declaration Statement – Record of Decision, Quanta Resources Inactive Hazardous Waste Disposal Site (a.k.a. Review Avenue Development II), Long Island City, Queens, New York, Site No. 2-41-005, February 2007.*

TABLES

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	T-801-0116		T-1401-0116		T-801		T-1401		T-801-0416		T-1401-0416	
Sample Date:		1/25/2016		1/25/2016		3/7/2016		3/7/2016		4/5/2016		4/5/2016	
Lab Sample ID:		460-108101-8		460-108101-7		JC15542-1		JC15542-2		JC17676-2		JC17676-3	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	15		5.2		12.7		0.5	U	0.5	U	0.5	U
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	9.35		2.03	
Aroclor 1254	mg/kg	4.9		0.5	U	0.5	U	0.5	U	5.11		0.5	U
Aroclor 1260	mg/kg	0.5	U	3.3		0.5	U	0.5	U	5.22		0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	19.9		8.5		12.7		0.5	U	19.68		2.03	

Prepared by: LMB 4/28/21
Reviewed by: TCK 4/30/21

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	T-801-052716		T-1401-052716		T-801-071116		T-1401-071116		T-801-083016		T-1401-083016	
Sample Date:		5/27/2016		5/27/2016		7/11/2016		7/11/2016		8/30/2016		8/30/2016	
Lab Sample ID:		JC21238-1		JC21238-2		JC23844-1		JC23844-2		JC26784-1		JC26784-2	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	4.37		1.24	
Aroclor 1248	mg/kg	6.87		0.5	U	4.32		0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	0.5	U	0.5	U	7.28		0.5	U	0.5	U	0.5	U
Aroclor 1260	mg/kg	5.99		0.5	U	6.23		0.5	U	5.29		2.87	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	12.86		0.5	U	17.83		0.5	U	9.66		4.11	
						w/ Permanganate Cleanup Procedure [1]		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**	

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	RA-T801-102116		T-801-010617		T-1401-010617		T-801-031717		T-801P-041017		T-1401-042517	
Sample Date:		10/21/2016		1/6/2017		1/6/2017		3/17/2017		4/10/2017		4/25/2017	
Lab Sample ID:		JC30289-2		JC35069-2		JC35069-3		JC39231-2		JC40858-1		JC42010-1	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	0.5	U	2.86		0.976		3.37		0.5	U	0.5	U
Aroclor 1248	mg/kg	2.85		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	0.5	U	4.16		3.96		0.5	U	0.5	U	0.5	U
Aroclor 1260	mg/kg	4.01		2.22		2.08		0.5	U	0.5	U	0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	6.86		9.24		7.016		3.37		0.5	U	0.5	U
		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]	

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Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	T-801-050917		T-801-070317		T-801-101017		T-1401-101017		T-801-0118		T-1401-0118	
Sample Date:		5/9/2017		7/3/2017		10/10/2017		10/10/2017		1/3/2018		1/3/2018	
Lab Sample ID:		JC42990-1		JC35069-3		JC52795-4		JC52795-5		JC58353-1		JC58353-2	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	0.5	U	1.08		0.5	U	0.5	U	2.23		0.5	U
Aroclor 1248	mg/kg	0.5	U	0.5	U	20.4		0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	7.27		0.5	U
Aroclor 1260	mg/kg	0.5	U	2.18		10.4		0.5	U	0.5	U	0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	0.5	U	3.26		30.8		0.5	U	9.5		0.5	U
		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]	

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	T-801-031318		T-1401-031318		T-801-050118		T-1401-050118		T-801-0618		T-1401-0618	
Sample Date:		3/13/2018		3/13/2018		5/1/2018		5/1/2018		6/5/2018		6/5/2018	
Lab Sample ID:		JC62277-1		JC62277-2		JC65251-1		JC65251-2		JC67478-1		JC67478-2	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.2	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.2	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.13	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	0.5	U	0.5	U	0.08	U	0.5	U	0.5	U	0.5	U
Aroclor 1248	mg/kg	2.89		4.04	U	7.01		0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	0.5	U	0.5	U	0.12	U	0.5	U	0.5	U	0.5	U
Aroclor 1260	mg/kg	1.95		2.71	U	6.53		0.5	U	0.5	U	0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.074	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.038	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	4.84		4.04	U	13.54		0.5	U	0.5	U	0.5	U
		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]	

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	T-801-0918		T-1401-0918		T-801-0119		T-1401-0119		T-801-0319		T-1401-0319		T-801-G	
Sample Date:		9/5/2018		9/5/2018		1/2/2019		1/2/2019		3/14/2019		3/14/2019		8/13/2019	
Lab Sample ID:		JC73140-1		JC73140-2		JC80741-1		JC80741-2		JC84564-1		JC84564-2		JC93220-1	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	9.7		0.5	U	11.9		0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3.65	
Aroclor 1254	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2.22	
Aroclor 1260	mg/kg	10.2		0.5	U	0.5	U	0.5	U	10.7		0.5	U	4.07	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	19.9		0.5	U	11.9		0.5	U	10.7		0.5	U	9.94	
		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]	

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	T-1401-G		PCB 801 2-13		PCB 1401 2-13		801-G		1401-G		801-G	
Sample Date:		8/13/2019		2/13/2020		2/13/2020		9/10/2020		9/10/2020		1/14/2021	
Lab Sample ID:		JC93220-2		JD3464-2		JD3464-1		JD12923-1		JD12923-2		JD19072-1 (2)	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	0.5	U	7.42		0.5	U	0.5	U	0.5	U	5.46	
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1260	mg/kg	0.5	U	0.5	U	0.5	U	21.06		3.69		0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	0.5	U	7.42		0.5	U	21.06		3.69		5.46	
		w/ Permanganate Cleanup Procedure (1)		w/ Permanganate Cleanup Procedure (1)		w/ Permanganate Cleanup Procedure (1)		w/ Permanganate Cleanup Procedure (1)		w/ Permanganate Cleanup Procedure (1)		w/ Permanganate Cleanup Procedure (1)	

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	1401-G	
Sample Date:		1/14/2021	
Lab Sample ID:		JD19072-2	
Aroclor 1016	mg/kg	0.5	U
Aroclor 1221	mg/kg	0.5	U
Aroclor 1232	mg/kg	0.5	U
Aroclor 1242	mg/kg	9.61	
Aroclor 1248	mg/kg	0.5	U
Aroclor 1254	mg/kg	0.5	U
Aroclor 1260	mg/kg	0.5	U
Aroclor 1268	mg/kg	0.5	U
Aroclor 1262	mg/kg	0.5	U
Total PCBs	mg/kg	9.61	
		w/ Permanganate Cleanup Procedure [1]	

Table 1
Summary of PCB Analytical Data - LNAPL Storage Tanks
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:

Bold = PCB Concentration > 50 mg/kg

Definitions:

mg/kg = milligrams per kilogram

PCB = Polychlorinated Biphenyl

RL = Reporting Limit

Data Qualifiers:

J = Indicates an estimated value

U = Not detected at the indicated Reporting Limit

Footnotes:

(1) Samples analyzed using SW-846 EPA Test Method 3665A Sulfuric Acid/Permanganate Cleanup

(2) Dilution requried due to matrix interference

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-1A		TF-1B		TF-1C		TF-1D		TF-2A		TF-2B		TF-2C	
Sample Date:		12/23/2014		3/25/2015		3/25/2015		12/23/2014		12/23/2014		3/25/2015		12/23/2014	
Lab Sample ID:		460-88367-14		460-92207-2		460-92207-1		460-88367-13		460-88367-10		460-92207-3		460-88367-11	
Aroclor 1016	mg/kg	0.33	U	0.16	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
Aroclor 1221	mg/kg	0.43	U	0.21	U	0.21	U	0.43	U	0.43	U	0.21	U	0.43	U
Aroclor 1232	mg/kg	0.51	U	0.25	U	0.25	U	0.51	U	0.51	U	0.25	U	0.51	U
Aroclor 1242	mg/kg	0.33	U	0.16	U	0.16	U	9.9		0.33	U	0.16	U	0.33	U
Aroclor 1248	mg/kg	0.33	U	0.16	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
Aroclor 1254	mg/kg	0.33	U	0.16	U	0.16	U	0.33	U	0.33	U	0.16	U	0.33	U
Aroclor 1260	mg/kg	0.33	U	0.16	U *	0.16	U *	9.6		0.33	U	5.1	*	17	
Aroclor 1268	mg/kg	0.56	U	0.27	U	0.27	U	0.56	U	0.56	U	0.27	U	0.56	U
Aroclor 1262	mg/kg	0.56	U	0.27	U	0.27	U	0.56	U	0.56	U	0.27	U	0.56	U
Total PCBs	mg/kg	0.56	U	0.27	U *	0.27	U *	19.5		0.56	U	5.1	*	17	

Prepared by: VMW 02/28/17
Reviewed by: TCK 02/28/17

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-2D		TF-3A		TF-3B		TF-3C		TF-3D		TF-4A		TF-4B	
Sample Date:		12/23/2014		4/27/2015		12/23/2014		12/23/2014		4/30/2015		12/23/2014		12/23/2014	
Lab Sample ID:		460-88367-12		460-93882-2		460-88367-9		460-88367-8		460-94094-1		460-88367-4		460-88367-5	
Aroclor 1016	mg/kg	0.33	U	0.16	U *	0.34	U	0.33	U	0.17	U	0.33	U	0.33	U
Aroclor 1221	mg/kg	0.43	U	0.21	U	0.43	U	0.43	U	0.22	U	0.43	U	0.43	U
Aroclor 1232	mg/kg	0.51	U	0.25	U	0.51	U	0.51	U	0.26	U	0.51	U	0.51	U
Aroclor 1242	mg/kg	18		0.16	U	8.9		18		21		0.33	U	5.3	
Aroclor 1248	mg/kg	0.33	U	0.16	U	0.34	U	0.33	U	0.17	U	0.33	U	0.33	U
Aroclor 1254	mg/kg	0.33	U	0.16	U	0.34	U	0.33	U	0.17	U	0.33	U	0.33	U
Aroclor 1260	mg/kg	14		0.16	U *	2		4.9		16		0.33	U	5.8	
Aroclor 1268	mg/kg	0.56	U	0.27	U	0.56	U	0.56	U	0.28	U	0.56	U	0.56	U
Aroclor 1262	mg/kg	0.56	U	0.27	U	0.56	U	0.56	U	0.28	U	0.56	U	0.56	U
Total PCBs	mg/kg	32		0.27	U	10.9		22.9		37		0.56	U	11.1	

Prepared by: VMW 02/28/17
Reviewed by: TCK 02/28/17

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-4C		TF-4D		TF-5A		TF-5B		TF-5C		TF-5D		TF-6A	
Sample Date:		12/23/2014		12/23/2014		12/23/2014		12/23/2014		12/23/2014		12/23/2014		1/23/2015	
Lab Sample ID:		460-88367-6		460-88367-7		460-88367-3		460-88367-2		460-88367-1		460-88367-24		460-89644-1	
Aroclor 1016	mg/kg	0.33	U	0.33	U	0.33	U	0.34	U	0.34	U	0.33	U	0.17	U
Aroclor 1221	mg/kg	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.22	U
Aroclor 1232	mg/kg	0.51	U	0.51	U	0.51	U	0.51	U	0.51	U	0.51	U	0.26	U
Aroclor 1242	mg/kg	29		30		0.33	U	0.34	U	27		30		9.2	
Aroclor 1248	mg/kg	0.33	U	0.33	U	0.33	U	0.34	U	0.34	U	0.33	U	0.17	U
Aroclor 1254	mg/kg	0.33	U	0.33	U	0.33	U	0.34	U	0.34	U	0.33	U	0.17	U
Aroclor 1260	mg/kg	7.7		15		0.33	U	1.5	J	15		14		11	
Aroclor 1268	mg/kg	0.56	U	0.56	U	0.56	U	0.57	U	0.56	U	0.56	U	0.28	U
Aroclor 1262	mg/kg	0.56	U	0.56	U	0.56	U	0.57	U	0.56	U	0.56	U	0.28	U
Total PCBs	mg/kg	36.7		45		0.56	U	1.5		42		44		20.2	

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-6B		TF-6C		TF-6D		TF-7A		TF-7B		TF-7C		TF-7D	
Sample Date:		1/23/2015		1/23/2015		1/23/2015		1/23/2015		1/23/2015		4/27/2015		1/23/2015	
Lab Sample ID:		460-89644-3		460-89644-5		460-89644-7		460-89644-2		460-89644-4		460-93882-1		460-89644-6	
Aroclor 1016	mg/kg	0.16	U	0.17	U	0.33	U	0.17	U	0.17	U	0.16	U *	0.17	U
Aroclor 1221	mg/kg	0.21	U	0.22	U	0.43	U	0.22	U	0.22	U	0.21	U	0.22	U
Aroclor 1232	mg/kg	0.25	U	0.26	U	0.51	U	0.26	U	0.26	U	0.25	U	0.26	U
Aroclor 1242	mg/kg	17		9.1		30		3.4		8		0.16	U	11	
Aroclor 1248	mg/kg	0.16	U	0.17	U	0.33	U	0.17	U	0.17	U	0.16	U	0.17	U
Aroclor 1254	mg/kg	0.16	U	0.17	U	0.33	U	0.17	U	0.17	U	0.16	U	0.17	U
Aroclor 1260	mg/kg	13		11		22		4.4		12		0.16	U *	13	
Aroclor 1268	mg/kg	0.27	U	0.28	U	0.56	U	0.28	U	0.28	U	0.27	U	0.28	U
Aroclor 1262	mg/kg	0.27	U	0.28	U	0.56	U	0.28	U	0.28	U	0.27	U	0.28	U
Total PCBs	mg/kg	30		20.1		**52**		7.8		20		0.27	U	24	

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-7E		TF-7F		S-1B		S-1C		S-2A		S-2B		S-2C	
Sample Date:		1/23/2015		1/30/2015		12/23/2014		12/23/2014		12/23/2014		12/23/2014		12/23/2014	
Lab Sample ID:		460-89644-8		460-89873-1		460-88367-20		460-88367-19		460-88367-21		460-88367-23		460-88367-22	
Aroclor 1016	mg/kg	0.17	U	0.33	U	0.33	U	0.34	U	0.33	U	0.17	U	0.17	U
Aroclor 1221	mg/kg	0.21	U	0.42	U	0.43	U	0.43	U	0.43	U	0.22	U	0.22	U
Aroclor 1232	mg/kg	0.25	U	0.5	U	0.51	U	0.51	U	0.51	U	0.26	U	0.26	U
Aroclor 1242	mg/kg	20		27		0.33	U	0.34	U	0.33	U	0.17	U	0.17	U
Aroclor 1248	mg/kg	0.17	U	0.33	U	0.33	U	0.34	U	0.33	U	0.17	U	0.17	U
Aroclor 1254	mg/kg	0.17	U	0.33	U	0.33	U	0.34	U	0.33	U	0.17	U	0.17	U
Aroclor 1260	mg/kg	17		9.8		0.33	U	0.34	U	0.33	U	0.17	U	6.3	
Aroclor 1268	mg/kg	0.28	U	0.55	U	0.56	U	0.57	U	0.56	U	0.28	U	0.28	U
Aroclor 1262	mg/kg	0.28	U	0.55	U	0.56	U	0.57	U	0.56	U	0.28	U	0.28	U
Total PCBs	mg/kg	37		36.8		0.56	U	0.57	U	0.56	U	0.28	U	6.3	

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	S-3A		S-3B		S-3C		S-3E	
Sample Date:		12/23/2014		12/23/2014		12/23/2014		12/23/2014	
Lab Sample ID:		460-88367-18		460-88367-15		460-88367-16		460-88367-17	
Aroclor 1016	mg/kg	0.33	U	0.33	U	0.34	U	0.33	U
Aroclor 1221	mg/kg	0.43	U	0.43	U	0.43	U	0.43	U
Aroclor 1232	mg/kg	0.51	U	0.51	U	0.51	U	0.51	U
Aroclor 1242	mg/kg	0.33	U	0.33	U	0.34	U	0.33	U
Aroclor 1248	mg/kg	0.33	U	0.33	U	0.34	U	0.33	U
Aroclor 1254	mg/kg	0.33	U	0.33	U	0.34	U	0.33	U
Aroclor 1260	mg/kg	0.33	U	0.33	U	0.34	U	0.33	U
Aroclor 1268	mg/kg	0.56	U	0.56	U	0.57	U	0.56	U
Aroclor 1262	mg/kg	0.56	U	0.56	U	0.57	U	0.56	U
Total PCBs	mg/kg	0.56	U	0.56	U	0.57	U	0.56	U

Table 2
Summary of PCB Analytical Data - Baseline Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:

Bold = PCB Concentration > 50 mg/kg

Definitions:

mg/kg = milligrams per kilogram

PCB = Polychlorinated Biphenyl

RL = Reporting Limit

Data Qualifiers:

J = Indicates an estimated value

U = Not detected at the indicated Reporting Limit

* = Recovery or RPD exceeds control limits

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-2D-083016		TF-3D-061516		TF-3D-061516		TF-3D-090116		TF-3D-082517		TF-3D		TF-3D	
Sample Date:		8/30/2016		6/15/2016		6/15/2016		9/1/2016		8/25/2017		10/25/2017		11/14/2017	
Lab Sample ID:		JC26783-5		JC22334-1		JC22334-1R		JC26925-1		JC49684-2					
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	12.3		25.3		21.9		3.03		11.5		0.5	U	9.33	
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	28.7		0.5	U
Aroclor 1254	mg/kg	9.58		26.7		18		0.5	U	20.4		16.7		11	
Aroclor 1260	mg/kg	10.0		0.5	U	14.1		3.2		0.5	U	0.5	U	0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	31.88		52		**54**		6.18		31.9		45.4		20.33	
		w/ Permanganate Cleanup Procedure [1]				w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-4C-061516		TF-4C-061516		TF-4C-083016		TF-4D-061516		TF-4D-061516		TF-4D-070517		TF-4D-071417	
Sample Date:		6/15/2016		6/15/2016		8/30/2016		6/15/2016		6/15/2016		7/3/2017		7/14/2017	
Lab Sample ID:		JC22334-2		JC22334-2R		JC26783-6		JC22334-3		JC22334-3R		JC46386-2		JC47048-1	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	26.4		17.6		18.6		43.2		25.1		13.2		0.5	
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	13.7	U
Aroclor 1254	mg/kg	18.2		9.28		0.5	U	50		20.9		0.5	U	18	
Aroclor 1260	mg/kg	0.5	U	8.0		8.1		0.5	U	18.1		9.04		0.5	U
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	44.6		34.9		26.7		93.2		**64.1**		22.24		18.5	
				w/ Permanganate Cleanup Procedure [1]		**w/ Permanganate Cleanup Procedure [1]**				**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-4D-072017		TF-5C-061516		TF-5C-061516		TF-5C-083016		TF-5D-061516		TF-5D-061516		TF-5D-083016	
Sample Date:		7/20/2017		6/15/2016		6/15/2016		8/30/2016		6/15/2016		6/15/2016		8/30/2016	
Lab Sample ID:		JC47416-1		JC22334-4		JC22334-4R		JC26783-7		JC22334-5		JC22334-5R		JC26783-1	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	13.6		15.9		10.9		22.2		36.7		22.1		29.2	
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	0.5	U	19.6		10.9		12.9		21.1		16.9		20.5	
Aroclor 1260	mg/kg	9.91		0.5	U	8.4		14.2		0.5	U	11.8		11.8	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	23.51		35.5		30.16		49.3		57.8		**50.8**		**61.5**	
		w/ Permanganate Cleanup Procedure (1)				**w/ Permanganate Cleanup Procedure (1)**		**w/ Permanganate Cleanup Procedure (1)**				**w/ Permanganate Cleanup Procedure (1)**		**w/ Permanganate Cleanup Procedure (1)**	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-5D-010617		TF-5D-020717		TF-5D-030617		TF-5D-033017		TF-5D-041417		TF-5D-042817		TF-6B-083016	
Sample Date:		1/6/2017		2/7/2017		3/6/2017		3/30/2017		4/14/2017		4/28/2017		8/30/2016	
Lab Sample ID:		JC35069-1		JC37014-1		JC38433-1		JC40133-1		JC41331-1		JC42594-1		JC26783-4	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	32.6		57.6		34.3		10.3		13.3		0.5	U	8.45	
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	27		0.5	U
Aroclor 1254	mg/kg	14.2		23.5		0.5	U	7.73		0.5	U	13		0.5	U
Aroclor 1260	mg/kg	9.8		14.7		16.8		5.5		0.5	U	8.68		5.3	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	**56.56**		**95.8**		**51.1**		23.51		13.3		48.68		13.72	
		w/ Permanganate Cleanup Procedure [1]		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-6D-0416		TF-6D-041316		TF-6D-042616		TF-6D-050516		TF-6D-051216		TF-6D-052716		TF-6D-053116	
Sample Date:		4/5/2016		4/13/2016		4/26/2016		5/5/2016		5/12/2016		5/27/2016		5/31/2016	
Lab Sample ID:		JC17616-1		JC18303-1		JC19129-1		JC19787-1		JC20188-1		JC21237-1		JC21329-1	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	0.5	U	0.5	U	0.5	U	23.9		22.4		0.5	U	21.4	
Aroclor 1248	mg/kg	31.4		21.6		17.9		0.5	U	0.5	U	17.9		0.5	U
Aroclor 1254	mg/kg	16		0.5	U	14.5		18.1		0.5	U	5	U	21.2	
Aroclor 1260	mg/kg	0.5	U	12.5		14.3		12.5		15.0		15.3		12.7	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	47.4		34.1		46.7		54.5		37.4		33.2		55.3	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-6D-053116		TF-6D-061616		TF-6D-061616		TF-6D-062216		TF-6D-063016		TF-6D-070716		TF-6D-071116	
Sample Date:		6/7/2016		6/16/2016		6/16/2016		6/22/2016		6/30/2016		7/7/2016		7/11/2016	
Lab Sample ID:		JC21329-1		JC22334-8		JC22334-8R		JC22828-1		JC23438-1		JC23724-2		JC23844-3	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	21.2		18.2		7.78		0.5	U	10.7		8.47		9.32	
Aroclor 1248	mg/kg	5	U	0.5	U	0.5	U	23.6		0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	13.4		21.4		8.05		25.7		9.49		9.86		11.4	
Aroclor 1260	mg/kg	11.7		100.0	U	3.9		8.2		8.0		5.6		6.3	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	46.3		39.6		19.73		**57.5**		28.17		23.92		27.06	
						w/ Permanganate Cleanup Procedure [1]		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**		**w/ Permanganate Cleanup Procedure [1]**	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	TF-7E-061516		TF-7E-061516		TF-7E-073016		TF-7F-061516		TF-7F-061516		TF-7F-083016	
Sample Date:		6/15/2016		6/15/2016		8/30/2016		6/15/2016		6/15/2016		8/30/2016	
Lab Sample ID:		JC22334-6		JC22334-6R		JC26783-3		JC22334-7		JC22334-7R		JC26783-2	
Aroclor 1016	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1221	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1232	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1242	mg/kg	17.1		16		7.59		35.2		13.9		15.6	
Aroclor 1248	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1254	mg/kg	26.1		16.3		12.9		27.7		15.9		20.3	
Aroclor 1260	mg/kg	0.5	U	0.5	U	5.3		15.6		13.4		7.5	
Aroclor 1268	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Aroclor 1262	mg/kg	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total PCBs	mg/kg	43.2		32.3		25.74		78.5		43.2		43.41	
				w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]				w/ Permanganate Cleanup Procedure [1]		w/ Permanganate Cleanup Procedure [1]	

Table 3
Summary of PCB Analytical Data - Recovery Well Samples
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:

Bold = PCB Concentration > 50 mg/kg after Permanganate Cleanup

Definitions:

mg/kg = milligrams per kilogram

PCB = Polychlorinated Biphenyl

RL = Reporting Limit

Data Qualifiers:

J = Indicates an estimated value

U = Not detected at the indicated Reporting Limit

Footnotes:

(1) Samples analyzed using SW-846 EPA Test Method 3665A Sulfuric Acid/Permanganate Cleanup

Table 4
Summary of Offsite LNAPL Disposal Quantities
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

LNAPL Waste Oil Disposal Summary (<50 ppm PCBs):

