

Tenth Annual Report for NAPL Recovery

August 2023 Through July 2024
Former Equity Works MGP Site, Brooklyn, New York
NYSDEC Site No.: 224050
Order on Consent Index #: A2-0552-0606
EPA ID Number for the Site: NYR 000 225 615

National Grid

Project number: 60137362

December 10, 2024

Quality information

Prepared by



Michelle Mata

Approved by



Peter S. Cox, PG
Project Manager

Prepared for:

National Grid
2 Hanson Place
Brooklyn, NY 11217

Prepared by:

AECOM
250 Apollo Drive
Chelmsford
MA, 01824
USA
aecom.com

Table of Contents

Executive Summary.....	ES-1
1. Introduction.....	1-1
2. Recovery Well Installation and Operation.....	2-1
2.1 Recovery Well Designs	2-1
2.2 Initial Monitoring and NAPL Recovery	2-2
2.2.1 Primary Recovery Wells.....	2-2
2.2.2 Secondary Recovery Wells	2-2
2.2.3 Gauging Wells	2-2
2.2.4 Pilot Wells.....	2-2
2.3 System Operation	2-3
2.3.1 Automated Wells.....	2-3
2.3.2 Gauging Wells	2-3
2.3.3 Pilot Wells.....	2-4
3. System Performance	3-1
3.1 NAPL Recovery	3-1
3.1.1 Automated Wells.....	3-1
3.1.2 Gauging Wells	3-1
3.1.3 Pilot Wells.....	3-2
3.2 Waste Management.....	3-2
3.3 System Maintenance	3-2
3.4 Incidents/Unplanned Releases.....	3-2
4. Recommendations.....	4-1
4.1 Past Recommendations	4-1
4.2 Future Recommendations	4-1
5. References	5-2

Appendices

Appendix A Waste Disposal Documentation

Tables

Table 2-1	Categories of Recovery Wells
Table 3-1	NAPL Monitoring and Recovery – Automated Wells
Table 3-2a	NAPL Monitoring – Gauging Wells
Table 3-2b	NAPL Recovery – Gauging Wells
Table 3-3	Summary of Waste Management

Figures

Figure 1-1	Site Location
Figure 1-2	Site Properties
Figure 2-1	Locations of On-Site and Perimeter Recovery Wells
Figure 2-2	Completed Well Location
Figure 2-3	Location of Automated Wells
Figure 2-4	Control Trailer
Figure 3-1	Cumulative Volume of Mixed Fluids Collected in Automated Wells
Figure 3-2	NAPL Thickness Versus Time – Gauging Wells
Figure 4-1	NAPL Recharge Rates Versus Time – Automated Wells

Acronyms

BUG	Brooklyn Union Gas Company
CCR	Construction Completion Report
DNAPL	dense non-aqueous phase liquid
gpd	gallons per day
IRM	Interim Remedial Measure
MGP	Manufactured Gas Plant
NAPL	non-aqueous phase liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation & Maintenance
PDI	Pre-design Investigation
PLC	Programmable Logic Controller
PVC	polyvinyl chloride
Site	222-254 Maspeth Avenue
TOC	top of casing

Executive Summary

On behalf of National Grid, AECOM USA, Inc. (AECOM), has prepared this non-aqueous phase liquid (NAPL) Recovery Annual Report to document the tenth year of operation of the NAPL recovery system within the footprint of the former K-Equity Works site (the Site), a former Manufactured Gas Plant (MGP) site, located at 222-254 Maspeth Avenue in Brooklyn, New York, during the period of August 2023 through July 2024.

The NAPL recovery is being conducted pursuant to a Multi-site Order on Consent and Administrative Settlement, Index # A2-0552-0606, between The Brooklyn Union Gas Company (BUG) d/b/a National Grid NY, and the New York State Department of Environmental Conservation (NYSDEC).

The Site is located in a historically industrialized area and operated as a MGP from approximately 1893 to 1929. BUG acquired the MGP in approximately 1903 and transferred ownership of the Site in 1951. The Site currently consists of three adjoining properties – 222 Maspeth Avenue, 252 Maspeth Avenue, and 254 Maspeth Avenue. The 222 Maspeth Avenue property was previously used by Cooper Tank as a solid waste recycling facility and more recently used for waste container (roll-off) fabrication and rehabilitation. The 252 Maspeth Avenue property is leased to a tenant who parks and maintains buses on it, and the 254 Maspeth Avenue parcel is leased to a construction contractor as a lay-down space to support their construction operations.

The NAPL Recovery Interim Remedial Measure (IRM) activities, performed under the NYSDEC approved Interim Remedial Measure Work Plan for Product Recovery dated January 2013 (AECOM, 2013), included the following:

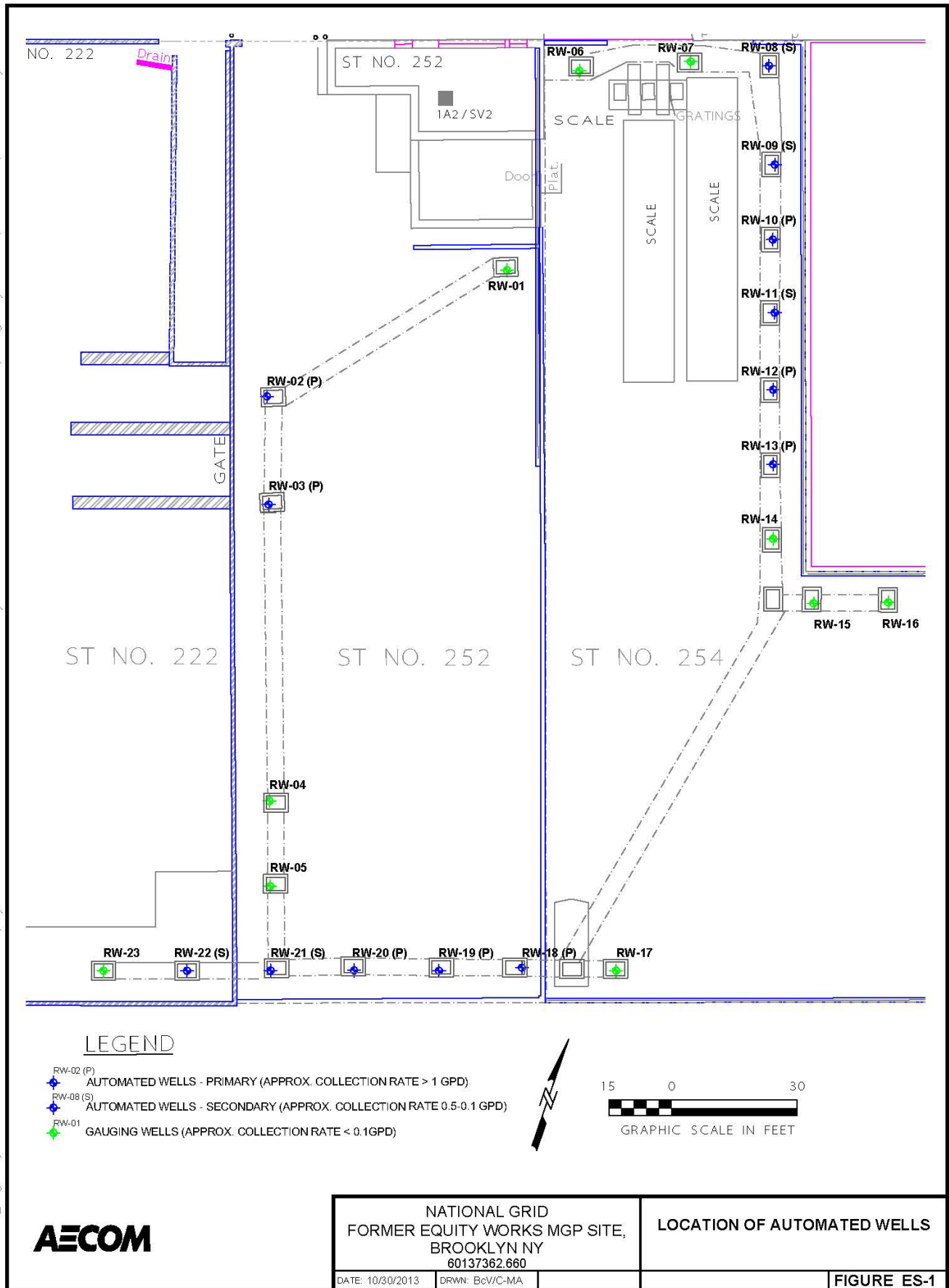
- Installation of five recovery wells at appropriate locations within the central areas of the Site to reduce the quantity of NAPL, and at 18 selected perimeter locations to control the potential for off-Site migration (Figure ES-1).
- Installation of pumps, controls, and a NAPL recovery collection tank/system.
- Installation of two recovery wells (RW-24 and RW-25) within the former No. 1 Relief Holder in 2018.
- Installation of seven pilot recovery wells screened at varying depths below the former gas holder foundation at 222 Maspeth Avenue between September and December 2021 to recover NAPL beneath this suspected source area structure. Given the start of IRM activities involving the removal of the material within the former gas holder foundation at the 222 Maspeth Avenue parcel, the pilot recovery wells were properly abandoned by a licensed driller in July 2023 in accordance with NYSDEC's CP-43 Groundwater Monitoring Well Decommissioning Policy. Abandonment information will be included in the Construction Completion Report (CCR) for the ongoing IRM at 222 Maspeth Avenue.

On-going Operation Maintenance and Monitoring activities following completion of the IRM include the following:

- Gauging of NAPL, and
- Recovery of NAPL that collects in the recovery wells,
- Quarterly maintenance and housekeeping of the NAPL recovery system trailer and quarterly maintenance of NAPL recovery pump well screens as required.

Details regarding the construction of the NAPL recovery wells are included in the Interim Remedial Measure for NAPL Recovery Construction Completion Report (CCR), submitted to the NYSDEC in May 2015 (AECOM, 2015). Details regarding the pilot recovery wells were transmitted to NYSDEC via prior emails.

File: J:\Rem_Eng\Project Files\National Grid\1765 - 076 Equity Former MGP\7.2 CADD & GIS\2013 - PR Well Layout\60137362 - 668 - PR Wells with Pumps.dwg Layout: PS (WorkProduct) User: clearym Plotted:



Since system startup through July 31, 2024, the system has operated with an average on-line factor of 98%, without incidents or unplanned releases from the system. Based on system measurements, approximately 35,000 gallons of mixed fluids have been collected from the recovery system and managed as an alternative fuel, initially at the Tradebe Facility in Cohoes, New York until March of 2017 and more recently at Veolia Technical Solutions Facility in Middlesex, New Jersey. An estimate of the NAPL/water ratios over the monitoring period indicates that the mixed fluids collected are typically 60 to 70% NAPL, resulting in over 21,000 gallons of NAPL having been removed from the Site to date. In addition, over 2,600 gallons of mixed fluids have been collected from the seven pilot recovery wells between December 2021 and July 2023 with an estimated 80% NAPL/water ratio.

NAPL collection at 11 of the initial 23 recovery well locations (two on-Site and 9 perimeter locations) will continue using automated pumps during Year 11 operations. The well pumps are controlled with timers that are adjusted, as required, with a goal of containing the NAPL within the sump of each well, but at a level above the inlet to the pump to minimize the collection of groundwater. The remaining 14 wells are managed using manual recovery techniques on a quarterly basis. Deep recovery wells screened below the former gas holder foundation, and infrastructure for connecting these wells to the automated NAPL collection system, is a component of the ongoing IRM occurring at the 222 Maspeth Avenue parcel. Following installation, these deep recovery wells will be incorporated into the ongoing quarterly NAPL monitoring and recovery program.

1. Introduction

On behalf of National Grid, AECOM USA, Inc. (AECOM), has prepared this Tenth Annual Report outlining NAPL recovery progress during its tenth year of operation, covering the period of August 2023 through July 2024.