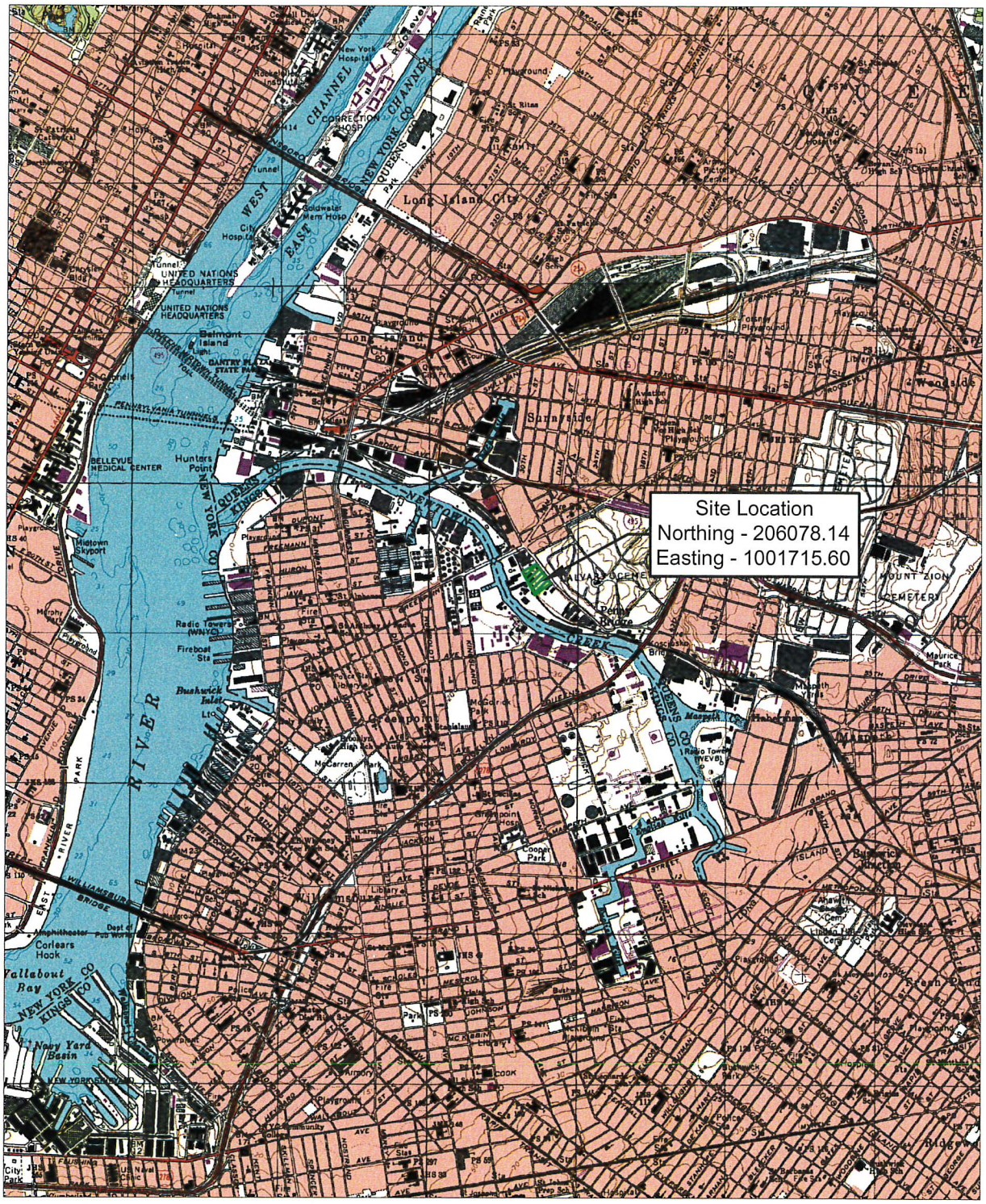
Date	BOL Number	T-801	T-1401	Total
12/18/15	0277706	5,000 gal		5,000 gal
01/11/16	0277790		4,767 gal	4,767 gal
02/02/16	0277924	5,032 gal		5,032 gal
02/04/16	0277942		4,900 gal	4,900 gal
03/02/16	278269	2,703 gal	2,592 gal	5,295 gal
03/17/16	0278392	4,613 gal		4,613 gal
03/31/16	278518	5,000 gal		5,000 gal
04/13/16	278574	5,000 gal		5,000 gal
04/27/16	278823	4,880 gal		4,880 gal
05/05/16	278889		5,000 gal	5,000 gal
05/12/16	278941	5,000 gal		5,000 gal
05/26/16	279054	4,998 gal		4,998 gal
05/31/16	099965		3,103 gal	3,103 gal
06/07/16	279111	4,810 gal		4,810 gal
07/01/16	283085	5,026 gal		5,026 gal
07/18/16	283124	4,900 gal		4,900 gal
07/26/16	283125		5,000 gal	5,000 gal
08/09/16	283446	4,800 gal		4,800 gal
08/31/16	283592	5,052 gal		5,052 gal
09/01/16	283600		4,280 gal	4,280 gal
09/22/16	283745	4,950 gal		4,950 gal
10/07/16	180754	4,964 gal		4,964 gal
10/17/16	180744		4,800 gal	4,800 gal
11/04/16	104535	5,500 gal		5,500 gal
11/29/16	104145	5,300 gal		5,300 gal
12/01/16	258577		4,565 gal	4,565 gal
12/20/16	258731	4,869 gal		4,869 gal
01/06/17	258823	4,900 gal		4,900 gal
01/16/17	258893	4,875 gal		4,875 gal
01/25/17	259005	4,850 gal		4,850 gal
02/07/17	259108	4,900 gal		4,900 gal
02/14/17	259137		4,900 gal	4,900 gal
02/16/17	259170	4,860 gal		4,860 gal
03/01/17	259226	4,960 gal		4,960 gal
03/17/17	280224	4,837 gal		4,837 gal
03/30/17	280327	4,960 gal		4,960 gal
04/10/17	280370	3,436 gal		3,436 gal
04/25/17	280486		5,000 gal	5,000 gal
04/28/17	280485	5,000 gal		5,000 gal
05/12/17	280663	4,081 gal		4,081 gal
05/30/17	280874	4,964 gal		4,964 gal
06/23/17	238017	4,936 gal		4,936 gal
07/14/17	238326		4,884 gal	4,884 gal
07/20/17	238302	4,964 gal		4,964 gal
08/25/17	179863	4,936 gal		4,936 gal
09/05/17	179864	4,195 gal		4,195 gal
09/15/17	179956		4,859 gal	4,859 gal
09/26/17	180208	4,936 gal		4,936 gal
10/12/17	284001	4,838 gal		4,838 gal
10/27/17	284113	4,892 gal		4,892 gal
11/15/17	284446	4,857 gal		4,857 gal
12/06/17	256622	4,636 gal		4,636 gal
01/03/18	256810	4,633 gal		4,633 gal
01/22/18	257014	5,032 gal		5,032 gal
02/08/18	257162	4,936 gal		4,936 gal
02/23/18	257266	4,936 gal		4,936 gal
03/09/18	257369		4,964 gal	4,964 gal
03/13/18	257409	4,857 gal		4,857 gal
03/30/18	276735	4,857 gal		4,857 gal
04/18/18	276899	4,645 gal		4,645 gal
05/10/18	ACV002088	4,810 gal		4,810 gal
05/29/18	ACV002204	4,969 gal		4,969 gal
06/08/18	ACV002257	5,068 gal		5,068 gal
06/19/18	ACV002312	4,857 gal		4,857 gal
06/25/18	ACV002336		5,068 gal	5,068 gal
07/13/18	ACV002428	4,946 gal		4,946 gal
08/14/18	ACV002699	4,998 gal		4,998 gal
08/29/18	ACV002794		4,657 gal	4,657 gal
08/31/18	ACV002809	4,857 gal		4,857 gal
09/25/18	ACV002977	4,998 gal		4,998 gal
10/12/18	ACV022156	5,000 gal		5,000 gal
11/12/18	ACV033513	5,028 gal		5,028 gal
12/07/18	ACV023259	4,964 gal		4,964 gal
01/04/19	ACV023419	4,964 gal		4,964 gal
01/10/19	ACV0234756		4,837 gal	4,837 gal
02/08/19	ACV022841	4,900 gal		4,900 gal
02/20/19	ACV022896		4,630 gal	4,630 gal
03/20/19	ACV045063	4,613 gal		4,613 gal
04/05/19	ACV045150		4,692 gal	4,692 gal
07/16/19	ACV044897	5,170 gal		5,170 gal
08/13/19	ACV045767	4,964 gal		4,964 gal
08/29/19	ACV059072		4,964 gal	4,964 gal
09/30/19	ACV059303	4,857 gal		4,857 gal
10/09/19	ACV059356		5,068 gal	5,068 gal
10/17/19	ACV059387	4,964 gal		4,964 gal
11/27/19	ACV041988	4,406 gal		4,406 gal
01/29/20	ACV058282		4,954 gal	4,954 gal
02/20/20	ACV058282	4,926 gal		4,926 gal
04/21/20	ACV073540	4,908 gal		4,908 gal
06/23/20	ACV073978	4,856 gal		4,856 gal
07/21/20	ACV070767		4,796 gal	4,796 gal
08/05/20	ACV070820	4,775 gal		4,775 gal
10/08/20	ACV084102	4,950 gal		4,950 gal
10/13/20	ACV084125		4,927 gal	4,927 gal
01/26/21	ACV086093	5,083 gal		5,083 gal
	TOTALS:	**348,937 gal**	**112,207 gal**	**461,144 gal**

LNAPL Waste Oil Disposal Summary (>/= 50 ppm PCBs):

Date	Manifest Number	TF-3D	TF-4D	TF-5D	TF-6D	Total
08/30/16	016113060 JJK	0 gal	0 gal	0 gal	50 gal	50 gal
08/08/17	015633471 JJK	0 gal	20 gal	35 gal	0 gal	55 gal
02/06/18	017955324 JJK	23 gal	0 gal	0 gal	0 gal	23 gal
	TOTALS:	**23 gal**	**20 gal**	**35 gal**	**50 gal**	**128 gal**

Prepared by: LMB 4/29/21
Reviewed by: TCK 4/30/21

FIGURES



Coordinate System: NAD 1983 StatePlane New York Long Island. Units: Foot US

0 1000 2000 4000

SCALE IN FEET

Amec Foster Wheeler PROJECT No. 3480160502 *DRAWING:* 3480160502-0600-SLM0-0000	
PREPARED/DATE: VMW 2/28/2017	*CHECKED/DATE:* TCK 2/28/2017

MACTEC
MACTEC Engineering and Consulting, P.C.
511 Congress Street, Suite 200
Portland, Maine 04112
(207) 775-5401

FIGURE 1
SITE LOCATION MAP
REVIEW AVENUE DEVELOPMENT SITES
RAD I AND RAD II
LONG ISLAND CITY, NEW YORK

LEGEND

- FIRE HYDRANT
- UNKNOWN VALVE
- LIGHT POLE
- UTILITY POLE
- CATCHBASIN
- ROUND CATCHBASIN (CB)
- MONITORING WELL (INCLUDED IN LNAPL MONITORING PROGRAM) — AML-01
- MONITORING WELL (INCLUDED IN GROUNDWATER MONITORING PROGRAM) — GAGW-02
- MONITORING WELL (INCLUDED IN GROUNDWATER MONITORING PROGRAM IF ACCESSABLE) — GAGW-09S
- MONITORING WELL (NOT INCLUDED IN THESE LNAPL OR GROUNDWATER MONITORING PROGRAMS) — GAL-24
- EXISTING MONITORING WELL (STATUS UNKNOWN) — GAL-20
- PROTECTIVE POST
- LARGE TREE
- SMALL TREE
- GAS VALVE (G)
- WATER VALVE (W)
- WATER BOX (W)
- ELECTRIC MANHOLE (E)
- RAILROAD Elec. VAULT
- RAILROAD SIGNAL (RR)
- SANITARY MANHOLE (S)
- WATER MANHOLE (W)
- TELEPHONE MANHOLE (T)
- UNKNOWN MANHOLE
- SKIMMER WELL — S-1B
- SKIMMER WELL WITH CONTROLLER — S-1A
- TOTAL FLUIDS WELL — TF-1A

LINE LEGEND

- RAIL ROAD TRACKS
- PROPERTY LINE
- ADJOINER PROPERTY LINE
- CURBING
- EASEMENT LINE
- REMEDIATION SYSTEM PROCESS PIPING
- CHAIN LINK FENCE
- OVERHEAD WIRES — OHU
- PRESTON AVE

NAD 83-96 N.Y.L.I. 3104

REVIEW AVENUE 80' R.O.W.

BUILDING #2 3 STORY BRICK BLDG

BUILDING #1 5 STORY BRICK BLDG

BLOCK 312 LOT 39

RAD I BLOCK 312; LOT 41 AREA = 119,033 SF (2,733 AC)

RAD II BLOCK 312; LOT 69 AREA = 73,865 SF (1,696 AC)

PRESTON AVENUE

LONG ISLAND RAILROAD CO.

BLOCK 312 LOT 79 3 STORY BRICK BLDG

BM1 MONUMENT SET BY GEOD N=206252.493 E=1001705.224 EL=20.01

BM2 MONUMENT SET BY GEOD N=2057739.434 E=1001720.737 EL=15.33

MONITORING WELL NOTES:

1) Suffixes:
   - Where a well is designated with the suffix "R", that well is a replacement for a previous well at that location.
   - Where a well is designated with the suffix "RR", that well is a replacement for a previous replacement well at that location.
2) MW-# are monitoring wells that were installed prior to the Remedial Investigation.
3) The designation GAGW-# indicates a groundwater monitoring well was originally located and installed by Golder Associates. The one exception is GAGW-04 which is screened across the LNAPL zone.
4) The designation GAL-# indicates a LNAPL monitoring well that was screened across the top of the water table.
5) Well GAGW-06I is a smear zone monitoring well.
6) The designation AMGW-# represents a GW monitorng well that was located and installed by AMEC.
7) The designation AML-# is a LNAPL monitoring well located and installed by Amec Foster Wheeler.
8) GAL-04R, GAL-11R, GAL-18R, GAGW-05R, AND GAGW-08R were installed by Waste Management.

NOTES:

1) This drawing references the "Topographic Plan – Block 312 Lots 41, 69 & 79 – 37-80 Review Avenue", dated 12/22/2014, prepared by GEOD Corporation, 24 Kanouse Rd., Newfoundland, NJ 07435.
2) Recovery well locations (except where noted) are per survey drawings named "Property Survey, Block 312 Lot 41, 37-80 Review Avenue" and "Property Survey, Block 312 Lot 69, 37-80 Review Avenue", by GEOD Corporation, dated January 29, 2015. Recovery Wells TF-3A and TF-7C were located via field measurement methods.
3) Horizontal datum is North American Datum of 1983 (NAD83 New York State Plane coordinates, Long Island zone 3104). Vertical datum is North American Vertical Datum of 1988 (NAVD88).

REV.	DATE	STATUS	PRPD BY	CHKD BY
1	03/15/17	PERIODIC REVIEW REPORT	VMW	TCK

MACTEC PROJECT No. 3480160502
DRAWING: 3480160502-0600-SP00-0000

PREPARED/DATE: VMW 01/22/16

CHECKED/DATE: TCK 01/22/16

MACTEC
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FIGURE 2
SITE PLAN
REVIEW AVENUE DEVELOPMENT SITES
RAD I AND RAD II
LONG ISLAND CITY, QUEENS, NY 11101

SCALE: 1" = 40'

P:\CADD\QUANTA\Review Avenue\working drawings\3480160502-0600-SP00-0000.dwg Thu, 16 Mar 2017 - 9:30am vincent.whelan Layout: SITE PLAN

APPENDIX A

Monthly Reports

Review Ave. LNAPL Recovery System Monthly Summary
April 2020

Work completed in April 2020:

Week of Wed 4/1 – Sat 4/4

- O&M site visit on 4/2

Week of Sun 4/5 – Sat 4/11

- O&M site visit on 4/9

Week of Sun 4/12 – Sat 4/18

- O&M site visits on 4/14 & 4/17

Week of Sun 4/19 – Sat 4/25

- O&M site visits on 4/21 & 4/23
- Product load-out from T-801 on 4/21
    - 4,908 GAL product removed (offsite) according to Bill of Landing

Week of Sun 4/26 – Thu 4/30

- O&M site visit on 4/30

O&M Activities:

Week of Wed 4/1 – Sat 4/4

- Operating on TF Zone 5
- Changed bag filters and cleaned basket strainer on 4/2
- Backwashed carbon on 4/2
- Processed water from totes on 4/2
- Viscosity testing of product in OWS day tank on 4/2

Week of Sun 4/5 – Sat 4/11

- Operating on TF Zone 5
- Changed bag filters and cleaned basket strainer on 4/9
- Switched active carbon vessel to LGAC-1102 on 4/9
- Viscosity testing of product in OWS day tank on 4/9
- Reset IP camera on 4/9

Week of Sun 4/12 – Sat 4/18

- Operating on TF Zone 5 until 4/13
    - Switched to TF Zones 4 & 5 on 4/13
- Water removal from T-801 & T-1401 on 4/14
- Repaired IP camera mount on 4/14
- Rebuilt chemical metering pumps on 4/14
- Cleaned basket strainer on 4/14
- Cleaned flow transducer and reset flow meter k-factor on 4/14
- Changed bag filters and cleaned basket strainer on 4/17
- Backwashed carbon on 4/17
- Processed water from totes on 4/17
- Viscosity testing of product in OWS day tank on 4/17

Week of Sun 4/19 – Sat 4/25

- Operating on TF Zones 4 & 5
- Product load-out from T-801 on 4/21
- Repaired chemical feed pump (replaced 3-way valve with check valve) on 4/21
- Set chemical feed pumps to 20% auto on 4/21

Prepared By: VMW 6/19/20
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
April 2020

- Load out trash on 4/21
- Reset camera on 4/21
- Rebooted HMI on 4/21
- Changed bag filters and cleaned basket strainer on 4/23
- Backwashed carbon on 4/23
- Processed water from totes on 4/23
- Viscosity testing of product in OWS day tank on 4/23

Week of Sun 4/26 – Thu 4/30

- Operating on TF Zones 4 & 5
- Backwashed carbon on 4/30
- Blow-down LGAC-1101 on 4/30
- Changed bag filters and cleaned basket strainer on 4/30
- Viscosity testing of product in OWS day tank on 4/30

VER/TF System Production Results:

- TF System uptime for April was 647.37 Actual Run Hours out of 710.51 Available Hours, or 91.11%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
    - System shut down on 4/23 via high water level alarm in OWS; restarted same day after changing bag filters and backwashing carbon.
    - System shut down on 4/28 via high water level alarm in OWS; restarted on 4/30 after changing bag filters and backwashing carbon.
- Approximately 2,588 GAL Product Recovered in April from Zones 4 and 5.
    - Average TF Product recovery rate for April was 86.3 GPD (calendar days), or 95.9 GPD (run days) accounting for system downtime.
- Approximately 327,511 GAL Product Recovered Total since system start-up.
- 4,908 GAL Product from T-801 disposed of offsite in April.
    - 329,273 GAL Product from T-801 disposed of Total since start-up.
- Approximately 196,370 GAL Effluent discharged in April.
    - Average 6,546 GPD at an avg rate of 7,280 GPD considering downtime.
- 12,032,356 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.32%

Skimmer System Production Results:

- Skimmer System uptime for April was 240 Actual Run Hours out of 240 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 1,140 GAL Product Recovered in April.
    - Average Skimmer Product recovery rate for April was 38 GPD (calendar days), or 38 GPD (run days) accounting for system downtime.
- Approximately 106,166 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in April.
    - 102,484 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 3,728 GAL Product recovered in April.

Prepared By: VMW 6/19/20
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
April 2020

  - Average Product recovery rate for April was 124.3 GPD.
- 433,678 GAL Product Recovered Total since system start-up.
- 4,908 GAL Product shipped off-site for disposal in April (see attached summary table).
- 431,757 GAL Product shipped off-site for disposal since system start-up as of the end of April 2020 (see attached summary table).

Prepared By: VMW 6/19/20
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
May 2020

Work completed in May 2020:

Week of Fri 5/1 – Sat 5/9

- O&M site visit on 5/4, 5/5 and 5/6
- Carbon change-out completed by Carbon Filtration Systems, Inc. on 5/5

Week of Sun 5/10 – Sat 5/16

- O&M site visit on 5/13
- 2Q 2020 Effluent Discharge Compliance Sampling completed 5/14

Week of Sun 5/17 – Sat 5/23

- O&M site visit on 5/19

Week of Sun 5/24 – Sun 5/31

- O&M site visits on 5/27 and 5/28

O&M Activities:

Week of Fri 5/1 – Sat 5/9

- Operating on TF Zones 4 & 5 until 5/5
    - Switched to TF Zones 1 & 2 on 5/5
- Changed bag filters and cleaned basket strainer on 4/2
- Backwashed carbon on 4/2
- Processed water from totes on 4/2
- Viscosity testing of product in OWS day tank on 4/2

Week of Sun 5/10 – Sat 5/16

- Operating on TF Zones 1 & 2
- Changed bag filters and cleaned basket strainer on 4/9
- Switched active carbon vessel to LGAC-1102 on 4/9
- Viscosity testing of product in OWS day tank on 4/9
- Reset IP camera on 4/9

Week of Sun 5/17 – Sat 5/23

- Operating on TF Zones 1 & 2
- Water removal from T-801 & T-1401 on 4/14
- Repaired IP camera mount on 4/14
- Rebuilt chemical metering pumps on 4/14
- Cleaned basket strainer on 4/14
- Cleaned flow transducer and reset flow meter k-factor on 4/14
- Changed bag filters and cleaned basket strainer on 4/17
- Backwashed carbon on 4/17
- Processed water from totes on 4/17
- Viscosity testing of product in OWS day tank on 4/17

Week of Sun 5/24 – Sun 5/31

- Operating on TF Zones 1 & 2 until 5/27
    - Switched to TF Zones 1, 2 & 3 on 5/27
- Backwashed carbon on 4/30
- Blow-down LGAC-1101 on 4/30
- Changed bag filters and cleaned basket strainer on 4/30
- Viscosity testing of product in OWS day tank on 4/30

Prepared By: VMW 6/19/20
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
May 2020

VER/TF System Production Results:

- TF System uptime for May was 647.37 Actual Run Hours out of 710.51 Available Hours, or 91.11%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
    - System shut down on 4/23 via high water level alarm in OWS; restarted same day after changing bag filters and backwashing carbon.
    - System shut down on 4/28 via high water level alarm in OWS; restarted on 4/30 after changing bag filters and backwashing carbon.
- Approximately 2,588 GAL Product Recovered in May from Zones 4 and 5.
    - Average TF Product recovery rate for May was 86.3 GPD (calendar days), or 95.9 GPD (run days) accounting for system downtime.
- Approximately 327,511 GAL Product Recovered Total since system start-up.
- 4,908 GAL Product from T-801 disposed of offsite in May.
    - 329,273 GAL Product from T-801 disposed of Total since start-up.
- Approximately 196,370 GAL Effluent discharged in May.
    - Average 6,546 GPD at an avg rate of 7,280 GPD considering downtime.
- 12,032,356 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.32%

Skimmer System Production Results:

- Skimmer System uptime for May was 240 Actual Run Hours out of 240 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 1,140 GAL Product Recovered in May.
    - Average Skimmer Product recovery rate for May was 38 GPD (calendar days), or 38 GPD (run days) accounting for system downtime.
- Approximately 106,166 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in May.
    - 102,484 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 3,728 GAL Product recovered in May.
    - Average Product recovery rate for May was 124.3 GPD.
- 433,678 GAL Product Recovered Total since system start-up.
- 4,908 GAL Product shipped off-site for disposal in May (see attached summary table).
- 431,757 GAL Product shipped off-site for disposal since system start-up as of the end of May 2020 (see attached summary table).

Prepared By: VMW 6/19/20
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
June 2020

Work completed in June 2020:

Week of Tue 6/2 – Sat 6/6

- O&M site visit on 6/2
- OWS Cleanout/flush line to sewer completed by ACV Environmental Services on 6/2

Week of Sun 6/7 – Sat 6/13

- O&M site visit on 6/9

Week of Sun 6/14 – Sat 6/20

- O&M site visit on 6/17

Week of Sun 6/21 – Sun 6/27

- O&M site visit on 6/23
- T-801 Product Loadout by ACV Environmental Services on 6/23

Week of Sun 6/28 – Tues 6/30

- O&M site visits on 6/30
- Re-pipe Inlet strainer to Effluent Pump 901

O&M Activities:

Week of Fri 6/2 – Sat 6/6

- Operating on TF Zone 1, 2, and 3 until 6/2
    - Switched to TF Zone 1 on 6/2
- Changed bag filters and cleaned basket strainer on 6/2
- Operating LGAC-1102 on 6/2
- Backwashed carbon on 6/2
- OWS Cleanout/flush line to sewer completed by ACV Environmental Services on 6/2

Week of Sun 6/7 – Sat 6/13

- Operating on TF Zone 1 until 6/9
    - Switched to TF Zone 2 & 3 on 6/9
- Changed bag filters and cleaned basket strainer on 6/9
- Backwash Carbon and Operating active carbon vessel LGAC-1101 on 6/9
- Effluent HL-water alarm/system shutdown; replace bag filters & restart system on 6/9

Week of Sun 6/14 – Sat 6/20

- Operating on TF Zones 2 & 3
- Operating active carbon vessel LGAC-1101 on 6/17
- Changed bag filters and clean strainers on 6/17
- Backwashed carbon on 6/17

Week of Sun 6/21 – Sun 6/27

- Operating on TF Zones 2 & 3
- Backwashed carbon on 6/23
- Operating active carbon vessel LGAC-1101 on 6/23
- Changed bag filters and strainer on 6/23
- Pump backwash holding tank/pump wastewater on 6/23
- Sequesterant R-330 delivered and chemical transfer conducted on 6/23
- T-801 product load-out on 6/23

Prepared By: DAM 3/12/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
June 2020

Week of Sun 6/28 – Tues 6/30

- Operating on TF Zones 2 & 3 until 6/30
    - Switched to TF Zones 3 & 4 on 6/30
- Active vessel LGAC-1102 on 6/30
- Changed bag filters and cleaned basket strainer on 6/30
- Re-pipe inlet strainer to Effluent pump 901 on 6/30

VER/TF System Production Results:

- TF System uptime for June was 656.93 Actual Run Hours out of 687.60 Available Hours, or 95.54%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
    - System shut down on 6/9 via high water level alarm in OWS; restarted same day after changing bag filters and backwashing carbon.
- Approximately 2,145 GAL Product Recovered in June from Zones 2 and 3.
    - Average TF Product recovery rate for June was 71.5 GPD (calendar days), or 78.4 GPD (run days) accounting for system downtime.
- Approximately 332,257 GAL Product Recovered Total since system start-up.
- 4,856 GAL Product from T-801 disposed of offsite in June.
    - 334,129 GAL Product from T-801 disposed of Total since start-up.
- Approximately 195,666 GAL Effluent discharged in June.
    - Average 6,522 GPD at an avg rate of 7,148 GPD considering downtime.
- 12,445,263 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.10%

Skimmer System Production Results:

- Skimmer System uptime for June was 240 Actual Run Hours out of 240 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 1,151 GAL Product Recovered in June.
    - Average Skimmer Product recovery rate for June was 38.4 GPD (calendar days), or 38.4 GPD (run days) accounting for system downtime.
- Approximately 108,402 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in June.
    - 102,484 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 3,297 GAL Product recovered in June.
    - Average Product recovery rate for June was 109.9 GPD.
- 440,659 GAL Product Recovered Total since system start-up.
- 4,856 GAL Product shipped off-site for disposal in June (see attached summary table).
- 436,613 GAL Product shipped off-site for disposal since system start-up as of the end of June 2020 (see attached summary table).

Prepared By: DAM 3/12/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
July 2020

Work completed in July 2020:

Week of Sun 7/4 – Sat 7/10

- O&M site visit on 7/7
- Pipe change-out to suction line effluent/discharge effluent on 7/7

Week of Sun 7/11 – Sat 7/17

- O&M site visit on 7/14

Week of Sun 7/18 – Sat 7/24

- Load-out by ACV Environmental Services on 7/21

Week of Sun 7/25 – Fri 7/31

- O&M site visits on 7/28

O&M Activities:

Week of Sun 7/4 – Sat 7/10

- Operating on TF Zones 3 & 4 on 7/7
- Changed bag filters and cleaned strainers on 7/7
- Operating active carbon vessel LGAC-1102 on 7/7
- Backwashed carbon on 7/7
- Change-out pipes for Effluent, Suction, and Discharge lines on 7/7
- Collection of TF 3 and 4 Samples on 7/7

Week of Sun 7/11 – Sat 7/17

- Operating on TF Zones 3 & 4 on 7/14
- Changed bag filters and cleaned strainers on 7/14
- Operating active carbon vessel LGAC-1102 on 7/14
- Backwash carbon on 7/14
- Collect samples from TF 3 and 4 on 7/14

Week of Sun 7/18 – Sat 7/24

- Removed Non-DOT PCB by ACV Environmental Services on 7/21 TF Zones 2 & 3

Week of Sun 7/25 – Fri 7/31

- Operating on TF Zone 3 &4 until 7/28
    - Switched to TF Zone 4 & 5 on 7/28
- Backwashed carbon and cleaned strainers on 7/28
- Operating active carbon vessel LGAC-1102 on 7/28
- Changed bag filters and flush water line to city on 7/28
- Sequesterant R-330 delivered and chemical transfer conducted on 7/28
- Samples collected from TF 4 and 5 on 7/28.

VER/TF System Production Results:

- TF System uptime for July was 566.04 Actual Run Hours out of 662.79 Available Hours, or 85.40%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).

Prepared By: DAM 3/15/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
July 2020

- Approximately 3,973 GAL Product Recovered in July from Zones 3 and 4.
    - Average TF Product recovery rate for July was 128.2 GPD (calendar days), or 168.4 GPD (run days) accounting for system downtime.
- Approximately 336,230 GAL Product Recovered Total since system start-up.
- 0 GAL Product from T-801 disposed of offsite in July.
    - 334,129 GAL Product from T-801 disposed of Total since start-up.
- Approximately 223,303 GAL Effluent discharged in July.
    - Average 7,203 GPD at an avg rate of 9,468 GPD considering downtime.
- 12,668,566 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.78%

Skimmer System Production Results:

- Skimmer System uptime for July was 248 Actual Run Hours out of 248 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 652 GAL Product Recovered in July.
    - Average Skimmer Product recovery rate for July was 21.0 GPD (calendar days), or 21.0 GPD (run days) accounting for system downtime.
- Approximately 109,054 GAL Product Recovered Total since start-up.
- 4,796 GAL Product from T-1401 disposed of offsite in July.
    - 107,280 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 4,624 GAL Product recovered in July.
    - Average Product recovery rate for July was 149.2 GPD.
- 445,284 GAL Product Recovered Total since system start-up.
- 4,796 GAL Product shipped off-site for disposal in July (see attached summary table).
- 441,409 GAL Product shipped off-site for disposal since system start-up as of the end of July 2020 (see attached summary table).

Prepared By: DAM 3/15/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
August 2020

Work completed in August 2020:

Week of Sun 8/2 – Sat 8/8

- Load-out by ACV Environmental Services on 8/5
- Carbon Filtration Systems, Inc. – remove and replace GAC on 8/7

Week of Sun 8/9 – Sat 8/15

- O&M site visit on 8/11
- Load-out by ACV Environmental Services on 8/11

Week of Sun 8/16 – Sat 8/22

- Load-out by ACV Environmental Services on 8/21

Week of Sun 8/23 – Sat 8/29

- O&M site visits on 8/28

O&M Activities:

Week of Sun 8/9 – Sat 8/15

- Operating on TF Zone 4 & 5 until 7/28
    - Switched to TF Zone 5 on 8/11
- OWS Cleanout on 8/11
- Changed bag filters and cleaned strainers on 8/11
- Operating active carbon vessel LGAC-1102 and LGAC-1102 on 8/11
- Backwash carbon on 8/11
- Collect samples from TF 5 on 8/11

Week of Sun 8/16 – Sat 8/22

- Changed bag filters and cleaned strainers on 8/18
- Backwash carbon on 8/18
- Pump backwash holding tank on 8/18
- Change product pump; re-pipe; install/replace drain hoes from skimmer system and tube skimmer timer; check flow meter on 8/18 and 8/19
- Extinguish fire on 8/19

Week of Sun 8/23 – Sat 8/29

- Operating on TF Zone 4 & 5 until 8/25
    - Switched to TF Zones 1 - 5 on 8/25
- Backwashed carbon and cleaned strainers on 8/25
- Operating active carbon vessel LGAC-1101 on 8/25
- Changed bag filters on 8/25
- Skimmer well maintenance on 8/25

VER/TF System Production Results:

- TF System uptime for August was 508.84 Actual Run Hours out of 557.13 Available Hours, or 91.33%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).

Prepared By: DAM 3/15/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
August 2020

- Approximately 2,561 GAL Product Recovered in August from Zones 4 and 5.
    - Average TF Product recovery rate for August was 82.6GPD (calendar days), or 120.8 GPD (run days) accounting for system downtime.
- Approximately 338,791 GAL Product Recovered Total since system start-up.
- 4,775 GAL Product from T-801 disposed of offsite in August.
    - 338,904 GAL Product from T-801 disposed of Total since start-up.
- Approximately 146,665 GAL Effluent discharged in August.
    - Average 4,731 GPD at an avg rate of 6,918 GPD considering downtime.
- 12,815,231 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.75%

Skimmer System Production Results:

- Skimmer System uptime for August was 248 Actual Run Hours out of 248 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 1,057 GAL Product Recovered in August.
    - Average Skimmer Product recovery rate for August was 34.1 GPD (calendar days), or 34.1 GPD (run days) accounting for system downtime.
- Approximately 110,111 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in August.
    - 107,280 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 3,618 GAL Product recovered in August.
    - Average Product recovery rate for August was 116.7 GPD.
- 448,902 GAL Product Recovered Total since system start-up.
- 4,775 GAL Product shipped off-site for disposal in August (see attached summary table).
- 446,184 GAL Product shipped off-site for disposal since system start-up as of the end of August 2020 (see attached summary table).

Prepared By: DAM 3/15/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
September 2020

Work completed in September 2020:

Week of Tues 9/1 – Sat 9/5

- TF-2 line has no flow as of 8/28; checked equipment on 9/2

Week of Sun 9/6 – Sat 9/12

- O&M site visit on 9/8
- Quarterly PCB Sampling of T-801 and T-1301 on 9/10

Week of Sun 9/13 – Sat 9/19

- O&M site visit on 9/14
- Repair LC-K hoses and change bag filters on 9/17

Week of Sun 9/20 – Sat 9/26

- Reset system; reprime effluent pump and clean basket strainers on 9/21
- O&M site visits on 9/22

Week of Sun 9/27 – Wed 9/30

- O&M site visits on 9/29

O&M Activities:

Week of Tues 9/1 – Sat 9/5

- Operating on TF Zones 1 - 5 on 8/25
    - TF Zone 2 down on 8/28 through 9/2
    - Operating TF Zones 1, 3, 4, & 5 on 9/2
- Check TF Zone 2 line on 9/2

Week of Sun 9/6 – Sat 9/12

- Changed bag filters and cleaned strainers on 9/8
- Backwash carbon (both LGAC-1101 and LGAC-1102) on 9/8
- Check TF Zone 2 line on 9/8
- Quarterly Sampling T-801 and T-1301/PCB Sampling on 9/10

Week of Sun 9/13 – Sat 9/19

- Backwashed carbon (LGAC-1101) and cleaned strainers on 9/14
- Operating active carbon vessel LGAC-1101 on 9/14
- Changed bag filters on 9/14
- Backwashed carbon (LGAC-1102) and cleaned strainers on 9/15
- Repair LC-K hoses and change bag filters on 9/17
- Resample on 9/17

Week of Sun 9/20 – Sat 9/26

- Reset System; reprime effluent pump and clean strainers on 9/21
- Changed bag filters and cleaned strainers on 9/22
- Operating TF Zones 1, 3, 4, & 5 on 9/2
    - Switched from LGAC-1102 to LGAC-1102 on 9/22
- Backwash carbon (both LGAC-1101 and LGAC-1102) on 9/8

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
September 2020

Week of Sun 9/27 – Wed 9/30

- Backwashed carbon and cleaned strainers on 9/29
- Changed bag filters on 9/29

VER/TF System Production Results:

- TF System uptime for September was 550.15 Actual Run Hours out of 642.94 Available Hours, or 85.57%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
- Approximately 2,323 GAL Product Recovered in September from Zones 1, 3, 4 and 5.
    - Average TF Product recovery rate for September was 77.4 GPD (calendar days), or 101.3 GPD (run days) accounting for system downtime.
- Approximately 341,114 GAL Product Recovered Total since system start-up.
- 0 GAL Product from T-801 disposed of offsite in September.
    - 338,904 GAL Product from T-801 disposed of Total since start-up.
- Approximately 184,836 GAL Effluent discharged in September.
    - Average 6,161.2 GPD at an avg rate of 8,063.4 GPD considering downtime.
- 13,000,066 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.26%

Skimmer System Production Results:

- Skimmer System uptime for September was 168 Actual Run Hours out of 240 Available Hours, or 70%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 3,111 GAL Product Recovered in September.
    - Average Skimmer Product recovery rate for September was 103.7 GPD (calendar days), or 148.1 GPD (run days) accounting for system downtime.
- Approximately 113,222 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in September.
    - 107,280 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 5,434 GAL Product recovered in September.
    - Average Product recovery rate for September was 181.1 GPD.
- 454,336 GAL Product Recovered Total since system start-up.
- 0 GAL Product shipped off-site for disposal in September (see attached summary table).
- 446,184 GAL Product shipped off-site for disposal since system start-up as of the end of September 2020 (see attached summary table).

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
October 2020

Work completed in October 2020:

Week of Sun 10/4 – Sat 10/10

- O&M site visit on 10/6
- Removed Non-DOT PCB by ACV Environmental Services on 10/8 TF Zones 1, 3, 4, & 5

Week of Sun 10/11 – Sat 10/17

- O&M site visit on 10/13
- Removed Non-DOT PCB by ACV Environmental Services on 10/13 TF Zones 1, 3, 4, 5, & 6

Week of Sun 10/18 – Sat 10/24

- O&M site visit on 10/20

O&M Activities:

Week of Sun 10/4 – Sat 10/10

- Operating TF Zones 1, 3, 4, & 5 on 9/2
    - Switched to TF Zones 1, 3, 4, 5, & 6 on 10/6
- Cleaned strainers on 10/6
- Change oil regulators in TF-2A on 10/6
- Pump water from 801 and 1401 on 10/6
- Product load-out from T-801 on 10/8

Week of Sun 10/11 – Sat 10/17

- Changed bag filters and cleaned strainers on 10/13
- Backwash carbon (LGAC-1102) on 10/13
- Product load-out from T-1401 on 10/13
- Maintenance of AC 1501 on 10/13

Week of Sun 10/18 – Sat 10/24

- Changed bag filters and cleaned strainers on 10/20
- Backwash carbon on 10/20

Week of Sun 10/25 – Sat 10/30

- Changed bag filters and cleaned strainers on 10/26
- Backwash carbon on 10/26
- Reset S4-D at 12 on 10/26
- Drain carbon LGAC 1101 on 10/29

VER/TF System Production Results:

- TF System uptime for October was 496.73 Actual Run Hours out of 662.26 Available Hours, or 75.01%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
- Approximately 2,696 GAL Product Recovered in October from Zones 1, 3, 4 and 5.
    - Average TF Product recovery rate for October was 87.0 GPD (calendar days), or 130.3 GPD (run days) accounting for system downtime.
- Approximately 343,810 GAL Product Recovered Total since system start-up.
- 4,950 GAL Product from T-801 disposed of offsite in October.
    - 343,854 GAL Product from T-801 disposed of Total since start-up.

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
October 2020

- Approximately 177,220 GAL Effluent discharged in October.
    - Average 5,716.8 GPD at an avg rate of 8,562.6 GPD considering downtime.
- 13,177,286 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.52%

Skimmer System Production Results:

- Skimmer System uptime for October was 248 Actual Run Hours out of 248 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 2,072 GAL Product Recovered in October.
    - Average Skimmer Product recovery rate for October was 66.8 GPD (calendar days), or 66.8 GPD (run days) accounting for system downtime.
- Approximately 115,293 GAL Product Recovered Total since start-up.
- 4,927 GAL Product from T-1401 disposed of offsite in October.
    - 112,207 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 4,767 GAL Product recovered in October.
    - Average Product recovery rate for October was 153.8 GPD.
- 459,103 GAL Product Recovered Total since system start-up.
- 9,877 GAL Product shipped off-site for disposal in October (see attached summary table).
- 456,061 GAL Product shipped off-site for disposal since system start-up as of the end of October 2020 (see attached summary table).

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
November 2020

Work completed in November 2020:

Week of Sun 11/1 – Sat 11/7

- Restart System
- O&M site visit on 11/3
- Removed Non-DOT PCB by ACV Environmental Services on 11/3 TF Zones 1, 3, 4, 5, & 6

Week of Sun 11/8 – Sat 11/14

- Carbon change-out on 11/10
- OWS cleanout on 11/11
- Removed Non-DOT PCB by ACV Environmental Services on 11/11 TF Zones 1, 3, 4, 5, & 6

Week of Sun 11/15 – Sat 11/21

- Repairs to System on 11/16
- Repairs to System and restart system on 11/17

Week of Sun 11/22 – Sat 11/28

- O&M site visit on 11/23
- Discharge compliance sampling on 11/23
- O&M site visit on 11/24

O&M Activities:

Week of Sun 11/1 – Sat 11/7

- Restart system on 11/2
- Backwash Carbon on 11/2
- Complete blowdown of LGAC-1101
- Operating TF Zones 1, 3, 4, 5, & 6 on 10/6
- Change bag filters and cleaned strainers on 11/3
- Backwash Carbon on 11/3
- Removed Non-DOT PCB by ACV Environmental Services on 11/3 TF Zones 1, 3, 4, 5, & 6

Week of Sun 11/8 – Sat 11/14

- Blowdown of LGAC-1102 on 11/9
- Carbon change-out on 11/10
- OWS cleanout on 11/11
- Removed Non-DOT PCB by ACV Environmental Services on 11/11 TF Zones 1, 3, 4, 5, & 6

Week of Sun 11/15 – Sat 11/21

- Repairs to System on 11/16
- Repairs to System and restart system on 11/17

Week of Sun 11/22 – Sat 11/28

- Change bag filters and cleaned strainers on 11/23
- Backwash Carbon on 11/23
- Influent check on 11/23
- Discharge Compliance sampling on 11/23
- Change bag filters and cleaned strainers on 11/24
- Backwash Carbon on 11/24
- Paint floor in OWS on 11/24

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
November 2020

VER/TF System Production Results:

- TF System uptime for November was 301.55 Actual Run Hours out of 359.60 Available Hours, or 83.86%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
- Approximately 1,559 GAL Product Recovered in November from Zones 1, 3, 4 and 5.
    - Average TF Product recovery rate for November was 52.0 GPD (calendar days), or 124.1 GPD (run days) accounting for system downtime.
- Approximately 345,369 GAL Product Recovered Total since system start-up.
- 0 GAL Product from T-801 disposed of offsite in November.
    - 343,854 GAL Product from T-801 disposed of Total since start-up.
- Approximately 95,931 GAL Effluent discharged in November.
    - Average 3,197.7 GPD at an avg rate of 7,635.1 GPD considering downtime.
- 13,273,218 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.63%

Skimmer System Production Results:

- Skimmer System uptime for November was 240 Actual Run Hours out of 240 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 973 GAL Product Recovered in November.
    - Average Skimmer Product recovery rate for November was 32.4 GPD (calendar days), or 32.4 GPD (run days) accounting for system downtime.
- Approximately 116,266 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in November.
    - 112,207 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 2,532 GAL Product recovered in November.
    - Average Product recovery rate for November was 84.4 GPD.
- 461,635 GAL Product Recovered Total since system start-up.
- 0 GAL Product shipped off-site for disposal in November (see attached summary table).
- 456,061 GAL Product shipped off-site for disposal since system start-up as of the end of November 2020 (see attached summary table).

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
December 2020

Work completed in December 2020:

Week of Tues 12/1 – Sat 12/5

- Sampling on 12/1
- O&M on 12/2

Week of Sun 12/6 – Sat 12/12

- Rebuild Transfer Pump on 12/7
- Tap plugs for Vac Test on 12/7

Week of Sun 12/27 – Thurs 12/31

- Replace GFCI and rewire for VFD on 12/29
- Repair frozen Transfer Pump on 12/29
- Remove water from T-801 and T-1401 on 12/29

O&M Activities:

Week of Tues 12/1 – Sat 12/5

- Sampling on 12/1
- Change bag filters and cleaned strainers on 12/2
- Backwash Carbon on 12/2

Week of Sun 12/6 – Sat 12/12

- Rebuild Transfer Pump on 12/7
- Tap plugs for Vac Test on 12/7

Week of Sun 12/27 – Thurs 12/31

- Replace GFCI and rewire for VFD on 12/29
- Repair frozen Transfer Pump on 12/29

VER/TF System Production Results:

- TF System uptime for December was 147.08 Actual Run Hours out of 151.89 Available Hours, or 96.83%
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
    - Down time for planned vacuum testing.
- Approximately 795 GAL Product Recovered in December from Zones 1, 3, 4, 5 and 6.
    - Average TF Product recovery rate for December was 25.6 GPD (calendar days), or 129.7 GPD (run days) accounting for system downtime.
- Approximately 346,164 GAL Product Recovered Total since system start-up.
- 0 GAL Product from T-801 disposed of offsite in December.
    - 343,854 GAL Product from T-801 disposed of Total since start-up.
- Approximately 45,159 GAL Effluent discharged in December.
    - Average 1,456.7 GPD at an avg rate of 7,368.8 GPD considering downtime.
- 13,318,376 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.76%

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
December 2020

Skimmer System Production Results:

- Skimmer System uptime for December was 48 Actual Run Hours out of 48 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 14 GAL Product Recovered in December.
    - Average Skimmer Product recovery rate for December was 0.5 GPD (calendar days), or 2.4 GPD (run days) accounting for system downtime.
- Approximately 116,281 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in December.
    - 112,207 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 809 GAL Product recovered in December.
    - Average Product recovery rate for December was 26.1 GPD.
- 462,445 GAL Product Recovered Total since system start-up.
- 0 GAL Product shipped off-site for disposal in December (see attached summary table).
- 456,061 GAL Product shipped off-site for disposal since system start-up as of the end of December 2020 (see attached summary table).

Prepared By: DAM 3/16/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
January 2021

Work completed in January 2021:

Week of Sun 1/3 – Sat 1/9

- Change Product Pump on 1/5
- O&M site visit on 1/6
    - System on LGAC

Week of Sun 1/10 – Sat 1/16

- Repair effluent line from Carbon and repair belt to Skimmer System on 1/11
- Complete Discharge Sampling on 1/11
- O&M site visit on 1/12

Week of Sun 1/17 – Sat 1/23

- O&M site visit on 1/19
- TF Pump cleaning on 1/19
- Pump water from tanks, T-801 and T-1401 on 1/19

Week of Sun 1/24 – Sat 1/30

- Removed Non-DOT PCB by ACV Environmental Services on 1/26

O&M Activities:

Week of Sun 1/3 – Sat 1/9

- Change Product Pump on 1/5
- Strainers cleaned on 1/6
- Remove water from T-1401 on 1/6
-

Week of Sun 1/10 – Sat 1/16

- Repair effluent line from Carbon on 1/11
- Repair/replace belt to Skimmer System on 1/11
- Complete Discharge Sampling on 1/11
- Switch to and Carbon backwash LGAC-1102 on 1/12
- Change bag filters and cleaned strainers on 1/12

Week of Sun 1/17 – Sat 1/23

- TF Pump cleaning on 1/19
- Pump water from tanks, T-801 and T-1401 on 1/19

VER/TF System Production Results:

- TF System uptime for January was 542.18 Actual Run Hours out of 613.04 Available Hours, or 88.44 %
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
- Approximately 2,208 GAL Product Recovered in January from Zones 1, 3, 4, 5 and 6.
    - Average TF Product recovery rate for January was 71.2 GPD (calendar days), or 97.7 GPD (run days) accounting for system downtime.
- Approximately 348,372 GAL Product Recovered Total since system start-up.

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Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
January 2021

- 5,083 GAL Product from T-801 disposed of offsite in January.
    - 348,937 GAL Product from T-801 disposed of Total since start-up.
- Approximately 182,398 GAL Effluent discharged in January.
    - Average 5,883.8 GPD at an avg rate of 8,074.0 GPD considering downtime.
- 13,500,774 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 1.21 %

Skimmer System Production Results:

- Skimmer System uptime for January was 210 Actual Run Hours out of 210 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 741 GAL Product Recovered in January.
    - Average Skimmer Product recovery rate for January was 23.9 GPD (calendar days), or 28.2 GPD (run days) accounting for system downtime.
- Approximately 117,022 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in January.
    - 112,207 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 2,949 GAL Product recovered in January.
    - Average Product recovery rate for January was 95.1 GPD.
- 465,393 GAL Product Recovered Total since system start-up.
- 5,083 GAL Product shipped off-site for disposal in January (see attached summary table).
- 461,144 GAL Product shipped off-site for disposal since system start-up as of the end of January 2021 (see attached summary table).

Prepared By: DAM 3/17/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
February 2021

Work completed in February 2021:

Week of Sun 2/1 – Sat 2/6

- O&M site visit on 2/4

Week of Sun 2/7 – Sat 2/13

- O&M site visit on 2/9
- Maintenance/repair overheated compressor on 2/9

Week of Sun 2/21 – Sat 2/27

- O&M site visit on 2/23
- TF Line 4 – issues turn line off on 2/23

O&M Activities:

Week of Sun 2/1 – Sat 2/6

- Change bag filters and cleaned strainers on 2/4
- No backwash of carbon/hydrant frozen on 2/4
- Operating TF Zones 1, 3, 4, 5, & 6 from 10/6

Week of Sun 2/7 – Sat 2/13

- Maintenance/repair overheated compressor on 2/9
- Collect Samples from TF-1, 3, 4, 5, & 6 on 2/9
- Backwash carbon LGAC-1102 on 2/9
- Change bag filters and cleaned strainers on 2/9
- Maintenance/repair overheated compressor on 2/9

Week of Sun 2/21 – Sat 2/27

- Operating TF Zones 1, 3, 4, 5, & 6 from 10/6
    - Switched to TF Zones 1, 3, 5, & 6 on 2/23
- Backwash carbon LGAC-1102 on 2/23
- Change bag filters and cleaned strainers on 2/23
- Maintenance/repair overheated compressor on 2/23
- Collect Samples from TF-1, 3, 4, 5, & 6 on 2/23

VER/TF System Production Results:

- TF System uptime for February was 368.10 Actual Run Hours out of 659.36 Available Hours, or 55.83 %
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
    - Downtime due to OWS system off (compressor issues/solenoid issues and O&M – clogged strainers).
- Approximately 1,090 GAL Product Recovered in February from Zones 1, 3, 4, 5 and 6.
    - Average TF Product recovery rate for February was 38.9 GPD (calendar days), or 71.7 GPD (run days) accounting for system downtime.
- Approximately 349,462 GAL Product Recovered Total since system start-up.
- 0 GAL Product from T-801 disposed of offsite in February.
    - 348,937 GAL Product from T-801 disposed of Total since start-up.
- Approximately 117,596 GAL Effluent discharged in February.
    - Average 4,199.9 GPD at an avg rate of 7,667.2 GPD considering downtime.

Prepared By: DAM 3/17/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
February 2021

- 13,618,370 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 0.93%

Skimmer System Production Results:

- Skimmer System uptime for February was 224 Actual Run Hours out of 224 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
    - OWS was off due to compressor issues.
- Approximately 347 GAL Product Recovered in February.
    - Average Skimmer Product recovery rate for February was 12.4 GPD (calendar days), or 12.4 GPD (run days) accounting for system downtime.
- Approximately 117,368 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in February.
    - 112,207 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 1,437 GAL Product recovered in February.
    - Average Product recovery rate for February was 51.3 GPD.
- 466,830 GAL Product Recovered Total since system start-up.
- 0 GAL Product shipped off-site for disposal in February (see attached summary table).
- 461,144 GAL Product shipped off-site for disposal since system start-up as of the end of February 2021 (see attached summary table).

Prepared By: DAM 3/17/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
March 2021

Work completed in March 2021:

Week of Sun 3/4 – Sat 3/10

- O&M site visit on 3/9
- Replace TF – Zone 5 – Replace Pump at 5D on 3/9

Week of Sun 3/14 – Sat 3/20

- O&M site visit on 3/17

Week of Sun 3/21 – Sat 3/27

- O&M site visit on 3/23

O&M Activities:

Week of Sun 3/4 – Sat 3/10

- Change bag filters and cleaned strainers on 3/9
- Backwash of carbon LGAC-1102 on 3/9
- Operating TF Zone 5 – collect samples from TF-5

Week of Sun 3/11 – Sat 3/17

- Backwash carbon LGAC-1102 on 3/17
- Change bag filters and cleaned strainers on 3/17
- Clean TF Pumps on 3/17

Week of Sun 3/21 – Sat 3/27

- Operating TF Zone 5
- Backwash carbon LGAC-1102 on 3/23
- Change bag filters and cleaned strainers on 3/23

VER/TF System Production Results:

- TF System uptime for March was 614.5 Actual Run Hours out of 564.64 Available Hours, or 91.94 %
    - Available Hours = Scheduled Daily Operating Hours – scheduled maintenance time – product removal time – force majeure time (power outage, weather, etc.).
    - Pump replacement on TF-Zone 5.
- Approximately 1,008 GAL Product Recovered in March from Zone 5.
    - Average TF Product recovery rate for March was 32.5 GPD (calendar days), or 42.8 GPD (run days) accounting for system downtime.
- Approximately 350,470 GAL Product Recovered Total since system start-up.
- 0 GAL Product from T-801 disposed of offsite in March.
    - 348,937 GAL Product from T-801 disposed of Total since start-up.
- Approximately 120,496 GAL Effluent discharged in March.
    - Average 3,887.0 GPD at an avg rate of 5,121.7GPD considering downtime.
- 13,738,866 GAL Effluent discharged Total since start-up.
- Recovered Oil/Extracted Groundwater Ratio = 0.84%

Prepared By: DAM 4/12/21
Checked By: TCK

Review Ave. LNAPL Recovery System Monthly Summary
March 2021

Skimmer System Production Results:

- Skimmer System uptime for March was 248 Actual Run Hours out of 248 Available Hours, or 100%
    - Skimmer system running @ 8 hrs/day schedule (7AM – 3PM)
- Approximately 704 GAL Product Recovered in March.
    - Average Skimmer Product recovery rate for March was 22.7 GPD (calendar days), or 22.7 GPD (run days) accounting for system downtime.
- Approximately 118,073 GAL Product Recovered Total since start-up.
- 0 GAL Product from T-1401 disposed of offsite in March.
    - 112,207 GAL Product from T-1401 disposed of Total since start-up.

Total Product Recovery System Results:

- 1,712 GAL Product recovered in March.
    - Average Product recovery rate for March was 55.2 GPD.
- 468,542 GAL Product Recovered Total since system start-up.
- 0 GAL Product shipped off-site for disposal in March (see attached summary table).
- 461,144 GAL Product shipped off-site for disposal since system start-up as of the end of March 2021 (see attached summary table).

Prepared By: DAM 4/12/21
Checked By: TCK

APPENDIX B

Annual Inspection Report

Site Inspection Form – RAD II – Annual

I. Site Information		
Site Name:	Review Avenue Development Site II (RAD II)	
NYSDEC Site Number:	BCP #C241005	
Site Address:	37-80 Review Avenue, Long Island City, NY	
Block/Lot:	Block 312; Lot 69	
Date of Inspection:	12/21/20	
Type of Inspection:	Regular ☒	Emergency ☐
Inspected By:	Brent O'Dell	

II. General Information	
Current Site Use: (Warehouse, Parking Lot, Vacant, etc.):	Commercial
Summary of Previous Inspections: See Attached.	
Damaged treatment compound area fence identified in prior inspection repaired and now protected by concrete barrier. Fencing in west side of treatment compound needs to be repaired or even replaced. Fence between treatment compound and Phoenix Beverage degrading and has had minor repairs completed, however, will need continual repairs going forward if not replaced.	

III. Weather Conditions			
Time	**Temperature**	**Condition (Sunny, Overcast, Precipitation, etc.)**	**Wind (Light, Moderate, Heavy, etc.)**
0910	30s	Partly Cloudy, snow on ground	Light wind

IV. On-Site Documents & Records (Stored at RAD II)				
Description	**Readily available**	**Up to date**	**N/A**	**Remarks**
O&M Documents:				
O&M Manual	X	yes		
As-built drawings	X	yes		
Maintenance logs	X	yes		
Site Health & Safety Plan:				
Contingency Plan/Emergency response plan	X	yes		
O&M and OSHA Training Records:				
O&M and OSHA Training Records	X	yes		
Permits and Service Agreements:				
NYSDEC Air Permit Exemption	X	yes		
NYSDEC Petroleum Bulk Storage Certification	X	yes		
NYSDEC Erosion and Sediment Control Exemption		yes		
NYSDEC Tidal Wetlands Jurisdiction Determination Letter	X	yes		
NYCDEP Groundwater Discharge LOA		yes		Being renewed
NYCDEP Air Permit Informational Notice	X	yes		
NYCDEP Dewatering Scheme and Indemnity Agreement		yes		Being renewed
NYCDEP Bureau of Customer Service Groundwater Discharge Permit		yes		Being renewed
NYCDOB Certificates of Occupancy	X	yes		
Other:				

V. Site Conditions					
Description		**Inspected**			**Comments, Field Observations and Measurements (Dimensions and Depth of Disturbance of Cap), Reference Photo #**
		Yes	**No**	**N/A**	
Engineering Control: Pavement Cover System					
a.	Asphalt Condition (Check for cracking, spalling, and potholes)	X			Good in treatment area Pavement showing areas of distress and cracking. Suggest crack sealing be conducted.

b.	Differential Settlement (Check for settlement or subsidence)	X			None Observed
c.	Disturbance (Check for disturbance e.g. construction or utility repair, etc.)	X			None Observed
Engineering Control: LNAPL Recovery System					
a.	Recovery Well Vaults and Pumps (Check for leaks, operation, vault security, etc.)	X			Check list and photo's on file
b.	LNAPL Storage Tanks (Check capacity, inspect for leaks, corrosion, etc.)	X			In serviceable condition. Sings of corrosion on exterior containment.
c.	LNAPL Recovery / Groundwater Treatment System (Check for operation, leaks, up-to-date maintenance, etc.)	X			Weekly visits. System not running at time of inspections. But no reported incidents.
d.	Equipment Enclosures (Check emergency lights, signs, fire extinguishers, eyewash, condition of doors/exterior, etc.)	X			All in place and serviceable condition.
	Treatment Enclosures • Fence between RAD II and phoenix in the back still needs repair. Several posts are snapped off, and can be removed with some effort.				
Other:					
a.	Monitoring Wells (Check if secured, inspect condition of well, well cap, etc.)	X			In good condition.
b.	Security (Check fence, gates, locks, etc.)	X			Ok, however, fence between RAD II and phoenix in the back needs repair Fence on west side of treatment compound must be repaired or replaced.

c.	Site Use (Has site use changed? If so, is it still used for restricted use as specified in the SMP?)	X			Same.

VI. Institutional Controls

Status of Institutional Controls:

Description	Yes	No	N/A	Remarks
Site conditions imply Institutional Controls not properly implemented		X		
Site conditions imply Institutional Controls not being fully enforced		X		
Permits and records are onsite and up-to-date	X			
Violations (if any) have been reported			X	
Previous suggested correction(s) have been made	X			.

Other problems or suggestions:

Signs of wear on pavement, cracks have formed in the cap main area. Do not go completely thru but should be sealed.

VII. Groundwater and LNAPL Elevations

Monthly LNAPL Thickness Measurements:

Well ID Location	Date	Time	Depth from TOC to			Measured by:	Remarks: Calibration data found on Instrument Calibration Record
			Product (ft)	Water (ft)	Bottom (ft)		
AML-01							
AML-03							
AML-06							
GAL-01RR							
GAL-02R							
GAL-03R							
GAL-04R							
GAL-05R							
GAL-06							
GAL-07							

GAL-08							
GAL-09							
GAL-16R							
GAL-29							
GAL-30							
GAL-31R							
GAGW-04							

Semi-Annual Groundwater Elevation Measurements:

Well ID Location	Date	Time	Depth from TOC to		Measured by:	Sampled? (Y/N)	Remarks: Calibration data found on Instrument Calibration Record
			Water (ft)	Bottom (ft)			
GAGW-02							
GAGW-02							
GAGW-04D							
GAGW-04D							
GAGW-05R							
GAGW-05R							
GAGW-6I							
GAGW-6I							
GAGW-08R							
GAGW-08R							
AMGW-10D							
AMGW-10D							

Semi-Annual LNAPL Thickness Measurements (12 TF LNAPL Recovery Wells from RAD I & RAD II):

Well ID Location	Date	Time	Depth from TOC to			Measured by:	Remarks: Calibration data found on Instrument Calibration Record
			Product (ft)	Water (ft)	Bottom (ft)		
TF3A							
TF3B							
TF3C							
TF3D							
TF4A							
TF4B							
TF4C							
TF4D							
TF5A							
TF5B							
TF5C							
TF5D							

IX. Overall Observations on Remedy Implementation & Site Conditions

Fence between RAD II and phoenix in the back needs repair. Fence along west side of treatment compound needs to be repaired or replaced. Recommend crack sealing in some areas of the site where cracks have started to appear.