The non-aqueous phase liquid (NAPL) recovery system is located within the footprint of the former Equity Works Manufactured Gas Plant (MGP) site (the Site). The Site consists of three adjoining properties – 222 Maspeth Avenue, 252 Maspeth Avenue, and 254 Maspeth Avenue located in Brooklyn, New York. Details regarding the construction of the NAPL recovery system are included in the Interim Remedial Measure for NAPL Recovery Construction Completion Report (CCR), submitted to the New York State Department of Environmental Conservation (NYSDEC) in May 2015 (AECOM, 2015). The location of the Site and the orientation of the individual properties are illustrated in **Figure 1-1** and **Figure 1-2**, respectively.

The Interim Remedial Measure (IRM) was implemented pursuant to a Multi-site Order on Consent and Administrative Settlement, Index # A2-0552-0606, between The Brooklyn Union Gas Company (BUG) d/b/a National Grid NY (hereinafter, National Grid), and the NYSDEC, in accordance with applicable guidelines of the NYSDEC and the New York State Department of Health (NYSDOH).

This document is organized in the following manner: a summary of activities associated with the installation and operation of the recovery system is presented in **Section 2**; the results from the tenth year's monitoring activities are documented in **Section 3** and proposed revisions to the system's operation and monitoring program are discussed in **Section 4**.

2. Recovery Well Installation and Operation

National Grid is collecting recoverable NAPL while Site-wide IRMs and remedial design activities are completed. The design of the NAPL recovery system included the installation of 25 recovery wells at locations that were determined to have the potential to collect mobile NAPL and be compatible with Cooper Tank's construction and long-term operational activities. Consistent with the NYSDEC approved work-plan (AECOM, 2013), recovery wells were installed in the following areas of the Site:

- On-Site – Five recovery wells (RW-1 through 5) were installed at locations within the 252 Maspeth Avenue property.
- Site Perimeter – 18 recovery wells (RW-6 through 23) were installed along the perimeter of the Site on the 222, 252 and 254 Maspeth Avenue properties.
- Two additional recovery wells (RW-24 and RW-25) were installed in 2018 inside the former No. 1 Relief Holder and added to the NAPL recovery Operation & Maintenance (O&M) program. These wells were properly abandoned by a licensed driller in July 2023 in accordance with NYSDEC's CP-43 Groundwater Monitoring Well Decommissioning Policy in advance of the planned excavation of the former No. 1 Relief Holder contents as part of the ongoing IRM happening at 222 Maspeth Avenue.
- Seven recovery wells (referred to as pilot recovery wells) were installed in late 2021 below the foundation of the former No. 1 Relief Holder for a pilot program to explore the recoverability of dense non-aqueous phase liquid (DNAPL) below the intermediate clay and above the deep clay (a confining unit). These recovery wells terminated at various depths and were designated as follows: shallow (RW-28S and RW-29S), intermediate (RW-27I), and deep (RW-26, RW-27DR, RW-28D, and RW-29D). One of the Pilot wells (RW-27D) was abandoned due to broken casing and was replaced (RW-27DR). Remaining pilot recovery wells were properly abandoned by a licensed driller in July 2023 in accordance with NYSDEC's CP-43 Groundwater Monitoring Well Decommissioning Policy in advance of the planned excavation of the former No. 1 Relief Holder contents as part of the ongoing IRM happening at 222 Maspeth Avenue.

Recovery well locations are shown on **Figure 2-1**. The perimeter locations are spaced at approximately 18 ft on center, with the exception of the area along the driveway of 254 Maspeth Avenue where the presence of a subsurface structure required spacing of approximately 30 feet between the three recovery wells (RW-6, -7 and -8). The On-Site and Site Perimeter locations were equipped with the infrastructure, i.e., conduits for electrical service and tubing, for the subsequent automation of NAPL recovery activities.

2.1 Recovery Well Designs

Recovery wells were designed to accommodate the uncertainty of long-term NAPL recovery rates. All well risers were constructed of 6-inch diameter schedule 40 polyvinyl chloride (PVC). Recovery well screens were constructed of 6-inch diameter 0.020-inch slot wire wrap stainless steel.

Five (5) and ten (10) foot lengths of screen were used, as required, to address soil intervals where NAPL (i.e., saturated thickness greater than 1-inch) has been observed. Centralizers were installed at the top and bottom of each screen. The screen size was selected based on the grain-size information obtained during the Pre-Design Investigation (PDI).

Each well was equipped with a 5-foot long, 6-inch diameter, stainless steel sump to collect NAPL, with the exception of wells RW-24 and RW-25 which were screened to the former No. 1 Relief Holder foundation to avoid penetrating the holder bottom. The annular space above the filter pack was filled with a bentonite seal (minimum of 3 to 4 feet thick). Note that additional bentonite seals were used at locations where multiple screen intervals were installed. The annular space above the bentonite seal was filled with a grout mixture from the bentonite seal to approximately one to two feet below the top of casing (TOC).

Recovery wells at the On-Site and Site Perimeter locations were completed in a 4-foot by 4-foot traffic rated well vault. Illustrations of an in-place recovery well and completed well location are provided in

Figure 2-2. The pilot wells were constructed in a similar fashion with four different screen lengths: 5-foot (RW-29D), 10 feet (RW-26, RW-28S, RW-29S and RS-28D), 15 feet (RW-27I), and 20 feet (RW-27DR). All pilot wells have 10-foot-long sumps.

2.2 Initial Monitoring and NAPL Recovery

The NAPL recovery system is intended to operate in a manner that contains the NAPL levels within the well sumps (5 feet in length) to the extent practicable. As part of the installation of the system, initial monitoring activities were conducted to provide a preliminary estimate of potential collection rates. The results were used to determine which locations would require automation for the cost-effective recovery of NAPL.

The monitoring activities provided the ability to group the locations into three categories based on the observed recharge rates. They were grouped as follows: Primary recovery wells (greater than 0.5 gallons per day [gpd] of NAPL recovered); Secondary recovery wells (approximately 0.1 to 0.5 gpd of NAPL recovered) and gauging wells (< 0.1 gpd of NAPL recovered). The distribution of wells within these categories is provided on **Table 2-1**.

2.2.1 Primary Recovery Wells

The majority of NAPL (approximately 85 percent of total) was collected from the eight primary locations. The manual management of NAPL at these locations would require that recovery activities be conducted on a weekly basis to ensure that the storage capacity of the well sumps (approximately 7.5 gallons) not be exceeded. This frequency of manual monitoring/collection is not cost-effective or practical given site access issues and the level of activity at the Site. As a result, the wells at these eight locations were automated by setting NAPL recovery pumps in the wells.

2.2.2 Secondary Recovery Wells

Approximately 15 percent of the NAPL was collected from the seven secondary wells. The manual management of NAPL at these locations would require that recovery activities be conducted monthly to ensure that the storage capacity of the well sumps is not exceeded. Long-term manual monitoring/recovery at this frequency is not cost effective, and these locations were also automated by setting NAPL recovery pumps in the wells.

2.2.3 Gauging Wells

NAPL levels at the 13 remaining wells were consistently observed to be within the well's sumps at each location or within the former No. 1 Relief Holder foundation. It was determined that NAPL at these locations could be effectively managed on a quarterly basis using manual recovery techniques. Note that one of the secondary wells (RW-11) was converted to a gauging well during the first year of operation, bringing the total to 13 wells.

The measurements of the quantity of NAPL collected from locations within the former No. 1 Relief Holder indicated that RW-24 and RW-25 could also be effectively managed using manual recovery techniques on a quarterly basis.

2.2.4 Pilot Wells

Seven pilot recovery wells were installed in the fall of 2021 to evaluate the potential for NAPL recovery at depth below the intermediate clay unit beneath the former gas holder foundation at 222 Maspeth Avenue. RW-26 and RW-28S were installed initially. The second group included RW-27I, RW-27D, and RW-29S. One of the wells, RW-27D, was later abandoned and replaced by RW-27DR. The third group of wells installed were RW-28D and RW-29D.

The pilot recovery wells were installed in accordance with the NYSDEC-approved IRM Work Plan Addendum (AECOM, 2021). These well groups were installed sequentially and based on the DNAPL

accumulation documented in the previous group. After installation, significant DNAPL accumulation was not observed in either the first or second group of wells, prompting the installation of the third and final group. By the third month since RW-26 and RW-28S were installed, measurable DNAPL accumulation began to be observed in all pilot wells except RW-27I.

The DNAPL recharge rates vary among these pilot wells. Wells have been gauged and pumped as needed on a weekly basis to assess the long-term NAPL recoverability potential to determine if certain pilot recovery wells can be abandoned or whether NAPL accumulation can be performed quarterly under the current O&M program, or if well(s) would benefit from automation similar to other existing primary recovery wells. The pilot recovery wells were abandoned in early July 2023 prior to mobilization for the planned 222 Maspeth Avenue IRM work.

2.3 System Operation

Discussions of the recovery/collection methods for the automated and gauging wells are provided below.

2.3.1 Automated Wells

The Primary and Secondary recovery well locations (**Figure 2-3**) are equipped with fixed speed pumps manufactured by Linear Pumps. The well pumps are controlled with timers that are adjusted, as required, with a goal of containing the NAPL within the sump of each well, but at a level above the inlet to the pump to minimize the collection of groundwater.

Collected NAPL is accumulated in a 500-gallon capacity double-walled polyethylene tank located above ground in the system's control trailer on the 254 Maspeth Avenue parcel (**Figure 2-4**). The accumulation tank is equipped with a high liquid level detector to prevent over-filling, as well as secondary containment. The system is equipped with additional alarms and communication equipment to ensure its safe operation.

The contents of the tank are periodically gauged by field staff using the following method:

- The tank is accessed through the topmost access port.
- An interface probe is lowered to the bottom of the tank.
- The probe is left in place for a period of five minutes to allow the separate layers of NAPL and water to resolve.
- The probe is slowly raised until the water level is encountered.

The thicknesses of the NAPL and water levels are used to estimate the relative NAPL/water composition of the mixed fluids.

2.3.2 Gauging Wells

The gauging wells are monitored during quarterly inspection activities and accumulated NAPL is recovered using an air lift system that consists of an air compressor and sample line (1 inch outside diameter black iron pipe) that runs from the bottom of the well sump to a closed 55-gallon drum and is operated in the following manner:

- A small stream of compressed air is introduced into the bottom of the sample line through a "T" connection.
- The upward movement of the air "bubble" creates a vacuum that draws NAPL upward from the sump and into the drum.
- The consistency of the stream is determined by an oil/water interface probe that is inserted into the sample line. Air flow is discontinued when the probe detects water is being pumped through the tubing instead of DNAPL. Then the volume of collected NAPL is measured and recorded.

The collected NAPL is stored in sealed drums and collected with the NAPL from the accumulation tank at regular intervals by a certified waste hauler.

2.3.3 Pilot Wells

From August 1, 2022, through November 28, 2022, the seven pilot recovery wells were accessed, gauged, and pumped on a weekly basis. From November 29, 2022, until July 12th, 2023, pilot recovery wells were gauged only if there was 50% or greater (5 feet in NAPL thickness) accumulation of NAPL in any particular well, and wells with 8 feet or greater of NAPL (80% of the sump capacity) were pumped on weekly basis through July 11, 2023. On July 12th, 2023, all pilot recovery wells were abandoned in preparation for mobilization of the 222 Maspeth IRM Work. New deep recovery wells meant to replace the pilot recovery wells and infrastructure for connecting these deep recovery wells to the automated NAPL collection system is a component of the ongoing IRM occurring at the 222 Maspeth Avenue parcel.

DNAPL from the pilot recovery wells was recovered using the air lift pumping system currently in use to remove NAPL from the Gauging Wells described in **Section 2.3.2** above.

DNAPL recovered from these wells was stored in 55-gallon steel drums and picked up by National Grid's approved waste hauler on a bi-weekly basis. The quantity of the DNAPL generated from these wells is recorded separately from the other wells on-Site and outlined in **Section 3.1.3** below.