Photo 1. West side of treatment Compound

Photo 2. Wast Oil Storage Tanks

Photo 3. Treatment Sea Boxes

Photo 4. Damaged Gate Main Entrance RAD II

Photo 5. Pavement Cracking RAD II

Inspection Date: 12/21/20

Photo 6. RAD II Pavement

Photo 7. Fence Between Phoenix and RAD II

Photo 8. Fence Along Phoenix Adjacent RAD II

Inspection Date: 12/21/20

Review Avenue LNAPL Recovery System
Well Gauging Data - April 2020 Through March 2021

Well ID	8/11/2020			9/1/2020			9/28/2020			10/30/2020			11/21/2020			12/23/2020	
	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water
										Dan Sanchez			Dan Sanchez				
AML-01	12.39	15.75	3.36	Inaccessible	Inaccessible		12.5	16.9	4.40	12.69	15.54	2.85	12.90	14.21	1.31	Inaccessible	Inaccessible
AML-04	16.88	18.95	2.07	17.14	19.28	2.14	17.07	18.32	1.25	17.25	19.13	1.88	Inaccessible	Inaccessible		17.24	18.31
GAL-10	20.06	21.95	1.89	20.68	21.70	1.02	20.27	21.15	0.88	20.48	21.62	1.14	20.49	21.88	1.39	20.37	21.07
GAL-11R	14.98	19.37	4.39	15.32	18.22	2.55	15.10	17.5	2.40	Inaccessible	Inaccessible		15.42	17.88	2.46	Inaccessible	Inaccessible
GAL-13	14.72	16.69	1.97	15.1	17	1.90	14.85	16.4	1.55	15.11	16.90	1.79	15.14	16.93	1.79	15.00	16.48
GAL-18R	18.18	19.9	1.72	Inaccessible	Inaccessible		18.45	16.4	-2.05	18.57	20.21	1.64	18.60	20.32	1.72	18.50	19.72
GAL-21	Inaccessible	Inaccessible		14.71	17.92	3.21	14.55	17.85	3.30	14.60	17.80	3.20	Inaccessible	Inaccessible		Inaccessible	Inaccessible
GAL-22	17.96	19.40	1.44	18.42	20.06	1.64	18.15	19.28	1.13	18.36	19.70	1.34	18.40	19.69	1.29	18.30	19.03
GAL-23	14.46	16.38	1.92	14.83	17.33	2.50	14.79	17.26	2.47	14.83	17.60	2.77	14.88	16.19	1.31	Inaccessible	Inaccessible
GAL-24	14.82	16.24	1.42	15.06	16.48	1.42	15.06	16.47	1.41	15.17	16.50	1.33	15.21	16.60	1.39	15.11	16.19
MW-4RR	11.00	14.59	3.59	11.31	14.93	3.62	11.32	14.30	2.98	11.30	13.21	1.91	11.60	14.51	2.91	Inaccessible	Inaccessible
GAGW-04	22.22	24.06	1.84	22.53	24.87	2.34	22.59	24.15	1.56	22.68	23.90	1.22	22.80	24.00	1.20	22.71	24.40
AML-02	17.21	19.18	1.97	17.87	20.24	2.37	18.60	20.30	1.70	18.19	20.20	2.01	18.06	20.44	2.38	18.02	20.21
AML-03	15.80	19.31	3.51	18.03	19.35	1.32	16.04	18.90	2.86	16.16	18.56	2.40	16.30	18.95	2.65	16.25	18.60
AML-06	18.60	19.83	1.23	18.00	21.30	3.30	18.35	21.50	3.15	18.45	21.17	2.72	18.52	22.24	3.72	18.51	20.92
GAL-01RR	18.43	21.21	2.78	18.74	28.00	9.26	18.66	21.70	3.04	18.80	21.11	2.31	18.92	21.71	2.79	18.34	21.42
GAL-02R	14.04	17.25	3.21	13.61	17.64	4.03	13.60	17.10	3.50	13.59	14.70	1.11	13.91	16.79	2.88	13.85	18.10
GAL-03R	20.8	22.90	2.10	20.03	23.17	3.14	21.15	22.98	1.83	20.35	23.30	2.95	20.48	23.02	2.54	Inaccessible	Inaccessible
GAL-04R	14.35	16.25	1.90	14.6	17.37	2.77	14.55	17.49	2.94	14.70	17.44	2.74	14.80	17.65	2.85	Inaccessible	Inaccessible
GAL-05R	22.50	24.10	1.60	20.93	23.75	2.82	20.83	23.56	2.73	20.95	23.15	2.20	21.10	23.49	2.39	21.01	23.03
GAL-06	Bottom	Bottom		Dry	Dry		22.05	22.1	0.05	22.00	22.00	0.00	Dry	Dry		Dry	Dry
GAL-07	16.31	18.89	2.58	16.68	19.25	2.57	16.6	19.07	2.47	16.77	19.10	2.33	Inaccessible	Inaccessible		16.82	18.98
GAL-08	16.67	18.30	1.63	16.22	17.35	1.13	17.40	17.59	0.19	16.44	16.60	0.16	13.31	16.50	3.19	Inaccessible	Inaccessible
GAL-09	23.00	24.5	1.50	23.03	25.15	2.12	23.03	24.94	1.91	17.80	17.80	0.00	23.39	25.25	1.86	23.25	25.17
GAL-16R	14.31	17.82	3.51	13.65	17.30	3.65	13.67	17.45	3.78	9.48	16.86	7.38	13.96	17.74	3.78	14.00	16.96
GAL-29	23.10	24.05	0.95	23.10	25.75	2.65	23.19	25.48	2.29	23.28	25.75	2.47	Inaccessible	Inaccessible		Inaccessible	Inaccessible
GAL-30	23.48	24.52	1.04	24.77	26.00	1.23	23.81	26.07	2.26	23.90	25.60	1.70	23.92	23.92	0.00	23.79	25.49
GAL-31	23.10	24.7	1.60	21.57	23.30	1.73	21.20	23.25	2.05	21.50	23.72	2.22	21.56	23.71	2.15	21.47	23.23
VER-2	-	-		-	-		14.35	17.72	3.37	14.35	17.52	3.17	14.50	22.37	7.87	11.11	16.06

Review Avenue LNAPL Recovery System
Well Gauging Data - April 2020 Through March 2021

Well ID		1/21/2021			2/24/2021			3/24/2021		
	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness	Depth to top of product	Depth to top of water	Product Thickness
AML-01		12.78	13.82	1.04	12.45	13.97	1.52	12.56	16.29	3.73
AML-04	1.07	17.16	18.40	1.24	16.97	18.01	1.04	16.97	18.67	1.70
GAL-10	0.70	20.30	21.08	0.78	20.40	21.19	0.79	20.06	21.38	1.32
GAL-11R		15.20	17.52	2.32	14.49	17.02	2.53	15.23	17.94	2.71
GAL-13	1.48	14.50	16.60	2.10	14.85	16.30	1.45	14.97	16.64	1.67
GAL-18R	1.22	18.41	19.80	1.39	Inaccessible	Inaccessible	Inaccessible - Crane re		Inaccessible	
GAL-21		Inaccessible	Inaccessible		Inaccessible	Inaccessible	Inaccessible - Crane P		Inaccessible	
GAL-22	0.73	18.24	18.89	0.65	18.33	19.52	1.19	18.03	19.39	1.36
GAL-23		14.79	17.35	2.56	14.34	16.32	1.98	14.51	16.93	2.42
GAL-24	1.08	15.02	16.44	1.42	Inaccessible	Inaccessible	Inaccessible - Crane Boor		Inaccessible	
MW-4RR		11.30	15.38	4.08	11.96	13.91	1.95	11.24	14.33	3.09
GAGW-04	1.69	22.54	23.94	1.40	22.40	23.44	1.04	22.29	23.66	1.37
AML-02	2.19	17.81	20.07	2.26	17.58	19.80	2.22	17.68	20.43	2.75
AML-03	2.35	16.00	18.32	2.32	15.75	18.25	2.50	15.92	20.01	4.09
AML-06	2.41	18.30	22.21	3.91	Inaccessible	Inaccessible	Inaccessible - Personal		Inaccessible	
GAL-01RR	3.08	18.60	21.11	2.51	18.59	21.15	2.56	18.54	22.64	4.10
GAL-02R	4.25	13.51	18.16	4.65	13.30	15.15	1.85	14.46	20.17	5.71
GAL-03R		Inaccessible	Inaccessible		Inaccessible	Inaccessible		20.03	22.45	2.42
GAL-04R		14.50	16.72	2.22	14.54	16.71	2.17	13.66	16.78	3.12
GAL-05R	2.02	20.80	23.38	2.58	13.35	20.84	7.49	20.64	23.09	2.45
GAL-06		Dry	Dry		16.33	18.45	2.12	Dry	Dry	
GAL-07	2.16	16.49	18.60	2.11	16.26	18.45	2.19	16.43	18.78	2.35
GAL-08		16.38	16.56	0.18	13.75	25.55	11.80	16.43	18.78	2.35
GAL-09	1.92	23.00	24.56	1.56	22.70	25.25	2.55	22.94	24.53	1.59
GAL-16R	2.96	Inaccessible	Inaccessible		13.45	16.71	3.26	13.57	16.91	3.34
GAL-29		23.08	25.20	2.12	22.88	21.60	-1.28	22.95	24.97	2.02
GAL-30	1.70	23.70	25.34	1.64	17.17	17.32	0.15	23.56	25.42	1.86
GAL-31	1.76	21.22	23.05	1.83	16.99	22.63	5.64	21.07	23.20	2.13
VER-2	4.95	14.17	16.80	2.63	14.03	16.45	2.42	14.11	16.86	2.75

APPENDIX C

Discharge Compliance Reports

Wood Environment & Infrastructure Solutions, Inc.
200 American Metro Blvd., Suite 113
Hamilton, NJ 08619
Phone: (609) 689-2829 Fax: (609) 689-2838

LETTER OF TRANSMITTAL

To: Mr. Sean H. Hulbert Assistant Chemical Engineer NYCDEP, Bureau of Wastewater Treatment 96-05 Horace Harding Expressway, 1st Floor Corona, New York 11368 **FROM:** Timothy Kessler	**DATE:** 7/29/20 **PROJECT NO.:** 3480160502 **PROJ. NAME:** Review Avenue LNAPL Recovery System **SUBJECT:** Review Avenue Development Sites 37-30 and 37-80 Review Avenue File # C-5652 2nd Quarter 2020 Effluent Discharge Compliance Report

WE TRANSMIT TO YOU: ☒ HEREWITH ☐ UNDER SEPARATE COVER

SUBJECT:	ACTION:	SENT BY:
☐ DRAWINGS	☐ FOR YOUR INFORMATION	☒ MAIL E-Mail
☐ SPECIFICATIONS	☐ FOR YOUR COMMENT OR APPROVAL	☐ CERTIFIED MAIL
☐ CALCULATIONS	☐ RETURNED FOR CORRECTION: RESUBMIT	☐ EXPRESS
☒ REPORT	☐ APPROVED AS NOTED	☐ COURIER
☐ COST ESTIMATE	☐ AS REQUESTED	☐ HAND DELIVERED
☐ CD	☐ PAYMENT FEE ENCLOSED	☐ FACSIMILE:

# of pages (including transmittal sheet)____

COPIES	DATE	DESCRIPTION
1	7/7/20	Compliance Monitoring Report for 2nd Quarter 2020

REMARKS: This report has been revised to include the result for Carbon Tetrachloride. Table 1 has been revised as well as the corrected laboratory report package. de maximis, Inc. will forward report to NYSDEC.

CC: Craig Coslett, de maximis, Inc.

By: Tim Kessler
609-631-2927

If transmission is not received in good order, please call Anne at 609-689-2829

de maximis, inc.

1550 Pond Road
Suite 120
Allentown, PA 18104
(610) 435-1151
FAX (610) 435-8459

July 13, 2020

Mr. Sean H. Hulbert
Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, New York 11368

RE: Review Avenue Development Sites - 37-30 and 37-80 Review Avenue
File # C-5652
2nd Quarter 2020 Effluent Discharge Compliance Report

Dear Mr. Hulbert:

Enclosed is the 2nd Quarter 2020 - Effluent Discharge Compliance Report for the Review Avenue Development Sites. This report is being submitted on behalf of the Review Avenue System LLC administering the Review Avenue Development Site Brownfield Projects identified as RAD I and RAD II.

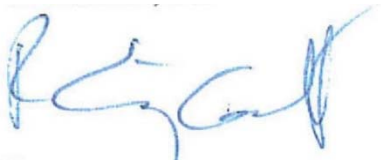
I would like to call to your attention the following, relative to discharge for the 2nd Quarter 2020:

- Approximately 696,640 gallons of water have been discharged to the sewer system since the last reporting period – March 2020.
- No constituents were reported above discharge criteria.

Please contact me with any questions at (610) 435-1151.

Sincerely,

de maximis, inc.



R. Craig Coslett
Project Coordinator for RADI and RAD II

Enclosures: Compliance Monitoring Report for 2nd Quarter 2020
CC: K Forester, NYDEC (electronic mail only)
Tim Kessler, Wood Group (electronic mail only)
Brent O'Dell, Wood Group (electronic mail only)

File: 3216 / 2020 2nd Quarter Cover Page

July 16, 2020

Mr. Sean H. Hulbert - Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, NY 11368

Subject: **2nd Quarter 2020 Effluent Discharge Compliance**
Review Avenue Development Sites
37-30 and 37-80 Review Avenue
Long Island City, Queens, New York, File # C-5652

Dear Mr. Hulbert:

Wood Environment and Infrastructure Solutions, Inc. (Wood), on behalf of Review Avenue System LLC, submits the effluent laboratory analysis data in connection with the letter of approval (LOA) for groundwater discharge to sanitary or combined sewer for the Review Avenue Development (RAD) Sites and LOA Extension dated September 30, 2019.

Wood collected the 2nd Quarter 2020 discharge compliance samples on June 4, 2020. Analytical results indicate no exceedances of the daily discharge limits for all parameters and no exceedances of the monthly discharge limits for all parameters, and therefore the discharge is in compliance with our LOA requirements. The analytical results collected for the 2nd quarter 2020 compliance sampling are summarized on Table 1 attached. The total volume of groundwater discharged to the sanitary or combined sewer, since system start-up was 12,104,540 gallons as of the June 4th sampling event and 724,610 gallons since the last quarterly sampling event on February 20th.

If you have any questions, please contact either of the undersigned at (609) 689-2829.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Digitally signed by Brent.ODell
DN: cn=Brent.ODell
Date: 2020.07.16 11:22:19
-04'00'

Brent C. O'Dell, P.E.
Principal Engineer – Civil

Timothy C. Kessler
Senior Associate Engineer/PM

Attachments: Table 1 – Summary of Groundwater Analytical Results

cc: R. Craig Coslett – Review Avenue System LLC

200 American Metro Blvd
Suite 113
Hamilton, NJ 08619
609-689-2829
woodplc.com

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	NYCDEP Daily Limit	NYCDEP Monthly Limit	RA-EFF-G		RA-EFF-C	
Compliance Period:				2Q 2020		2Q 2020	
Sample Date:				6/4/2020		6/4/2020	
Lab Sample ID:				JD8092-1		JD8092-2	
Non-polar material[1]	mg/L	50	NL	5.0	U	-	
pH[2]	SUs	5 - 12	NL	6.33		-	
Temperature[2]	ºF	150	NL	64.40		-	
Flash Point[3]	ºF	> 140	NL	> 200		-	
Cadmium (Instantaneous)	mg/L	2	NL	0.003	U	-	
Cadmium (Composite)	mg/L	0.69	NL	-		0.003	U
Chromium (VI)	mg/L	5	NL	0.01	U	-	
Copper	mg/L	5	NL	0.01	U	-	
Lead	mg/L	2	NL	0.003	U	-	
Mercury	mg/L	0.05	NL	0.0002	U	-	
Nickel	mg/L	3	NL	0.01	U	-	
Zinc	mg/L	5	NL	0.02	U	-	
Benzene	µg/L	134	57	0.34	U	-	
Carbon Tetrachloride	µg/L	NL	NL	-		0.55	U
Chloroform	µg/L	NL	NL	-		0.50	U
1,4-Dichlorobenzene	µg/L	NL	NL	0.63	U	-	
Ethylbenzene	µg/L	380	142	0.30	U	-	
MTBE (Methyl-Tert-Butyl-Ether)	µg/L	50	NL	1.7		-	
Napthalene	µg/L	47	19	-		0.23	U
Phenol	µg/L	NL	NL	-		0.39	U
Tetrachloroethylene (Perc)	µg/L	20	NL	0.9	U	-	
Toluene	µg/L	74	28	0.36	U	-	
1,2,4-Trichlorobenzene	µg/L	NL	NL	-		0.25	U
1,1,1-Trichloroethane	µg/L	NL	NL	-		0.54	U
Xylenes (Total)	µg/L	74	28	0.35	U	-	
PCBs (Total)	µg/L	1	NL	-		0.034	U
Total Suspended Solids (TSS)	mg/L	350	NL	4.0	U	-	
CBOD	mg/L	NL	NL	-		1.4	
Chloride	mg/L	NL	NL	117		-	
Total Nitrogen	mg/L	NL	NL	-		1.2	
Total Solids	mg/L	NL	NL	597		-	

Prepared by: TK 03/09/20

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:
RA-EFF-G: Instantaneous (Grab) Sample
RA-EFF-C: 4-Hour Flow Weighted Composite Sample
Bold/Shaded: Concentration exceeds daily limit
Underline: Concentration exceeds monthly limit
1. Non-polar Material reported by lab as "Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)"
2. pH and Temperature measured in field
3. Flash Point reported by lab as Ignitability
4. Temperature was estimated

Definitions:
MDL: Method Detection Limit
RL: Reporting Limit
NL: No Limit

Data Qualifiers:
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U: Indicates the analyte was not detected at the indicated MDL.

Prepared by: TK 12/12/19

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Wood Environment & Infrastructure Solut.

Review Avenue, Long Island City, NY

3480160502 PO#C01270035

SGS Job Number: JD8092

Sampling Date: 06/04/20

Report to:

Wood Environment & Infrastructure Soln.
200 American Metro Boulevard Suite 113
Hamilton, NJ 08619
Timothy.Kessler@woodplc.com; Vincent.Whelan@woodplc.com

ATTN: Tim Kessler

Total number of pages in report: 31

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Hemex Patel
Appointed Deputy for GM

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

July 24, 2020

Mr. Tim Kessler
Wood Environment & Infrastructure Solution
200 American Metro Boulevard Suite 113
Hamilton, NJ 08619

RE: SGS – Dayton, Jobs # JD8092 – Reissues

Dear Mr. Kessler,

The final report for SGS jobs number JD8092 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the Carbon Tetrachloride has been reported for sample JD8092-2T per your request on 7/23/2020. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

Sections: 1 2 3 4 5

Table of Contents

SGS North America Inc.

Sample Summary

Wood Environment & Infrastructure Solut.

Job No: JD8092

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD8092-1	06/04/20	11:15	DB	06/04/20	AQ	Effluent	RA-EFF-G
JD8092-1R	06/04/20	11:15	DB	06/04/20	AQ	Effluent	RA-EFF-G
JD8092-2	06/04/20	12:15	DB	06/04/20	AQ	Effluent	RA-EFF-C
JD8092-2R	06/04/20	12:15	DB	06/04/20	AQ	Effluent	RA-EFF-C
JD8092-2T	06/04/20	12:15	DB	06/04/20	AQ	Effluent	RA-EFF-C

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Wood Environment & Infrastructure Solut.	**Job No**	JD8092
Site:	Review Avenue, Long Island City, NY	**Report Date**	7/24/2020 12:26:57 P

On 06/04/2020, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD8092 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method EPA 624.1

Matrix: AQ **Batch ID:** VT10157

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8657-1MS, JD8657-1MSD were used as the QC samples indicated.

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ **Batch ID:** OP27883

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

GC/LC Semi-volatiles By Method EPA 608.3

Matrix: AQ **Batch ID:** OP27899

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP21357

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8097-1MS, JD8097-1SDL, JD8097-1MSD were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Lead are outside control limits for sample MP21357-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP21357-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method EPA 245.1

Matrix: AQ **Batch ID:** MP21375

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8047-8AMS, JD8047-8AMSD were used as the QC samples for metals.

General Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** GP28591

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8666-2DUP, JD8224-1MS were used as the QC samples for HEM Petroleum Hydrocarbons.
- Matrix Spike Recovery(s) for HEM Petroleum Hydrocarbons are outside control limits. Spike recovery indicates possible matrix interference.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP28457

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8041-1DUP, JD8041-1MS were used as the QC samples for Chloride.

General Chemistry By Method EPA 351.2/LACHAT

Matrix: AQ **Batch ID:** GP28484

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8281-2DUP, JD8281-2MS were used as the QC samples for Nitrogen, Total Kjeldahl.

General Chemistry By Method EPA 353.2/LACHAT

Matrix: AQ **Batch ID:** GP28536

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD7995-3DUP, JD7995-3MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

General Chemistry By Method EPA353.2/SM4500NO2B

Matrix: AQ **Batch ID:** R185798

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD8092-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

General Chemistry By Method SM2540 B-11

Matrix: AQ **Batch ID:** GN8525

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8092-1DUP were used as the QC samples for Solids, Total.

General Chemistry By Method SM2540 D-11

Matrix: AQ **Batch ID:** GN8528

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8210-1DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM3500CR B-11

Matrix: AQ	Batch ID: GN8447

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8092-1DUP, JD8092-1MS were used as the QC samples for Chromium, Hexavalent.

General Chemistry By Method SM4500 A-11

Matrix: AQ	Batch ID: R185797

- The data for SM4500 A-11 meets quality control requirements.
- JD8092-2 for Nitrogen, Total: Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

General Chemistry By Method SM4500NO2 B-11

Matrix: AQ	Batch ID: GN8442

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8075-1MS, JD8075-1MSD were used as the QC samples for Nitrogen, Nitrite.

General Chemistry By Method SM5210 B-11

Matrix: AQ	Batch ID: GP28429

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD8092-2DUP were used as the QC samples for Carbonaceous Bod, 5 Day.
- JD8092-2 for Carbonaceous Bod, 5 Day: Sample set up with 3 separate dilutions, but DO difference is less than 2 on all of the dilutions. Results reported are from the lowest dilution.

General Chemistry By Method SW846 1010A/ASTM D93

Matrix: AQ	Batch ID: GN8674

- Sample(s) JD8502-1DUP were used as the QC samples for Ignitability (Flashpoint).

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD8092
Account: Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Collected: 06/04/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD8092-1	**RA-EFF-G**					
Methyl Tert Butyl Ether		1.7	1.0	0.87	ug/l	EPA 624.1
Chloride		117	2.0		mg/l	EPA 300/SW846 9056A
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
Solids, Total		597	10		mg/l	SM2540 B-11
JD8092-1R	**RA-EFF-G**					
No hits reported in this sample.						
JD8092-2	**RA-EFF-C**					
Carbonaceous Bod, 5 Day [a]		1.4	1.0		mg/l	SM5210 B-11
Nitrogen, Total [b]		1.2	0.30		mg/l	SM4500 A-11
Nitrogen, Total Kjeldahl		1.2	0.20		mg/l	EPA 351.2/LACHAT
JD8092-2R	**RA-EFF-C**					
No hits reported in this sample.						
JD8092-2T	**RA-EFF-C**					
No hits reported in this sample.						

(a) Sample set up with 3 separate dilutions, but DO difference is less than 2 on all of the dilutions. Results reported are from the lowest dilution.
(b) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD8092-1	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T245387.D	1	06/17/20 17:25	CSF	n/a	n/a	VT10157
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.34	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.7	1.0	0.87	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	104%		76-122%
2037-26-5	Toluene-D8 (SUR)	95%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	94%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RA-EFF-G
Lab Sample ID: JD8092-1
Matrix: AQ - Effluent
Project: Review Avenue, Long Island City, NY

Date Sampled: 06/04/20
Date Received: 06/04/20
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	06/08/20	06/09/20	ND	EPA 200.7 [2]	EPA 200.7 [4]
Copper	< 10	10	ug/l	1	06/08/20	06/09/20	MET	EPA 200.7 [3]	EPA 200.7 [4]
Lead	< 3.0	3.0	ug/l	1	06/08/20	06/09/20	ND	EPA 200.7 [2]	EPA 200.7 [4]
Mercury	< 0.20	0.20	ug/l	1	06/08/20	06/08/20	LL	EPA 245.1 [1]	EPA 245.1 [5]
Nickel	< 10	10	ug/l	1	06/08/20	06/09/20	ND	EPA 200.7 [2]	EPA 200.7 [4]
Zinc	< 20	20	ug/l	1	06/08/20	06/09/20	ND	EPA 200.7 [2]	EPA 200.7 [4]

(1) Instrument QC Batch: MA48780
(2) Instrument QC Batch: MA48785
(3) Instrument QC Batch: MA48792
(4) Prep QC Batch: MP21357
(5) Prep QC Batch: MP21375

RL = Reporting Limit

Report of Analysis

Client Sample ID: RA-EFF-G
Lab Sample ID: JD8092-1
Matrix: AQ - Effluent
Project: Review Avenue, Long Island City, NY

Date Sampled: 06/04/20
Date Received: 06/04/20
Percent Solids: n/a

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	117	2.0	mg/l	1	06/09/20 23:35	JW	EPA 300/SW846 9056A
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	06/04/20 22:08	EB	SM3500CR B-11
Ignitability (Flashpoint)	> 200		Deg. F	1	06/13/20 16:00	TM	SW846 1010A/ASTM D93
Solids, Total	597	10	mg/l	1	06/09/20 10:12	RI	SM2540 B-11
Solids, Total Suspended	< 4.0	4.0	mg/l	1	06/09/20 12:08	RI	SM2540 D-11

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD8092-1R	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Petroleum Hydrocarbons	< 5.0	5.0	mg/l	1	06/17/20 17:00	LX	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD8092-2	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T245388.D	1	06/17/20 17:56	CSF	n/a	n/a	VT10157
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	106%		76-122%
2037-26-5	Toluene-D8 (SUR)	96%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	94%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD8092-2	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P491445.D	1	06/12/20 15:18	JC	06/10/20 07:00	OP27883	E6P3009
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-95-2	Phenol	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		10-110%
4165-62-2	Phenol-d5	23%		10-110%
118-79-6	2,4,6-Tribromophenol	80%		35-147%
4165-60-0	Nitrobenzene-d5	80%		32-132%
321-60-8	2-Fluorobiphenyl	88%		40-117%
1718-51-0	Terphenyl-d14	88%		33-126%

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD8092-2	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	06/08/20	06/09/20	ND	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA48785
(2) Prep QC Batch: MP21357

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD8092-2	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Carbonaceous Bod, 5 Day [a]	1.4	1.0	mg/l	1	06/05/20 21:02	EB	SM5210 B-11
Nitrogen, Nitrate [b]	< 0.11	0.11	mg/l	1	06/15/20 12:33	KI	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	06/15/20 12:33	KI	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	06/04/20 22:11	KB	SM4500NO2 B-11
Nitrogen, Total [c]	1.2	0.30	mg/l	1	06/15/20 12:33	KI	SM4500 A-11
Nitrogen, Total Kjeldahl	1.2	0.20	mg/l	1	06/11/20 12:08	KI	EPA 351.2/LACHAT

(a) Sample set up with 3 separate dilutions, but DO difference is less than 2 on all of the dilutions. Results reported are from the lowest dilution.
(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(c) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD8092-2R	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2450113.D	1	06/11/20 02:34	CP	06/10/20 13:00	OP27899	GXX7047
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		10-156%
877-09-8	Tetrachloro-m-xylene	74%		10-156%
2051-24-3	Decachlorobiphenyl	56%		10-143%
2051-24-3	Decachlorobiphenyl	66%		10-143%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD8092-2T	**Date Sampled:**	06/04/20
Matrix:	AQ - Effluent	**Date Received:**	06/04/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T245388R.D	1	06/17/20 17:56	CSF	n/a	n/a	VT10157
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	106%		76-122%
2037-26-5	Toluene-D8 (SUR)	96%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	94%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JD8092
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Ignitability (Flashpoint)		**SW846 1010A/ASTM D93**	AQ	SGS is not certified for this parameter.[a]
Nitrogen, Total		**SM4500 A-11**	AQ	SGS is not certified for this parameter.[b]

(a) Lab cert for analyte/method not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.
(b) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

JD8092

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(Only / E)

FED-EX Tracking #:
Bottle Order Control #: KR-06120-108
SGS Quote #:
SGS Job #: HLANJPR67753

Client / Reporting Information
Company Name: Wood E&IS
Street Address: 200 American Metro Blvd #113
City: Hamilton State: NJ Zip: 08619
Project Contact: Vincent.Whelan E-mail: @woodplc.com
Phone #: 609-689-2832
Sampler(s) Name(s): Dan Baron Phone #: 732-425-0962