3. System Performance

The following discussion provides summaries of NAPL recovery and waste management observations during the tenth year of system operation (August 2023 through July 2024), as well as a discussion of the associated maintenance and response activities.

3.1 NAPL Recovery

The results from the monitoring of the automated and gauging wells are discussed below.

3.1.1 Automated Wells

The results from the gauging activities during the system's operation are summarized in **Table 3-1**. Adjustments to the pumping rates were generally appropriate to contain NAPL within the sumps of the wells. However, experience during the first nine years of operation demonstrate that although general trends of the flow of NAPL to a well can be established, there are short-term variabilities in flow and/or minor mechanical issues (e.g., pump screen clogging, tripped fuses, pump failures) that can challenge the ability to continually maintain a matching pumping rate. In addition, because the system is automated with pumping times and durations controlled by a timer, periodically there are times where the NAPL thickness is identified above the sump interval (e.g., if wells are gauged just before pumping). These are temporary conditions, as accumulated NAPL is removed from the sumps on a continuous basis over time. Pump duration adjustments are also made on an on-going basis when data indicate NAPL thickness is near or above the sump level in the recovery wells.

Approximately 1,800 gallons of mixed fluids were collected from the system during the tenth year of operation (August 1, 2023, through July 31, 2024). An illustration of the cumulative volume of mixed fluids collected from the tank over time is provided in **Figure 3-1**. From startup through July 2024, approximately 35,000 gallons of mixed fluids have been removed by the system based on readings from the level sensor in the recovery tank. Note that the estimates of total recovered gallons presented in **Table 3-1** are based on in-truck volumes listed on the manifests and include NAPL that is pumped from the recovery tank and NAPL that is manually removed from the gauging wells thus providing a higher estimate than the "recovery tank" level sensor results provided on **Figure 3-1**.

In the past, observation of the relative proportions of NAPL/water have been highly variable; however, the use of the standardized protocol presented in the Year 2 Report including lowering the probe to the bottom of the recovery tank and letting it equilibrate for approximately five minutes prior to recording the NAPL and water thicknesses has provided more consistent results. In addition, a change in pumping frequency from daily to weekly in July 2020 indicated an approximate 10% reduction in water content of the recovered NAPL following this change to weekly pumping. Another change that occurred in the eighth year is the conversion of RW-8, which has become a gauging well based on the NAPL thickness and calculated recharge rates in this well.

During Year 10 operations, the observed NAPL to water ratio of collected mixed fluids was approximately 60% to 70% NAPL. A conservative estimate of the NAPL/water ratios since system startup indicates that the collected material likely contained over 20,000 gallons of NAPL.

3.1.2 Gauging Wells

Monitoring and recovery activities were conducted on an approximate quarterly basis throughout the year. The 2016-2024 data from the gauging wells is presented in **Table 3-2a** and **Table 3-2b**. As indicated, manual recovery on a quarterly basis is appropriate to maintain DNAPL levels within the sumps. During Year 10 operations, approximately 92 gallons of mixed fluids were recovered from the 14 gauging wells.

Figure 3-2 presents a graphical illustration of the trend in DNAPL thickness in the gauging wells during ten years of operation. As illustrated, thicknesses have generally decreased over time with typical variation. This suggests that the collection system is having a potentially significant effect on reducing the quantity of recoverable DNAPL in the areas where the gauging wells are located.

3.1.3 Pilot Wells

No new information was collected from the pilot recovery wells in Year 10 since they were abandoned in July of 2023.

3.2 Waste Management

The collected NAPL was managed as an alternative fuel at the Veolia Technical Solutions Facility in Middlesex, New Jersey for fuels blending. A summary of the waste shipments and associated quantities according to manifests from both the automated and gauging wells is presented in **Table 3-4**.

The initial shipments of mixed fluids during Years 1 and 2 were managed as a non-hazardous waste in accordance with NYSDEC Guidance DER-4, "Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment". From time to time the results from the analysis of the mixed fluids in the tank have indicated a flash point greater than 140 °F. Although the results were believed to be the result of inconsistencies in sampling and analysis, shipments after February 5, 2016, during Year 2 operations, have been conservatively managed as a D001 Ignitable Waste using the RCRA ID number for the Site: NYR 000 225 615. Documentation of the shipments for Year 10 operations are provided in **Appendix A**.

3.3 System Maintenance

There were no significant maintenance issues with the system during the monitoring period; however, in early 2022, Sensaphone discontinued remote monitoring support for the systems Programmable Logic Controller (PLC), the SCADA 3000. As this unit operates as the system PLC and monitoring system, it was determined that both needed to be upgraded. The PLC/monitoring system upgrade was completed in November of 2022.

The following maintenance activities were accomplished during the tenth year of operation:

- Periodic cleaning of the system trailer to remove dust generated by site operations.
- Quarterly cleaning of recovery well pump intake screens as needed and replacement of vault lid hardware (latches, hinges, etc.) that get damaged by site operations.

During the current reporting period, the system was on-line 355 days out of a total of 365 planned operating days, as outlined below. This reflects an on-line factor of 97%, which is consistent with prior years of operation.

3.4 Incidents/Unplanned Releases

There were no incidents or unplanned releases during the reporting period.

4. Recommendations

National Grid continues to conduct additional evaluations of recharge rates and the composition of mixed fluids to determine if it will be practical to refine the operation of the system, e.g., transition automated wells to gauging wells, over time.

4.1 Past Recommendations

Starting in June 2014, and continuing forward during various quarterly gauging events, a program was initiated to evaluate the recharge rates for selected wells. During the evaluation, NAPL was removed from the selected wells, and NAPL thickness was monitored periodically over the next 24 hours or longer, with results reported in gallons/day. The results for four wells (RW-10, RW-18, RW-19, and RW-20) during Year 10 operations are summarized in **Figure 4-1**. As illustrated on **Figure 4-1**, NAPL recharge rates generally indicate a decreasing trend, with expected variability. The evaluation will be continued at these wells during Year 11 operations.

During Year 3 operations, National Grid also conducted a recharge evaluation to assess the possibility that the decreasing recharge rates could be associated with “fouling” of the well screens. The results from the evaluation were presented in the Year 3 Annual Report (AECOM, 2017) and demonstrated that significant NAPL recharge was noted in all wells, confirming that recovery well screen fouling is not an issue or the cause of the gradually decreasing recharge rates.

The NAPL recovery system was switched from daily to weekly pumping on July 27, 2020 in an attempt to improve NAPL to water collection ratios. Results from recorded NAPL to water ratios in the recovery tank during Year 7 and Year 8 indicated an approximate 10% reduction in water content of the recovered NAPL following this change to weekly pumping. The results of the above actions will be reviewed as part of the next annual report to determine if there is a trend in the rate of NAPL collection and if any future modifications to the operation of the system are required.

4.2 Future Recommendations

The automated collection of NAPL will continue for the Primary and Secondary wells as described in **Section 2.3.1**. The gauging wells will be monitored and pumped during the quarterly inspections as described in **Section 2.3.2**. Following installation of the deeper NAPL recovery wells screened beneath the former No. 1 Relief Holder upon completion of the current IRM at 222 Maspeth Avenue, the NAPL monitoring and recovery of those wells will be evaluated and incorporated into the ongoing quarterly O&M program.

5. References

AECOM, 2011. Equity Former MGP Site 254 Maspeth Avenue Property Interim Remedial Measure Work Plan. December 16, 2011.

AECOM, 2012. Interim Site Management Plan, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. November 28, 2012.

AECOM, 2013. Interim Remedial Measure Work Plan for Product Recovery, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. January 2013.

AECOM, 2015. Completion Report Interim Remedial Measure for NAPL Recovery, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. May 20, 2015.

AECOM, 2015. Annual Report, Interim Remedial Measure for NAPL Recovery, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. August 2015.

AECOM, 2016. 2nd Annual Report, Interim Remedial Measure for NAPL Recovery – June 2015 through July 2016, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. November 2016.

AECOM, 2017. 3rd Annual Report, Interim Remedial Measure for NAPL Recovery – August 2016 through July 2017, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. November 2017.

AECOM, 2018. 4th Annual Report, Interim Remedial Measure for NAPL Recovery – August 2017 through July 2018, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. September 2018.

AECOM, 2019. 5th Annual Report, Interim Remedial Measure for NAPL Recovery – August 2018 through July 2019, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. December 2019.

AECOM, 2021. 6th Annual Report, Interim Remedial Measure for NAPL Recovery – August 2019 through July 2020, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. January 2021.

AECOM, 2021. 7th Annual Report for NAPL Recovery – August 2020 through July 2021, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. October 2021.

AECOM, 2022. 8th Annual Report, Interim Remedial Measure for NAPL Recovery – August 2021 through July 2022, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. October 2022.

AECOM, 2023. 9th Annual Report, Interim Remedial Measure for NAPL Recovery – August 2022 through July 2023, Equity Works Former Manufactured Gas Plant Site, Brooklyn, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606. October 2023.

AECOM, 2021. Interim Remedial Measure Work Plan Addendum, 222 Maspeth Avenue Parcel, Former Equity Works Manufactured Gas Plant Site, 222-254 Maspeth Avenue, Brooklyn, Kings County, New York, NYSDEC Site No.: 224050, Order on Consent Index #: A2-0552-0606, July 2021.

National Grid, 2012. National Grid Environmental Procedure 2-A, Aboveground Storage Tank Management. December 2012.

New York State Department of Environmental Conservation (NYSDEC), 2002. Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment (DER-4). January 11, 2002.

Tables

Table 3-1
NAPL Monitoring and Recovery - Automated Wells
Former Equity Works MGP Site, Brooklyn, New York

Location		Depth of Well (ft.)		Typical Pre-Recovery NAPL Thickness (ft.)	NAPL Thickness (ft)														
Parcel		Well ID	Design		Measured	6/3/2015	7/29/2015	10/15/2015	1/15/2016	4/28/2016	7/28/2016	10/17/2016	1/19/2017	4/6/2017	7/26/2017	10/26/2017	1/19/2018	4/5/2018	7/25/2018
On-Site	252	RW- 2	51.00	49.70	12	4.41	0.06	5.43	8.98	0.55	3.42	0.20	3.33	0.01	6.05	3.62	8.82	1.38	1.52
		RW- 3	51.00	50.40	14	3.11	0.63	4.72	11.74	1.25	3.06	0.50	9.20	6.02	12.04	11.02	13.42	1.11	13.95
Perimeter	254	RW- 8	48.00	46.72	3	1.48	0.06	0.15	1.89	0.98	0.10	2.41	3.63	2.05	0.01	0.01	0.01	0.00	2.71
		RW- 9	50.00	48.87	6	0.65	0.06	1.73	7.32	13.50	7.78	0.10	4.92	6.30	12.30	0.01	0.01	0.00	0.00
		RW- 10	46.00	45.30	11	3.41	0.06	6.25	11.44	3.03	0.20	0.05	6.32	6.60	0.95	0.01	0.01	0.00	0.02
		RW- 11	46.00	45.73	8	---	---	---	---	---	---	---	---	---	---	---	---	---	0.91
		RW- 12	46.00	45.48	13	3.20	4.01	2.65	10.45	10.60	2.25	10.11	1.20	0.01	2.85	2.65	0.75	4.30	5.60
		RW- 13	46.00	45.53	12	trace	0.06	0.35	10.51	6.01	0.1	8.08	5.53	6.2	0.01	0.01	0.01	6.95	10.81
	252	RW- 18	50.00	47.50	10	3.21	8.80	0.10	trace	0.10	0.10	0.05	0.01	0.01	0.01	0.01	0.01	0.01	3.65
		RW- 19	52.00	50.18	12	trace	0.06	0.1	7.71	0.15	2.72	0.05	5.56	0.01	6.2	0.01	0.01	0.01	0.00
		RW- 20	52.00	50.75	11	trace	9.01	1.8	2.0	1.4	2.2	1.9	2.0	0.0	2.1	2.0	1.2	0.0	1.31
		RW- 21	50.00	49.80	5	trace	0.06	0.1	trace	8.65	0.1	5.97	0.01	0	0	0.01	2.12	1.82	3.70
222	RW- 22	46.00	42.95	8	No Access	1.88	8.34	0.57	0	0.1	0.1	0.01	1.51	0.01	---	0.01	0.01	0.02	
Recovered Gallons (cumulative from system startup)						2272	4215	5539	7156	9277	11477	12531	14071	15277	16263	16750	17730	18792	19316
Average Gallons per Day						7.0	11.1	12.1	13.1	14.3	15.5	15.3	15.4	15.4	14.8	14.0	13.9	13.9	13.2