Project Information
Project Name: Review Ave GWM
Street: Review Ave
City: Long Island City State: NY
Project #: 3480160502
Client Purchase Order #: C01270035
Project Manager: Tim Kessler

Billing Information (If different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE
1	RA-EFF-G		6/4/2020	11:15	DB	G	GW	11	5		1		5			
2	RA-EFF-C		6/4/2020	12:15	DB	C	GW	11	3		1	1	6			
2	RA-VOC-C1		6/4/2020	9:00	DB	G	GW	3	3							
2	RA-VOC-C2		6/4/2020	10:00	DB	G	GW	3	3							
2	RA-VOC-C3		6/4/2020	11:00	DB	G	GW	3	3							
2	RA-VOC-C4		6/4/2020	12:00	DB	G	GW	3	3							

Requested Analysis:

Field ID	Flashpoint (Ignitability) SW846 1010A	Metals (Cd, Cu, Pb, Ni, Zn) EPA 200.7; Mercury (Hg) EPA 245.1	Total Solids (SM 2540 B-11); chloride (EPA 300.0 / SM4500 Cl-C)	Total suspended solids - SM 2540-D11	VOC (V624BTXM, VMS+PCE, VMS+ 14DCB) - EPA 624	Hexavalent Chromium (SM3500 Cr B)	Phenol, Naphthalene, 1,2,4-Trichlorobenzene EPA 625	CBOD5 - SM5210 B-11	Metals (Cadium Only) - EPA 200.7	PCBs, Low Level (P608PCBLL) - EPA 608	SGT HEM - EPA 1664A SGT	LAB USE ONLY
RA-EFF-G	X	X	X	X	X	X					H	E1
RA-EFF-C							X	X	X	H		V605
RA-VOC-C1												
RA-VOC-C2												
RA-VOC-C3												
RA-VOC-C4												Comp

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, SED - Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB - Field Blank, EB - Equipment Blank, RB - Rinse Blank, TB - Trip Blank

Turn Around Time (Business Days)
- ☐ 10 Business Days
- ☐ 5 Business Days
- ☐ 3 Business Days*
- ☐ 2 Business Days*
- ☐ 1 Business Day*
- ☒ Other Standard

Approved By (SGS PM): / Date:

All data available via Lablink
* Approval needed for 1-3 Business Day TAT

Deliverable
- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ NJ Reduced (Level 3)
- ☐ Full Tier I (Level 4)
- ☐ Commercial "C"
- ☐ NJ DKQP
- ☐ NYASP Category A
- ☒ NYASP Category B
- ☐ MA MCP Criteria
- ☐ CT RCP Criteria
- ☐ State Forms
- ☒ EDD Format NYSDEC
- ☐ DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions
Composit RA-VOC-C1 to RA-VOC-C4 in Lab to be used for RA-EFF-C voc analysis.
Hold SGT-Hem + PCB samples
Hex chrome test Method only allows 24 hr Hold time
http://www.sgs.com/en/terms-and-conditions

RA-EFF-C	
PH	6.33
Temp	18°C

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	6/4/2020 1415	1 DL	2		2
3		3	4		4
5		5	Custody Seal #	☐ Intact ☐ Not Intact	Preserved where applicable ☑ Absent; Therm. ID:; On Ice ☑; Cooler Temp. °C 2.9, 2.2 °C FP IR-4

Initial Assessment 2 Bo
Label Verification

EHSA-QAC-0023-02-FORM-Dayton - Standard COC.xlsx

JD8092: Chain of Custody
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JD8092 Page 2 of 2

SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #:
Bottle Order Control #:
SGS Quote #:
SGS Job #: HLANJPR67753

Client / Reporting Information

- Company Name: Wood E+IS
- Street Address: 200 American Metro Blvd #113
- City: Hamilton State: NJ Zip: 08619
- Project Contact / E-mail: vincent.whelan@woodplc.com
- Phone #: 609-689-2832
- Sampler(s) Name(s) / Phone #: Dan Burcin (732)-425-0962

Project Information

- Project Name: Review Ave GWM
- Street: Review Avenue
- City: Long Island City State: NY
- Project #: 3480160502
- Client Purchase Order #: C01270035
- Project Manager: Tim Kessler

Billing Information (If different from Report to)

- Company Name:
- Street Address:
- City: State: Zip:
- Attention:

Requested Analysis

- Total Nitrogen (TKN, NO2/NO3) SM18 4500N
- Composite VOCs (4:1 Ratio)
- VOC (V624CHLFRM, VMS+TCA, EPA 624)

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	Total Nitrogen (TKN, NO2/NO3) SM18 4500N	Composite VOCs (4:1 Ratio)	VOC (V624CHLFRM, VMS+TCA, EPA 624)	LAB USE ONLY
1	RA-EFF-G		6/4/2020	11:15	DB	G	GW	11	5		1		5							
2	RA-EFF-C		6/4/2020	12:15	DB	C	GW	11	3		1	1	6				X		X	
2	RA-VOC-C1		6/4/2020	9:00	DB	G	GW	3	3									X		
2	RA-VOC-C2		6/4/2020	10:00	DB	G	GW	3	3									X		
2	RA-VOC-C3		6/4/2020	11:00	DB	G	GW	3	3									X		
2	RA-VOC-C4		6/4/2020	12:00	DB	G	GW	3	3									X		

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Turn Around Time (Business Days)

- ☐ 10 Business Days
- ☐ 5 Business Days
- ☐ 3 Business Days*
- ☐ 2 Business Days*
- ☐ 1 Business Day*
- ☒ Other: standard

Approved By (SGS PM): / Date:

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ NJ Reduced (Level 3)
- ☐ Full Tier I (Level 4)
- ☐ Commercial "C"
- ☐ NJ DKQP
- ☐ NYASP Category A
- ☒ NYASP Category B
- ☐ MA MCP Criteria
- ☐ CT RCP Criteria
- ☐ State Forms
- ☒ EDD Format: NYSDEC
- ☐ DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Composit RA-VOC-C1 to RA-VOC-C4 in Lab to be used for RA-EFF-C VOC analysis.
Hold SGT-Hem + PCB samples
Hex Chrome Test Method only allows 24hr hold time

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	6/4/2020 1415	1 DL	2		2
3		3	4		4
5		5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ Absent; On Ice ☐; Therm. ID:; Cooler Temp. °C

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5.2
5

JD8092: Chain of Custody
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SGS Sample Receipt Summary

Job Number: JD8092 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** REVIEW AVENUE, LONG ISLAND CITY, NY

Date / Time Received: 6/4/2020 2:15:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.9); Cooler 2: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.6); Cooler 2: (2.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JD8092

Requested Date: 6/8/2020 **Received Date:** 6/4/2020

Account Name: Wood Environment & Infrastructur **Due Date:** 6/18/2020

Project Description: Review Avenue, Long Island City, NY **Deliverable:** NYASPB

C/O Initiated By: KR **PM:** KR **TAT (Days):** 14

==========

Sample #: JD8092-1 **Change:**

Dept: Please relog for PHC1664

TAT: 14

RA-EFF-G

==========

Sample #: JD8092-2 **Change:**

Dept: Please relog for P608PCBLL

TAT: 14

RA-EFF-C

==========

Above Changes Per: Tim Kessler **Date/Time:** 6/8/2020 3:10:35 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

JD8092: Chain of Custody
Page 4 of 5

Job Change Order: JD8092

Requested Date:	7/23/2020	**Received Date:**	6/4/2020
Account Name:	Wood Environment & Infrastructu	**Due Date:**	6/18/2020
Project Description:	Review Avenue, Long Island City, NY	**Deliverable:**	NYASPB
C/O Initiated By:	MICHELLD **PM:** KR	**TAT (Days):**	1

Sample #: JD8092-2
Dept:
TAT: 1

RA-EFF-C

Change:
Relog/retrieve for VR624CTC

Above Changes Per: Tim Kessler **Date/Time:** 7/23/2020 11:48:28 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD8092: Chain of Custody
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Internal Sample Tracking Chronicle

Wood Environment & Infrastructure Solut.

Job No: JD8092

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD8092-1 RA-EFF-G	Collected: 04-JUN-20 11:15 By: DB		Received: 04-JUN-20 By: JP			
JD8092-1	SM3500CR B-11	04-JUN-20 22:08	EB			XCRSM
JD8092-1	EPA 245.1	08-JUN-20 14:15	LL	08-JUN-20	LL	HG
JD8092-1	EPA 200.7	09-JUN-20 00:22	ND	08-JUN-20	CH	CD,NI,PB,ZN
JD8092-1	SM2540 B-11	09-JUN-20 10:12	RI			TS
JD8092-1	SM2540 D-11	09-JUN-20 12:08	RI			TSS
JD8092-1	EPA 200.7	09-JUN-20 15:36	MET	08-JUN-20	CH	CU
JD8092-1	EPA 300/SW846 9056A	09-JUN-20 23:35	JW	09-JUN-20	JW	CHL
JD8092-1	SW846 1010A/ASTM D93	13-JUN-20 16:00	TM			IGN
JD8092-1	EPA 624.1	17-JUN-20 17:25	CSF			V624BTXM
JD8092-2 RA-EFF-C	Collected: 04-JUN-20 12:15 By: DB		Received: 04-JUN-20 By: JP			
JD8092-2	SM4500NO2 B-11	04-JUN-20 22:11	KB			NO2
JD8092-2	SM5210 B-11	05-JUN-20 21:02	EB	05-JUN-20	EB	CBOD5
JD8092-2	EPA 200.7	09-JUN-20 00:27	ND	08-JUN-20	CH	CD
JD8092-2	EPA 351.2/LACHAT	11-JUN-20 12:08	KI	10-JUN-20	MP	TKN
JD8092-2	EPA 625.1	12-JUN-20 15:18	JC	10-JUN-20	VP	AB625SL2
JD8092-2	SM4500 A-11	15-JUN-20 12:33	KI			TNIT
JD8092-2	EPA353.2/SM4500NO2B	15-JUN-20 12:33	KI			NO3O
JD8092-2	EPA 353.2/LACHAT	15-JUN-20 12:33	KI	15-JUN-20	KI	NO32
JD8092-2	EPA 624.1	17-JUN-20 17:56	CSF			V624CHLFRM,VMS+ TCA
JD8092-1R RA-EFF-G	Collected: 04-JUN-20 11:15 By: DB		Received: 04-JUN-20 By: JP			
JD8092-1R	EPA 1664A	17-JUN-20 17:00	LX	17-JUN-20	LX	PHC1664
JD8092-2R RA-EFF-C	Collected: 04-JUN-20 12:15 By: DB		Received: 04-JUN-20 By: JP			
JD8092-2R	EPA 608.3	11-JUN-20 02:34	CP	10-JUN-20	VP	P608PCBLL
JD8092-2T RA-EFF-C	Collected: 04-JUN-20 12:15 By: DB		Received: 04-JUN-20 By: JP			
JD8092-2T	EPA 624.1	17-JUN-20 17:56	CSF			VR624CTC

SGS Internal Chain of Custody

Job Number: JD8092
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 06/04/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD8092-1.2	Secured Storage	Omar Khalid	06/17/20 14:14	Retrieve from Storage
JD8092-1.2	Omar Khalid	Secured Staging Area	06/17/20 14:14	Return to Storage
JD8092-1.2	Secured Staging Area	Lixiao Xu	06/17/20 15:37	Retrieve from Storage
JD8092-1.2	Lixiao Xu		06/17/20 18:00	Depleted
JD8092-1.3	Secured Storage	Benjamin Gaines	06/07/20 13:59	Retrieve from Storage
JD8092-1.3	Benjamin Gaines	Secured Staging Area	06/07/20 13:59	Return to Storage
JD8092-1.3	Secured Staging Area	Lindsey Lee	06/08/20 06:00	Retrieve from Storage
JD8092-1.3	Lindsey Lee	Colleen Hill	06/08/20 07:16	Custody Transfer
JD8092-1.3	Colleen Hill	Secured Storage	06/08/20 10:28	Return to Storage
JD8092-1.3	Dave Hunkele		07/18/20 07:00	Disposed
JD8092-1.3.1	Colleen Hill	Metals Digestion	06/08/20 10:21	Digestate from JD8092-1.3
JD8092-1.3.1	Metals Digestion	Colleen Hill	06/08/20 10:21	Digestate from JD8092-1.3
JD8092-1.3.1	Colleen Hill	Metals Digestate Storage	06/08/20 10:21	Return to Storage
JD8092-1.4	Secured Storage	Todd Shoemaker	06/09/20 08:19	Retrieve from Storage
JD8092-1.4	Todd Shoemaker	Secured Staging Area	06/09/20 08:19	Return to Storage
JD8092-1.4	Secured Staging Area	Rie Iwasaki	06/09/20 08:54	Retrieve from Storage
JD8092-1.4	Rie Iwasaki		06/09/20 13:03	Depleted
JD8092-1.6	Secured Storage	Omar Khalid	06/08/20 20:43	Retrieve from Storage
JD8092-1.6	Omar Khalid	Secured Staging Area	06/08/20 20:43	Return to Storage
JD8092-1.6	Secured Staging Area	Jennell Webber	06/09/20 12:12	Retrieve from Storage
JD8092-1.6	Jennell Webber	Secured Storage	06/09/20 16:34	Return to Storage
JD8092-1.6	Secured Storage	Todd Shoemaker	06/10/20 08:41	Retrieve from Storage
JD8092-1.6	Todd Shoemaker	Secured Staging Area	06/10/20 08:41	Return to Storage
JD8092-1.6	Secured Staging Area	Jennell Webber	06/10/20 16:53	Retrieve from Storage
JD8092-1.6	Jennell Webber	Secured Storage	06/10/20 16:53	Return to Storage
JD8092-1.6	Secured Storage	Matthew Robbins	06/11/20 18:22	Retrieve from Storage
JD8092-1.6	Matthew Robbins	Secured Staging Area	06/11/20 18:22	Return to Storage
JD8092-1.6	Secured Storage	Matthew Robbins	06/12/20 20:21	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD8092-1.6	Matthew Robbins	Secured Staging Area	06/12/20 20:21	Return to Storage
JD8092-1.6	Secured Staging Area	Tharun Murali	06/13/20 11:33	Retrieve from Storage
JD8092-1.6	Tharun Murali	Secured Storage	06/13/20 17:54	Return to Storage
JD8092-1.6	Dave Hunkele		07/18/20 07:00	Disposed
JD8092-1.6.1	Tharun Murali	TCLP	06/13/20 11:33	Leachate from JD8092-1.6
JD8092-1.6.1	TCLP	Tharun Murali	06/20/20 15:07	Leachate from JD8092-1.6
JD8092-1.6.1	Tharun Murali		06/20/20 15:08	Depleted
JD8092-1.7	Secured Storage	Omar Khalid	06/04/20 20:02	Retrieve from Storage
JD8092-1.7	Omar Khalid	Secured Staging Area	06/04/20 20:02	Return to Storage

SGS Internal Chain of Custody

Job Number: JD8092
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 06/04/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD8092-1.7	Secured Staging Area	Todd Shoemaker	06/05/20 11:52	Retrieve from Storage
JD8092-1.7	Todd Shoemaker	Secured Storage	06/05/20 11:53	Return to Storage
JD8092-1.7	Secured Storage	Todd Shoemaker	06/09/20 08:19	Retrieve from Storage
JD8092-1.7	Todd Shoemaker	Secured Staging Area	06/09/20 08:19	Return to Storage
JD8092-1.7	Secured Staging Area	Rie Iwasaki	06/09/20 08:54	Retrieve from Storage
JD8092-1.7	Rie Iwasaki	Secured Storage	06/09/20 13:04	Return to Storage
JD8092-1.7	Dave Hunkele		07/18/20 07:00	Disposed
JD8092-1.10	Secured Storage	Chelsea San Filippo	06/17/20 10:45	Retrieve from Storage
JD8092-1.10	Chelsea San Filippo	GCMST	06/17/20 10:45	Load on Instrument
JD8092-1.10	GCMST	Chelsea San Filippo	06/18/20 15:24	Unload from Instrument
JD8092-1.10	Chelsea San Filippo	Secured Storage	06/18/20 15:24	Return to Storage
JD8092-1.10	Dave Hunkele		07/18/20 07:00	Disposed
JD8092-2.3	Secured Storage	Todd Shoemaker	06/09/20 13:18	Retrieve from Storage
JD8092-2.3	Todd Shoemaker	Secured Staging Area	06/09/20 13:18	Return to Storage
JD8092-2.3	Secured Staging Area	Nicholas Weigand	06/09/20 23:15	Retrieve from Storage
JD8092-2.3	Nicholas Weigand		06/09/20 23:47	Depleted
JD8092-2.3.1	Nicholas Weigand	Organics Prep	06/09/20 23:15	Extract from JD8092-2.3
JD8092-2.3.1	Organics Prep	Vikas Parikh	06/10/20 12:36	Extract from JD8092-2.3
JD8092-2.3.1	Vikas Parikh	Extract Storage	06/10/20 12:36	Return to Storage
JD8092-2.3.1	Extract Storage	James Canas	06/10/20 17:00	Retrieve from Storage
JD8092-2.3.1	James Canas	GCMS6P	06/10/20 17:00	Load on Instrument
JD8092-2.3.1	GCMS6P	James Canas	06/11/20 13:33	Unload from Instrument
JD8092-2.3.1	James Canas	Extract Freezer	06/11/20 13:33	Return to Storage
JD8092-2.3.1	Extract Freezer		07/20/20 09:00	Disposed
JD8092-2.4	Secured Storage	Omar Khalid	06/09/20 20:10	Retrieve from Storage
JD8092-2.4	Omar Khalid	Secured Staging Area	06/09/20 20:10	Return to Storage
JD8092-2.4	Secured Staging Area	Vikas Parikh	06/10/20 10:56	Retrieve from Storage
JD8092-2.4	Vikas Parikh		06/10/20 14:07	Depleted
JD8092-2.4.1	Vikas Parikh	Organics Prep	06/10/20 10:56	Extract from JD8092-2.4
JD8092-2.4.1	Organics Prep	Vikas Parikh	06/10/20 19:00	Extract from JD8092-2.4
JD8092-2.4.1	Vikas Parikh	Extract Storage	06/10/20 19:00	Return to Storage
JD8092-2.4.1	Extract Storage	Christine Phillips	06/10/20 23:23	Retrieve from Storage
JD8092-2.4.1	Christine Phillips	GCXX	06/10/20 23:23	Load on Instrument
JD8092-2.5	Secured Storage	Benjamin Gaines	06/07/20 13:50	Retrieve from Storage
JD8092-2.5	Benjamin Gaines	Secured Staging Area	06/07/20 13:50	Return to Storage
JD8092-2.5	Secured Staging Area	Colleen Hill	06/08/20 06:10	Retrieve from Storage
JD8092-2.5	Colleen Hill	Secured Storage	06/08/20 10:28	Return to Storage
JD8092-2.5	Dave Hunkele		07/18/20 07:00	Disposed

SGS Internal Chain of Custody

Job Number: JD8092
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 06/04/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD8092-2.5.1	Colleen Hill	Metals Digestion	06/08/20 10:21	Digestate from JD8092-2.5
JD8092-2.5.1	Metals Digestion	Colleen Hill	06/08/20 10:21	Digestate from JD8092-2.5
JD8092-2.5.1	Colleen Hill	Metals Digestate Storage	06/08/20 10:21	Return to Storage
JD8092-2.6	Secured Storage	Benjamin Gaines	06/09/20 15:41	Retrieve from Storage
JD8092-2.6	Benjamin Gaines	Secured Staging Area	06/09/20 15:41	Return to Storage
JD8092-2.6	Secured Staging Area	Mahendra Patel	06/10/20 13:18	Retrieve from Storage
JD8092-2.6	Secured Storage	Matthew Robbins	06/10/20 16:05	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD8092-2.6	Matthew Robbins	Secured Staging Area	06/10/20 16:05	Return to Storage
JD8092-2.6	Secured Storage	Todd Shoemaker	06/12/20 08:20	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD8092-2.6	Todd Shoemaker	Secured Staging Area	06/12/20 08:20	Return to Storage
JD8092-2.6	Secured Storage	Todd Shoemaker	06/15/20 10:56	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD8092-2.6	Todd Shoemaker	Secured Staging Area	06/15/20 10:56	Return to Storage
JD8092-2.6	Secured Staging Area	Kimberly Ignace	06/15/20 11:00	Retrieve from Storage
JD8092-2.6	Kimberly Ignace	Secured Storage	06/15/20 16:31	Return to Storage
JD8092-2.6	Dave Hunkele		07/18/20 07:00	Disposed
JD8092-2.7	Secured Storage	Omar Khalid	06/04/20 20:02	Retrieve from Storage
JD8092-2.7	Omar Khalid	Secured Staging Area	06/04/20 20:02	Return to Storage
JD8092-2.7	Secured Staging Area	Todd Shoemaker	06/05/20 11:52	Retrieve from Storage
JD8092-2.7	Todd Shoemaker	Secured Storage	06/05/20 11:53	Return to Storage
JD8092-2.7	Secured Storage	Todd Shoemaker	06/05/20 14:16	Retrieve from Storage
JD8092-2.7	Todd Shoemaker	Secured Staging Area	06/05/20 14:16	Return to Storage
JD8092-2.7	Secured Staging Area	Elaine Banting	06/06/20 00:20	Retrieve from Storage
JD8092-2.7	Elaine Banting	Secured Storage	06/06/20 00:20	Return to Storage
JD8092-2.7	Secured Storage	Elaine Banting	06/10/20 00:40	Retrieve from Storage
JD8092-2.7	Elaine Banting		06/10/20 00:40	Depleted
JD8092-2.8	Secured Storage	Omar Khalid	06/04/20 20:02	Retrieve from Storage
JD8092-2.8	Omar Khalid	Secured Staging Area	06/04/20 20:02	Return to Storage
JD8092-2.8	Secured Staging Area	Todd Shoemaker	06/05/20 11:52	Retrieve from Storage
JD8092-2.8	Todd Shoemaker	Secured Storage	06/05/20 11:53	Return to Storage
JD8092-2.8	Dave Hunkele		07/18/20 07:00	Disposed
JD8092-2.10	Secured Storage	Chelsea San Filippo	06/17/20 15:03	Retrieve from Storage
JD8092-2.10	Chelsea San Filippo		06/17/20 15:04	Depleted
JD8092-2.11	Secured Storage	Chelsea San Filippo	06/17/20 15:04	Retrieve from Storage
JD8092-2.11	Chelsea San Filippo	GCMSN	06/17/20 15:04	Load on Instrument
JD8092-2.11	GCMSN	Chelsea San Filippo	06/18/20 15:23	Unload from Instrument

SGS Internal Chain of Custody

Job Number: JD8092
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 06/04/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD8092-2.11	Chelsea San Filippo	Secured Storage	06/18/20 15:23	Return to Storage
JD8092-2.11	Dave Hunkele		07/18/20 07:00	Disposed

October 14, 2020

Mr. Sean H. Hulbert - Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, NY 11368

Subject: 3rd **Quarter 2020 Effluent Discharge Compliance**
Review Avenue Development Sites
37-30 and 37-80 Review Avenue
Long Island City, Queens, New York, File # C-5652

Dear Mr. Hulbert:

Wood Environment and Infrastructure Solutions, Inc. (Wood), on behalf of Review Avenue System LLC, submits the effluent laboratory analysis data in connection with the letter of approval (LOA) for groundwater discharge to sanitary or combined sewer for the Review Avenue Development (RAD) Sites and LOA Extension dated September 30, 2019.

Wood collected the 3rd Quarter 2020 discharge compliance samples on September 17, 2020. Analytical results indicate no exceedances of the daily discharge limits for all parameters and no exceedances of the monthly discharge limits for all parameters, and therefore the discharge is in compliance with our LOA requirements. The analytical results collected for the 3rd Quarter 2020 compliance sampling are summarized on Table 1 attached. The total volume of groundwater discharged to the sanitary or combined sewer, since system start-up was 12,735,320 gallons as of the September 17th sampling event and 630,780 gallons since the last quarterly sampling event on June 4th.

If you have any questions, please contact either of the undersigned at (609) 689-2829.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Brent C. O'Dell, P.E.
Principal Engineer – Civil

Timothy C. Kessler
Senior Associate Engineer/PM

Attachments: Table 1 – Summary of Groundwater Analytical Results

cc: R. Craig Coslett – Review Avenue System LLC

200 American Metro Blvd
Suite 113
Hamilton, NJ 08619
609-689-2829
woodplc.com

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	NYCDEP Daily Limit	NYCDEP Monthly Limit	RA-EFF-G		RA-EFF-C	
Compliance Period:				3Q 2020		3Q 2020	
Sample Date:				9/17/2020		9/17/2020	
Lab Sample ID:				JD13228-1		JD13228-2	
Non-polar material[1]	mg/L	50	NL	13.0		-	
pH[2]	SUs	5 - 12	NL	6.693		-	
Temperature[2]	ºF	150	NL	69.7		-	
Flash Point[3]	ºF	> 140	NL	> 200		-	
Cadmium (Instantaneous)	mg/L	2	NL	0.003	U	-	
Cadmium (Composite)	mg/L	0.69	NL	-		0.003	U
Chromium (VI)	mg/L	5	NL	0.010	U	-	
Copper	mg/L	5	NL	0.01	U	-	
Lead	mg/L	2	NL	0.003	U	-	
Mercury	mg/L	0.05	NL	0.0002	U	-	
Nickel	mg/L	3	NL	0.01	U	-	
Zinc	mg/L	5	NL	0.02	U	-	
Benzene	µg/L	134	57	0.34	U	-	
Carbon Tetrachloride	µg/L	NL	NL	-		0.55	U
Chloroform	µg/L	NL	NL	-		3.9	
1,4-Dichlorobenzene	µg/L	NL	NL	0.63	U	-	
Ethylbenzene	µg/L	380	142	0.30	U	-	
MTBE (Methyl-Tert-Butyl-Ether)	µg/L	50	NL	0.87	U	-	
Napthalene	µg/L	47	19	-		0.22	U
Phenol	µg/L	NL	NL	-		0.37	U
Tetrachloroethylene (Perc)	µg/L	20	NL	0.90	U	-	
Toluene	µg/L	74	28	0.36	U	-	
1,2,4-Trichlorobenzene	µg/L	NL	NL	-		0.24	U
1,1,1-Trichloroethane	µg/L	NL	NL	-		0.54	U
Xylenes (Total)	µg/L	74	28	0.35	U	-	
PCBs (Total)	µg/L	1	NL	-		0.033	U
Total Suspended Solids (TSS)	mg/L	350	NL	4.0		-	
CBOD	mg/L	NL	NL	-		1.0	U
Chloride	mg/L	NL	NL	70.8		-	
Total Nitrogen	mg/L	NL	NL	-		0.30	U
Total Solids	mg/L	NL	NL	330		-	

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:
RA-EFF-G: Instantaneous (Grab) Sample
RA-EFF-C: 4-Hour Flow Weighted Composite Sample
Bold/Shaded: Concentration exceeds daily limit
Underline: Concentration exceeds monthly limit
1. Non-polar Material reported by lab as "Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)"
2. pH and Temperature measured in field
3. Flash Point reported by lab as Ignitability
4. Temperature was estimated

Definitions:
MDL: Method Detection Limit
RL: Reporting Limit
NL: No Limit

Data Qualifiers:
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U: Indicates the analyte was not detected at the indicated MDL.

Prepared by: LB 10/12/20

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Wood Environment & Infrastructure Solut.

Review Avenue, Long Island City, NY

3480160502 PO#C01270035

SGS Job Number: JD13228

Sampling Date: 09/17/20

Report to:

Wood Environment & Infrastructure Soln.
200 American Metro Boulevard Suite 113
Hamilton, NJ 08619
Timothy.Kessler@woodplc.com; Vincent.Whelan@woodplc.com;
michelle.jenkins@sgs.com; william.whitacre@woodplc.com
ATTN: Tim Kessler

Total number of pages in report: 25

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Table of Contents

Sample Summary

Wood Environment & Infrastructure Solut.

Job No: JD13228

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD13228-1	09/17/20	12:40	WTW	09/17/20	AQ	Effluent	RA-EFF-G
JD13228-1R	09/17/20	12:40	WTW	09/17/20	AQ	Effluent	RA-EFF-G
JD13228-2	09/17/20	12:26	WTW	09/17/20	AQ	Effluent	RA-EFF-C
JD13228-2R	09/17/20	12:26	WTW	09/17/20	AQ	Effluent	RA-EFF-C

Summary of Hits

Job Number: JD13228
Account: Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Collected: 09/17/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD13228-1	**RA-EFF-G**					
Chloride		70.8	2.0		mg/l	EPA 300/SW846 9056A
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
Solids, Total		330	10		mg/l	SM2540 B-11
Solids, Total Suspended [a]		4.0	4.0		mg/l	SM2540 D-11
JD13228-1R	**RA-EFF-G**					
HEM Petroleum Hydrocarbons		13.0	5.0		mg/l	EPA 1664A
JD13228-2	**RA-EFF-C**					
Chloroform		3.9	1.0	0.50	ug/l	EPA 624.1
Carbonaceous Bod, 5 Day		< 1.0	1.0		mg/l	SM5210 B-11
Nitrogen, Total Kjeldahl		0.28	0.20		mg/l	EPA 351.2/LACHAT
JD13228-2R	**RA-EFF-C**					

No hits reported in this sample.