Notes:

Bold Primary Recovery Wells

--- Not available. At RW-11, pump transferred to RW-22 during 10/3/14 event

RW-11 converted to a Gauging Well

Recovered Gallons (cumulative) is total amount pumped (based on disposal manifests) and does not include correction factor for NAPL to water ratio

Gallons per Day does not include correction factor for NAPL to water ratio

RW-8 converted to a Gauging Well during 7/20/22 event

Table 3-1
NAPL Monitoring and Recovery - Automated Wells
Former Equity Works MGP Site, Brooklyn, New York

Location		Depth of Well (ft.)		Typical Pre-Recovery NAPL Thickness (ft.)	NAPL Thickness (ft)															
Parcel	Well ID	Design	Measured		11/5/2018	1/30/2019	4/3/2019	8/13/2019	11/7/2019	1/28/2020	4/30/2020	7/27/2020	10/19/2020	1/25/2021	4/26/2021	7/13/2021	10/18/2021	1/24/2022	4/25/2022	
On-Site	252	RW- 2	51.00	49.70	12	0.14	6.10	9.55	0.00	1.21	6.05	6.80	0.01	5.75	---	8.85	1.79	2.35	2.05	1.50
		RW- 3	51.00	50.40	14	10.21	11.33	11.15	0.30	3.43	9.88	---	2.44	12.10	---	12.90	5.25	1.10	6.80	12.10
Perimeter	254	RW- 8	48.00	46.72	3	5.10	5.83	5.42	6.35	2.05	4.25	0.00	3.20	4.55	2.50	2.30	2.95	4.20	3.28	3.00
		RW- 9	50.00	48.87	6	0.00	1.70	5.25	7.55	3.80	6.95	5.00	3.20	0.10	0.50	4.85	4.20	4.50	---	0.15
		RW- 10	46.00	45.30	11	0.02	2.72	6.42	7.99	4.06	6.99	5.30	1.25	2.96	6.98	5.91	11.89	9.68	0.90	0.30
		RW- 11	46.00	45.73	8	1.41	1.30	0.82	1.05	1.00	1.00	1.00	1.15	0.92	1.20	0.85	0.70	1.50	1.85	2.00
		RW- 12	46.00	45.48	13	0.10	0.01	2.55	0.85	0.03	0.00	0.20	0.01	2.08	5.20	5.96	7.50	1.10	0.98	2.50
		RW- 13	46.00	45.53	12	0.00	0.00	1.52	0.15	0.01	0.00	0.00	0.01	0.10	0.30	0.20	0.02	0.01	---	0.00
	252	RW- 18	50.00	47.50	10	0.10	0.01	7.71	0.02	0.00	0.00	0.00	0.01	1.40	1.50	2.25	0.95	0.10	1.21	1.20
		RW- 19	52.00	50.18	12	0.00	0.00	9.68	0.23	6.95	9.23	9.50	9.55	3.63	2.00	2.25	2.02	0.60	2.62	2.00
		RW- 20	52.00	50.75	11	1.45	2.00	10.02	5.55	6.02	1.87	2.30	1.93	4.22	---	0.62	4.10	2.90	4.70	1.20
		RW- 21	50.00	49.80	5	---	2.60	4.01	3.00	6.67	4.98	3.90	0.01	0.10	---	0.33	0.22	0.80	0.42	---
	222	RW- 22	46.00	42.95	8	---	---	2.02	0.00	0.02	0.00	---	0.00	0.10	0.00	0.32	0.00	0.00	0.92	0.21
Recovered Gallons (cumulative from system startup)					19877	21035	21629	23127	23801	24216	24988	25473	26429	26989	27397	28861	29346	30384	30761	
Average Gallons per Day					12.7	12.7	12.6	12.5	12.0	11.7	11.7	11.5	11.5	11.7	11.1	11.4	11.1	11.1	10.9	

Notes:

Bold Primary Recovery Wells

--- Not available. At RW-11, pump transferred to RW-22 during 10/3/14 event

RW-11 converted to a Gauging Well

Recovered Gallons (cumulative) is total amount pumped (based on disposal manifests) and does not include correction factor for NAPL to water ratio

Gallons per Day does not include correction factor for NAPL to water ratio

RW-8 converted to a Gauging Well during 7/20/22 event

Table 3-1
NAPL Monitoring and Recovery - Automated Wells
Former Equity Works MGP Site, Brooklyn, New York

Location		Depth of Well (ft.)		Typical Pre-Recovery NAPL Thickness (ft.)	NAPL Thickness (ft)									
Parcel		Well ID	Design		Measured	7/20/2022	11/8/2022	2/22/2023	4/19/2023	8/8/2023	11/14/2023	3/26/2024	6/11/2024	7/30/2024
On-Site	252	RW- 2	51.00	49.70	12	1.83	1.95	3.04	4.00	7.42	0.85	9.35	0.30	4.45
		RW- 3	51.00	50.40	14	4.42	1.95	9.22	6.25	1.60	0.05	0.40	0.90	10.00
Perimeter	254	RW- 8	48.00	46.72	3	4.40	---	---	---	---	---	---	---	---
		RW- 9	50.00	48.87	6	0.00	0.70	2.25	3.83	6.71	6.02	6.97	8.00	0.02
		RW- 10	46.00	45.30	11	0.00	0.02	0.03	0.92	0.82	0.30	1.65	0.24	2.70
		RW- 11	46.00	45.73	8	3.11	2.45	1.40	0.82	0.81	1.44	0.87	0.55	0.30
		RW- 12	46.00	45.48	13	1.65	0.02	1.44	3.92	4.92	5.52	6.92	3.48	0.92
		RW- 13	46.00	45.53	12	0.00	0.80	2.75	3.09	4.21	2.22	2.80	0.02	0.02
	252	RW- 18	50.00	47.50	10	1.70	1.43	0.01	1.50	1.05	1.67	1.70	1.40	0.75
		RW- 19	52.00	50.18	12	2.40	2.88	0.30	1.50	2.50	4.02	7.23	2.30	10.13
		RW- 20	52.00	50.75	11	7.65	7.01	7.01	6.24	3.33	4.30	4.14	4.90	2.30
		RW- 21	50.00	49.80	5	---	8.11	7.05	0.07	1.07	0.02	0.02	0.30	1.00
	222	RW- 22	46.00	42.95	8	0.55	0.85	0.80	1.45	0.22	1.45	1.75	0.90	2.34
Recovered Gallons (cumulative from system startup)					31195	32534	33368	33765	34201	34626	35094	35194	35579	
Average Gallons per Day					10.7	10.8	10.7	10.6	10.4	10.2	10.0	9.8	9.7	

Notes:

Bold Primary Recovery Wells

--- Not available. At RW-11, pump transferred to RW-22 during 10/3/14 event

RW-11 converted to a Gauging Well

Recovered Gallons (cumulative) is total amount pumped (based on disposal manifests) and does not include correction factor for NAPL to water ratio

Gallons per Day does not include correction factor for NAPL to water ratio

RW-8 converted to a Gauging Well during 7/20/22 event

Table 3-2a
NAPL Monitoring and Recovery - Gauging Wells
Former Equity Works MGP Site
Brooklyn, New York

Location		Depth of Well (ft.)		NAPL Thickness (feet)																
Parcel	Well ID	Design	Measured	10/17/2016	1/19/2017	4/6/2017	7/26/2017	10/26/2017	1/19/2018	4/5/2018	7/25/2018	11/5/2018	1/30/2019	4/3/2019	8/13/2019	11/7/2019	1/28/2020	4/30/2020	7/27/2020	
On-Site	252	RW- 1	45.00	43.35	0.98	1.55	0.01	1.66	1.02	0.95	1.00	1.52	1.52	0.73	1.11	1.72	1.00	1.00	---	3.11
		RW- 4	51.00	49.91	0.05	0.01	0.01	0.06	0.00	0.01	0.01	0.02	---	0.54	1.15	0.02	0.01	0.0	0.0	0.01
		RW- 5	47.00	44.45	0.05	0.01	0.01	0.00	0.01	0.01	0.01	0.02	---	0.55	0.73	0.0	0.02	0.0	0.10	0.01
Perimeter	254	RW- 6	47.00	45.72	2.67	3.75	2.55	2.95	3.23	2.85	2.00	2.33	2.71	1.80	1.65	2.55	2.11	1.88	2.40	2.54
		RW- 7	48.00	46.05	---	---	1.46	0.75	0.01	0.54	1.30	0.60	0.70	0.73	0.72	0.82	0.75	0.59	---	1.22
		RW- 8	48.00	46.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		RW- 11	46.00	45.73	1.33	2.20	1.22	2.85	1.30	0.80	0.80	0.91	1.41	1.30	0.82	1.05	1.00	1.00	1.00	1.15
		RW- 14	45.00	45.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		RW- 15	45.00	43.72	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	---	---	---	0.0	0.0
		RW- 16	50.00	49.72	---	0.56	0.0	0.0	0.0	1.7	1.81	0.02	---	---	0.0	---	---	---	---	---
		RW- 17	48.00	49.60	3.55	3.72	3.20	4.67	4.03	3.14	2.90	4.65	4.83	2.93	2.27	4.22	3.33	3.35	3.90	2.23
	222	RW- 23	44.00	41.69	---	---	0.01	0.01	---	---	---	---	---	---	---	---	---	---	---	---
		RW- 24	26.50	25.95	NI	NI	NI	NI	NI	NI	NI	NI	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		RW- 25	26.25	24.93	NI	NI	NI	NI	NI	NI	NI	NI	1.75	0.01	0.11	0.80	0.55	0.10	0.20	0.25

Notes:

--- = Unable to access due to ongoing Cooper Tank/bus company site operations or equipment blocking recovery well that could not be moved

NI - Not installed

RW-8 converted to a Gauging Well during 7/20/22 event

RW-11 converted to a Gauging Well during 10/3/14 event

No manual gauging and removal during June 2015 due to time/access limitation

Table 3-2a
NAPL Monitoring and Recovery - Gauging Wells
Former Equity Works MGP Site
Brooklyn, New York

Location			Depth of Well (ft.)		NAPL Thickness (feet)																
Parcel		Well ID	Design	Measured	10/19/2020	1/25/2021	4/26/2021	7/13/2021	10/18/2021	1/24/2022	4/25/2022	7/20/2022	11/8/2022	2/22/2023	4/19/2023	8/8/2023	11/14/2023	3/26/2024	6/11/2024	7/30/2024	
On-Site	252	RW- 1	45.00	43.35	0.70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		RW- 4	51.00	49.91	0.10	---	0.75	0.0	0.01	0.10	---	---	---	---	---	---	---	---	---	---	
		RW- 5	47.00	44.45	0.10	---	0.45	0.30	0.45	0.10	---	---	---	---	---	---	---	---	---	---	
Perimeter	254	RW- 6	47.00	45.72	1.35	2.50	1.80	1.32	2.20	2.47	2.00	1.65	2.45	1.50	0.8	2.02	0.91	0.81	0.9	0.3	
		RW- 7	48.00	46.05	0.75	1.00	0.90	0.78	0.80	1.80	0.70	1.52	0.80	0.54	0.75	0.85	0.88	0.8	0.3		
		RW- 8	48.00	46.72	---	---	---	---	---	---	---	4.40	3.30	3.12	2.04	0.82	3.04	3.61	3.65	1.0	
		RW- 11	46.00	45.73	0.92	1.20	0.85	0.70	1.50	1.85	2.00	3.11	2.45	1.40	0.82	0.81	1.44	0.87	0.55	0.3	
		RW- 14	45.00	45.13	0.0	0.0	0.0	0.0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	
		RW- 15	45.00	43.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		RW- 16	50.00	49.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	222	RW- 17	48.00	49.60	3.40	4.00	3.45	2.81	4.40	3.51	3.00	2.45	3.23	3.00	1.42	2.15	1.94	1.82	2.85	0.8	
		RW- 23	44.00	41.69	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00	0.02
		RW- 24	26.50	25.95	0.0	0.1	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.01	---	---	---	---	---	---	
		RW- 25	26.25	24.93	0.12	1.00	0.10	0.23	0.01	---	---	---	0.80	---	---	---	---	---	---	---	