(a) Reported sample aliquot obtained from filtration of 50 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD13228-1	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A204222.D	1	09/22/20 16:12	ED	n/a	n/a	V1A8823
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.34	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.87	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	92%		76-122%
2037-26-5	Toluene-D8 (SUR)	93%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%		80-120%
1868-53-7	Dibromofluoromethane (S)	109%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD13228-1	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	09/21/20	09/21/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Copper	< 10	10	ug/l	1	09/21/20	09/21/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Lead	< 3.0	3.0	ug/l	1	09/21/20	09/21/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Mercury	< 0.20	0.20	ug/l	1	09/29/20	09/29/20	LL	EPA 245.1 [2]	EPA 245.1 [4]
Nickel	< 10	10	ug/l	1	09/21/20	09/21/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Zinc	< 20	20	ug/l	1	09/21/20	09/21/20	ND	EPA 200.7 [1]	EPA 200.7 [3]

(1) Instrument QC Batch: MA49330
(2) Instrument QC Batch: MA49376
(3) Prep QC Batch: MP22844
(4) Prep QC Batch: MP23008

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD13228-1	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	70.8	2.0	mg/l	1	09/29/20 18:05	EB	EPA 300/SW846 9056A
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	09/18/20 08:54	RI	SM3500CR B-11
Ignitability (Flashpoint)	> 200		Deg. F	1	09/21/20 13:00	DG	SW846 1010A/ASTM D93
Solids, Total	330	10	mg/l	1	09/23/20 17:43	TB	SM2540 B-11
Solids, Total Suspended [a]	4.0	4.0	mg/l	1	09/22/20 17:15	TB	SM2540 D-11

(a) Reported sample aliquot obtained from filtration of 50 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD13228-1R	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Petroleum Hydrocarbons	13.0	5.0	mg/l	1	09/25/20 18:00	LX	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD13228-2	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A204223.D	1	09/22/20 16:37	ED	n/a	n/a	V1A8823
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
67-66-3	Chloroform	3.9	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	92%		76-122%
2037-26-5	Toluene-D8 (SUR)	92%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%		80-120%
1868-53-7	Dibromofluoromethane (S)	109%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD13228-2	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P493609.D	1	09/21/20 15:04	HSS	09/18/20 17:00	OP29564	E6P3119
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-95-2	Phenol	ND	1.9	0.37	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-110%
4165-62-2	Phenol-d5	33%		10-110%
118-79-6	2,4,6-Tribromophenol	94%		35-147%
4165-60-0	Nitrobenzene-d5	106%		32-132%
321-60-8	2-Fluorobiphenyl	88%		40-117%
1718-51-0	Terphenyl-d14	105%		33-126%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD13228-2	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	09/21/20	09/21/20	ND	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA49330
(2) Prep QC Batch: MP22844

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD13228-2	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Carbonaceous Bod, 5 Day	< 1.0	1.0	mg/l	1	09/17/20 21:42	EB	SM5210 B-11
Nitrogen, Nitrate [a]	< 0.11	0.11	mg/l	1	09/28/20 18:32	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/28/20 18:32	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	09/17/20 09:22	MP	SM4500NO2 B-11
Nitrogen, Total [b]	< 0.30	0.30	mg/l	1	09/29/20 16:05	BM	SM4500 A-11
Nitrogen, Total Kjeldahl	0.28	0.20	mg/l	1	09/29/20 16:05	BM	EPA 351.2/LACHAT

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD13228-2R	**Date Sampled:**	09/17/20
Matrix:	AQ - Effluent	**Date Received:**	09/17/20
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2454916.D	1	10/08/20 11:38	VDT	09/29/20 17:15	OP29694	GXX7187
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.049	0.033	ug/l	
11104-28-2	Aroclor 1221	ND	0.049	0.028	ug/l	
11141-16-5	Aroclor 1232	ND	0.049	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.049	0.026	ug/l	
12672-29-6	Aroclor 1248	ND	0.049	0.024	ug/l	
11097-69-1	Aroclor 1254	ND	0.049	0.033	ug/l	
11096-82-5	Aroclor 1260	ND	0.049	0.026	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	147%		10-156%
877-09-8	Tetrachloro-m-xylene	89%		10-156%
2051-24-3	Decachlorobiphenyl	68%		10-143%
2051-24-3	Decachlorobiphenyl	68%		10-143%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JD13228
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Ignitability (Flashpoint)		**SW846 1010A/ASTM D93**	AQ	SGS is not certified for this parameter.[a]
Nitrogen, Total		**SM4500 A-11**	AQ	SGS is not certified for this parameter.[b]

(a) Lab cert for analyte/method not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.
(b) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

GW

E/Comp

SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #		Bottle Order Control #	JD 13228
SGS Quote #		SGS Job #	HLANJPR67753

Client / Reporting Information	Project Information	
Company Name: Wood E&IS	Project Name: Review Avenue GWM	
Street Address: 200 American Metro Blvd #113	Street: Review Avenue	Billing Information (If different from Report to)
City: Hamilton, State: NJ, Zip: 08619	City: Long Island City, State: NY	Company Name
Project Contact / E-mail: Timothy.kessler@woodplc.com	Project #: 3480160502	Street Address
Phone #: 609-689-2829	Client Purchase Order #: C01270035	City / State / Zip
Sampler(s) Name(s) / Phone #: William Whitacre 646-831-5662	Project Manager: Tim Kessler	Attention:

Requested Analysis:
- Flashpoint (Ignitability) - SW846 1010A
- Metals (Cd, Cu, Pb, Ni, Zn) - EPA 200.7 Mercury (Hg) - EPA 245.1
- SGT HEM - EPA 1664A SGT
- Total Solids, (SM 2540 B-11); Chloride (EPA 300.0 / SM4500 Cl-C)
- Total Suspended Solids - SM 2540 D-11
- VOC (V624BTXM, VMS+PCE, VMS+14DCB) - EPA 624
- Hexavalent Chromium (SM3500 Cr B)
- Phenol, Naphthalene, 1,2,4-Trichlorobenzene - EPA 625
- CBOD5 - SM5210 B-11
- Metals (Cadmium Only) - EPA 200.7
- PCBs, Low Level (608PCBLL) - EPA 608

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL- Sludge, SED-Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB - Field Blank, EB-Equipment Blank, RB - Rinse Blank, TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Flashpoint	Metals	SGT HEM	Total Solids; Chloride	TSS	VOC	Hex Cr	Phenol, Naphthalene, 1,2,4-TCB	CBOD5	Metals (Cd Only)	PCBs	LAB USE ONLY
1	RA-EFF-G		9/17/2020	1240	wtw	G	GW	11	5		1		5				X	X	H	X	X	X	X					L29
2	RA-EFF-C		9/17/2020	1220	wtw	C	GW	11	3		1	1	6											X	X	X	H	
	RA-VOC-C1		9/17/2020	0900	wtw	G	GW	3	3																			A31
	RA-VOC-C2		9/17/2020	1000	wtw	G	GW	3	3																			C34
	RA-VOC-C3		9/17/2020	1100	wtw	G	GW	3	3																			
	RA-VOC-C4		9/17/2020	1200	wtw	G	GW	3	3																			

INITIAL ASSESSMENT 3A

LABEL VERIFICATION

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [x] Other Standard

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [x] EDD Format NYSDEC
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Composite RA-VOC-C1 to RA-VOC-C4 in lab to be used for RA-EFF-C VOC analysis.

Hold SGT-HEM + PCB Samples.

Hex Chrome Test Method Only Allows 24HR Hold Time

Custody seal 15752 & 15750

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 Robert Eastwood	9/17/20 @ 1450	1 Padmesh Kumar. P	2		2
3		3	4		4
5		5	Custody Seal # 15750	☑ Intact ☐ Not intact; Preserved where applicable ☐ Absent	Therm. ID: IR4; On Ice ☑; Cooler Temp. °C 3.2; 3.4 °C

9.17.20 COC for Q3 2020.xlsx

4.2

4

JD13228: Chain of Custody
Page 1 of 4

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #: JD 13228
SGS Quote #: | SGS Job #: HLANJPR67753

Client / Reporting Information

Company Name: Wood E&IS
Street Address: 200 American Metro Blvd #113
City: Hamilton, NJ State: | Zip: 08619
Project Contact: | E-mail: timothy.kessler@woodplc.com
Phone #: 609-689-2829
Sampler(s) Name(s): William Whitacre 646-831-5662 | Phone #:

Project Information

Project Name: Review Avenue GWM
Street: Review Avenue
City: Long Island City State: NY
Project #: 3480160502
Client Purchase Order #: C01270035
Project Manager: Tim Kessler

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	Total Nitrogen (TKN, NO2/NO3) - SM18 4500N ✓	Composite VOCs (4:1 Ratio) ✓	VOC (V624CHLFRM, VMS+CTC, VMS+TCA) - EPA 624, ✓
1	RA-EFF-G		9/17/2020	1240	wtw	G	GW	11	5		2		5						
	RA-EFF-C		9/17/2020	1220	wtw	G	GW	11	3		1	1	6				X		X
	RA-VOC-C1		9/17/2020	0900	wtw	G	GW	3	3									X	
2	RA-VOC-C2		9/17/2020	1000	wtw	G	GW	3	3									X	
	RA-VOC-C3		9/17/2020	1100	wtw	G	GW	3	3									X	
	RA-VOC-C4		9/17/2020	1200	wtw	G	GW	3	3									X	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipes
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

LAB USE ONLY

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [X] Other Standard

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [X] EDD Format NYSDEC
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Composite RA-VOC-C1 to RA-VOC-C4 in lab to be used for RA-EFF-C VOC analysis.

Hold SGT-HEM + PCB Samples.

Hex Chrome Test Method Only Allows 24HR Hold Time

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:
1		9/17/20 1450	Poonamchkumar P.
2	Relinquished By:	Date / Time:	Received By: 2
3	Relinquished by:	Date / Time:	Received By: 3
4	Relinquished By:	Date / Time:	Received By: 4
5	Relinquished by:	Date / Time:	Received By: 5

Custody Seal # | [ ] Intact [ ] Not intact | Preserved where applicable [ ] Absent | On Ice [ ] | Cooler Temp. °C | Therm. ID:

9.17.20 COC for Q3 2020.xlsx

SGS Sample Receipt Summary

Job Number: JD13228 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** REVIEW AVENUE, LONG ISLAND CITY, NY

Date / Time Received: 9/17/2020 2:50:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler : (3.4); Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler : (3.1); Cooler 1: (2.9);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☑	☐
2. Trip Blank listed on COC:	☐	☑	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD13228: Chain of Custody
Page 3 of 4

Job Change Order: JD13228

Requested Date: 9/23/2020 **Received Date:** 9/17/2020

Account Name: Wood Environment & Infrastructur **Due Date:** 10/1/2020

Project Description: Review Avenue, Long Island City, NY **Deliverable:** NYASPA

C/O Initiated By: MICHELLD **PM:** KR **TAT (Days):** 14

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Sample #: JD13228-1 **Change:**

Dept: Relog for PHC1664

TAT: 14

RA-EFF-G

==========

==========

Sample #: JD13228-2 **Change:**

Dept: Relog for P608PCBLL

TAT: 14

RA-EFF-C

==========

Above Changes Per: Tim Kessler **Date/Time:** 9/23/2020 5:21:49 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Internal Sample Tracking Chronicle

Wood Environment & Infrastructure Solut.

Job No: JD13228

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD13228-1 RA-EFF-G	Collected: 17-SEP-20 12:40 By: WTW		Received: 17-SEP-20 By: JP			
JD13228-1	SM3500CR B-11	18-SEP-20 08:54	RI			XCRSM
JD13228-1	SW846 1010A/ASTM D93	23-SEP-20 13:00	DG			IGN
JD13228-1	EPA 200.7	21-SEP-20 21:31	ND	21-SEP-20	TG	CD,CU,NI,PB,ZN
JD13228-1	EPA 624.1	22-SEP-20 16:12	ED			V624BTXM
JD13228-1	SM2540 D-11	22-SEP-20 17:15	TB			TSS
JD13228-1	SM2540 B-11	23-SEP-20 17:43	TB			TS
JD13228-1	EPA 245.1	29-SEP-20 15:05	LL	29-SEP-20	LL	HG
JD13228-1	EPA 300/SW846 9056A	29-SEP-20 18:05	EB	28-SEP-20	EB	CHL
JD13228-2 RA-EFF-C	Collected: 17-SEP-20 12:26 By: WTW		Received: 17-SEP-20 By: JP			
JD13228-2	SM4500NO2 B-11	17-SEP-20 09:22	MP			NO2
JD13228-2	SM5210 B-11	17-SEP-20 21:42	EB	17-SEP-20	EB	CBOD5
JD13228-2	EPA 625.1	21-SEP-20 15:04	HSS	18-SEP-20	AS	AB625SL2
JD13228-2	EPA 200.7	21-SEP-20 21:41	ND	21-SEP-20	TG	CD
JD13228-2	EPA 624.1	22-SEP-20 16:37	ED			V624CHLFRM,VMS+ CTC,VMS+ TCA
JD13228-2	EPA353.2/SM4500NO2B	28-SEP-20 18:32	BM			NO3O
JD13228-2	EPA 353.2/LACHAT	28-SEP-20 18:32	BM	28-SEP-20	BM	NO32
JD13228-2	SM4500 A-11	29-SEP-20 16:05	BM			TNIT
JD13228-2	EPA 351.2/LACHAT	29-SEP-20 16:05	BM	28-SEP-20	MP	TKN
JD13228-1R RA-EFF-G	Collected: 17-SEP-20 12:40 By: WTW		Received: 17-SEP-20 By: JP			
JD13228-1R	EPA 1664A	25-SEP-20 18:00	LX	25-SEP-20	LX	PHC1664
JD13228-2R RA-EFF-C	Collected: 17-SEP-20 12:26 By: WTW		Received: 17-SEP-20 By: JP			
JD13228-2R	EPA 608.3	08-OCT-20 11:38	VDT	29-SEP-20	NW	P608PCBLL

SGS Internal Chain of Custody

Job Number: JD13228
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 09/17/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13228-1.1	Matthew Robbins	Secured Storage	09/17/20 19:41	Return to Storage
JD13228-1.1	Secured Storage	Todd Shoemaker	09/25/20 09:25	Retrieve from Storage
JD13228-1.1	Todd Shoemaker	Secured Staging Area	09/25/20 09:25	Return to Storage
JD13228-1.1	Secured Staging Area	Lixiao Xu	09/25/20 10:04	Retrieve from Storage
JD13228-1.1	Lixiao Xu		09/25/20 16:51	Depleted
JD13228-1.2	Matthew Robbins	Secured Storage	09/17/20 19:41	Return to Storage
JD13228-1.3	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-1.3	Secured Storage	Benjamin Gaines	09/20/20 15:53	Retrieve from Storage
JD13228-1.3	Benjamin Gaines	Secured Staging Area	09/20/20 15:53	Return to Storage
JD13228-1.3	Secured Staging Area	Taylor Gorman	09/21/20 04:48	Retrieve from Storage
JD13228-1.3	Taylor Gorman	Secured Storage	09/21/20 11:47	Return to Storage
JD13228-1.3	Secured Storage	Benjamin Gaines	09/27/20 15:02	Retrieve from Storage
JD13228-1.3	Benjamin Gaines	Secured Staging Area	09/27/20 15:02	Return to Storage
JD13228-1.3	Secured Staging Area	Lindsey Lee	09/28/20 08:00	Retrieve from Storage
JD13228-1.3	Lindsey Lee	Secured Storage	09/28/20 16:37	Return to Storage
JD13228-1.3	Secured Storage	Omar Khalid	09/28/20 17:21	Retrieve from Storage
JD13228-1.3	Omar Khalid	Secured Staging Area	09/28/20 17:21	Return to Storage
JD13228-1.3	Secured Staging Area	Lindsey Lee	09/29/20 08:03	Retrieve from Storage
JD13228-1.3	Lindsey Lee	Secured Storage	09/29/20 12:49	Return to Storage
JD13228-1.3.1	Taylor Gorman	Metals Digestion	09/21/20 11:33	Digestate from JD13228-1.3
JD13228-1.3.1	Metals Digestion	Taylor Gorman	09/21/20 11:33	Digestate from JD13228-1.3
JD13228-1.3.1	Taylor Gorman	Metals Digestate Storage	09/21/20 11:33	Return to Storage
JD13228-1.4	Matthew Robbins	Secured Storage	09/17/20 17:44	Return to Storage
JD13228-1.5	Matthew Robbins	Secured Storage	09/17/20 17:44	Return to Storage
JD13228-1.5	Secured Storage	Todd Shoemaker	09/22/20 11:41	Retrieve from Storage
JD13228-1.5	Todd Shoemaker	Secured Staging Area	09/22/20 11:42	Return to Storage
JD13228-1.5	Secured Staging Area	Tayler Barone	09/22/20 14:07	Retrieve from Storage
JD13228-1.5	Tayler Barone	Secured Storage	09/23/20 00:59	Return to Storage
JD13228-1.6	Matthew Robbins	Secured Storage	09/17/20 17:44	Return to Storage
JD13228-1.6	Secured Storage	Todd Shoemaker	09/22/20 11:41	Retrieve from Storage
JD13228-1.6	Todd Shoemaker	Secured Staging Area	09/22/20 11:42	Return to Storage
JD13228-1.6	Secured Staging Area	Tayler Barone	09/22/20 14:07	Retrieve from Storage
JD13228-1.6	Tayler Barone	Secured Storage	09/23/20 00:59	Return to Storage
JD13228-1.6	Secured Storage	Benjamin Gaines	09/23/20 13:43	Retrieve from Storage
JD13228-1.6	Benjamin Gaines	Secured Staging Area	09/23/20 13:43	Return to Storage
JD13228-1.6	Secured Staging Area	Tayler Barone	09/23/20 14:38	Retrieve from Storage
JD13228-1.6	Tayler Barone	Secured Storage	09/23/20 21:55	Return to Storage
JD13228-1.6	Secured Storage	Benjamin Gaines	09/24/20 13:21	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD13228
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 09/17/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13228-1.6	Benjamin Gaines	Secured Staging Area	09/24/20 13:21	Return to Storage
JD13228-1.6	Secured Staging Area	Elaine Banting	09/29/20 04:18	Retrieve from Storage
JD13228-1.6	Elaine Banting	Secured Storage	09/29/20 04:18	Return to Storage
JD13228-1.7	Secured Storage	Matthew Robbins	09/17/20 17:34	Retrieve from Storage
JD13228-1.7	Matthew Robbins	Secured Staging Area	09/17/20 17:34	Return to Storage
JD13228-1.7	Secured Staging Area	Elaine Banting	09/18/20 03:38	Retrieve from Storage
JD13228-1.7	Elaine Banting	Secured Storage	09/18/20 03:39	Return to Storage
JD13228-1.7	Secured Storage	Todd Shoemaker	09/18/20 08:00	Retrieve from Storage
JD13228-1.7	Todd Shoemaker	Secured Staging Area	09/18/20 08:00	Return to Storage
JD13228-1.7	Secured Staging Area	Rie Iwasaki	09/18/20 08:09	Retrieve from Storage
JD13228-1.7	Rie Iwasaki	Secured Storage	09/18/20 17:11	Return to Storage
JD13228-1.8	Matthew Robbins	Secured Storage	09/17/20 17:44	Return to Storage
JD13228-1.8	Secured Storage	Todd Shoemaker	09/18/20 09:09	Retrieve from Storage
JD13228-1.8	Todd Shoemaker	Secured Staging Area	09/18/20 09:09	Return to Storage
JD13228-1.8	Secured Staging Area	Devin Gomez	09/18/20 09:15	Retrieve from Storage
JD13228-1.8	Devin Gomez	Secured Storage	09/18/20 15:26	Return to Storage
JD13228-1.8	Secured Storage	Todd Shoemaker	09/21/20 09:13	Retrieve from Storage
JD13228-1.8	Todd Shoemaker	Secured Staging Area	09/21/20 09:13	Return to Storage
JD13228-1.8	Secured Staging Area	Devin Gomez	09/21/20 09:17	Retrieve from Storage
JD13228-1.8	Devin Gomez	Secured Storage	09/21/20 17:06	Return to Storage
JD13228-1.9	Secured Storage	Edward Durner	09/22/20 15:18	Retrieve from Storage
JD13228-1.9	Edward Durner	GCMS1A	09/22/20 15:18	Load on Instrument
JD13228-1.9	GCMS1A	Edward Durner	09/23/20 08:16	Unload from Instrument
JD13228-1.9	Edward Durner	Secured Storage	09/23/20 08:16	Return to Storage
JD13228-2.1	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-2.1	Secured Storage	Todd Shoemaker	09/18/20 15:10	Retrieve from Storage
JD13228-2.1	Todd Shoemaker	Secured Staging Area	09/18/20 15:10	Return to Storage
JD13228-2.1	Secured Staging Area	Alexandra Silecchia	09/18/20 15:37	Retrieve from Storage
JD13228-2.1	Alexandra Silecchia		09/19/20 00:05	Depleted
JD13228-2.1.1	Alexandra Silecchia	Organics Prep	09/18/20 15:37	Extract from JD13228-2.1
JD13228-2.1.1	Organics Prep	Alexandra Silecchia	09/19/20 00:04	Extract from JD13228-2.1
JD13228-2.1.1	Alexandra Silecchia		09/19/20 00:05	Depleted
JD13228-2.2	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-2.3	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-2.3	Secured Storage	Nicholas Weigand	09/18/20 17:36	Retrieve from Storage
JD13228-2.3	Nicholas Weigand		09/25/20 23:08	Depleted

SGS Internal Chain of Custody

Job Number: JD13228
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 09/17/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13228-2.3.1	Nicholas Weigand	Organics Prep	09/18/20 17:37	Extract from JD13228-2.3
JD13228-2.3.1	Organics Prep	Alexandra Silecchia	09/19/20 00:04	Extract from JD13228-2.3
JD13228-2.3.1	Alexandra Silecchia		09/19/20 00:05	Depleted
JD13228-2.4	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-2.4	Secured Storage	Todd Shoemaker	09/29/20 15:18	Retrieve from Storage
JD13228-2.4	Todd Shoemaker	Secured Staging Area	09/29/20 15:18	Return to Storage
JD13228-2.4	Secured Staging Area	Nicholas Weigand	09/29/20 15:59	Retrieve from Storage
JD13228-2.4	Nicholas Weigand		09/29/20 23:52	Depleted
JD13228-2.4.1	Nicholas Weigand	Organics Prep	09/29/20 16:00	Extract from JD13228-2.4
JD13228-2.4.1	Organics Prep	Nicholas Weigand	09/29/20 23:51	Extract from JD13228-2.4
JD13228-2.4.1	Nicholas Weigand	Extract Storage	09/29/20 23:51	Return to Storage
JD13228-2.4.1	Extract Storage	Vincent Drago	10/06/20 17:05	Retrieve from Storage
JD13228-2.4.1	Vincent Drago	GC5G	10/06/20 17:05	Load on Instrument
JD13228-2.5	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-2.5	Secured Storage	Benjamin Gaines	09/20/20 15:53	Retrieve from Storage
JD13228-2.5	Benjamin Gaines	Secured Staging Area	09/20/20 15:53	Return to Storage
JD13228-2.5	Secured Staging Area	Taylor Gorman	09/21/20 04:48	Retrieve from Storage
JD13228-2.5	Taylor Gorman	Secured Storage	09/21/20 11:47	Return to Storage
JD13228-2.5.1	Taylor Gorman	Metals Digestion	09/21/20 11:33	Digestate from JD13228-2.5
JD13228-2.5.1	Metals Digestion	Taylor Gorman	09/21/20 11:33	Digestate from JD13228-2.5
JD13228-2.5.1	Taylor Gorman	Metals Digestate Storage	09/21/20 11:33	Return to Storage
JD13228-2.6	Matthew Robbins	Secured Storage	09/17/20 17:44	Return to Storage
JD13228-2.6	Secured Storage	Todd Shoemaker	09/28/20 12:14	Retrieve from Storage
JD13228-2.6	Todd Shoemaker	Secured Staging Area	09/28/20 12:14	Return to Storage
JD13228-2.6	Secured Staging Area	Mahendra Patel	09/28/20 12:42	Retrieve from Storage
JD13228-2.6	Mahendra Patel	Secured Storage	09/28/20 18:49	Return to Storage
JD13228-2.7	Secured Storage	Matthew Robbins	09/17/20 17:34	Retrieve from Storage
JD13228-2.7	Matthew Robbins	Secured Staging Area	09/17/20 17:34	Return to Storage
JD13228-2.7	Secured Staging Area	Elaine Banting	09/18/20 03:38	Retrieve from Storage
JD13228-2.7	Elaine Banting	Secured Storage	09/18/20 03:39	Return to Storage
JD13228-2.8	Secured Storage	Matthew Robbins	09/17/20 17:34	Retrieve from Storage
JD13228-2.8	Matthew Robbins	Secured Staging Area	09/17/20 17:34	Return to Storage
JD13228-2.8	Secured Staging Area	Elaine Banting	09/18/20 03:38	Retrieve from Storage
JD13228-2.8	Elaine Banting	Secured Storage	09/18/20 03:39	Return to Storage
JD13228-2.8	Secured Storage	Todd Shoemaker	09/18/20 08:23	Retrieve from Storage
JD13228-2.8	Todd Shoemaker	Secured Staging Area	09/18/20 08:23	Return to Storage
JD13228-2.8	Secured Staging Area	Mahendra Patel	09/18/20 08:31	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD13228
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 09/17/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD13228-2.8	Mahendra Patel	Secured Storage	09/18/20 10:08	Return to Storage
JD13228-2.9	Matthew Robbins	Secured Storage	09/17/20 17:55	Return to Storage
JD13228-2.12	Secured Storage	Edward Durner	09/22/20 15:18	Retrieve from Storage
JD13228-2.12	Edward Durner	GCMS1A	09/22/20 15:18	Load on Instrument
JD13228-2.12	GCMS1A	Edward Durner	09/23/20 08:16	Unload from Instrument
JD13228-2.12	Edward Durner	Secured Storage	09/23/20 08:16	Return to Storage

de maximis, inc.
1550 Pond Road
Suite 120
Allentown, PA 18104
(610) 435-1151
FAX (610) 435-8459

January 5, 2021

Via U.S. Mail

Mr. Sean H. Hulbert
Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, New York 11368

RE: Review Avenue Development Sites - 37-30 and 37-80 Review Avenue
File # C-5652
4th Quarter 2020 Effluent Discharge Compliance Report

Dear Mr. Hulbert:

Enclosed is the 4th Quarter 2020 - Effluent Discharge Compliance Report for the Review Avenue Development Sites. This report is being submitted on behalf of the Review Avenue System LLC administering the Review Avenue Development Site Brownfield Projects identified as RAD I and RAD II.

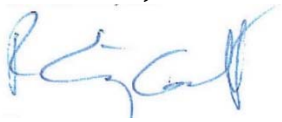
I would like to call to your attention the following, relative to discharge for the 4th Quarter 2020:

- Approximately 369,080 gallons of water have been discharged to the sewer system since the last reporting period – September 17, 2020.
- No constituents were reported above discharge criteria.

Please contact me with any questions at (610) 435-1151.

Sincerely,

de maximis, inc.



R. Craig Coslett
Project Coordinator for RADI and RAD II

Enclosure: Compliance Monitoring Report for 4th Quarter 2020
CC: K Forester, NYDEC (electronic mail only)
Tim Kessler, Wood Group (electronic mail only)
Brent O'Dell, Wood Group (electronic mail only)

January 4, 2021

Mr. Sean H. Hulbert - Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, NY 11368

Subject: **4th Quarter 2020 Effluent Discharge Compliance**
Review Avenue Development Sites
37-30 and 37-80 Review Avenue
Long Island City, Queens, New York, File # C-5652

Dear Mr. Hulbert:

Wood Environment and Infrastructure Solutions, Inc. (Wood), on behalf of Review Avenue System LLC, submits the effluent laboratory analysis data in connection with the letter of approval (LOA) for groundwater discharge to sanitary or combined sewer for the Review Avenue Development (RAD) Sites and LOA Extension dated September 30, 2019.

Wood collected the 4th Quarter 2020 discharge compliance samples on December 1, 2020. Analytical results indicate no exceedances of the daily discharge limits for all parameters and no exceedances of the monthly discharge limits for all parameters, and therefore the discharge is in compliance with our LOA requirements. The analytical results collected for the 4th Quarter 2020 compliance sampling are summarized on Table 1 attached. The total volume of groundwater discharged to the sanitary or combined sewer, since system start-up was 13,004,400 gallons as of the December 1st sampling event and 369,080 gallons since the last quarterly sampling event on September 17th.