Notes:

--- = Unable to access due to ongoing Cooper Tank/bus company site operations or equipment blocking recovery well that could not be moved

NI - Not installed

RW-8 converted to a Gauging Well during 7/20/22 event

RW-11 converted to a Gauging Well during 10/3/14 event

No manual gauging and removal during June 2015 due to time/access limitation

Table 3-2b
NAPL Monitoring and Recovery - Gauging Wells
Former Equity Works MGP Site
Brooklyn, New York

Location			Depth of Well (ft.)		Typical Pre-Recovery NAPL Thickness (ft.)	Mixed Fluids Quantity Recovered (gal.)																																
	Parcel	Well ID	Design	Measured		1/19/2017	4/6/2017	7/26/2017	10/26/2017	1/19/2018	4/5/2018	7/25/2018	11/5/2018	1/30/2019	4/3/2019	8/13/2019	11/7/2019	1/28/2020	4/30/2020	7/27/2020	10/19/2020	1/25/2021	4/26/2021	7/13/2021	10/18/2021	1/24/2022	4/25/2022	7/20/2022	11/8/2022	2/22/2023	4/19/2023	8/8/2023	11/14/2023	3/26/2024	6/11/2024	7/30/2024		
On-Site	252	RW- 1	45.00	43.35	3	5.0	0.0	5.0	3.0	3.0	2.0	4.0	4.0	3.0	4.0	3.0	3.0	3.0	---	10.0	3.0	---	---	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---	---	---	---
		RW- 4	51.00	49.91	trace	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	---	4.0	0.0	0.0	0.0	0.0	0.0	0.0	---	5.0	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---	---	---	
		RW- 5	47.00	44.45	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	3.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---	---	---	
Perimeter	254	RW- 6	47.00	45.72	3	7.0	7.0	7.0	5.0	5.0	6.0	4.5	6.0	5.0	3.0	4.5	5.0	5.0	0.0	7.0	4.0	5.5	10.0	5.5	3.0	4.0	15.0	5.0	5.0	5.0	3.0	5.0	5.0	4.0	4.0	3.0	3.0	
		RW- 7	48.00	46.05	1	---	0.0	3.0	0.0	2.0	3.0	2.0	3.0	2.0	2.0	3.0	2.0	2.0	---	5.0	3.0	4.0	5.0	4.0	7.0	3.0	0.0	0.0	4.0	4.0	3.0	4.0	3.0	3.0	3.0	3.0		
		RW- 8	48.00	46.72	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10.0	6.0	6.0	6.0	6.0	7.0	7.0	10.0	3.0	3.0	
		RW- 11	46.00	45.73	4	5.0	3.5	4.0	3.0	3.0	3.0	4.0	3.5	3.0	4.0	5.0	3.0	4.0	0.0	0.0	5.0	5.0	5.0	5.0	0.0	3.0	0.0	6.0	5.0	5.0	3.0	3.0	4.0	3.0	3.0	6.0		
		RW- 14	45.00	45.13	trace	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0		
		RW- 15	45.00	43.72	trace	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0	0.0	---	---	---	
		RW- 16	50.00	49.72	1	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0	0.0	0.0	0.0	---	---	---		
		RW- 17	48.00	49.60	6	12.0	7.0	9.0	7.0	7.0	6.0	8.0	10.0	5.0	8.0	8.0	5.0	7.0	5.0	5.0	8.0	7.5	14.0	7.5	7.0	5.0	15.0	0.0	6.0	6.0	5.0	5.0	7.0	4.0	6.0	3.0	3.0	
	222	RW- 23	44.00	41.69	2	---	0.0	0.0	---	0.0	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0	---	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		RW- 24	26.50	25.95	NI	NI	NI	NI	NI	NI	NI	NI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
		RW- 25	26.25	24.93	NI	NI	NI	NI	NI	NI	NI	NI	3.5	1.0	1.0	5.0	1.0	0.0	0.0	2.0	5.0	4.0	0.0	0.0	0.0	0.0	0.0	---	---	2.0	---	---	---	---	---	---	---	---
Total					29.0	17.5	32.0	18.0	20.0	25.0	22.5	30.0	19.0	29.0	28.5	19.0	21.0	5.0	29.0	28.0	26.0	39.0	22.0	17.0	15.0	30.0	21.0	28.0	26.0	20.0	25.0	27.0	21.0	26.0	18.0			
Cumulative from System Startup					333.5	351.0	383.0	401.0	421.0	446.0	468.5	498.5	517.5	546.5	575.0	594.0	615.0	620.0	649.0	677.0	703.0	742.0	764.0	781.0	796.0	826.0	847.0	875.0	901.0	921.0	946.0	973.0	994.0	1020.0	1038.0			

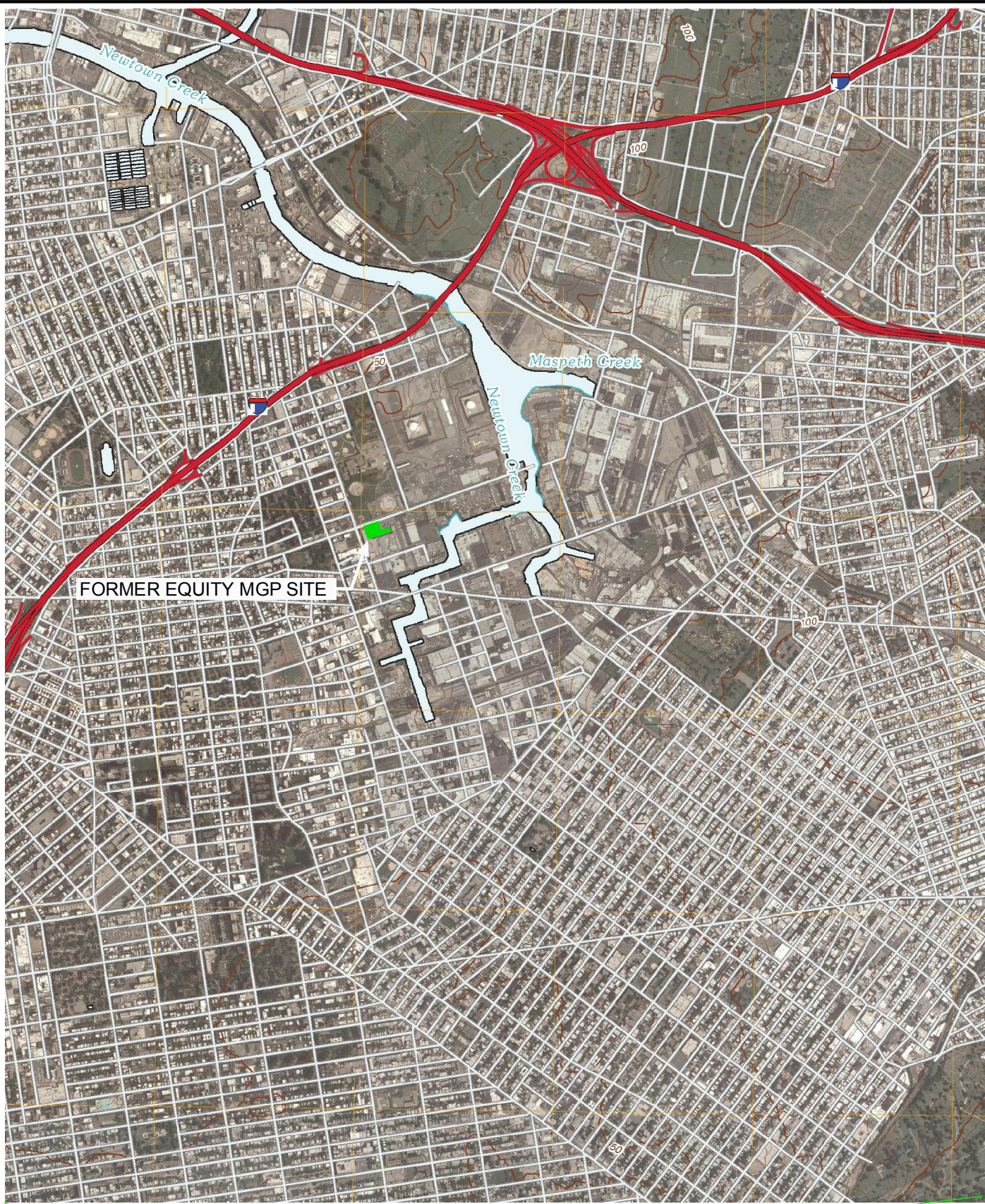
Notes:
RW-11 converted to a Gauging Well during 10/3/14 event
No manual gauging and removal during June 2015 due to time/access limitation
--- = Unable to access due to ongoing Cooper Tank/bus company site operations or equipment blocking recovery well that could not be moved
NI - Not installed
RW-8 converted to a Gauging Well during 7/20/22 event

Table 3-3
Summary of Waste Management
Former Equity Works MGP Site, Brooklyn, New York

Date	Quantity Shipped (gallons)
6/8/2015	466
6/24/2015	490
7/9/2015	550
7/24/2015	437
8/17/2015	493
9/10/2015	335
9/29/2015	496
10/22/2015	617
11/18/2015	550
12/22/2015	450
2/5/2016	581
2/19/2016	545
3/11/2016	462
4/5/2016	533
5/2/2016	540
5/31/2016	625
6/27/2016	495
7/25/2016	540
9/1/2016	540
10/6/2016	514
11/10/2016	550
12/14/2016	500
1/12/2017	490
3/10/2017	553
4/6/2017	653
5/22/2017	520
7/28/2017	466
9/29/2017	487
11/17/2017	495
12/22/2017	485
2/15/2018	571
4/6/2018	491
6/29/2018	524
8/15/2018	561
11/7/2018	567
12/20/2018	591
2/7/2019	594
5/6/2019	530
6/10/2019	483
7/17/2019	485
10/7/2019	533
12/4/2019	415
2/6/2020	421
4/23/2020	472
6/24/2020	485
8/20/2020	501
10/7/2020	455
12/18/2020	560
3/10/2021	408
5/12/2021	474
7/12/2021	455
7/27/2021	535
9/15/2021	485
10/26/2021	545
1/10/2022	493
3/30/2022	377
6/1/2022	434
7/20/2022	443
8/31/2022	444
10/13/2022	452
12/7/2022	428
2/15/2023	406
5/10/2023	397
8/7/2023	436
11/6/2023	425
2/27/2024	468
4/9/2024	100
5/28/2024	385

Note: Shipments prior to June 2015 not included on table.