If you have any questions, please contact either of the undersigned at (609) 689-2829.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Brent C. O'Dell, P.E.
Principal Engineer – Civil

Timothy C. Kessler
Senior Associate Engineer/PM

Attachments: Table 1 – Summary of Groundwater Analytical Results

cc: R. Craig Coslett – Review Avenue System LLC

200 American Metro Blvd
Suite 113
Hamilton, NJ 08619
609-689-2829
woodplc.com

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	NYCDEP Daily Limit	NYCDEP Monthly Limit	RA-EFF-G		RA-EFF-C	
Compliance Period:				4Q 2020		4Q 2020	
Sample Date:				12/1/2020		12/1/2020	
Lab Sample ID:				JD16912-1		JD16912-2	
Non-polar material[1]	mg/L	50	NL	5.0	U	-	
pH[2]	SUs	5 - 12	NL	7.01		-	
Temperature[2]	ºF	150	NL	37.2		-	
Flash Point[3]	ºF	> 140	NL	> 200		-	
Cadmium (Instantaneous)	mg/L	2	NL	0.003	U	-	
Cadmium (Composite)	mg/L	0.69	NL	-		0.003	U
Chromium (VI)	mg/L	5	NL	0.010	U	-	
Copper	mg/L	5	NL	0.01	U	-	
Lead	mg/L	2	NL	0.003	U	-	
Mercury	mg/L	0.05	NL	0.0002	U	-	
Nickel	mg/L	3	NL	0.01	U	-	
Zinc	mg/L	5	NL	0.02	U	-	
Benzene	µg/L	134	57	0.34	U	-	
Carbon Tetrachloride	µg/L	NL	NL	-		0.55	U
Chloroform	µg/L	NL	NL	-		16.1	
1,4-Dichlorobenzene	µg/L	NL	NL	0.63	U	-	
Ethylbenzene	µg/L	380	142	0.30	U	-	
MTBE (Methyl-Tert-Butyl-Ether)	µg/L	50	NL	0.37	U	-	
Napthalene	µg/L	47	19	-		0.23	U
Phenol	µg/L	NL	NL	-		0.39	U
Tetrachloroethylene (Perc)	µg/L	20	NL	0.41	U	-	
Toluene	µg/L	74	28	0.36	U	-	
1,2,4-Trichlorobenzene	µg/L	NL	NL	-		0.25	U
1,1,1-Trichloroethane	µg/L	NL	NL	-		0.54	U
Xylenes (Total)	µg/L	74	28	0.35	U	-	
PCBs (Total)	µg/L	1	NL	-		0.034	U
Total Suspended Solids (TSS)	mg/L	350	NL	10.0		-	
CBOD	mg/L	NL	NL	-		1.3	
Chloride	mg/L	NL	NL	16.7		-	
Total Nitrogen	mg/L	NL	NL	-		0.34	
Total Solids	mg/L	NL	NL	12.0		-	

Prepared by: DAM 12/10/20
Checked by: LMB 12/11/20

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:

RA-EFF-G: Instantaneous (Grab) Sample

RA-EFF-C: 4-Hour Flow Weighted Composite Sample

Bold/Shaded: Concentration exceeds daily limit

Underline: Concentration exceeds monthly limit

1. Non-polar Material reported by lab as "Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)"
2. pH and Temperature measured in field
3. Flash Point reported by lab as Ignitability
4. Temperature was estimated

Definitions:

MDL: Method Detection Limit

RL: Reporting Limit

NL: No Limit

Data Qualifiers:

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U: Indicates the analyte was not detected at the indicated MDL.

Prepared by: LB 10/12/20

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Wood Environment & Infrastructure Solut.

Review Avenue, Long Island City, NY

3480160502 PO#C01270035

SGS Job Number: JD16912

Sampling Date: 12/01/20

Report to:

Wood Environment & Infrastructure Soln.
200 American Metro Boulevard Suite 113
Hamilton, NJ 08619
Timothy.Kessler@woodplc.com; Vincent.Whelan@woodplc.com;
michelle.jenkins@sgs.com; william.whitacre@woodplc.com
ATTN: Tim Kessler

Total number of pages in report: 24

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Table of Contents

Sample Summary

Wood Environment & Infrastructure Solut.

Job No: JD16912

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD16912-1	12/01/20	10:15	WTW	12/01/20	AQ	Effluent	RA-EFF-G
JD16912-1R	12/01/20	10:15	WTW	12/01/20	AQ	Effluent	RA-EFF-G
JD16912-2	12/01/20	10:30	WTW	12/01/20	AQ	Effluent	RA-EFF-C
JD16912-2R	12/01/20	10:30	WTW	12/01/20	AQ	Effluent	RA-EFF-C

Summary of Hits

Job Number: JD16912
Account: Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Collected: 12/01/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD16912-1	**RA-EFF-G**					
Chloride		16.7	2.0		mg/l	EPA 300/SW846 9056A
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
Solids, Total		12.0	10		mg/l	SM2540 B-11
Solids, Total Suspended		10.0	4.0		mg/l	SM2540 D-11
JD16912-1R	**RA-EFF-G**					
No hits reported in this sample.						
JD16912-2	**RA-EFF-C**					
Chloroform		16.1	1.0	0.50	ug/l	EPA 624.1
Carbonaceous Bod, 5 Day [a]		1.3	1.0		mg/l	SM5210 B-11
Nitrogen, Total [b]		0.34	0.30		mg/l	SM4500 A-11
Nitrogen, Total Kjeldahl		0.34	0.20		mg/l	EPA 351.2/LACHAT
JD16912-2R	**RA-EFF-C**					
No hits reported in this sample.						

(a) Sample set up with 3 separate dilutions, but DO difference is less than 2 on all of the dilutions. Results reported are from the lowest dilution.
(b) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD16912-1	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T248519.D	1	12/04/20 19:08	ED	n/a	n/a	VT10302
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.34	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.37	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	99%		76-122%
2037-26-5	Toluene-D8 (SUR)	99%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%		80-120%
1868-53-7	Dibromofluoromethane (S)	108%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD16912-1	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	12/02/20	12/02/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Copper	< 10	10	ug/l	1	12/02/20	12/02/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Lead	< 3.0	3.0	ug/l	1	12/02/20	12/02/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Mercury	< 0.20	0.20	ug/l	1	12/07/20	12/08/20	LL	EPA 245.1 [2]	EPA 245.1 [4]
Nickel	< 10	10	ug/l	1	12/02/20	12/02/20	ND	EPA 200.7 [1]	EPA 200.7 [3]
Zinc	< 20	20	ug/l	1	12/02/20	12/02/20	ND	EPA 200.7 [1]	EPA 200.7 [3]

(1) Instrument QC Batch: MA49736
(2) Instrument QC Batch: MA49748
(3) Prep QC Batch: MP24051
(4) Prep QC Batch: MP24151

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD16912-1	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	16.7	2.0	mg/l	1	12/04/20 18:26	MH	EPA 300/SW846 9056A
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	12/01/20 22:20	EB	SW846 7196A
Ignitability (Flashpoint)	> 200		Deg. F	1	12/02/20 12:59	ER	SW846 1010A/ASTM D93
Solids, Total	12.0	10	mg/l	1	12/07/20 19:31	TB	SM2540 B-11
Solids, Total Suspended	10.0	4.0	mg/l	1	12/02/20 15:29	TB	SM2540 D-11

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD16912-1R	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Petroleum Hydrocarbons	< 5.0	5.0	mg/l	1	12/05/20 13:00	JOO	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID: RA-EFF-C
Lab Sample ID: JD16912-2
Matrix: AQ - Effluent
Method: EPA 624.1
Project: Review Avenue, Long Island City, NY

Date Sampled: 12/01/20
Date Received: 12/01/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T248520.D	1	12/04/20 19:38	ED	n/a	n/a	VT10302
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
67-66-3	Chloroform	16.1	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	98%		76-122%
2037-26-5	Toluene-D8 (SUR)	99%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	106%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD16912-2	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P140902.D	1	12/03/20 20:35	HSS	12/03/20 07:00	OP30848	EP6424
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-95-2	Phenol	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		10-110%
4165-62-2	Phenol-d5	74%		10-110%
118-79-6	2,4,6-Tribromophenol	76%		35-147%
4165-60-0	Nitrobenzene-d5	79%		32-132%
321-60-8	2-Fluorobiphenyl	76%		40-117%
1718-51-0	Terphenyl-d14	80%		33-126%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD16912-2	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	12/02/20	12/02/20	ND	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA49736
(2) Prep QC Batch: MP24051

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD16912-2	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Carbonaceous Bod, 5 Day [a]	1.3	1.0	mg/l	1	12/01/20 17:55	MH	SM5210 B-11
Nitrogen, Nitrate [b]	< 0.11	0.11	mg/l	1	12/03/20 20:51	EB	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/03/20 20:51	EB	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	12/01/20 16:25	MH	SM4500NO2 B-11
Nitrogen, Total [c]	0.34	0.30	mg/l	1	12/07/20 12:47	BM	SM4500 A-11
Nitrogen, Total Kjeldahl	0.34	0.20	mg/l	1	12/07/20 12:47	BM	EPA 351.2/LACHAT

(a) Sample set up with 3 separate dilutions, but DO difference is less than 2 on all of the dilutions. Results reported are from the lowest dilution.
(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(c) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD16912-2R	**Date Sampled:**	12/01/20
Matrix:	AQ - Effluent	**Date Received:**	12/01/20
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G101997.D	1	12/10/20 01:12	VDT	12/09/20 07:00	OP30894	G5G2542
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	45%		10-156%
877-09-8	Tetrachloro-m-xylene	41%		10-156%
2051-24-3	Decachlorobiphenyl	37%		10-143%
2051-24-3	Decachlorobiphenyl	39%		10-143%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JD16912
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Ignitability (Flashpoint)		**SW846 1010A/ASTM D93**	AQ	SGS is not certified for this parameter.[a]
Nitrogen, Total		**SM4500 A-11**	AQ	SGS is not certified for this parameter.[b]

(a) Lab cert for analyte/method not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.
(b) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

GW

E Comp

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #

Bottle Order Control # JD 16912

SGS Quote #

SGS Job # HLANJPR67753

Client / Reporting Information

Company Name: Wood E&IS
Street Address: 200 American Metro Blvd #113
City: Hamilton, NJ State: Zip: 08619
Project Contact: E-mail: Timothy.kessler@woodplc.com
Phone #: 609-689-2829
Sampler(s) Name(s): William Whitacre 646-831-5662 Phone #:

Project Information

Project Name: Review Avenue GWM
Street: Review Avenue
City: Long Island City State: NY
Project #: 3480160502
Client Purchase Order #: C01270035
Project Manager: Tim Kessler

Billing information (if different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	IGN, XCR	Cd, Cu, Pb, Ni, Zn (EPA 200.7) HG (EPA 245.1)	V624BTXM, VMS+PCE, VMS+14DCB	TSS, TS, CHL	PHC1664		V624CHLFRM, VMS+CTC, VMS+TCA (Composite of C1 thru C4	AB625SL2	CBOD5, XTNIT (NO32, TKN, TNIT), NO2, NO3O	CD (EPA 200.7)	PCBs, Low Level (P608PCBLL) - EPA 608	LAB USE ONLY
1	RA-EFF-G		12/1/2020	1015	wtw	G	GW	12	5		1		6				X	X	X	X	H							E1
	RA-EFF-C		12/1/2020	1030	wtw	C	GW	13	3		1	3	6										X	X	X	X	H	L20
	RA-VOC-C1		12/1/2020	0700	wtw	G	GW	3	3														C					
2	RA-VOC-C2		12/1/2020	0800	wtw	G	GW	3	3														C					
	RA-VOC-C3		12/1/2020	0900	wtw	G	GW	3	3														C					
	RA-VOC-C4		12/1/2020	1000	wtw	G	GW	3	3														C					

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [X] Other Standard

INITIAL ASESSMENT JA-PP

LABEL VERIFICATION

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] MA MCP Criteria_____
- [ ] CT RCP Criteria_____
- [ ] State Forms
- [X] EDD Format NYSDEC
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Composite RA-VOC-C1 to RA-VOC-C4 in lab to be used for RA-EFF-C VOC analysis.

Hold PHC1664 + PCB Samples.

Hex Chrome Test Method Only Allows 24HR Hold Time

Field pH 7.01

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:	Relinquished by:	Date / Time:	Received By:
1		12/1/20 1438	1	2		2
3			3	4		4
5			5			

Custody Seal # 11938 Intact / Not intact

Preserved where applicable: Absent

Therm. ID: IR-4 On Ice

Cooler Temp. °C 2.9°C

JP

Review Ave_COC 112420.xlsx

SGS Sample Receipt Summary

Job Number: JD16912 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** REVIEW AVENUE, LONG ISLAND CITY, NY

Date / Time Received: 12/1/2020 10:38:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.9);

Cooler Temps (Corrected) °C: Cooler 1: (2.4);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD16912: Chain of Custody
Page 2 of 3

Job Change Order: JD16912

Requested Date: 12/3/2020 **Received Date:** 12/1/2020

Account Name: Wood Environment & Infrastructur **Due Date:** 12/8/2020

Project Description: Review Avenue, Long Island City, NY **Deliverable:** NYASPA

C/O Initiated By: MICHELLD **PM:** KR **TAT (Days):** 7

==========

Sample #: JD16912-1 **Change:**

Dept: Relog/take off hold for PHC1664

TAT: 7

RA-EFF-G

==========

==========

Sample #: JD16912-2 **Change:**

Dept: Relog/take off hold for P608PCBLL

TAT: 7

RA-EFF-C

==========

Above Changes Per: Tim Kessler **Date/Time:** 12/3/2020 4:16:19 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Internal Sample Tracking Chronicle

Wood Environment & Infrastructure Solut.

Job No: JD16912

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD16912-1 RA-EFF-G	Collected: 01-DEC-20 10:15 By: WTW		Received: 01-DEC-20 By: JP			
JD16912-1	SW846 7196A	01-DEC-20 22:20	EB			XCR
JD16912-1	SW846 1010A/ASTM D93	02-DEC-20 12:59	ER			IGN
JD16912-1	SM2540 D-11	02-DEC-20 15:29	TB			TSS
JD16912-1	EPA 200.7	02-DEC-20 17:26	ND	02-DEC-20	MS	CD,CU,NI,PB,ZN
JD16912-1	EPA 300/SW846 9056A	04-DEC-20 18:26	MH	04-DEC-20	MH	CHL
JD16912-1	EPA 624.1	04-DEC-20 19:08	ED			V624BTXM
JD16912-1	SM2540 B-11	07-DEC-20 19:31	TB			TS
JD16912-1	EPA 245.1	08-DEC-20 09:19	LL	07-DEC-20	LL	HG
JD16912-2 RA-EFF-C	Collected: 01-DEC-20 10:30 By: WTW		Received: 01-DEC-20 By: JP			
JD16912-2	SM4500NO2 B-11	01-DEC-20 16:25	MH			NO2
JD16912-2	SM5210 B-11	01-DEC-20 17:55	MH	01-DEC-20	MH	CBOD5
JD16912-2	EPA 200.7	02-DEC-20 17:31	ND	02-DEC-20	MS	CD
JD16912-2	EPA 625.1	03-DEC-20 20:35	HSS	03-DEC-20	VP	AB625SL2
JD16912-2	EPA353.2/SM4500NO2B	03-DEC-20 20:51	EB			NO3O
JD16912-2	EPA 353.2/LACHAT	03-DEC-20 20:51	EB	03-DEC-20	EB	NO32
JD16912-2	EPA 624.1	04-DEC-20 19:38	ED			V624CHLFRM,VMS+ CTC,VMS+ TCA
JD16912-2	SM4500 A-11	07-DEC-20 12:47	BM			TNIT
JD16912-2	EPA 351.2/LACHAT	07-DEC-20 12:47	BM	03-DEC-20	MP	TKN
JD16912-1R RA-EFF-G	Collected: 01-DEC-20 10:15 By: WTW		Received: 01-DEC-20 By: JP			
JD16912-1R	EPA 1664A	05-DEC-20 13:00	JOO	05-DEC-20	JOO	PHC1664
JD16912-2R RA-EFF-C	Collected: 01-DEC-20 10:30 By: WTW		Received: 01-DEC-20 By: JP			
JD16912-2R	EPA 608.3	10-DEC-20 01:12	VDT	09-DEC-20	HW	P608PCBLL

SGS Internal Chain of Custody

Job Number: JD16912
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 12/01/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD16912-1.1	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.1	Secured Storage	Todd Shoemaker	12/04/20 10:28	Retrieve from Storage
JD16912-1.1	Todd Shoemaker	Secured Staging Area	12/04/20 10:28	Return to Storage
JD16912-1.1	Secured Staging Area	Jared O. Onindo	12/04/20 10:59	Retrieve from Storage
JD16912-1.1	Jared O. Onindo	Secured Storage	12/04/20 18:10	Return to Storage
JD16912-1.2	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.2	Secured Storage	Jared O. Onindo	12/05/20 13:29	Retrieve from Storage
JD16912-1.2	Jared O. Onindo		12/05/20 13:29	Depleted
JD16912-1.3	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.3	Secured Storage	Todd Shoemaker	12/02/20 08:20	Retrieve from Storage
JD16912-1.3	Todd Shoemaker	Secured Staging Area	12/02/20 08:20	Return to Storage
JD16912-1.3	Secured Staging Area	Madellyne Sanchez@sgs	12/02/20 08:44	Retrieve from Storage
JD16912-1.3	Madellyne Sanchez@sgs	Secured Storage	12/02/20 09:59	Return to Storage
JD16912-1.3	Secured Storage	Benjamin Gaines	12/03/20 12:36	Retrieve from Storage
JD16912-1.3	Benjamin Gaines	Secured Staging Area	12/03/20 12:36	Return to Storage
JD16912-1.3	Secured Staging Area	Gulcag Temizau	12/03/20 13:41	Retrieve from Storage
JD16912-1.3	Gulcag Temizau	Secured Storage	12/03/20 14:39	Return to Storage
JD16912-1.3	Secured Storage	Benjamin Gaines	12/06/20 15:49	Retrieve from Storage
JD16912-1.3	Benjamin Gaines	Secured Staging Area	12/06/20 15:49	Return to Storage
JD16912-1.3	Secured Staging Area	Lindsey Lee	12/07/20 08:32	Retrieve from Storage
JD16912-1.3	Lindsey Lee	Secured Storage	12/07/20 13:44	Return to Storage
JD16912-1.3.1	Madellyne Sanchez@sgs	Metals Digestion	12/02/20 09:54	Digestate from JD16912-1.3
JD16912-1.3.1	Metals Digestion	Madellyne Sanchez@sgs	12/02/20 09:54	Digestate from JD16912-1.3
JD16912-1.3.1	Madellyne Sanchez@sgs	Metals Digestate Storage	12/02/20 09:54	Return to Storage
JD16912-1.4	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.5	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.5	Secured Storage	Todd Shoemaker	12/02/20 10:52	Retrieve from Storage
JD16912-1.5	Todd Shoemaker	Secured Staging Area	12/02/20 10:52	Return to Storage
JD16912-1.5	Secured Staging Area	Tayler Barone	12/02/20 13:54	Retrieve from Storage
JD16912-1.5	Tayler Barone	Secured Storage	12/02/20 19:14	Return to Storage
JD16912-1.6	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.6	Secured Storage	Omar Khalid	12/03/20 19:35	Retrieve from Storage
JD16912-1.6	Omar Khalid	Secured Staging Area	12/03/20 19:35	Return to Storage
JD16912-1.6	Secured Staging Area	Dave Hunkele	12/08/20 07:17	Retrieve from Storage
JD16912-1.6	Dave Hunkele	Secured Storage	12/08/20 07:23	Return to Storage
JD16912-1.7	Secured Storage	Benjamin Gaines	12/01/20 15:00	Retrieve from Storage
JD16912-1.7	Benjamin Gaines	Secured Staging Area	12/01/20 15:00	Return to Storage

SGS Internal Chain of Custody

Job Number: JD16912
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 12/01/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD16912-1.7	Secured Staging Area	Elaine Banting	12/02/20 02:21	Retrieve from Storage
JD16912-1.7	Elaine Banting	Secured Storage	12/02/20 02:22	Return to Storage
JD16912-1.7	Secured Storage	Todd Shoemaker	12/07/20 11:53	Retrieve from Storage
JD16912-1.7	Todd Shoemaker	Secured Staging Area	12/07/20 11:54	Return to Storage
JD16912-1.7	Secured Staging Area	Tayler Barone	12/07/20 15:20	Retrieve from Storage
JD16912-1.7	Tayler Barone	Secured Storage	12/07/20 22:46	Return to Storage
JD16912-1.8	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.8	Secured Storage	Todd Shoemaker	12/02/20 10:52	Retrieve from Storage
JD16912-1.8	Todd Shoemaker	Secured Staging Area	12/02/20 10:52	Return to Storage
JD16912-1.8	Secured Staging Area	Tayler Barone	12/02/20 13:54	Retrieve from Storage
JD16912-1.8	Tayler Barone	Secured Storage	12/02/20 19:14	Return to Storage
JD16912-1.8	Secured Storage	Omar Khalid	12/03/20 22:14	Retrieve from Storage
JD16912-1.8	Omar Khalid	Secured Staging Area	12/03/20 22:14	Return to Storage
JD16912-1.8	Secured Staging Area	Tayler Barone	12/04/20 00:00	Retrieve from Storage
JD16912-1.8	Tayler Barone		12/04/20 00:01	Depleted
JD16912-1.9	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.9	Secured Storage	Todd Shoemaker	12/02/20 09:14	Retrieve from Storage
JD16912-1.9	Todd Shoemaker	Secured Staging Area	12/02/20 09:15	Return to Storage
JD16912-1.9	Secured Staging Area	Elijah Rick	12/02/20 11:54	Retrieve from Storage
JD16912-1.9	Elijah Rick	Secured Storage	12/02/20 18:15	Return to Storage
JD16912-1.10	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.10	Secured Storage	Edward Durner	12/04/20 14:41	Retrieve from Storage
JD16912-1.10	Edward Durner	GCMST	12/04/20 14:42	Load on Instrument
JD16912-1.10	GCMST	Edward Durner	12/07/20 09:45	Unload from Instrument
JD16912-1.10	Edward Durner	Secured Storage	12/07/20 09:45	Return to Storage
JD16912-1.11	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-1.12	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.1	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.2	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.2	Secured Storage	Omar Khalid	12/02/20 18:58	Retrieve from Storage
JD16912-2.2	Omar Khalid	Secured Staging Area	12/02/20 18:58	Return to Storage
JD16912-2.2	Secured Staging Area	Huachi Wu	12/03/20 06:38	Retrieve from Storage
JD16912-2.2	Huachi Wu		12/03/20 11:44	Depleted
JD16912-2.2.1	Huachi Wu	Organics Prep	12/03/20 06:40	Extract from JD16912-2.2
JD16912-2.2.1	Organics Prep	Huachi Wu	12/03/20 11:44	Extract from JD16912-2.2
JD16912-2.2.1	Huachi Wu	Extract Storage	12/03/20 11:44	Return to Storage

SGS Internal Chain of Custody

Job Number: JD16912
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 12/01/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD16912-2.2.1	Extract Storage	Henny Salim	12/03/20 15:54	Retrieve from Storage
JD16912-2.2.1	Henny Salim	GCMSP	12/03/20 15:54	Load on Instrument
JD16912-2.2.1	GCMSP	Kristi Schollenberger	12/04/20 12:11	Unload from Instrument
JD16912-2.2.1	Kristi Schollenberger	Extract Freezer	12/04/20 12:11	Return to Storage
JD16912-2.3	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.4	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.4	Jeemit Patel	Secured Staging Area	12/08/20 19:08	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD16912-2.4	Secured Staging Area	Huachi Wu	12/09/20 07:17	Retrieve from Storage
JD16912-2.4	Huachi Wu		12/09/20 13:27	Depleted
JD16912-2.4.1	Huachi Wu	Organics Prep	12/09/20 07:17	Extract from JD16912-2.4
JD16912-2.4.1	Organics Prep	Huachi Wu	12/09/20 13:25	Extract from JD16912-2.4
JD16912-2.4.1	Huachi Wu	Extract Storage	12/09/20 13:25	Return to Storage
JD16912-2.4.1	Extract Storage	Vincent Drago	12/09/20 17:11	Retrieve from Storage
JD16912-2.4.1	Vincent Drago	GC5G	12/09/20 17:11	Load on Instrument
JD16912-2.5	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.5	Secured Storage	Todd Shoemaker	12/02/20 08:20	Retrieve from Storage
JD16912-2.5	Todd Shoemaker	Secured Staging Area	12/02/20 08:20	Return to Storage
JD16912-2.5	Secured Staging Area	Madellyne Sanchez@sgs	12/02/20 08:44	Retrieve from Storage
JD16912-2.5	Madellyne Sanchez@sgs	Secured Storage	12/02/20 09:59	Return to Storage
JD16912-2.5.1	Madellyne Sanchez@sgs	Metals Digestion	12/02/20 09:54	Digestate from JD16912-2.5
JD16912-2.5.1	Metals Digestion	Madellyne Sanchez@sgs	12/02/20 09:54	Digestate from JD16912-2.5
JD16912-2.5.1	Madellyne Sanchez@sgs	Metals Digestate Storage	12/02/20 09:54	Return to Storage
JD16912-2.6	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.6	Secured Storage	Benjamin Gaines	12/03/20 09:29	Retrieve from Storage
JD16912-2.6	Benjamin Gaines	Secured Staging Area	12/03/20 09:29	Return to Storage
JD16912-2.6	Secured Staging Area	Mahendra Patel	12/03/20 14:49	Retrieve from Storage
JD16912-2.6	Mahendra Patel	Secured Storage	12/03/20 16:47	Return to Storage
JD16912-2.6	Dominic Guerriero	Secured Staging Area	12/05/20 09:50	Return to Storage
Analyst chain of custody update error.				
JD16912-2.6	Secured Staging Area	Dave Hunkele	12/08/20 07:23	Retrieve from Storage
JD16912-2.6	Dave Hunkele	Secured Storage	12/08/20 07:23	Return to Storage
JD16912-2.7	Secured Storage	Benjamin Gaines	12/01/20 15:00	Retrieve from Storage
JD16912-2.7	Benjamin Gaines	Secured Staging Area	12/01/20 15:00	Return to Storage
JD16912-2.7	Secured Staging Area	Elaine Banting	12/02/20 02:21	Retrieve from Storage
JD16912-2.7	Elaine Banting	Secured Storage	12/02/20 02:22	Return to Storage

SGS Internal Chain of Custody

Job Number: JD16912
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 12/01/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD16912-2.8	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.8	Secured Storage	Todd Shoemaker	12/02/20 14:03	Retrieve from Storage
JD16912-2.8	Todd Shoemaker	Secured Staging Area	12/02/20 14:06	Return to Storage
JD16912-2.8	Secured Staging Area	Elaine Banting	12/04/20 00:25	Retrieve from Storage
JD16912-2.8	Elaine Banting	Secured Storage	12/04/20 00:25	Return to Storage
JD16912-2.9	Secured Storage	Benjamin Gaines	12/01/20 15:00	Retrieve from Storage
JD16912-2.9	Benjamin Gaines	Secured Staging Area	12/01/20 15:00	Return to Storage
JD16912-2.9	Secured Staging Area	Elaine Banting	12/02/20 02:21	Retrieve from Storage
JD16912-2.9	Elaine Banting	Secured Storage	12/02/20 02:22	Return to Storage
JD16912-2.10	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.11	Todd Shoemaker	Secured Storage	12/01/20 15:02	Return to Storage
JD16912-2.12	Secured Storage	Edward Durner	12/04/20 14:41	Retrieve from Storage
JD16912-2.12	Edward Durner	GCMST	12/04/20 14:42	Load on Instrument
JD16912-2.12	GCMST	Edward Durner	12/07/20 09:45	Unload from Instrument
JD16912-2.12	Edward Durner	Secured Storage	12/07/20 09:45	Return to Storage

de maximis, inc.

1550 Pond Road
Suite 120
Allentown, PA 18104
(610) 435-1151
FAX (610) 435-8459

February 22, 2021

Via Electronic Mail

Mr. Sean H. Hulbert
Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, New York 11368

RE: Review Avenue Development Sites - 37-30 and 37-80 Review Avenue
File # C-5652
1st Quarter 2021 Effluent Discharge Compliance Report

Dear Mr. Hulbert:

Enclosed is the 1st Quarter 2021 - Effluent Discharge Compliance Report for the Review Avenue Development Sites. This report is being submitted on behalf of the Review Avenue System LLC administering the Review Avenue Development Site Brownfield Projects identified as RAD I and RAD II.