Figures



NATIONAL GRID
FORMER EQUITY WORKS MGP SITE,
BROOKLYN NY

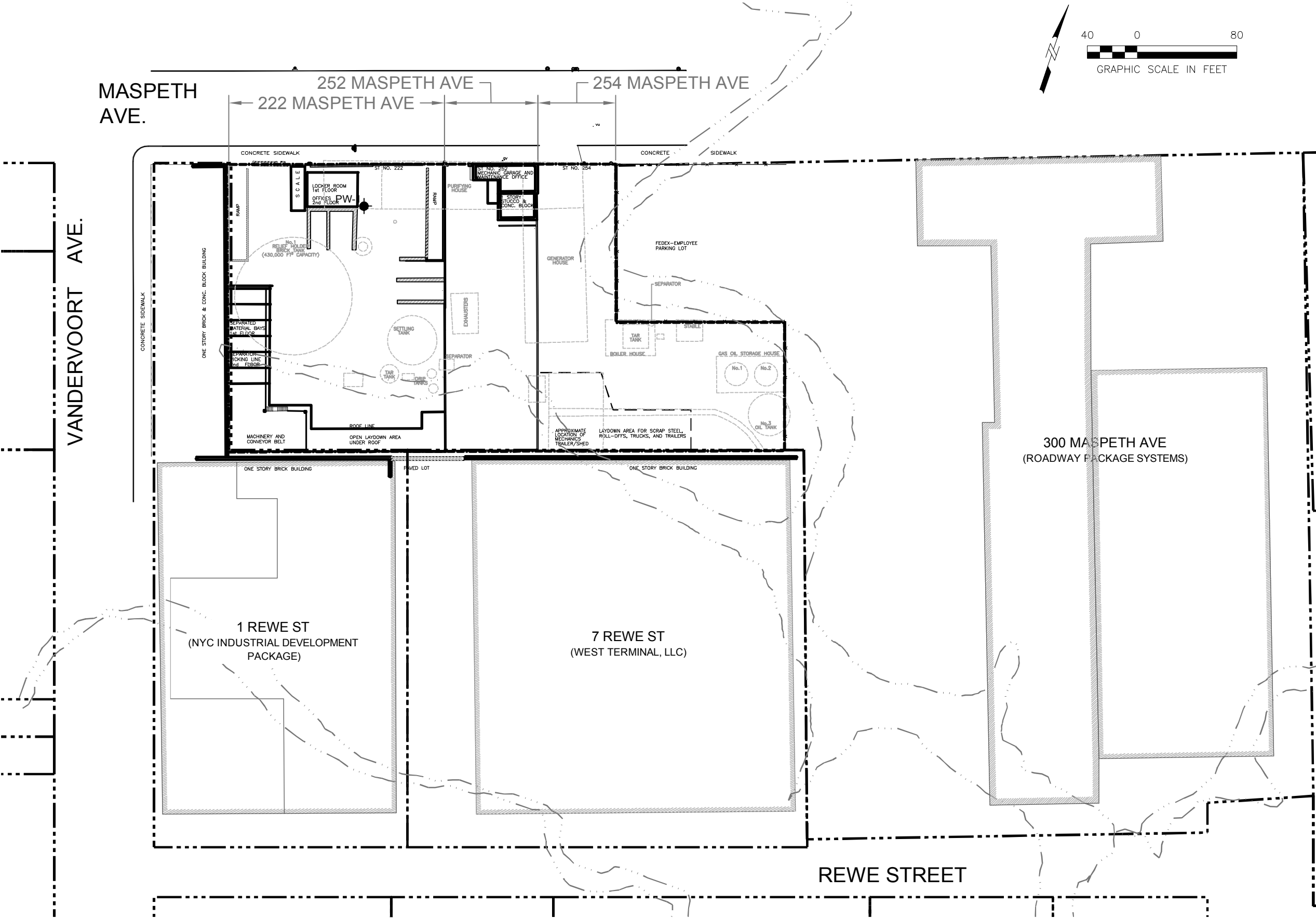
SITE LOCATION

DATE: 12/2012

DRWN: BcV/C-MA

FIGURE 1-1

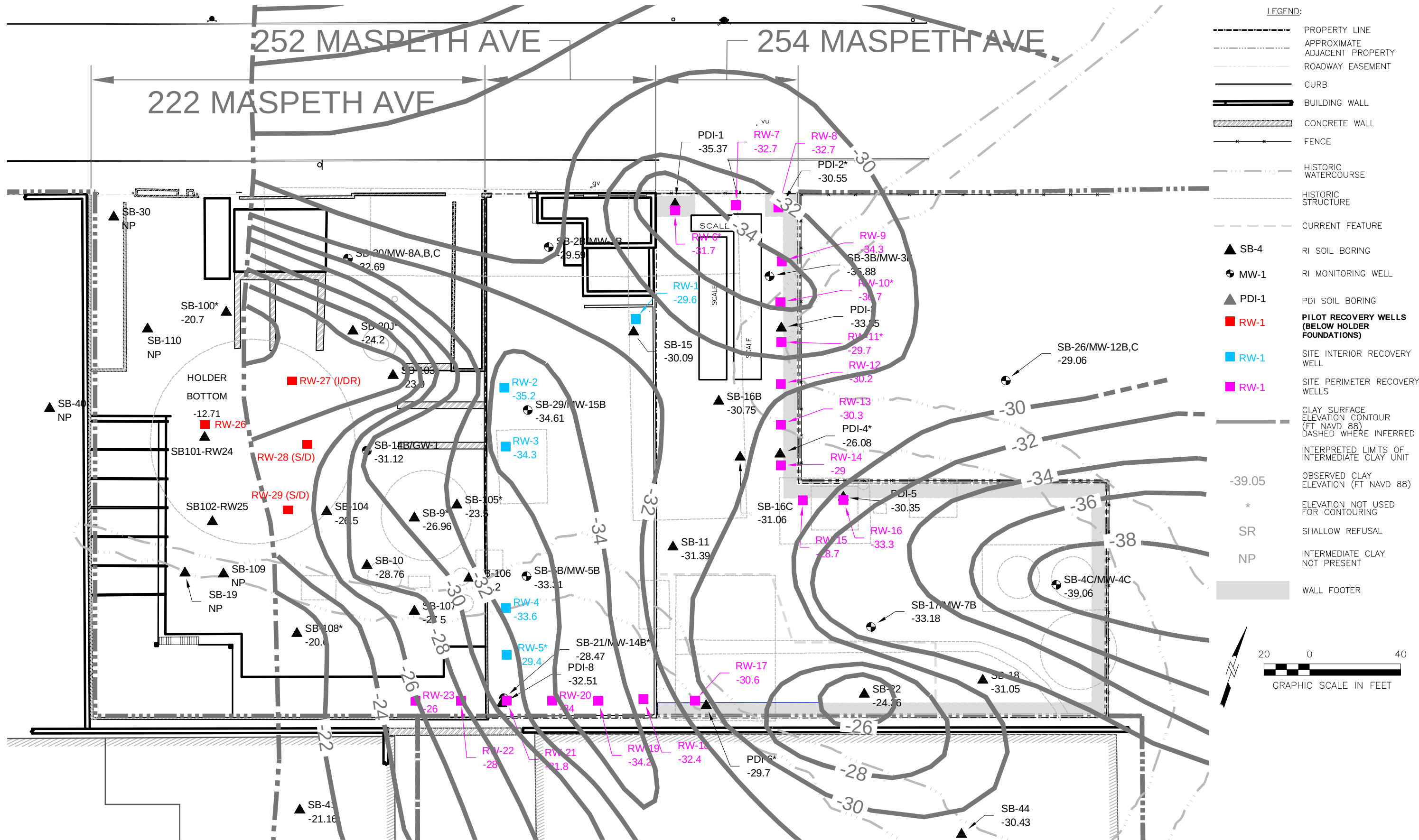
File: J:\Rem_Eng\Project_Files\National_Grid\1765-076_Equity_Former_MGP\7.2_CADD & GIS\2012-IRM_PRODUCT-RECOVERY\WorkPlan_figures\60137362-660-A1.dwg Layout: Site Limits User: vershomb Plotted: Dec 11



NATIONAL GRID FORMER EQUITY WORKS MGP SITE, BROOKLYN NY			SITE PROPERTIES	
60137362-400				
DATE: 12/2012	DRWN: BcV/C-MA		FIGURE 1-2	



File: P:\Jobs\Rem_Eng\Project Files\National Grid\1765-076 Equity Former MGP\7.2 CADD & GIS\2019\60137362-660_A5.dwg Layout: Layout1 User: Bourdeau Plotted: Sep 19, 2019 - 2:57pm



NATIONAL GRID
FORMER EQUITY WORKS MGP SITE, BROOKLYN NY

60137362-350

DATE: 07/25/22

DRWN: PT

LOCATIONS OF ON-SITE AND
PERIMETER RECOVERY WELLS

FIGURE 2-1

AECOM

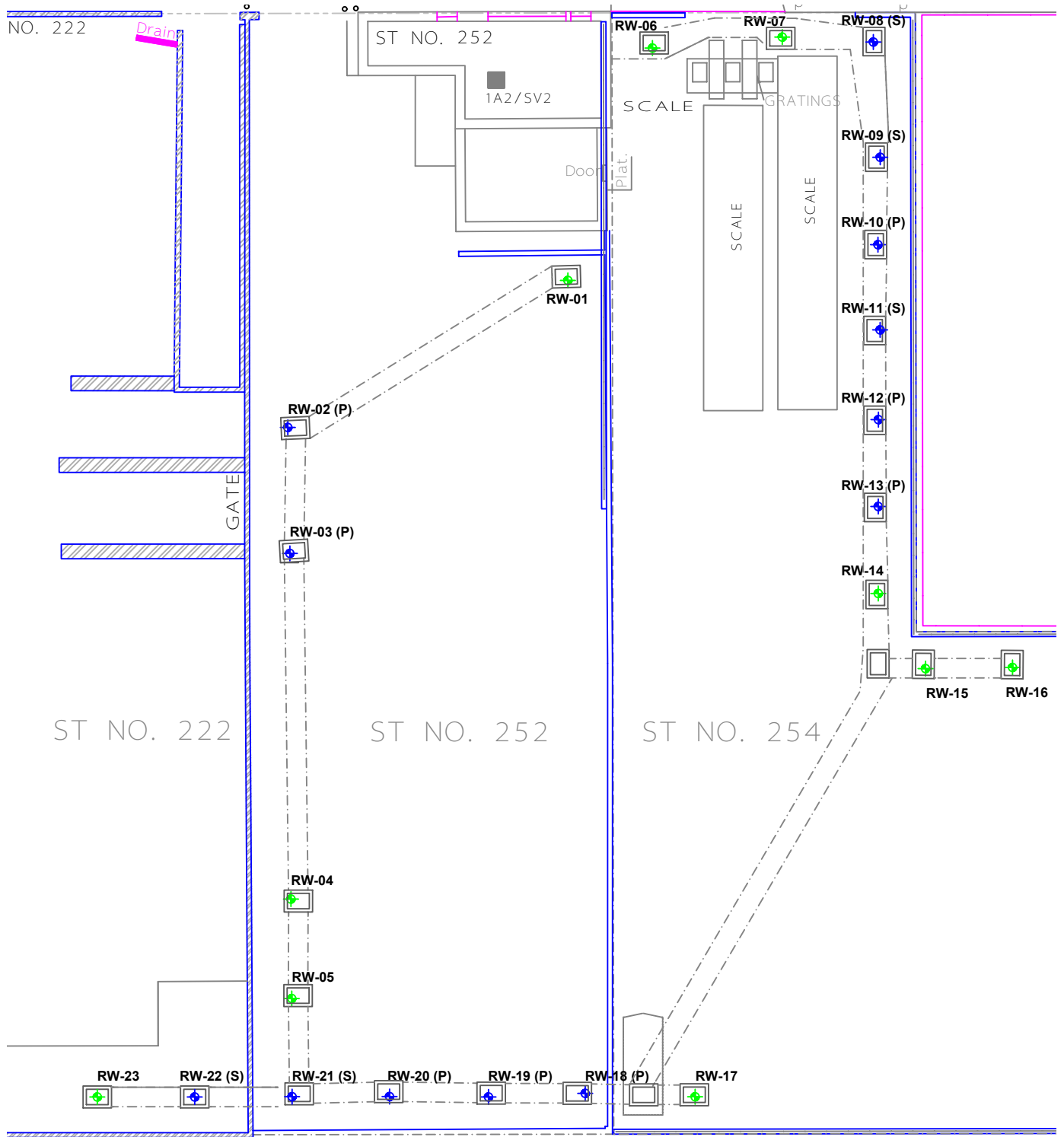


AECOM

NATIONAL GRID
FORMER EQUITY WORKS MGP SITE,
BROOKLYN, NY
60137362.660

COMPLETED WELL
LOCATION

FIGURE 2-2



LEGEND

- ◆ RW-02 (P) AUTOMATED WELLS - PRIMARY (APPROX. COLLECTION RATE > 1 GPD)
- RW-08 (S) AUTOMATED WELLS - SECONDARY (APPROX. COLLECTION RATE 0.5-0.1 GPD)
- RW-01 GAUGING WELLS (APPROX. COLLECTION RATE < 0.1GPD)



AECOM

NATIONAL GRID
FORMER EQUITY WORKS MGP SITE,
BROOKLYN NY
60137362.660

DATE: 10/30/2013

DRWN: BcV/C-MA

LOCATION OF AUTOMATED WELLS

FIGURE 2-3

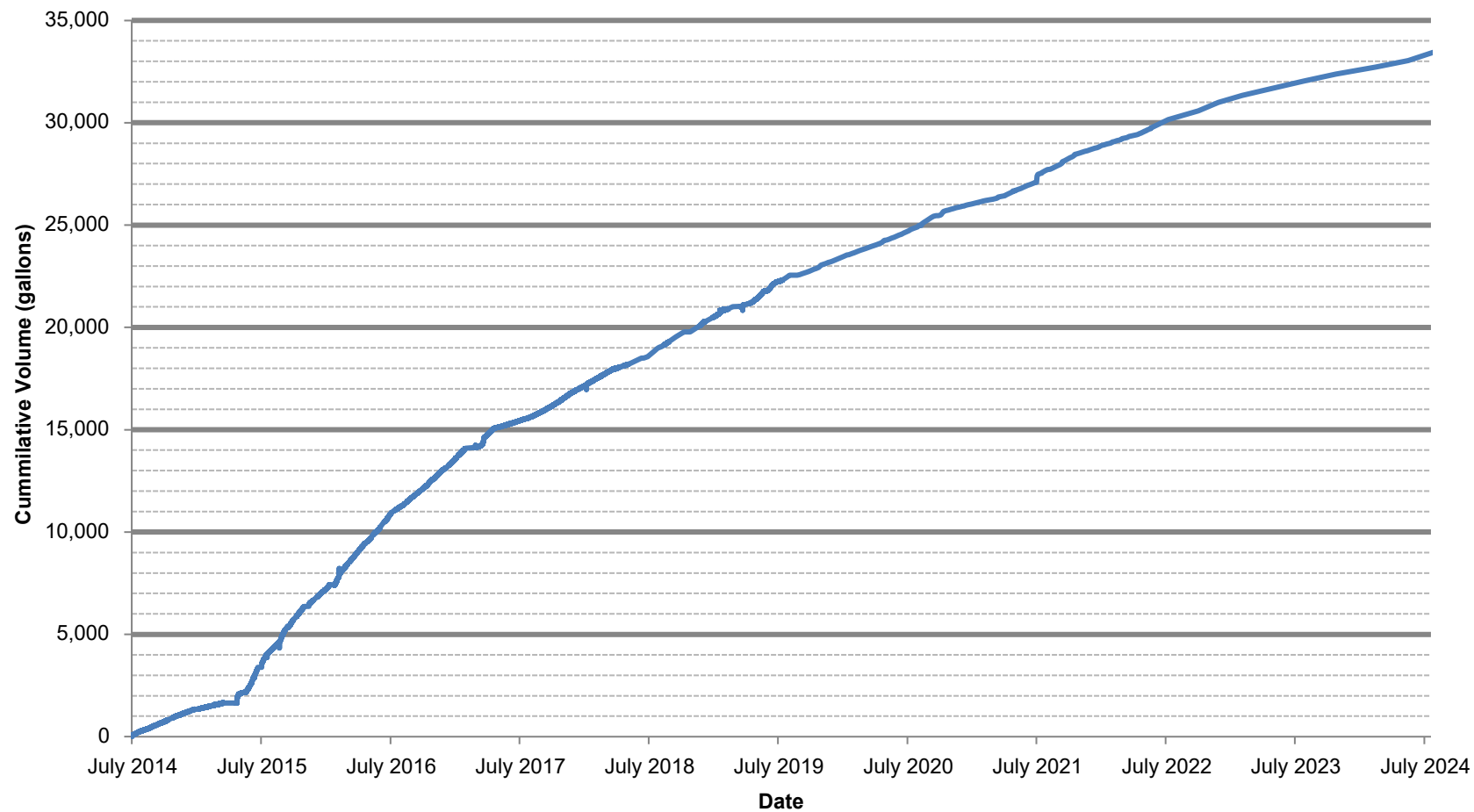


AECOM

NATIONAL GRID
FORMER EQUITY WORKS MGP
SITE, BROOKLYN, NY
60137362.660

CONTROL TRAILER

FIGURE 2-4



Note: Mixed Fluids are estimated to contain 60% NAPL

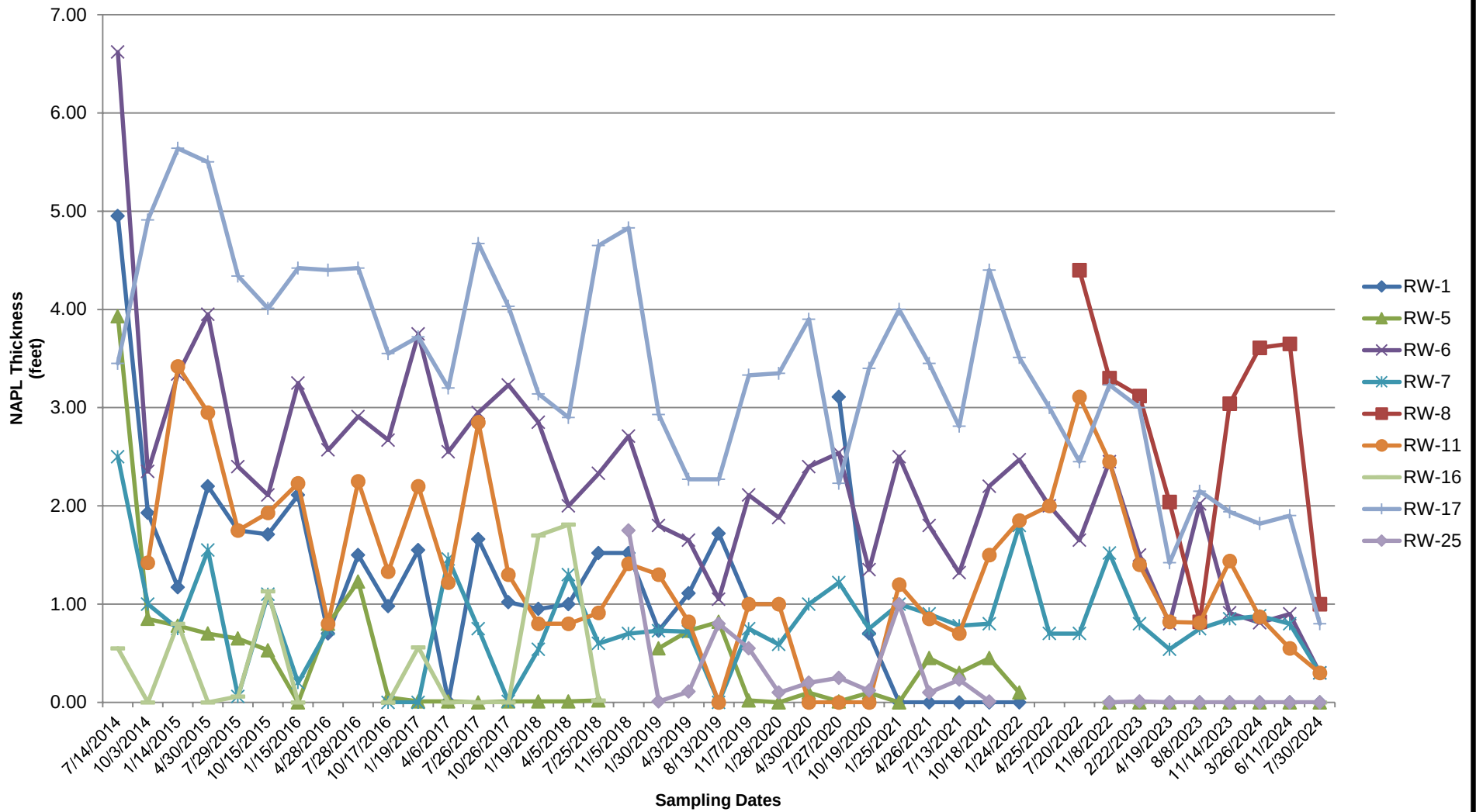


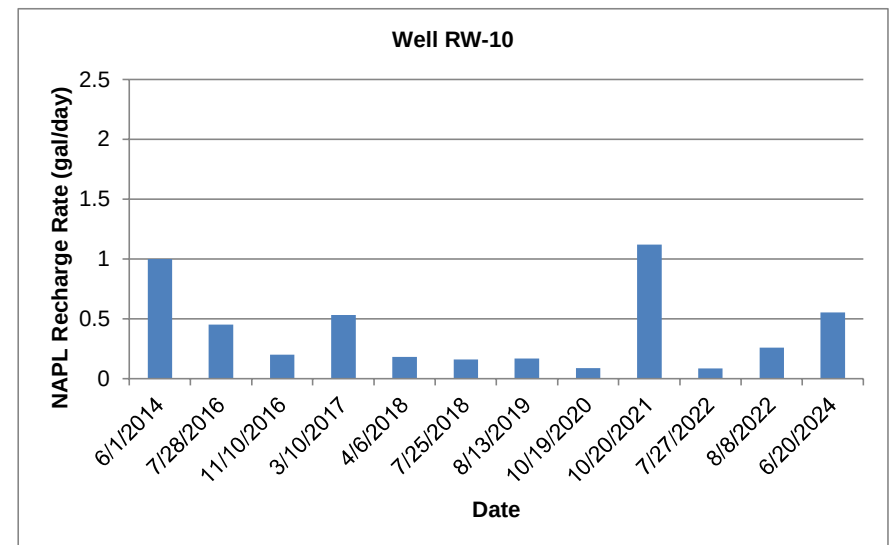
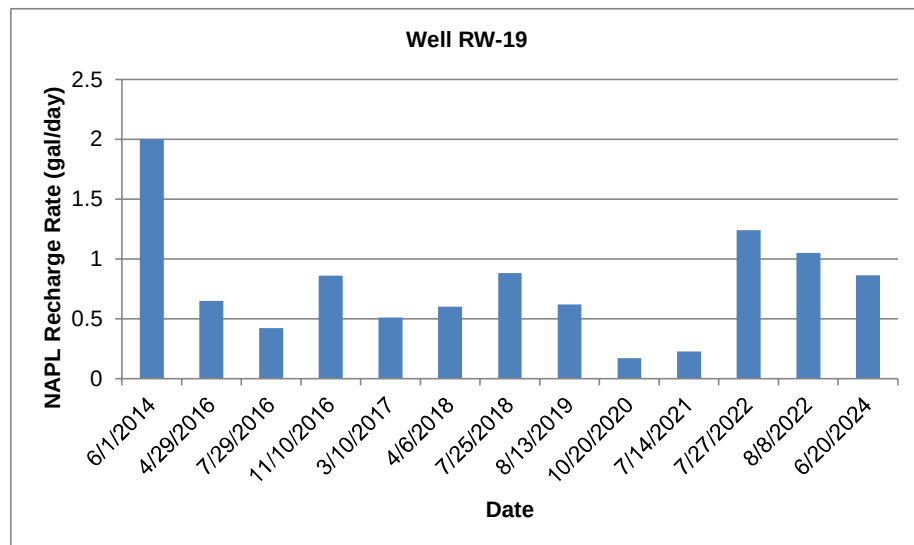
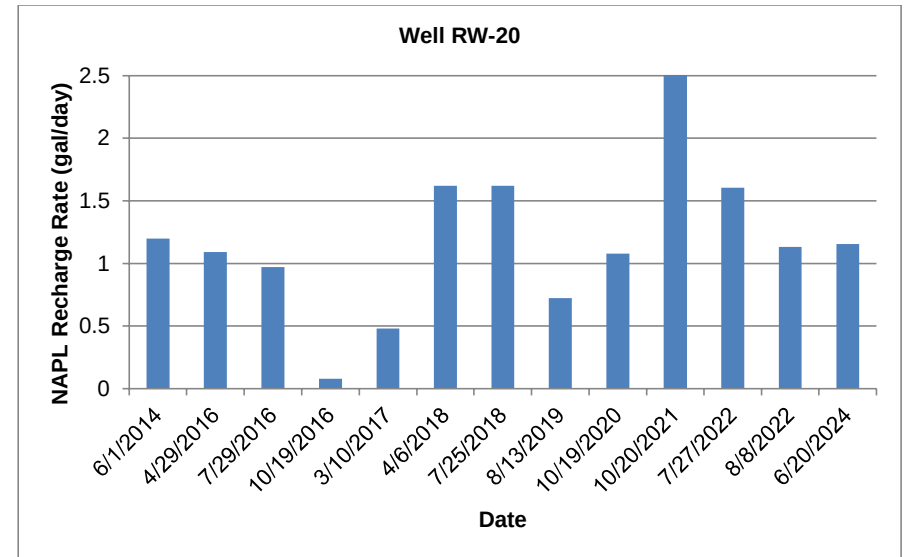
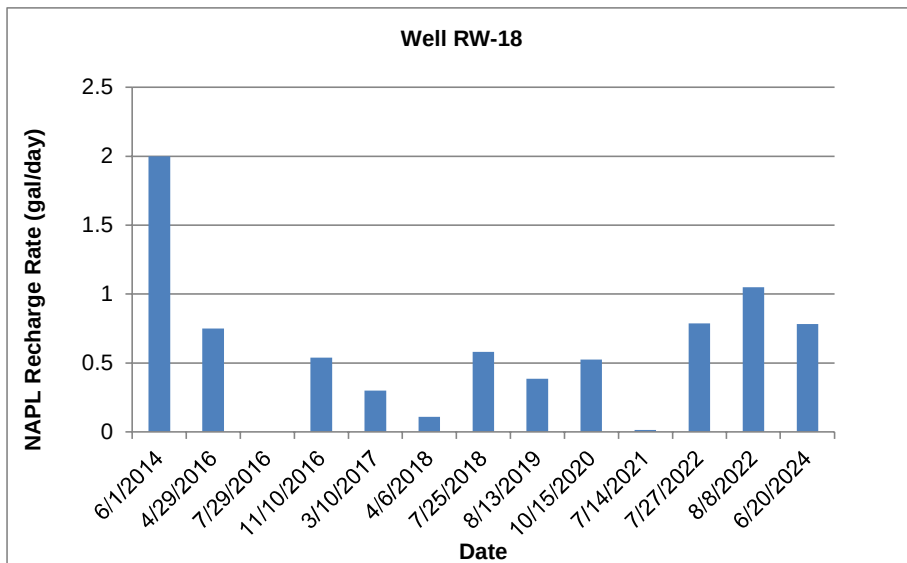
NATIONAL GRID
FORMER EQUITY WORKS MGP SITE,
BROOKLYN NY
60137362.660