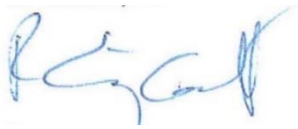
I would like to call to your attention the following, relative to discharge for the 1st Quarter 2021:

- Approximately 101,950 gallons of water have been discharged to the sewer system since the last reporting period – December 1, 2020.
- No constituents were reported above discharge criteria.

Please contact me with any questions at (610) 435-1151.

Sincerely,

de maximis, inc.



R. Craig Coslett
Project Coordinator for RADI and RAD II

Enclosures: Compliance Monitoring Report for 1st Quarter 2021
CC: K Forester, NYDEC (electronic mail only)
Tim Kessler, Wood Group (electronic mail only)
Brent O'Dell, Wood Group (electronic mail only)

File: 3242 / 1st Qrt Compliance Report 2021

February 17, 2021

Mr. Sean H. Hulbert - Assistant Chemical Engineer
NYCDEP, Bureau of Wastewater Treatment
96-05 Horace Harding Expressway, 1st Floor
Corona, NY 11368

Subject: 1st **Quarter 2021 Effluent Discharge Compliance**
Review Avenue Development Sites
37-30 and 37-80 Review Avenue
Long Island City, Queens, New York, File # C-5652

Dear Mr. Hulbert:

Wood Environment and Infrastructure Solutions, Inc. (Wood), on behalf of Review Avenue System LLC, submits the effluent laboratory analysis data in connection with the letter of approval (LOA) for groundwater discharge to sanitary or combined sewer for the Review Avenue Development (RAD) Sites and LOA Extension dated November 2, 2020.

Wood collected the 1st Quarter 2021 discharge compliance samples on January 11, 2021. Analytical results indicate no exceedances of the daily discharge limits for all parameters and no exceedances of the monthly discharge limits for all parameters, and therefore the discharge is in compliance with our LOA requirements. The analytical results collected for the 1st Quarter 2021 compliance sampling are summarized on Table 1 attached. The total volume of groundwater discharged to the sanitary or combined sewer, since system start-up was 13,106,350 gallons as of the January 11th sampling event and 101,950 gallons since the last quarterly sampling event on December 1, 2020.

If you have any questions, please contact either of the undersigned at (609) 689-2829.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Brent C. O'Dell, P.E.
Principal Engineer – Civil

Timothy C. Kessler
Senior Associate Engineer/PM

Attachments: Table 1 – Summary of Groundwater Analytical Results

cc: R. Craig Coslett – Review Avenue System LLC

200 American Metro Blvd
Suite 113
Hamilton, NJ 08619
609-689-2829
woodplc.com

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Field Sample ID:	Unit	NYCDEP Daily Limit	NYCDEP Monthly Limit	RA-EFF-G		RA-EFF-C	
Compliance Period:				1Q 2021		1Q 2021	
Sample Date:				1/11/2021		1/11/2021	
Lab Sample ID:				JD18875-1		JD18875-2	
Non-polar material[1]	mg/L	50	NL	< 5.0		-	
pH[2]	SUs	5 - 12	NL	7.04		-	
Temperature[2]	ºF	150	NL	37.6		-	
Flash Point[3]	ºF	> 140	NL	> 200		-	
Cadmium (Instantaneous)	mg/L	2	NL	< 0.003		-	
Cadmium (Composite)	mg/L	0.69	NL	-		< 0.003	
Chromium (VI)	mg/L	5	NL	< 0.010		-	
Copper	mg/L	5	NL	0.0107		-	
Lead	mg/L	2	NL	< 0.003		-	
Mercury	mg/L	0.05	NL	< 0.0002		-	
Nickel	mg/L	3	NL	< 0.01		-	
Zinc	mg/L	5	NL	0.0538		-	
Benzene	µg/L	134	57	0.34	U	-	
Carbon Tetrachloride	µg/L	NL	NL	-		0.55	U
Chloroform	µg/L	NL	NL	-		0.50	U
1,4-Dichlorobenzene	µg/L	NL	NL	0.63	U	-	
Ethylbenzene	µg/L	380	142	0.30	U	-	
MTBE (Methyl-Tert-Butyl-Ether)	µg/L	50	NL	0.37	U	-	
Napthalene	µg/L	47	19	-		0.23	U
Phenol	µg/L	NL	NL	-		0.39	U
Tetrachloroethylene (Perc)	µg/L	20	NL	0.41	U	-	
Toluene	µg/L	74	28	0.36	U	-	
1,2,4-Trichlorobenzene	µg/L	NL	NL	-		0.25	U
1,1,1-Trichloroethane	µg/L	NL	NL	-		0.54	U
Xylenes (Total)	µg/L	74	28	0.35	U	-	
PCBs (Total)	µg/L	1	NL	-		0.034	U
Total Suspended Solids (TSS)	mg/L	350	NL	< 4.0		-	
CBOD	mg/L	NL	NL	-		< 1.0	
Chloride	mg/L	NL	NL	25.6		-	
Total Nitrogen	mg/L	NL	NL	-		0.90	
Total Solids	mg/L	NL	NL	129.0		-	

Prepared by: LMB 1/21/21
Checked by:

Table 1
Summary of Analytical Results - Groundwater Treatment System
Review Avenue Development Sites, NYCDEP File # C-5652
Long Island City, Queens, New York

Notes:
RA-EFF-G: Instantaneous (Grab) Sample
RA-EFF-C: 4-Hour Flow Weighted Composite Sample
Bold/Shaded: Concentration exceeds daily limit
Underline: Concentration exceeds monthly limit
1. Non-polar Material reported by lab as "Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)"
2. pH and Temperature measured in field
3. Flash Point reported by lab as Ignitability
4. Total Nitrogen calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen,Nitrate + Nitrite)
5. Temperature was estimated

Definitions:
MDL: Method Detection Limit
RL: Reporting Limit
NL: No Limit
- : Not Analyzed

Data Qualifiers:
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U: Indicates the analyte was not detected at the indicated MDL.

Prepared by: LB 10/12/20

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Wood Environment & Infrastructure Solut.

Review Avenue, Long Island City, NY

3480160502 PO#C01270035

SGS Job Number: JD18875

Sampling Date: 01/11/21

Report to:

Wood Environment & Infrastructure Soln.
200 American Metro Boulevard Suite 113
Hamilton, NJ 08619
Timothy.Kessler@woodplc.com; Vincent.Whelan@woodplc.com;
michelle.jenkins@sgs.com; william.whitacre@woodplc.com
ATTN: Tim Kessler

Total number of pages in report: 24

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

January 26, 2020

Mr. Tim Kessler
Wood Environment & Infrastructure Solution
200 American Metro Boulevard Suite 113
Hamilton, NJ 08619

RE: SGS – Dayton, Job # JD18875 - Reissues

Dear Mr. Kessler,

The final report for SGS jobs number JD18875 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached. .

Specifically, all results from JD18875R has been combined with original job per client's request. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

Table of Contents

SGS North America Inc.

Sample Summary

Wood Environment & Infrastructure Solut.

Job No: JD18875

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD18875-1	01/11/21	15:00	WTW	01/11/21	AQ	Effluent	RA-EFF-G
JD18875-1R	01/11/21	15:00	WTW	01/11/21	AQ	Effluent	RA-EFF-G
JD18875-2	01/11/21	17:00	WTW	01/11/21	AQ	Effluent	RA-EFF-C
JD18875-2R	01/11/21	17:00	WTW	01/11/21	AQ	Effluent	RA-EFF-C

Summary of Hits

Job Number: JD18875
Account: Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Collected: 01/11/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD18875-1	**RA-EFF-G**					
Copper		10.7	10		ug/l	EPA 200.7
Zinc		53.8	20		ug/l	EPA 200.7
Chloride		25.6	2.0		mg/l	EPA 300/SW846 9056A
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
Solids, Total		129	10		mg/l	SM2540 B-11
JD18875-1R	**RA-EFF-G**					
No hits reported in this sample.						
JD18875-2	**RA-EFF-C**					
Carbonaceous Bod, 5 Day		< 1.0	1.0		mg/l	SM5210 B-11
Nitrogen, Nitrate [a]		0.37	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		0.37	0.10		mg/l	EPA 353.2/LACHAT
Nitrogen, Total [b]		0.90	0.30		mg/l	SM4500 A-11
Nitrogen, Total Kjeldahl		0.53	0.20		mg/l	EPA 351.2/LACHAT
JD18875-2R	**RA-EFF-C**					
No hits reported in this sample.						

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD18875-1	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T249250.D	1	01/12/21 17:35	ED	n/a	n/a	VT10340
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.34	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.37	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.63	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	96%		76-122%
2037-26-5	Toluene-D8 (SUR)	98%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	100%		80-120%
1868-53-7	Dibromofluoromethane (S)	98%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD18875-1	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	01/13/21	01/14/21	ND	EPA 200.7 [2]	EPA 200.7 [3]
Copper	10.7	10	ug/l	1	01/13/21	01/14/21	ND	EPA 200.7 [2]	EPA 200.7 [3]
Lead	< 3.0	3.0	ug/l	1	01/13/21	01/14/21	ND	EPA 200.7 [2]	EPA 200.7 [3]
Mercury	< 0.20	0.20	ug/l	1	01/14/21	01/14/21	LL	EPA 245.1 [1]	EPA 245.1 [4]
Nickel	< 10	10	ug/l	1	01/13/21	01/14/21	ND	EPA 200.7 [2]	EPA 200.7 [3]
Zinc	53.8	20	ug/l	1	01/13/21	01/14/21	ND	EPA 200.7 [2]	EPA 200.7 [3]

(1) Instrument QC Batch: MA49931
(2) Instrument QC Batch: MA49936
(3) Prep QC Batch: MP24653
(4) Prep QC Batch: MP24676

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD18875-1	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	25.6	2.0	mg/l	1	01/13/21 21:53	MH	EPA 300/SW846 9056A
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	01/11/21 23:50	EB	SW846 7196A
Ignitability (Flashpoint)	> 200		Deg. F	1	01/13/21 17:07	JZ	SW846 1010A/ASTM D93
Solids, Total	129	10	mg/l	1	01/13/21 15:51	TB	SM2540 B-11
Solids, Total Suspended	< 4.0	4.0	mg/l	1	01/13/21 16:21	TB	SM2540 D-11

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-G		
Lab Sample ID:	JD18875-1R	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Petroleum Hydrocarbons	< 5.0	5.0	mg/l	1	01/20/21 11:30	ER	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID: RA-EFF-C
Lab Sample ID: JD18875-2
Matrix: AQ - Effluent
Method: EPA 624.1
Project: Review Avenue, Long Island City, NY

Date Sampled: 01/11/21
Date Received: 01/11/21
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T249251.D	1	01/12/21 18:05	ED	n/a	n/a	VT10340
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	94%		76-122%
2037-26-5	Toluene-D8 (SUR)	97%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	101%		80-120%
1868-53-7	Dibromofluoromethane (S)	99%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD18875-2	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P496724.D	1	01/13/21 14:55	HSS	01/12/21 17:30	OP31482	E6P3268
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-95-2	Phenol	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	0.99	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.99	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		10-110%
4165-62-2	Phenol-d5	41%		10-110%
118-79-6	2,4,6-Tribromophenol	119%		35-147%
4165-60-0	Nitrobenzene-d5	111%		32-132%
321-60-8	2-Fluorobiphenyl	109%		40-117%
1718-51-0	Terphenyl-d14	111%		33-126%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD18875-2	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	01/13/21	01/14/21	ND	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA49936
(2) Prep QC Batch: MP24653

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD18875-2	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
		Percent Solids:	n/a
Project:	Review Avenue, Long Island City, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Carbonaceous Bod, 5 Day	< 1.0	1.0	mg/l	1	01/12/21 18:22	MH	SM5210 B-11
Nitrogen, Nitrate [a]	0.37	0.11	mg/l	1	01/14/21 13:13	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.37	0.10	mg/l	1	01/14/21 13:13	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	01/12/21 17:35	MH	SM4500NO2 B-11
Nitrogen, Total [b]	0.90	0.30	mg/l	1	01/25/21 15:30	BM	SM4500 A-11
Nitrogen, Total Kjeldahl	0.53	0.20	mg/l	1	01/25/21 15:30	BM	EPA 351.2/LACHAT

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Calculated as: (Nitrogen, Total Kjeldahl) + (Nitrogen, Nitrate + Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RA-EFF-C		
Lab Sample ID:	JD18875-2R	**Date Sampled:**	01/11/21
Matrix:	AQ - Effluent	**Date Received:**	01/11/21
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	Review Avenue, Long Island City, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G103106.D	1	01/20/21 02:54	VDT	01/19/21 06:00	OP31536	G5G2576
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		10-156%
877-09-8	Tetrachloro-m-xylene	86%		10-156%
2051-24-3	Decachlorobiphenyl	76%		10-143%
2051-24-3	Decachlorobiphenyl	98%		10-143%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JD18875
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Ignitability (Flashpoint)		**SW846 1010A/ASTM D93**	AQ	SGS is not certified for this parameter.[a]
Nitrogen, Total		**SM4500 A-11**	AQ	SGS is not certified for this parameter.[b]

(a) Lab cert for analyte/method not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.
(b) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

GW

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

JB JD18875 E/Comp

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: HLANJPR67753

Client / Reporting Information

Company Name: Wood E&IS
Street Address: 200 American Metro Blvd #113
City: Hamilton, NJ State: Zip: 08619
Project Contact: E-mail: Timothy.kessler@woodplc.com
Phone #: 609-689-2829
Sampler(s) Name(s): William Whitacre 646-831-5662 Phone #:

Project Information

Project Name: Review Avenue GWM
Street: Review Avenue
City: Long Island City State: NY
Project #: 3480160502
Client Purchase Order #: C01270035
Project Manager: Tim Kessler

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	IGN, XCR	Cd, Cu, Pb, Ni, Zn (EPA 200.7) HG (EPA 245.1)	V624BTXM, VMS+PCE, VMS+14DCB	TSS, TS, ChL	PHC1664		V624CHLFRM, VMS+CTC, VMS+TCA (Composite of C1 thru C4	AB625SL2	CBOD5, XTNIT (NO32, TKN, TN(T), NO2, NO3O	CD (EPA 200.7)	PCBs, Low Level (P608PCBLL) - EPA 608	LAB USE ONLY
1	RA-EFF-G		1/11/2021	1500	wtw	G	GW	12	5		1		6				X	X	X	X	H							L17
	RA-EFF-C		1/11/2021	1700	wtw	C	GW	13	3		1	3	6										X	X	X	X	H	A8
	RA-VOC-C1		1/11/2021	1300	wtw	G	GW	3	3														C					G57
2	RA-VOC-C2		1/11/2021	1400	wtw	G	GW	3	3														C					V952
	RA-VOC-C3		1/11/2021	1500	wtw	G	GW	3	3														C					E83
	RA-VOC-C4		1/11/2021	1600	wtw	G	GW	3	3														C					G1471

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [X] Other Standard

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] MA MCP Criteria_____
- [ ] CT RCP Criteria_____
- [ ] State Forms
- [X] EDD Format NYSDEC
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Composite RA-VOC-C1 to RA-VOC-C4 in lab to be used for RA-EFF-C VOC analysis.

Hold PHC1664 + PCB Samples.

Hex Chrome Test Method Only Allows 24HR Hold Time

Filt @ 7.04

http://www.sgs.com/en/terms-and-conditions

Seal# 15444 & 15445

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:
1		1/11/21 6:54	
2	Relinquished By:	Date / Time:	Received By: 2
3	Relinquished by:	Date / Time:	Received By: 3
4	Relinquished By:	Date / Time:	Received By: 4
5	Relinquished by:	Date / Time:	Received By: 5

Custody Seal # | [ ] Intact [ ] Not intact | Preserved where applicable [ ] Absent | Therm. ID: IR-4 | On Ice [X] | Cooler Temp. °C: 3.1 2.6 IP IP

Review Ave_COC 011121

Job Change Order: JD18875

Requested Date:	1/14/2021	**Received Date:**	1/11/2021
Account Name:	Wood Environment & Infrastructur	**Due Date:**	1/18/2021
Project Description:	Review Avenue, Long Island City, NY	**Deliverable:**	NYASPA
C/O Initiated By:	JADONS **PM:** KR	**TAT (Days):**	7

==========

Sample #: JD18875-1 **Change:** Please relog for PHC1664

Dept:

TAT: 7

RA-EFF-G

==========

==========

Sample #: JD18875-2 **Change:** Please relog for P608PCBLL

Dept:

TAT: 7

RA-EFF-C

==========

Above Changes Per: Tim Kessler **Date/Time:** 1/14/2021 11:36:32 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

SGS Sample Receipt Summary

Job Number: JD18875 **Client:** WOOD ENVIRONMENT & INFRASTRUCT **Project:** REVIEW AVENUE, LONG ISLAND CITY, NY

Date / Time Received: 1/11/2021 6:54:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1); Cooler 2: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.6); Cooler 2: (2.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD18875: Chain of Custody
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Internal Sample Tracking Chronicle

Wood Environment & Infrastructure Solut.

Job No: JD18875

Review Avenue, Long Island City, NY
Project No: 3480160502 PO#C01270035

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD18875-1 RA-EFF-G	Collected: 11-JAN-21 15:00 By: WTW		Received: 11-JAN-21 By: JP			
JD18875-1	SW846 7196A	11-JAN-21 23:50	EB			XCR
JD18875-1	EPA 624.1	12-JAN-21 17:35	ED			V624BTXM
JD18875-1	SM2540 B-11	13-JAN-21 15:51	TB			TS
JD18875-1	SM2540 D-11	13-JAN-21 16:21	TB			TSS
JD18875-1	SW846 1010A/ASTM D93	13-JAN-21 17:07	JZ			IGN
JD18875-1	EPA 300/SW846 9056A	13-JAN-21 21:53	MH	13-JAN-21	MH	CHL
JD18875-1	EPA 245.1	14-JAN-21 10:07	LL	14-JAN-21	LL	HG
JD18875-1	EPA 200.7	14-JAN-21 22:52	ND	13-JAN-21	MS	CD,CU,NI,PB,ZN
JD18875-2 RA-EFF-C	Collected: 11-JAN-21 17:00 By: WTW		Received: 11-JAN-21 By: JP			
JD18875-2	SM4500NO2 B-11	12-JAN-21 17:35	MH			NO2
JD18875-2	EPA 624.1	12-JAN-21 18:05	ED			V624CHLFRM,VMS+ CTC,VMS+ TCA
JD18875-2	SM5210 B-11	12-JAN-21 18:22	MH	12-JAN-21	MH	CBOD5
JD18875-2	EPA 625.1	13-JAN-21 14:55	HSS	12-JAN-21	NW	AB625SL2
JD18875-2	EPA353.2/SM4500NO2B	14-JAN-21 13:13	BM			NO3O
JD18875-2	EPA 353.2/LACHAT	14-JAN-21 13:13	BM	14-JAN-21	BM	NO32
JD18875-2	EPA 200.7	14-JAN-21 23:02	ND	13-JAN-21	MS	CD
JD18875-2	SM4500 A-11	25-JAN-21 15:30	BM			TNIT
JD18875-2	EPA 351.2/LACHAT	25-JAN-21 15:30	BM	13-JAN-21	MH	TKN
JD18875-1R RA-EFF-G	Collected: 11-JAN-21 15:00 By: WTW		Received: 11-JAN-21 By: JP			
JD18875-1R	EPA 1664A	20-JAN-21 11:30	ER	19-JAN-21	ER	PHC1664
JD18875-2R RA-EFF-C	Collected: 11-JAN-21 17:00 By: WTW		Received: 11-JAN-21 By: JP			
JD18875-2R	EPA 608.3	20-JAN-21 02:54	VDT	19-JAN-21	HW	P608PCBLL

SGS Internal Chain of Custody

Job Number: JD18875
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 01/11/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD18875-1.1	Manish Kewalramani	Secured Storage	01/11/21 20:21	Return to Storage
JD18875-1.2	Manish Kewalramani	Secured Storage	01/11/21 20:21	Return to Storage
JD18875-1.2	Secured Storage	Todd Shoemaker	01/19/21 08:21	Retrieve from Storage
JD18875-1.2	Todd Shoemaker	Secured Staging Area	01/19/21 08:22	Return to Storage
JD18875-1.2	Secured Staging Area	Elijah Rick	01/19/21 09:19	Retrieve from Storage
JD18875-1.2	Elijah Rick		01/19/21 17:52	Depleted
JD18875-1.3	Manish Kewalramani	Secured Storage	01/11/21 20:21	Return to Storage
JD18875-1.3	Secured Storage	Dave Hunkele	01/13/21 10:58	Retrieve from Storage
JD18875-1.3	Dave Hunkele	Secured Staging Area	01/13/21 11:20	Return to Storage
JD18875-1.3	Secured Staging Area	Madellyne Sanchez@sgs	01/13/21 11:37	Retrieve from Storage
JD18875-1.3	Madellyne Sanchez@sgs	Secured Storage	01/13/21 13:04	Return to Storage
JD18875-1.3	Secured Storage	Dave Hunkele	01/13/21 15:39	Retrieve from Storage
JD18875-1.3	Dave Hunkele	Secured Staging Area	01/13/21 15:40	Return to Storage
JD18875-1.3	Secured Staging Area	Lindsey Lee	01/14/21 06:29	Retrieve from Storage
JD18875-1.3	Lindsey Lee	Secured Storage	01/14/21 09:07	Return to Storage
JD18875-1.3.1	Madellyne Sanchez@sgs	Metals Digestion	01/13/21 12:59	Digestate from JD18875-1.3
JD18875-1.3.1	Metals Digestion	Madellyne Sanchez@sgs	01/13/21 12:59	Digestate from JD18875-1.3
JD18875-1.3.1	Madellyne Sanchez@sgs	Metals Digestate Storage	01/13/21 12:59	Return to Storage
JD18875-1.4	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-1.5	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-1.5	Secured Storage	Dave Hunkele	01/13/21 12:03	Retrieve from Storage
JD18875-1.5	Dave Hunkele	Secured Staging Area	01/13/21 12:04	Return to Storage
JD18875-1.5	Secured Staging Area	Tayler Barone	01/13/21 14:34	Retrieve from Storage
JD18875-1.5	Tayler Barone		01/14/21 00:51	Depleted
JD18875-1.6	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-1.6	Secured Storage	Dave Hunkele	01/13/21 11:52	Retrieve from Storage
JD18875-1.6	Dave Hunkele	Secured Staging Area	01/13/21 11:52	Return to Storage
JD18875-1.6	Secured Staging Area	Elaine Banting	01/14/21 03:21	Retrieve from Storage
JD18875-1.6	Elaine Banting	Secured Storage	01/14/21 03:22	Return to Storage
JD18875-1.7	Secured Storage	Dave Hunkele	01/13/21 10:41	Retrieve from Storage
JD18875-1.7	Dave Hunkele	Secured Staging Area	01/13/21 11:21	Return to Storage
JD18875-1.7	Secured Staging Area	Julio Zelaya	01/13/21 13:51	Retrieve from Storage
JD18875-1.7	Julio Zelaya	Secured Storage	01/13/21 19:16	Return to Storage
JD18875-1.8	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-1.8	Secured Storage	Dave Hunkele	01/13/21 12:03	Retrieve from Storage
JD18875-1.8	Dave Hunkele	Secured Staging Area	01/13/21 12:04	Return to Storage

SGS Internal Chain of Custody

Job Number: JD18875
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 01/11/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD18875-1.8	Secured Staging Area	Tayler Barone	01/13/21 14:34	Retrieve from Storage
JD18875-1.8	Tayler Barone	Secured Storage	01/14/21 00:52	Return to Storage
JD18875-1.9	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-1.10	Secured Storage	Edward Durner	01/12/21 15:20	Retrieve from Storage
JD18875-1.10	Edward Durner	GCMST	01/12/21 15:20	Load on Instrument
JD18875-1.10	GCMST	Edward Durner	01/13/21 10:03	Unload from Instrument
JD18875-1.10	Edward Durner	Secured Storage	01/13/21 10:03	Return to Storage
JD18875-2.1	Manish Kewalramani	Secured Storage	01/11/21 20:14	Return to Storage
JD18875-2.2	Manish Kewalramani	Secured Storage	01/11/21 20:14	Return to Storage
JD18875-2.3	Manish Kewalramani	Secured Storage	01/11/21 20:14	Return to Storage
JD18875-2.3	Secured Storage	Huachi Wu	01/19/21 07:38	Retrieve from Storage
JD18875-2.3	Huachi Wu		01/19/21 15:14	Depleted
JD18875-2.3.1	Huachi Wu	Organics Prep	01/19/21 07:38	Extract from JD18875-2.3
JD18875-2.3.1	Organics Prep	Huachi Wu	01/19/21 15:11	Extract from JD18875-2.3
JD18875-2.3.1	Huachi Wu	Extract Storage	01/19/21 15:12	Return to Storage
JD18875-2.3.1	Extract Storage	Vincent Drago	01/19/21 18:04	Retrieve from Storage
JD18875-2.3.1	Vincent Drago	GC5G	01/19/21 18:04	Load on Instrument
JD18875-2.4	Manish Kewalramani	Secured Storage	01/11/21 20:14	Return to Storage
JD18875-2.5	Manish Kewalramani	Secured Storage	01/11/21 20:21	Return to Storage
JD18875-2.5	Secured Storage	Dave Hunkele	01/13/21 10:58	Retrieve from Storage
JD18875-2.5	Dave Hunkele	Secured Staging Area	01/13/21 11:20	Return to Storage
JD18875-2.5	Secured Staging Area	Madellyne Sanchez@sgs	01/13/21 11:37	Retrieve from Storage
JD18875-2.5	Madellyne Sanchez@sgs	Secured Storage	01/13/21 13:04	Return to Storage
JD18875-2.5.1	Madellyne Sanchez@sgs	Metals Digestion	01/13/21 12:59	Digestate from JD18875-2.5
JD18875-2.5.1	Metals Digestion	Madellyne Sanchez@sgs	01/13/21 12:59	Digestate from JD18875-2.5
JD18875-2.5.1	Madellyne Sanchez@sgs	Metals Digestate Storage	01/13/21 12:59	Return to Storage
JD18875-2.6	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-2.6	Secured Storage	Benjamin Gaines	01/12/21 14:45	Retrieve from Storage
JD18875-2.6	Benjamin Gaines	Secured Staging Area	01/12/21 14:45	Return to Storage
JD18875-2.6	Secured Staging Area	Nicholas Weigand	01/12/21 15:27	Retrieve from Storage
JD18875-2.6	Nicholas Weigand		01/12/21 23:23	Depleted
JD18875-2.6	Secured Storage	Dave Hunkele	01/13/21 14:28	Retrieve from Storage
Sample not depleted, volume intact				
JD18875-2.6	Dave Hunkele	Secured Staging Area	01/13/21 14:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD18875
Account: HLANJPR Wood Environment & Infrastructure Solut.
Project: Review Avenue, Long Island City, NY
Received: 01/11/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD18875-2.6	Secured Staging Area	Madeline Hummel	01/13/21 17:12	Retrieve from Storage
JD18875-2.6	Madeline Hummel	Secured Storage	01/13/21 17:12	Return to Storage
JD18875-2.6.1	Nicholas Weigand	Organics Prep	01/12/21 15:28	Extract from JD18875-2.6
JD18875-2.6.1	Organics Prep	Nicholas Weigand	01/12/21 23:23	Extract from JD18875-2.6
JD18875-2.6.1	Nicholas Weigand	Extract Storage	01/12/21 23:23	Return to Storage
JD18875-2.6.1	Extract Storage	Henny Salim	01/13/21 11:34	Retrieve from Storage
JD18875-2.6.1	Henny Salim	GCMS6P	01/13/21 11:34	Load on Instrument
JD18875-2.6.1	GCMS6P	Henny Salim	01/15/21 11:49	Unload from Instrument
JD18875-2.6.1	Henny Salim	Extract Freezer	01/15/21 11:49	Return to Storage
JD18875-2.8	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-2.8	Secured Storage	Benjamin Gaines	01/13/21 15:55	Retrieve from Storage
JD18875-2.8	Benjamin Gaines	Secured Staging Area	01/13/21 15:55	Return to Storage
JD18875-2.8	Secured Staging Area	Beatrice Marcelino	01/14/21 15:04	Retrieve from Storage
JD18875-2.8	Beatrice Marcelino	Secured Storage	01/14/21 15:05	Return to Storage
JD18875-2.10	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-2.11	Manish Kewalramani	Secured Storage	01/11/21 20:07	Return to Storage
JD18875-2.12	Secured Storage	Edward Durner	01/12/21 15:20	Retrieve from Storage
JD18875-2.12	Edward Durner	GCMST	01/12/21 15:20	Load on Instrument
JD18875-2.12	GCMST	Edward Durner	01/13/21 10:03	Unload from Instrument
JD18875-2.12	Edward Durner	Secured Storage	01/13/21 10:03	Return to Storage