DATE: 12/10/2024

CUMULATIVE VOLUME OF MIXED FLUIDS
COLLECTED JULY 31, 2024
IRM FOR NAPL RECOVERY

FIGURE 3-1





Appendix A Waste Disposal Documentation



272290

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone (877) 818-0087	4. Manifest Tracking Number 002130998 VES			
5. Generator's Name and Mailing Address EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD HICKSVILLE, NY 11801 Generator's Phone: 516 545 3586			Generator's Site Address (if different than mailing address) 254 MASPETH AVE BROOKLYN, NY 11211					
6. Transporter 1 Company Name ENVIRON. TRANSPORT GROUP INC			U.S. EPA ID Number NJ D 0 0 0 6 9 2 0 6 1					
7. Transporter 2 Company Name			U.S. EPA ID Number					
8. Designated Facility Name and Site Address VEOLIA ES TECHNICAL SOLUTIONS 125 FACTORY LANE MIDDLESEX, NJ 08846 Facility's Phone: 732 469-5100			U.S. EPA ID Number NJ D 0 0 2 4 5 4 5 4 4					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001, D018)	1	T T	400	G	D001	B
		2.					D018	
		3.						
		4.						
14. Special Handling Instructions and Additional Information confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf. -(- 1) W: 101578 A: MARBULKS ER Service Contracted by VESTS -(- Contract retained by generator 170								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Melania Munoz of Nat Grid			Signature 			Month Day Year 8 7 23		
INTL.	16. International Shipments ☐ Import to U.S. ☐ Export from U.S.			Port of entry/exit: Date leaving U.S.:				
	Transporter signature (for exports only):							
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials							
	Transporter 1 Printed/Typed Name Rich Santian			Signature 			Month Day Year 08 07 23	
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name			Signature			Month Day Year	
	18. Discrepancy							
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Actual Qty Received by weight 436 gallons Manifest Reference Number:								
18b. Alternate Facility (or Generator)			U.S. EPA ID Number					
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)			Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H061			2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name David Solecki			Signature 			Month Day Year 08 07 23		



273790

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone (877) 818-0087	4. Manifest Tracking Number 002305635 VES	
5. Generator's Name and Mailing Address EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD HICKSVILLE, NY 11801 Generator's Phone: 516 545-2586			Generator's Site Address (if different than mailing address) 254 MASPETH AVE BROOKLYN, NY 11211			
6. Transporter 1 Company Name ENVIRON. TRANSPORT GROUP INC.			U.S. EPA ID Number NJD000692061			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address VEOLIA ES TECHNICAL SOLUTIONS 125 FACTORY LANE MIDDLESEX, NJ 08846			U.S. EPA ID Number NJD002454544			
Facility's Phone: 732 469-5100						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s. (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001, D018)	1	T T	450	G	D001 B D018
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information IMPACTED GROUND WATER; ER Service Contracted by VESTS - 1) W:101578 A:MARBULK'S MIXED NAPL						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name Melania Munoz		Signature <i>[Signature]</i>		Month 11	Day 6	Year 23
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Rich S. Whelan		Signature <i>[Signature]</i>		Month 11	Day 06	Year 23
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
18. Discrepancy						
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
Actual quantity received by weight 425 Gals						
18b. Alternate Facility (or Generator)				U.S. EPA ID Number		
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)				Month	Day	Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.	2.	3.	4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a						
Printed/Typed Name APRIL WATKINS		Signature <i>[Signature]</i>		Month 11	Day 6	Year 23

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone (877) 818-0007	4. Manifest Tracking Number 002011309 VES	
5. Generator's Name and Mailing Address EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD HICKSVILLE, NY 11801 Generator's Phone: 516 345-2586		Generator's Site Address (if different than mailing address) 254 MASPETH AVE BROOKLYN, NY 11211				
6. Transporter 1 Company Name ENVIRON. TRANSPORT GROUP INC.		U.S. EPA ID Number N J D 0 0 0 6 9 2 0 6 1				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address VBOLIA RS TECHNICAL SOLUTIONS 125 FACTORY LANE MIDDLESEX, NJ 08846		U.S. EPA ID Number N J D 0 0 2 4 5 4 5 4 4				
Facility's Phone: 732 469-5100						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001, D018)	1	T T	520	G	D001 B D018
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information RR Service Contracted by VESTS + Contract retained by generator confirm agency authority on initial transporter to add or substitute additional transporters on generator's behalf. + 1) W:101578 A: MARBULKS Actual Gallons 468						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offor's Printed/Typed Name Melania Munoz		Signature <i>Sign on behalf of Nat Grid</i>		Month Day Year 02 27 24		
16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.				
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Adam Grzeskowiak		Signature <i>Adam Grzeskowiak</i>		Month Day Year 02 27 24		
Transporter 2 Printed/Typed Name		Signature		Month Day Year		
18. Discrepancy						
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection		Actual Gallons 468				
18b. Alternate Facility (or Generator)		Manifest Reference Number: 002011309 VES U.S. EPA ID Number				
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)		Month Day Year				
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. H061		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name Diana B...		Signature <i>Diana B...</i>		Month Day Year 12 27 24		



2 216032

Please print or type.

Form Approved. OMB No. 2050-0039

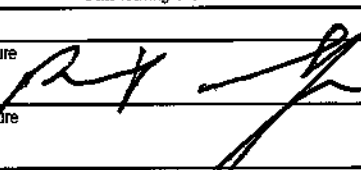
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone (877) 818-0087	4. Manifest Tracking Number 002086617 VES			
5. Generator's Name and Mailing Address EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD HICKSVILLE, NY 11801 Generator's Phone: 516 545-2586			Generator's Site Address (if different than mailing address) 254 MASPETH AVE BROOKLYN, NY 11211					
6. Transporter 1 Company Name VBOLIA ES TECHNICAL SOLUTIONS			U.S. EPA ID Number N J D 0 8 0 6 3 1 3 6 9					
7. Transporter 2 Company Name			U.S. EPA ID Number					
8. Designated Facility Name and Site Address VBOLIA ES TECHNICAL SOLUTIONS 125 FACTORY LANE MIDDLESEX, NJ 08846 Facility's Phone: 732 469-5100			U.S. EPA ID Number N J D 0 0 2 4 5 4 5 4 4					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
			No.	Type				
	X 1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001,D018)		2	D M	800	P	D001	B
							D018	
14. Special Handling Instructions and Additional Information RR Service Contracted by VESTS + Contract retained by generator confirm agency authority on initial transporter to add or substitute additional transporters on generator's behalf. + 1) W:101578 A: MARCSWFUEL <i>10 day received 4/10/24</i>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offor's Printed/Typed Name On Behalf of National Grid: KRZYSZTOF DZIATKOWSKI			Signature 			Month Day Year 04 09 24		
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name KRZYSZTOF DZIATKOWSKI			Signature 			Month Day Year 04 09 24		
Transporter 2 Printed/Typed Name			Signature			Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number								
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H061		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name APRIL WATKINS			Signature 			Month Day Year 4 11 24		



279288

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615		2. Page 1 of 1	3. Emergency Response Phone (877) 818-0007		4. Manifest Tracking Number 002302242 VES		
		5. Generator's Name and Mailing Address REBECCA STEFFENS EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD HICKSVILLE, NY 11801 Generator's Phone: 516 545-2586		Generator's Site Address (if different than mailing address) 254 MASPETH AVE BROOKLYN, NY 11211					
6. Transporter 1 Company Name ENVIRON. TRANSPORT GROUP INC.		U.S. EPA ID Number NJD000692061					U.S. EPA ID Number		
7. Transporter 2 Company Name		U.S. EPA ID Number					U.S. EPA ID Number		
8. Designated Facility Name and Site Address VBOLIA HS TECHNICAL SOLUTIONS 125 FACTORY LANE MIDDLESEX, NJ 08846		Facility's Phone: 732 460-5100					U.S. EPA ID Number NJD002454544		
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes
	X	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001, D018)			1 T T		415	G	D001 B D018
14. Special Handling Instructions and Additional Information RR Service Contracted by VESTS + Contract retained by generator confirm agency authority on initial transporter to add or substitute additional transporters on generator's behalf. + 1) W:101578 A: MARBULES 195									
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Offor's Printed/Typed Name Melania Munoz <i>Sign on Behalf of Nat Broid</i> Signature  Month 5 Day 28 Year 29									
TRANSPORTER INTL	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Rich Sullivan Signature  Month 5 Day 28 Year 29 Transporter 2 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____								
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Actual quantity received by weight 385Gls Manifest Reference Number: _____ U.S. EPA ID Number _____ 18b. Alternate Facility (or Generator) Facility's Phone: _____ 18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____								
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H061 2. _____ 3. _____ 4. _____								
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name April Watkins Signature  Month 5 Day 28 Year 29								
	DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM								