

Third Annual Interim Remedial Measure for NAPL Recovery

August 2016 Through July 2017
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

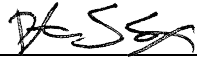
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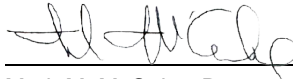
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Table of Contents

Executive Summary	1-1
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.....	2-1
2.2.1 Primary Recovery Wells	2-1
2.2.2 Secondary Recovery Wells	2-2
2.2.3 Gauging Wells	2-2
2.3 System Operation	2-2
2.3.1 Automated Wells.....	2-2
2.3.2 Gauging Wells	2-2
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
3.2 Waste Management.....	3-1
3.3 System Maintenance	3-2
3.4 Incidents/Unplanned Releases.....	3-2
4. Recommendations for Future Operation	4-1
5. References.....	5-1

Tables

Figures

Appendix A Waste Disposal Documentation

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
Figure 3-2	NAPL Thickness Versus Time – Gauging Wells
Figure 4-1	NAPL Recharge Rates Versus Time – Automated Wells
Figure 4-2	NAPL Recharge During Temporary System Shutdown

Tables

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

Executive Summary

National Grid's consultant, AECOM, has prepared this Interim Remedial Measure (IRM) Annual Report to document the third year of operation of the non-aqueous phase liquid (NAPL) recovery system within the footprint of the former Equity Manufactured Gas Plant (MGP) site (the Site) located at 254 Maspeth Avenue in Brooklyn, New York during the period of August 2016 through July 2017. The IRM 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). Details regarding the construction of the NAPL recovery IRM remedy are included in the IRM for NAPL Recovery Construction Completion Report (CCR), submitted to the NYSDEC in May 2015 (AECOM, 2015).

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 is used by Cooper Tank as a solid waste recycling facility, with the 252 and 254 parcels used to support Cooper Tank's recycling operations.

The IRM activities included the following:

- installation of 5 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.
- on-going measurement and recovery of NAPL that collects in the recovery wells.

Data collected to date indicate that NAPL collection rates at 12 of the 23 recovery well locations (2 on-site and 10 perimeter) warrant the continued operation of pumps to support automated recovery. 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 11 wells are managed using manual recovery techniques on a quarterly basis.

Since system startup through July 28, 2017, the system has operated with an average on-line factor of 93% without incidents or unplanned releases from the system. Approximately 15,544 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 organic/water ratios over the monitoring period indicates that the mixed fluids collected typically contain 60 to 75% organic, resulting in over 9,300 gallons of NAPL being removed from the site to date.

1. Introduction

National Grid's consultant, AECOM, is submitting this 3rd Annual Report outlining the Interim Remedial Measure (IRM) for NAPL Recovery progress during its third year of operation. The 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. The location of the Site and the orientation of the individual properties are illustrated in Figures 1-1 and 1-2, respectively.

The IRM is being 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, and the New York State Department of Environmental Conservation (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 initial installation and operation of the recovery wells is presented in Section 2; the results from the third 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 conducted the IRM to collect recoverable NAPL while site-wide investigation and remedial alternative and design activities are completed. The design of the NAPL recovery system included the installation of 23 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—5 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.

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 has required spacing of approximately 30 feet between the three recovery wells (RW-6, -7 and -8). All 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) have 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. 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). Each recovery well was 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.

2.2 Initial Monitoring and NAPL Recovery

The NAPL recovery system is intended to operate in a manner that contains the NAPL levels at the locations within the well sumps (5 ft. in length). 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 (produce approximately 1 gallon 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 monitoring/collection was not thought to be cost-effective or practical

given site access issues and the level of activity on the Cooper Tank facility. 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

Fifteen percent of the NAPL was collected from five secondary wells. The manual management of NAPL at these locations would require that recovery activities be conducted on a monthly basis to ensure that the storage capacity of the well sumps is not exceeded. Long-term manual monitoring/ recovery at this frequency was not thought to be 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 10 remaining wells were consistently observed to be within the wells sumps at each location. It was believed 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 11 wells.

2.3 System Operation

Discussions of the recovery/collection methods more 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 Pump Works and/or Linear Pumps. Note that the equipment designed by Linear Pumps has been determined to be better suited to site conditions and will be used to replace the Pump Works equipment over time. 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 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 5 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 organic/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 observed until the fluid being removed appears to be clear (i.e., NAPL is no longer being removed). At that point, the air flow is discontinued and 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.

3. System Performance

The following discussion provides summaries of NAPL recovery and waste management observations during the third year of system operation (August 2016 to July 2017), as well as a discussion of the associated maintenance and response activities.

3.1 NAPL Recovery

Monitoring and recovery activities were conducted on an approximate quarterly basis through the year. 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 three 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 that can challenge the ability to continually maintain a matching pumping rate. Pump duration adjustments are made on an on-going basis when data indicate NAPL thickness is near or above the sump level in the recovery wells.

Approximately 4,414 gallons of mixed fluids were collected from the system during the third year of operation. An illustration of the cumulative volume of mixed fluids collected over time is provided in Figure 3-1. From startup through July 2017, approximately 15,544 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 volume presented in Table 3-1 (16,263 gallons of mixed fluids based on manifest quantities) vary slightly from the "tank" estimate due to the variability over time between the level sensor readings and the "in truck" volumes recorded by the waste hauling company. In the past, observation of the relative proportions of organic/water have been highly variable; however, the use of the standardized protocol presented in the Year 2 Report has provided more consistent results. During Year 3 operations, the observed NAPL to water ratio of collected mixed fluids was closer to 75:25. A conservative estimate of the organic/water ratios since system startup indicates that the collected material likely contained over 9,300 gallons of NAPL.

3.1.2 Gauging Wells

The 2015-2017 data from the gauging wells is presented in Table 3-2. As indicated, manual recovery on a quarterly basis is appropriate to maintain DNAPL levels within the sumps. During Year 3 operations, approximately 100 gallons of mixed fluids were recovered from the 11 gauging wells.

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

3.2 Waste Management

The collected NAPL was managed as an alternative fuel at the Tradebe Facility in Cohoes, New York until March of 2017 and more recently at Veolia Technical Solutions Facility in Middlesex, New Jersey. A summary of the waste shipments and associated quantities from both the automated and gauging wells is presented in Table 3-3.

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". Shipments after February 5, 2016 during Year 2 operations were

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 3 operations are provided in Appendix A.

3.3 System Maintenance

There were no significant maintenance issues with the system during the monitoring period. The following maintenance activities were accomplished during the third year of operation:

- Periodic cleaning of the system trailer to remove wood dust generated by Cooper Tank recycling operations.
- Replacement of the pump to tubing connection fittings at RW-3 and at RW-9.

During the current reporting period, the system was on-line 332 days out of a total of 361 days of operation. This reflects an on-line factor of 92%, which is consistent with prior years of operation. The 29 days off-line (from 02/12/17 to 03/10/17) occurred when the tank was at capacity and the system was shut down to accommodate a change in waste hauler from ESA to Veolia.

Access to RW-3 continues to require support from the property owner to access the well. Since the final grade on the 252 Parcel has not been established and the anticipated paving of the 252 parcel by Cooper Tank has been delayed, the top of the vault for RW-3 continues to be exposed to excessive wear/damage from Cooper Tank operations. A temporary solution has involved temporary grading of the area around the vault and the replacement of the vault lid with steel road plate. Routine access to gauge the NAPL level has not been possible.

3.4 Incidents/Unplanned Releases

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

4. Recommendations for Future Operation

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

- **Recharge Rates** – Starting in June 2014, and continued during various quarterly gauging events, a pilot program was initiated to evaluate the recharge rates for select wells. During the evaluation, NAPL was removed from the well and NAPL thicknesses were monitored periodically over the next 24 hours, with results reported in gallons/day. The results for three wells located along the southern edge of the 252 Maspeth Avenue parcel (RW-18, -19 and -20) and one well along the eastern edge of the 254 Maspeth Avenue parcel (RW-10) are summarized in Figure 4-1. As illustrated, NAPL recharge rates are decreasing over time, with expected variability. This evaluation will be continued at these wells and additional wells during Year 4 operations.
- **Recovery Well Redevelopment Evaluation** – National Grid will continue to evaluate the possibility that the decreasing recharge rates (above) could be associated with “fouling” of the well screens. During Year 3, National Grid conducted a recharge evaluation during the month-long shutdown of the system in February and March 2017 (Section 3.3). The results are illustrated on Figure 4-2. In summary, significant NAPL recharge was noted in all wells monitored during the March 10, 2017 gauging event following a one-month temporary system shutdown indicating that recovery well screen fouling is not currently an issue. Frequently, the NAPL thickness in March 2017 returned to levels close to those observed prior to the startup of the system in 2014. Following tank pump-out and re-initiation of NAPL recovery, the levels dropped as expected as shown on the April 2017 data presented on Figure 4-2.

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 modifications to the operation of the system are required.

5. References

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Tables

**Table 2-1
Categories of Recovery Wells
Former Equity Works MGP Site, Brooklyn, New York**

Primary Recovery Wells (collection rate < 1 gpd)

Well	Location	
RW-2	252 Parcel	on-site
RW-3	252 Parcel	on-site
RW-10	254 Parcel	perimeter
RW-12	254 Parcel	perimeter
RW-13	254 Parcel	perimeter
RW-18	254 Parcel	perimeter
RW-19	254 Parcel	perimeter
RW-20	254 Parcel	perimeter

Secondary Recovery Wells (collection rates 0.1 to 0.5 gpd)

Well	Location	
RW-8	254 Parcel	perimeter
RW-9	254 Parcel	perimeter
RW-11	254 Parcel	perimeter
RW-21	254 Parcel	perimeter
RW-22	222 Parcel	perimeter

Gauging Wells (collection rate < 0.1 gpd)

Well	Location	
RW-1	252 Parcel	on-site
RW-4	252 Parcel	on-site
RW-5	252 Parcel	on-site
RW-6	254 Parcel	perimeter
RW-7	254 Parcel	perimeter
RW-11	254 Parcel	perimeter
RW-14	254 Parcel	perimeter
RW-15	254 Parcel	perimeter
RW-16	254 Parcel	perimeter
RW-17	254 Parcel	perimeter
RW-23	222 Parcel	perimeter

Note:

¹ Based on data from initial gauging events - May 2013 through February 2014

**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		7/29/2015	10/15/2015	1/15/2016	4/28/2016	7/28/2016	10/17/2016	1/19/2017	4/6/2017	7/26/2017	
On-Site	252	RW- 2	51.00	49.70	12	0.06	5.43	8.98	0.55	3.42	0.20	3.33	0.01	6.05
		RW- 3	51.00	50.40	14	0.63	4.72	11.74	1.25	3.06	0.50	9.20	6.02	12.04
Perimeter	254	RW- 8	48.00	46.72	3	0.06	0.15	1.89	0.98	0.10	2.41	3.63	2.05	0.01
		RW- 9	50.00	48.87	6	0.06	1.73	7.32	13.50	7.78	0.10	4.92	6.30	12.30
		RW- 10	46.00	45.30	11	0.06	6.25	11.44	3.03	0.20	0.05	6.32	6.60	0.95
		RW- 11	46.00	45.73	8	---	---	---	---	---	---	---	---	---
		RW- 12	46.00	45.48	13	4.01	2.65	10.45	10.60	2.25	10.11	1.20	0.01	2.85
		RW- 13	46.00	45.53	12	0.06	0.35	10.51	6.01	0.1	8.08	5.53	6.2	0.01
	252	RW- 18	50.00	47.50	10	8.80	0.10	trace	0.10	0.10	0.05	0.01	0.01	0.01
		RW- 19	52.00	50.18	12	0.06	0.1	7.71	0.15	2.72	0.05	5.56	0.01	6.2
		RW- 20	52.00	50.75	11	9.01	1.8	2.0	1.4	2.2	1.9	2.0	0.0	2.1
		RW- 21	50.00	49.80	5	0.06	0.1	trace	8.65	0.1	5.97	0.01	0	0
	222	RW- 22	46.00	42.95	8	1.88	8.34	0.57	0	0.1	0.1	0.01	1.51	0.01
Recovered Gallons (cumulative from system startup)					4215	5539	7156	9277	11477	12531	14071	15277	16263	
Average Gallons per Day					11.1	12.1	13.1	14.3	15.5	15.3	15.4	15.4	14.8	

Notes:

Bold Primary Recovery Wells

--- Pump from RW-11 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

**Table 3-2
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.)	NAPL Thickness (feet)									Mixed Fluids Quantity Recovered (gal.)										
Parcel	Well ID	Design	Measured		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	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		
On-Site	252	RW- 1	45.00	43.35	3	1.75	1.71	2.11	0.70	1.50	0.98	1.55	0.01	1.66	4.0	4.0	8.0	3.0	5.0	5.0	5.0	0.0	5.0	
		RW- 4	51.00	49.91	trace	5.22	1.00	trace	trace	trace	0.05	0.01	0.01	0.06	10.0	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
		RW- 5	47.00	44.45	2	0.65	0.53	trace	0.80	1.23	0.05	0.01	0.01	0.00	2.0	3.0	0.0	3.0	5.0	0.0	0.0	0.0	0.0	0.0
Perimeter	254	RW- 6	47.00	45.72	3	2.40	2.11	3.25	2.57	2.91	2.67	3.75	2.55	2.95	5.0	4.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
		RW- 7	48.00	46.05	1	0.06	1.10	0.20	0.25	---	---	---	1.46	0.75	0.0	3.0	0.0	4.0	---	---	---	0.0	3.0	
		RW- 11	46.00	45.73	4	1.75	1.93	2.23	0.80	2.25	1.33	2.20	1.22	2.85	4.0	6.0	5.0	2.0	6.0	3.5	5.0	3.5	4.0	
		RW- 14	45.00	45.13	trace	0.00	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- 15	45.00	43.72	trace	0.00	0.0	0.0	---	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
		RW- 16	50.00	49.72	1	0.06	1.13	trace	---	---	---	0.56	0.0	0.0	0.0	0.0	4.0	0.0	---	---	---	0.0	0.0	0.0
		RW- 17	48.00	49.60	6	4.34	4.01	4.42	4.40	4.42	3.55	3.72	3.20	4.67	8.0	8.0	8.0	12.0	10.0	6.0	12.0	7.0	9.0	
222	RW- 23	44.00	41.69	2	0.87	0.94	trace	---	---	---	---	0.01	0.01	0.0	0.0	0.0	---	---	---	---	0.0	0.0		
Total															33.0	32.0	27.0	31.0	33.0	21.5	29.0	17.5	32.0	
Cumulative from System Startup															160.0	192.0	219.0	250.0	283.0	304.5	333.5	351.0	383.0	

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

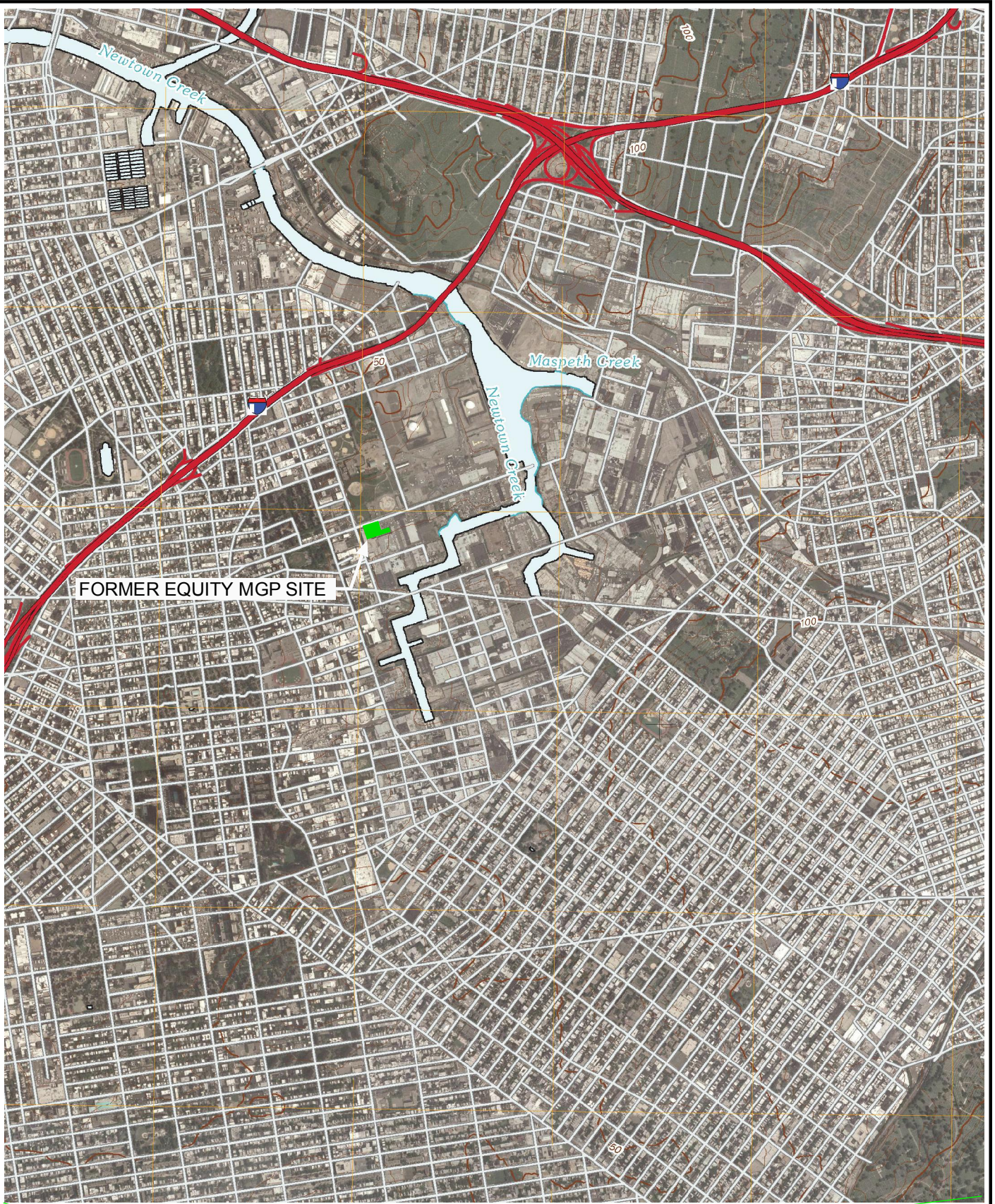
--- = Unable to access due to ongoing Cooper Tank site operations or equipment blocking recovery well that could not be moved

**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

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

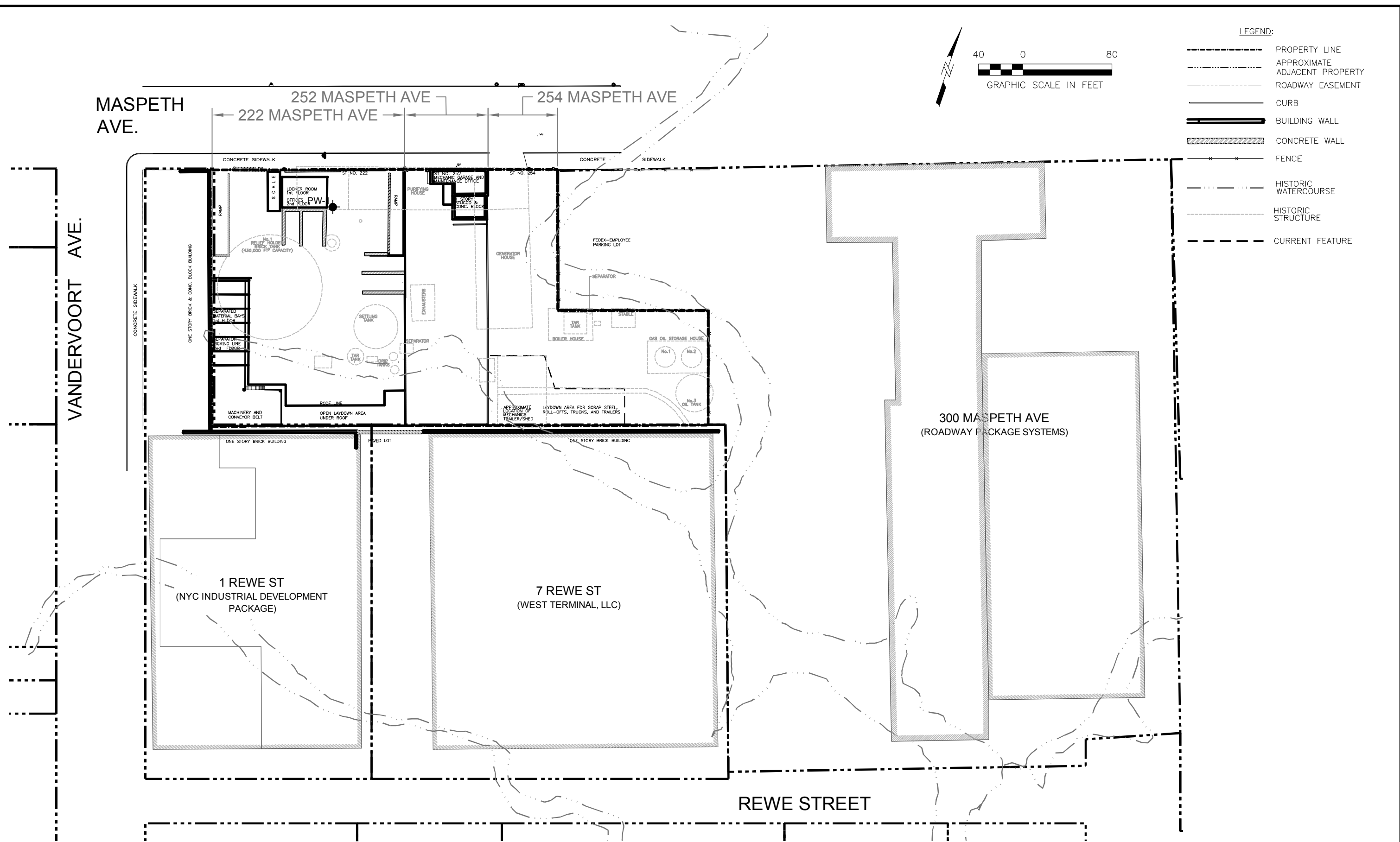
Figures



FORMER EQUITY MGP SITE

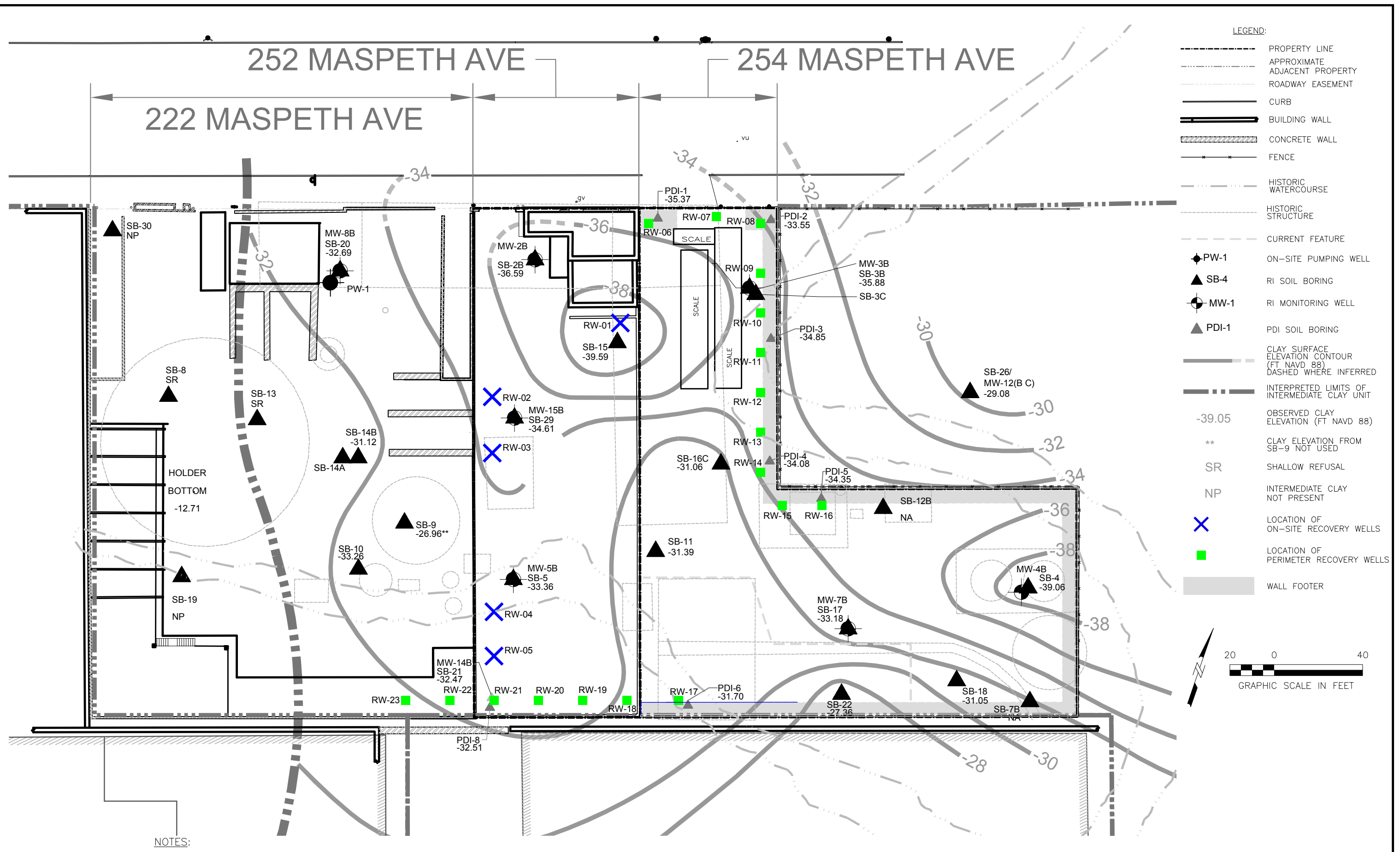


NATIONAL GRID FORMER EQUITY WORKS MGP SITE, BROOKLYN NY		SITE LOCATION
DATE: 12/2012	DRWN: BcV/C-MA	FIGURE 1-1

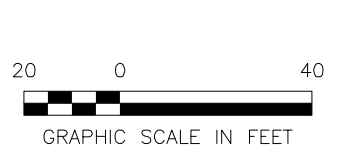


NATIONAL GRID FORMER EQUITY WORKS MGP SITE, BROOKLYN NY 60137362-400		SITE PROPERTIES
DATE: 12/2012	DRWN: BcV/C-MA	FIGURE 1-2

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_A5.dwg Layout: Layout1 User: vershobh Plotted: Dec 11, 2012



- LEGEND:**
- PROPERTY LINE
 - - - - - APPROXIMATE ADJACENT PROPERTY
 - ROADWAY EASEMENT
 - ===== CURB
 - ===== BUILDING WALL
 - ===== CONCRETE WALL
 - FENCE
 - HISTORIC WATERCOURSE
 - HISTORIC STRUCTURE
 - CURRENT FEATURE
 - ◆ PW-1 ON-SITE PUMPING WELL
 - ▲ SB-4 RI SOIL BORING
 - MW-1 RI MONITORING WELL
 - ▲ PDI-1 PDI SOIL BORING
 - CLAY SURFACE ELEVATION CONTOUR (FT NAVD 88) DASHED WHERE INFERRED
 - INTERPRETED LIMITS OF INTERMEDIATE CLAY UNIT
 - 39.05 OBSERVED CLAY ELEVATION (FT NAVD 88)
 - ** CLAY ELEVATION FROM SB-9 NOT USED
 - SR SHALLOW REFUSAL
 - NP INTERMEDIATE CLAY NOT PRESENT
 - ✕ LOCATION OF ON-SITE RECOVERY WELLS
 - LOCATION OF PERIMETER RECOVERY WELLS
 - ===== WALL FOOTER



NOTES:
 1. Final locations of proposed recovery wells will be reviewed with COOPER TANK to address facility operations and structures.



NATIONAL GRID FORMER EQUITY WORKS MGP SITE, BROOKLYN NY 60137362-400		LOCATIONS OF ON-SITE AND PERIMETER RECOVERY WELLS
DATE: 12/11/12	DRWN: BcV/C-MA	FIGURE 2-1

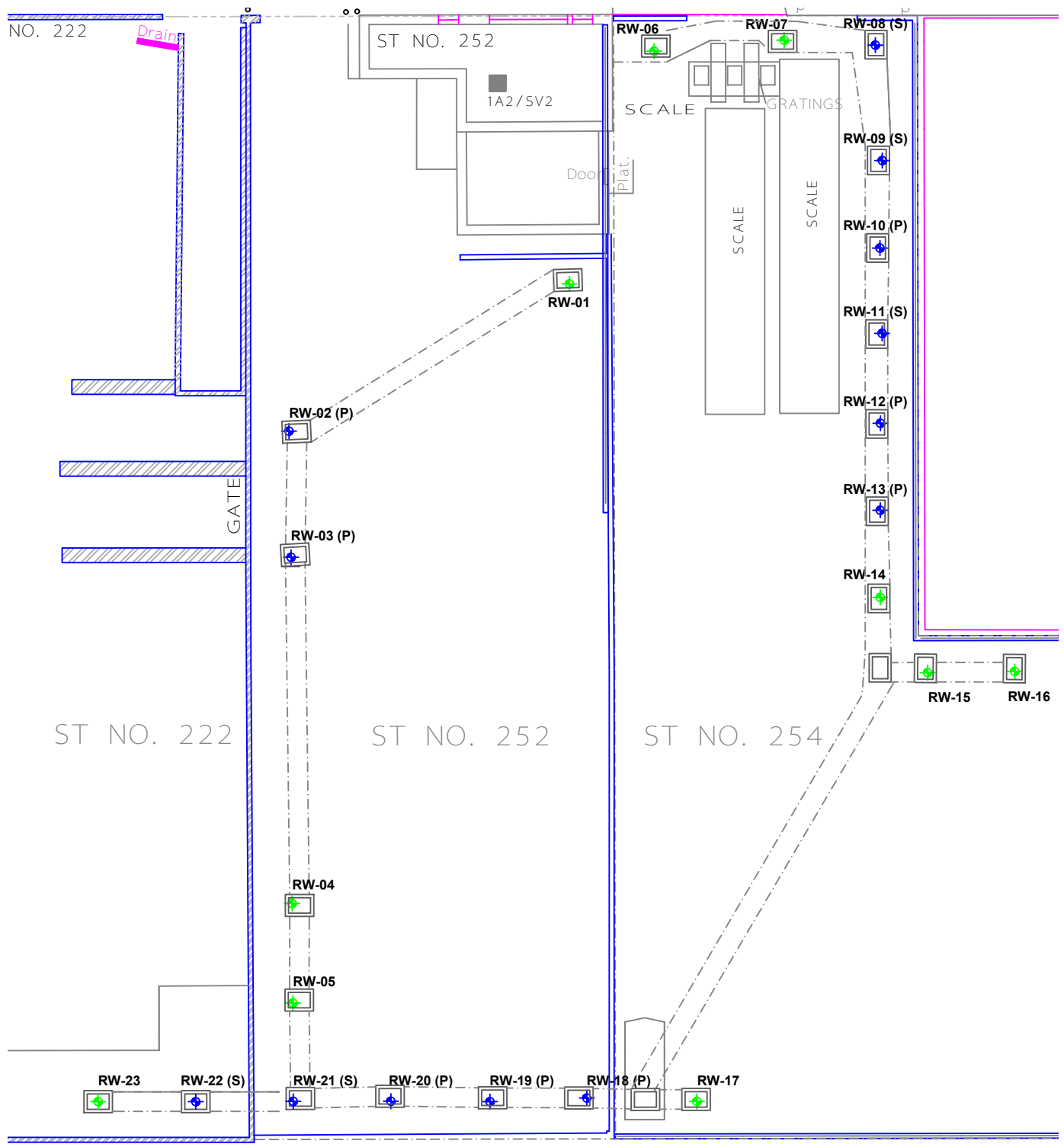


AECOM

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

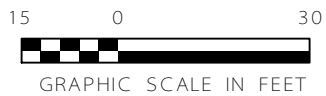
COMPLETED WELL
LOCATION

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)



NATIONAL GRID FORMER EQUITY WORKS MGP SITE, BROOKLYN NY 60137362.660		LOCATION OF AUTOMATED WELLS
DATE: 10/30/2013	DRWN: BcV/C-MA	FIGURE 2-3

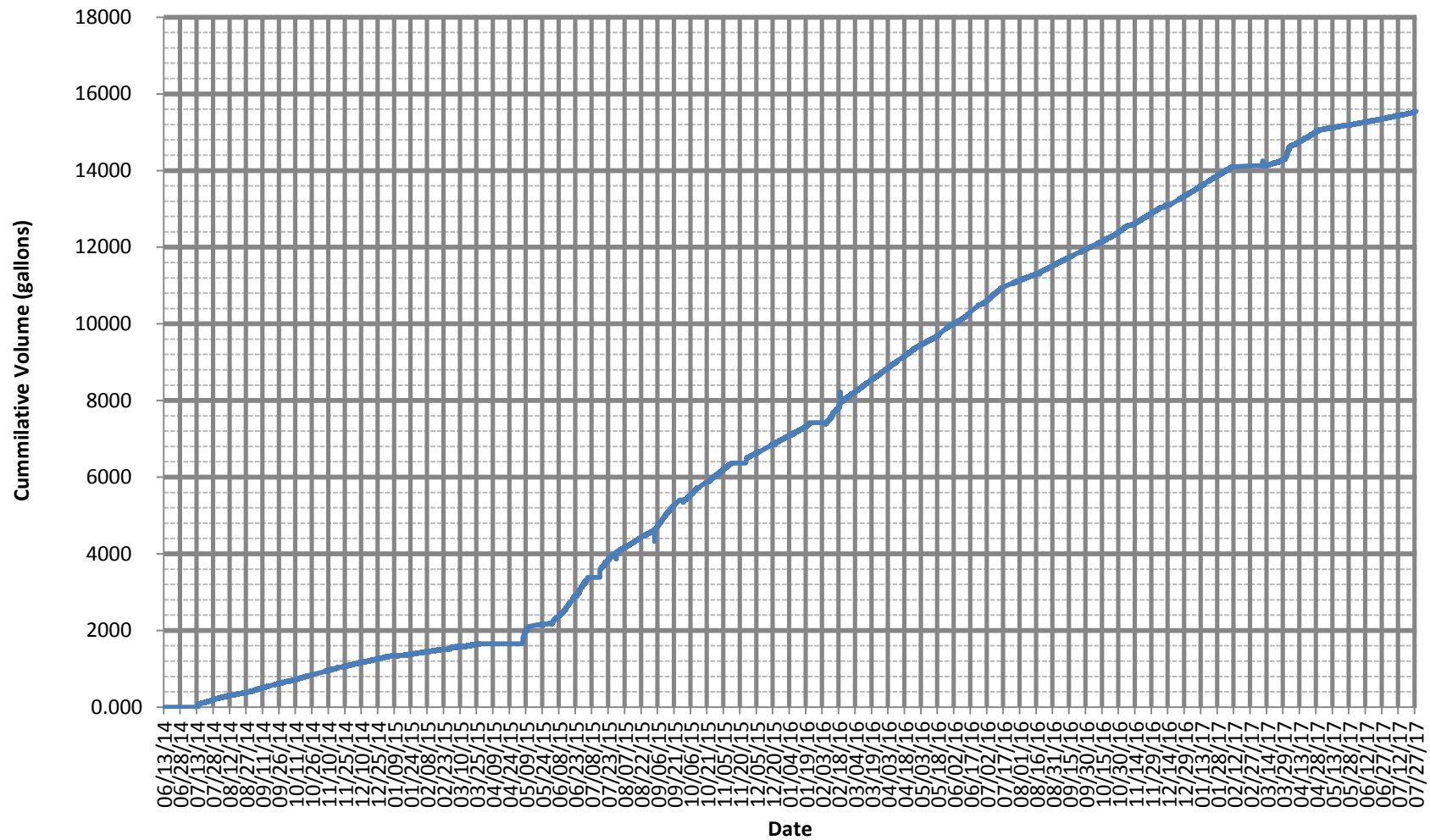


AECOM

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

Cumulative Volume of Mixed Fluids
Collected IRM for NAPL Recovery

Figure 3-1

Figure 3-2
NAPL Thickness Versus Time - Gauging Wells
Former Equity Works MGP Site, Brooklyn, New York

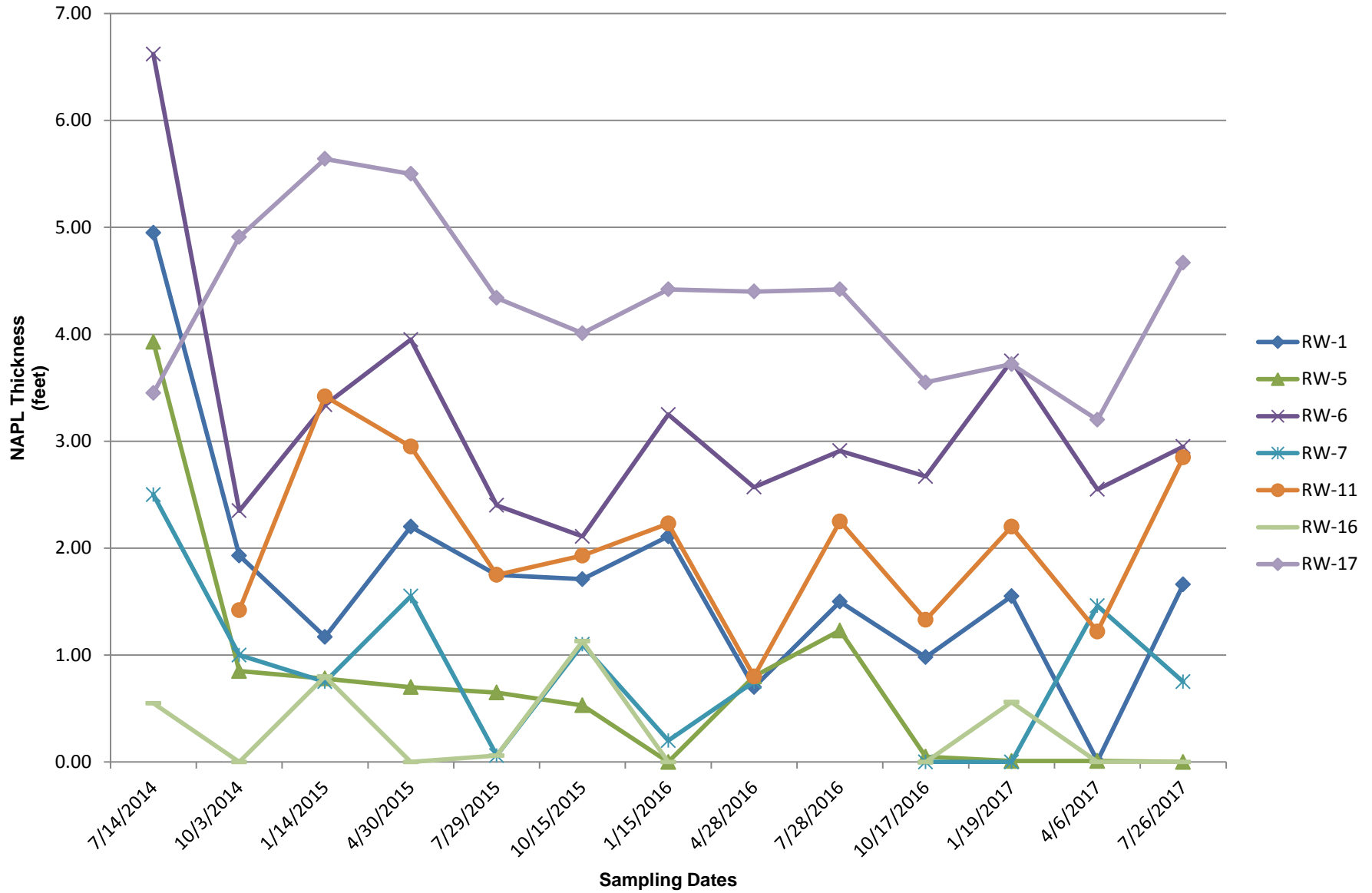


Figure 4-1
NAPL Recharge Rates Versus Time - Automated Wells
Former Equity Works MGP Site, Brooklyn, New York

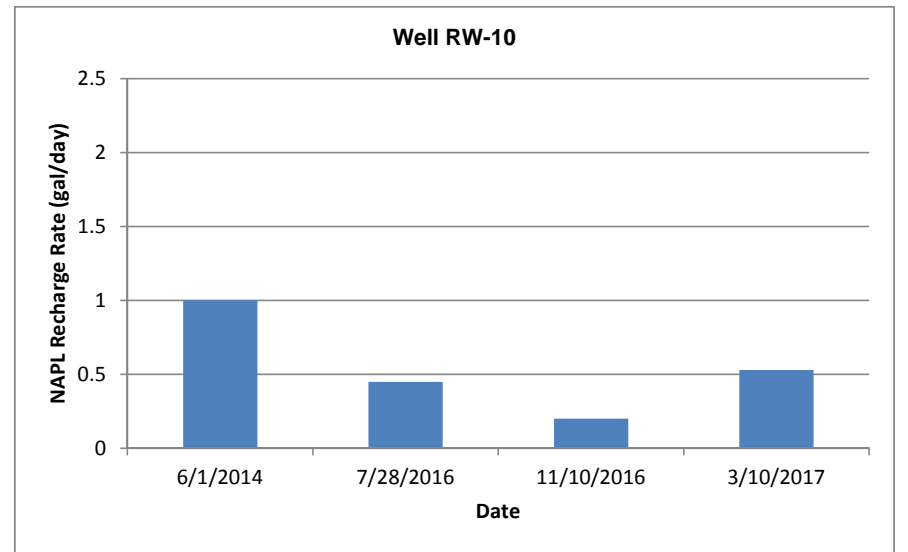
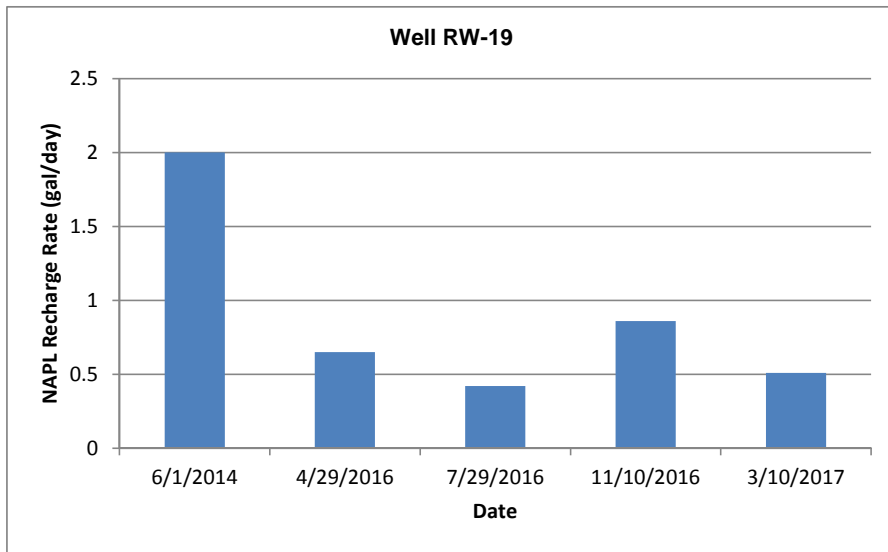
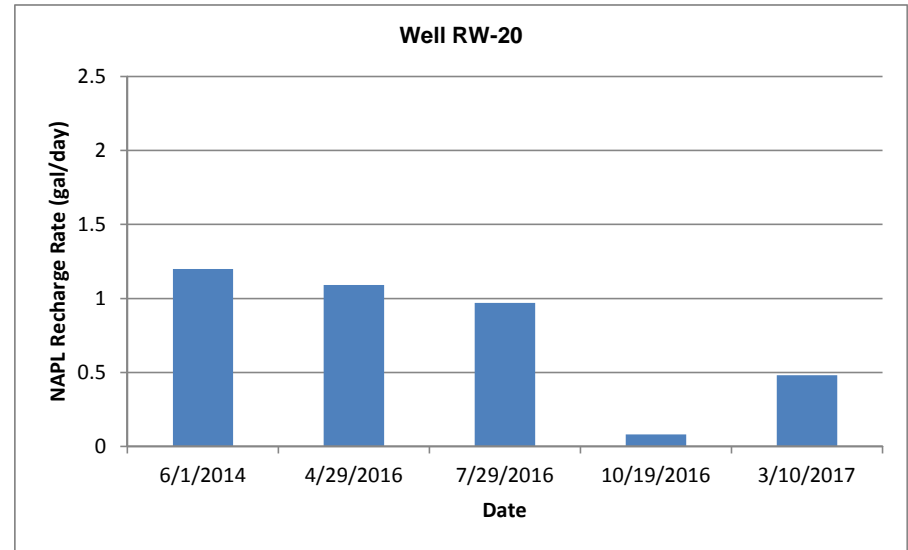
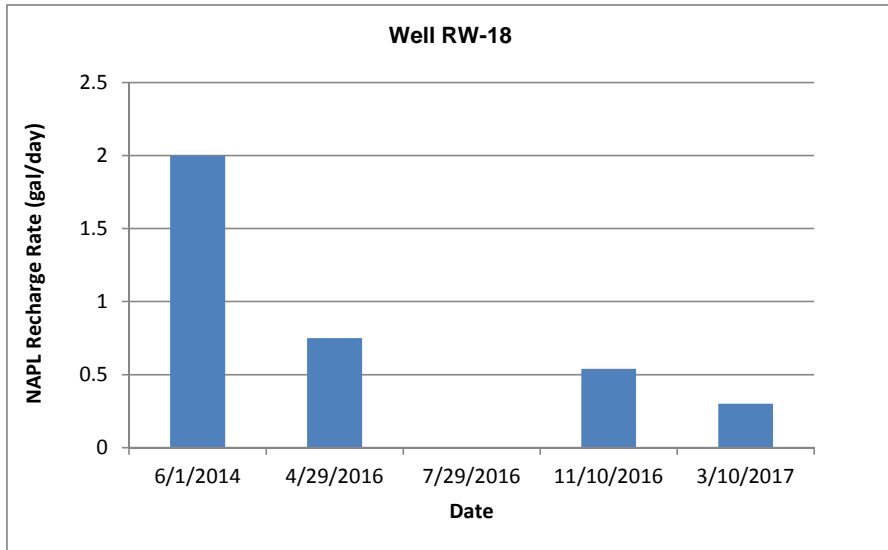
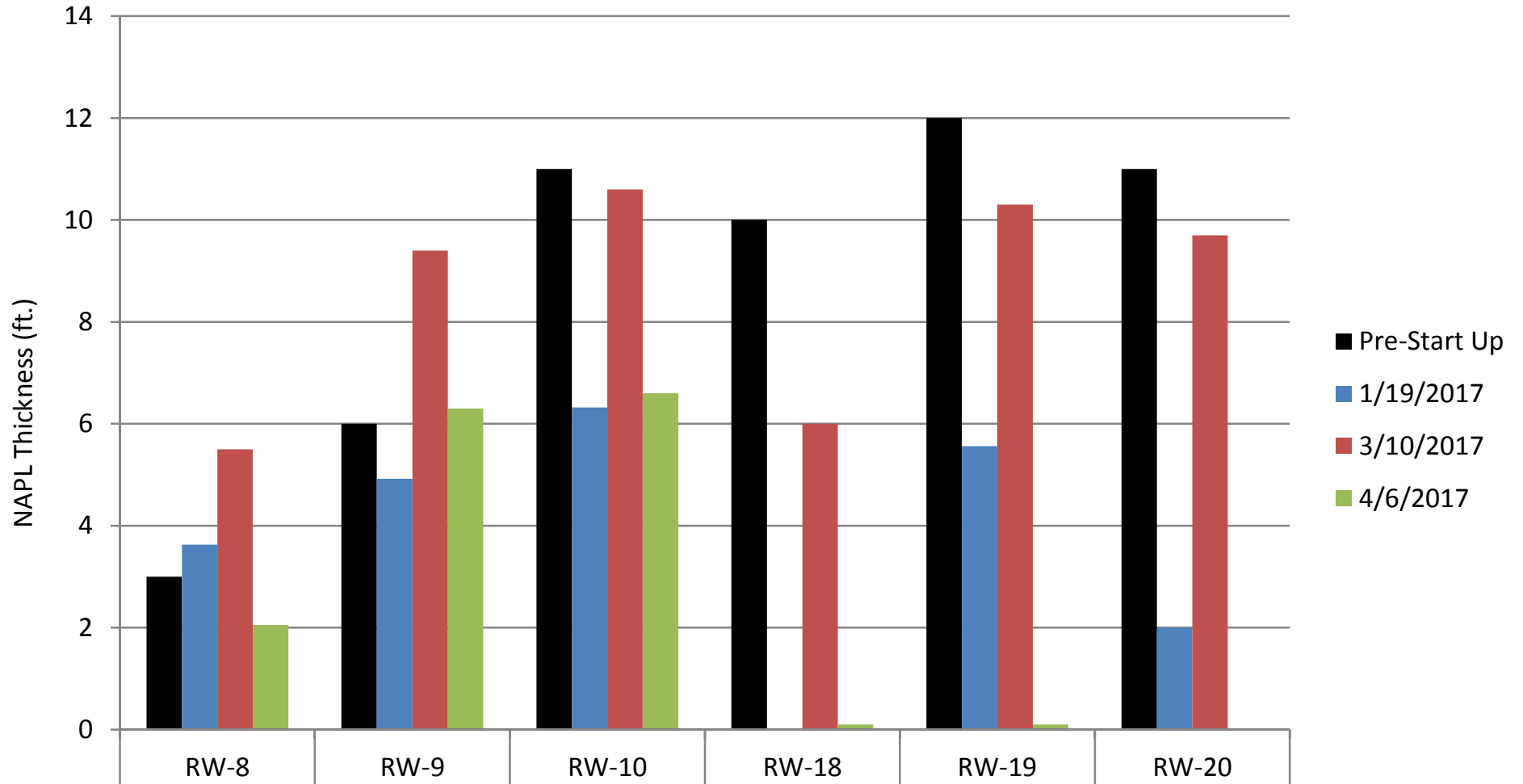


Figure 4-2
NAPL Recharge During Temporary System Shutdown
Former Equity Works MGP Site, Brooklyn, New York



Notes:

Data from 1/19/2017 collected during system operation before temporary system shutdown from 2/12/17 to 3/10/17

Data From 3/10/2017 collected just prior to system startup after temporary shutdown

Data from 4/6/2017 collected during normal system operation

Appendix A Waste Disposal Documentation

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone 8448738723	4. Manifest Tracking Number 015980259 JJK	
5. Generator's Name and Mailing Address BROOKLYN UNION GAS CO D/B/A NAT'L G ONE METROTECH CTR BROOKLYN, NY 11201 <i>ATTN: W. RYAN</i> 978-764-4257			Generator's Site Address (if different than mailing address) FORMER EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211			
6. Transporter 1 Company Name TRADEBE TRANSPORTATION, LLC			U.S. EPA ID Number CTD021816889			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address TRADEBE T&R OF BRIDGEPORT, LLC 50 CROSS STREET BRIDGEPORT, CT 06610 (203)334-1666			U.S. EPA ID Number CTD002593887			
Facility's Phone:						
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 WL/Vol.	13. Waste Codes
		No.	Type			
X	UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (COAL TAR) 3 II	1	TT	540	G	D001
14. DELETED DELETED 015980259 JJK 1279693						
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/Offerer's Printed/Typed Name E Miller			Signature <i>[Signature]</i>		Month 9	Day 1
					Year 16	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Larry Cunniff			Signature <i>[Signature]</i>		Month 9	Day 1
					Year 16	
Transporter 2 Printed/Typed Name			Signature		Month	Day
					Year	
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number: _____ U.S. EPA ID 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.	2.	3.	4.			
	4135					
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 Deke Burgess			Signature <i>[Signature]</i>		Month 9	Day 1
					Year 16	

Certificate of Disposal

This is to certify that materials from Brooklyn Union Gas
number DBA Med & BridCon hazardous waste manifest
number 0159812911 were received at Tradebe Treatment and Recycling of Bridgeport LLC.
The materials were treated at our facility at 50 Cross Street, Bridgeport Connecticut. The
petroleum and/or solid phase were blended with other materials and burned for its thermal
value. The aqueous phase was treated by ultrafiltration, chemical precipitation and carbon
absorption.

If you have any questions or would like to visit our facility, please feel free to contact us at
(203) 238-6745. Thank you for choosing Tradebe Treatment and Recycling of Bridgeport LLC
for your treatment and recovery needs.

9-1-16

Date

Mike Davia

Mike Davia
Facility Manager

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone 8448738773	4. Manifest Tracking Number 015980361 JJK
----------------------------------	---	--------------------------	--	---

5. Generator's Name and Mailing Address BROOKLYN UNION GAS CO D/B/A NAT'L GRID NY ONE METROTECH CTR BROOKLYN NY 11201	Generator's Site Address (if different than mailing address) FORMER EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211
---	---

6. Transporter 1 Company Name TRADEBE TRANSPORTATION, LLC	U.S. EPA ID Number CTD021816889
---	---

7. Transporter 2 Company Name	U.S. EPA ID Number
-------------------------------	--------------------

8. Designated Facility Name and Site Address TRADEBE T&R OF BRIDGEPORT, LLC 50 CROSS STREET BRIDGEPORT, CT 06610	U.S. EPA ID Number CTD002593887
--	---

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. (CORR.) 3 II NAPL	1	TT	514	G	D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
001) ERG 128 1000119211 SO: 1300653

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/Offoror's Printed/Typed Name: **AGENT FOR MILLER NATIONAL GRID NY** Signature: *[Signature]* Month: **10** Day: **06** Year: **16**

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 TUDN, TIMENEZ	Signature <i>[Signature]</i>	Month 10	Day 06	Year 16
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

18. Discrepancy

18a. Discrepancy Indication Space Quantity Type Residue Partial Rejection Full Rejection

Manifest Reference Number: _____ U.S. EPA ID Number: _____

18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number: _____

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. H135	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: **Delee Burgess** Signature: *[Signature]* Month: **10** Day: **06** Year: **16**

Certificate of Disposal

Brooklyn Union Gas Co

This is to certify that materials from DBA Nat'l Grid NY on hazardous waste manifest number 259836111 were received at Tradebe Treatment and Recycling of Bridgeport LLC. The materials were treated at our facility at 50 Cross Street, Bridgeport Connecticut. The petroleum and/or solid phase were blended with other materials and burned for its thermal value. The aqueous phase was treated by ultrafiltration, chemical precipitation and carbon absorption.

If you have any questions or would like to visit our facility, please feel free to contact us at (203) 238-6745. Thank you for choosing Tradebe Treatment and Recycling of Bridgeport LLC for your treatment and recovery needs.

10-6-16

Date

Mike Davia
Mike Davia
Facility Manager



UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone 8448738723	4. Manifest Tracking Number 015981517 JJK
----------------------------------	---	--------------------------	--	---

5. Generator's Name and Mailing Address BROOKLYN UNION GAS CO D/B/A NAT'L GRID NY ONE METROTECH CTR BROOKLYN, NY 11201 Generator's Phone: 516 545 2586 <i>ATTN: RYAN 978-764-4257</i>	Generator's Site Address (if different than mailing address) FORMER EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211
--	---

6. Transporter 1 Company Name TRADEBE TRANSPORTATION, LLC	U.S. EPA ID Number CTD021816889
---	---

7. Transporter 2 Company Name	U.S. EPA ID Number
-------------------------------	--------------------

8. Designated Facility Name and Site Address TRADEBE T&R OF BRIDGEPORT, LLC 50 CROSS STREET BRIDGEPORT, CT 06610 Facility's Phone: (203)334-1666	U.S. EPA ID Number CTD002593887
--	---

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	UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (COAL TAR) 3 II	1	TT	550	G	D001
2.						
3.						
4.						

14. Special Handling Instructions and Additional Information 001) ERG 128 1000 19211 SO: 1328844
--

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 E. Mike NATIONAL GRID NY	Signature <i>[Signature]</i>	Month Day Year 11/10/16
---	---------------------------------	-----------------------------------

16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.	Port of entry/exit: _____
Transporter signature (for exports only): _____	Date leaving U.S.: _____

17. Transporter Acknowledgment of Receipt of Materials	Signature	Month Day Year
Transporter 1 Printed/Typed Name AUSCHAM	<i>[Signature]</i>	10/10/16
Transporter 2 Printed/Typed Name	Signature	Month Day Year

18. Discrepancy	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection
18b. Alternate Facility (or Generator)	Manifest Reference Number: _____ U.S. EPA ID Number _____

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. H135	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	Signature	Month Day Year
Printed/Typed Name Salee Burgess	<i>[Signature]</i>	11/11/16

Certificate of Disposal

This is to certify that materials from Protek, Chem, Nav on hazardous waste manifest number 015-3815-1201 were received at Tradebe Treatment and Recycling of Bridgeport LLC. The materials were treated at our facility at 50 Cross Street, Bridgeport Connecticut. The petroleum and/or solid phase were blended with other materials and burned for its thermal value. The aqueous phase was treated by ultrafiltration, chemical precipitation and carbon absorption.

If you have any questions or would like to visit our facility, please feel free to contact us at (203) 238-6745. Thank you for choosing Tradebe Treatment and Recycling of Bridgeport LLC for your treatment and recovery needs.

11-11-16

Mike Davia

Mike Davia
Facility Manager

Date



UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone 8448738723	4. Manifest Tracking Number 008933064 JJK		
5. Generator's Name and Mailing Address BROOKLYN UNION GAS CO D/B/A NATL SKID NY ONE METROTECH CTR ATT W RYAN BROOKLYN, NY 11201 Generator's Phone: 516 5452581				Generator's Site Address (if different than mailing address) FORMER EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211			
6. Transporter 1 Company Name TRADEBE TRANSPORTATION, LLC				U.S. EPA ID Number CTD021816889			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address TRADEBE T&R OF BRIDGEPORT, LLC 50 CROSS STREET BRIDGEPORT, CT 06610 Facility's Phone: (203)334-1666				U.S. EPA ID Number CTD002593887			
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	UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (CORROSIVE LIQ) (NAPL)	1	TT	500	G	D001	
14. Special Handling Instructions and Additional Information DOT, ERG 1.28 140811921, 55, 1355132							
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 E Muller NASTON'S GRSD NY				Signature 		Month Day Year 12/14/16	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name L.S. Clark				Signature 		Month Day Year 12/14/16	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
18b. Alternate Facility (or Generator)				Manifest Reference Number: _____ U.S. EPA ID Number _____			
Facility's Phone: _____				Month Day Year			
18c. Signature of Alternate Facility (or Generator)							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. 4135		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 Spike Burgess				Signature 		Month Day Year 12/14/16	

Certificate of Disposal

This is to certify that materials from Brocklynne Liner Area
2/18/14 were received at Tradebe Treatment and Recycling of Bridgeport LLC.
number 88933664 were received at our facility at 50 Cross Street, Bridgeport Connecticut. The
petroleum and/or solid phase were blended with other materials and burned for its thermal
value. The aqueous phase was treated by ultrafiltration, chemical precipitation and carbon
absorption.

If you have any questions or would like to visit our facility, please feel free to contact us at
(203) 238-6745. Thank you for choosing Tradebe Treatment and Recycling of Bridgeport LLC
for your treatment and recovery needs.

12-14-16

Mike Davia

Date

Mike Davia
Facility Manager

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone 8448738723	4. Manifest Tracking Number 015981739 JJK	
5. Generator's Name and Mailing Address BROOKLYN UNION GAS CO D/B/A NAT'L GRID NY ONE METROTECH CTR <i>AST W RYAN</i> BROOKLYN, NY 11201 <i>5165452586</i> 978-764-4257		Generator's Site Address (if different than mailing address) FORMER EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211			
6. Transporter 1 Company Name TRADEBE TRANSPORTATION, LLC			U.S. EPA ID Number CTD021816889		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address TRADEBE T&R OF BRIDGEPORT, LLC 50 CROSS STREET BRIDGEPORT, CT 06610 (203)334-1666			U.S. EPA ID Number CTD002593887		
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 WL/Vol.	13. Waste Codes
		No.	Type		
X	UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (COAL TAR) 3 II <i>WAPL</i>	1	TT	490	G
					D001
14. Special Handling Instructions and Additional Information 001) ERG 128 1000119211 SO: 1376932					
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/Offoror's Printed/Typed Name <i>AGENT FOR</i> E Miller <i>NATIONAL GRID NY</i>			Signature <i>[Signature]</i>		Month Day Year 11/12/17
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 11/12/17
Transporter 2 Printed/Typed Name			Signature		Month Day Year
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator)			U.S. EPA ID Number		
Facility's Phone:					Month Day Year
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.		
4135					
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 Solke Burgos			Signature <i>[Signature]</i>		Month Day Year 11/12/17

Certificate of Disposal

This is to certify that materials from Brookline Union Gas
POA Nat'l Grid on hazardous waste manifest
number 0157813911 were received at Tradebe Treatment and Recycling of Bridgeport LLC.
The materials were treated at our facility at 50 Cross Street, Bridgeport Connecticut. The
petroleum and/or solid phase were blended with other materials and burned for its thermal
value. The aqueous phase was treated by ultrafiltration, chemical precipitation and carbon
absorption.

If you have any questions or would like to visit our facility, please feel free to contact us at
(203) 238- 6745. Thank you for choosing Tradebe Treatment and Recycling of Bridgeport LLC
for your treatment and recovery needs.

1-12-17

Date

Mike Davia

Mike Davia
Facility Manager



Tradebe Environmental Services, LLC

1433 E 83rd Ave, Suite 200
Merrillville, IN 46410
www.tradebeusa.com

CERTIFICATE OF WASTE MANAGEMENT

To whom this may concern

This certificate is to verify that the waste described below, is handled in accordance with local, state, and federal regulations.

Generator:

Name: FORMER EQUITY WORKS MGP SITE

Address: 254 MASPETH AVENUE BROOKLYN , NY 11211

Facility
TTR Northeast Bridgeport 50 Cross Street Bridgeport , CT 06610 EPA ID: CTD002593887

Profile	Description	Manifest	Page / Line	Weight (lb)	Hcode
1000119211	MGP HAZ LIQUID DNAPL	015981739JJK	00001/001	3,920.000	H061

Robert O'Brien
Executive Vice President of Operations

TRADEBE T&R OF BRIDGEPORT, LLC

Date:01/12/2017

On behalf of its subsidiary TTR Northeast, LLC

RESPONSIBLE SM
RECYCLING
A commitment to our generators
our employees and our
community.



CERTIFICATE OF RECYCLING AND/OR DISPOSAL

By accepting the waste products described by the document number below on this certificate, Veolia ES Technical Solutions, L.L.C. certifies to the generator that the transportation, storage or processing methods employed are in accordance with the Veolia ES Technical Solutions, L.L.C permit parameters and all applicable federal, state and local laws.

CUSTOMER: 487403 NATIONAL GRID 175 EAST OLD COUNTRY ROAD HICKSVILLE NY 11801	GENERATOR: NYR000225615 EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN NY 11211	RETURN MANIFEST: 640920 EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE NY 11801	RECEIVING FACILITY: NJD002454544 VEOLIA ES TECHNICAL SOLUTIONS, L.L.C 125 FACTORY LANE MIDDLESEX NJ 08846
Manifest/Shipping Number: 001220584VES	Date Shipped: 3/10/2017	Date Received: 3/10/2017	

WASTE RECYCLED AND/OR DISPOSED:

<u>Manifest Line</u>	<u>Waste Profile No.</u>	<u>Wastestream Description</u>	<u>Container Number</u>	<u>Container</u>	<u>Quantity</u>	<u>UOM</u>
1	101578	COAL TAR CONTAMINATED WATER	HN 2783766000 001 01 0	VACTRU	553	G

Under civil and criminal penalties of law for making or submission of false statements or representations (18 U.S.C. 1001 and 15 U.S.C 2615), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified information in this document, for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made verification that this information is true, accurate and complete.

Donald G. Lee, Technical Manager



218117

Form Approved, OMB No. 2050-0030

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST 1. Generator ID Number: NYR000225615 2. Page 1 of 1 3. Emergency Response Phone: (773) 818-0087 4. Manifest Tracking Number: 001220584 VES

5. Generator's Name and Mailing Address: NATIONAL GRID, 175 E. OLD COUNTRY ROAD, ATTN: JOE ODIERNA, HICKSVILLE, NY 11801. Generator's Phone: 516 545-3586. Generator's Site Address (if different than mailing address): EQUITY WORKS MGP SITE, 254 MASPETH AVENUE, 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: U.S. EPA ID Number: U.S. EPA ID Number: NJD002454544

8. Designated Facility Name and Site Address: VEOLIA ES TECHNICAL SOLUTIONS, 125 FACTORY LANE, MIDDLESEX, NJ 08846. Facility's Phone: 732 469-5100

9a. HM	9b. U.S. DDT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit (L/Vol.)	13. Waste Codes	
		No.	Type				
X	1. UN1993 WASTE FLAMMABLE LIQUIDS, n.o.s. (BENZENE, PETROLEUM DISTILLATES), 3. II RQ (D001, D018)	1	T T	553	G	D001	B
	2.					D018	
	3.						
	4.						

14. Special Handling Instructions and Additional Information: WATER - MARBULKS ER Service Contracted by VESTS -(- 1) WIP 101578 - COAL TAR CONTAMINATED

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/Offendor's Printed/Typed Name: Chad Small Signature: [Signature] Month: 03 Day: 00 Year: 07

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: Dave Delman Signature: [Signature] Month: 03 Day: 10 Year: 17

18. Discrepancy: 18a. Discrepancy Indication Space: Quantity Type Residue Part of Rejection Full Rejection

18b. Alternate Facility (or Generator): Monitor Reference Number: U.S. EPA ID Number: Facility's Phone: 18c. Signature of Alternate Facility (or Generator)

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems): 1. H001 2. 3.

20. Designated Facility Owner or Operator. Certificate of receipt of hazardous materials covered by the manifest except as noted in item 18a. Printed/Typed Name: Jennifer Feliciano Signature: [Signature] Month: 03 Day: 10 Year: 17

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)



Land Disposal Restriction Notification Form

Generator Name EQUITY WORKS MGP SITE

EPA ID Number NYR000225615

Manifest 0012205B4VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

This notice is also being provided in accordance with 6 NY CRR 376.1(g)(1).

Container Number HN-2783766000-001 (1/ 1)

WIP / Approval Code:	101578 / MARBULK5
Form Designation / CWA Status:	Non-Wastewater / Non-CWA
Waste Codes (Subcategories):	D001 (IGNITABLE CHARACTERISTIC WASTE, LIQUIDS >= 10% TOC PER 261.2 1(a)(1)), D018
Constituents (F001 - F005):	None
UHCs Present:	NAPHTHALENE (CRUDE OR REFINED), TOLUENE
Treatment Requirements:	Restricted waste requires treatment to applicable standards.
Additional Notices:	

I hereby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature *Chack...*

Title Environmental Engineer (Le...)

Date 3/10/17



Activity Report

JOB NO. 2783766000
BILL DOC NO HN29692704
GENERATOR NO 640920

WO NO: 2783766000
EPA ID: NYR000225615

BILL TO: NATIONAL GRID
175 E. OLD COUNTRY ROAD
SITE B
HICKSVILLE, NY 11801
(516) 545-2255

JOB SITE: EQUITY WORKS MGP SITE
254 MASPETH AVENUE
BROOKLYN, NY 11211
(516) 545-2586

CONTACT: JOSEPH ODIERNA

CONTACT: WILLIAM RYAN, PROJECT MANAGER

MANIFEST NUMBER(S):
001220584VES

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE				TERR.
		03/10/2017				N05
DESCRIPTION	# CONT.	CONT./CODE	QTY	UOM	PG/LN	WASTE AREA
Manifest # 001220584VES MP 101578 / Approval MARBULK5 COAL TAR CONTAMINATED WATER	1	VACTRU-TT		G	1 / 1	

03/10/2017 Misc. - STATE REGULATORY FEES 4418 1 EACH

Total Hours: 0
of Containers: 1

Comments:

Signature: *Chad Small*

Print Name: Chad Small

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.

1 of 1




CERTIFICATE OF RECYCLING AND/OR DISPOSAL

By accepting the waste products described by the document number below on this certificate, Veolia ES Technical Solutions, L.L.C. certifies to the generator that the transportation, storage or processing methods employed are in accordance with the Veolia ES Technical Solutions, L.L.C permit parameters and all applicable federal, state and local laws.

CUSTOMER: 487403 NATIONAL GRID 175 EAST OLD COUNTRY ROAD HICKSVILLE NY 11801	GENERATOR: NYR000225615 EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN NY 11211	RETURN MANIFEST: 640920 EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE NY 11801	RECEIVING FACILITY: NJD002454544 VEOLIA ES TECHNICAL SOLUTIONS, L.L.C 125 FACTORY LANE MIDDLESEX NJ 08846
Manifest/Shipping Number: 001062576VES	Date Shipped: 4/6/2017	Date Received: 4/6/2017	

WASTE RECYCLED AND/OR DISPOSED:						
<u>Manifest Line</u>	<u>Waste Profile No.</u>	<u>Wastestream Description</u>	<u>Container Number</u>	<u>Container</u>	<u>Quantity</u>	<u>UOM</u>
1	101578	COAL TAR CONTAMINATED WATER	HN 2797739000 001 01 0	VACTRU	653	G

Under civil and criminal penalties of law for making or submission of false statements or representations (18 U.S.C. 1001 and 15 U.S.C 2615), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified information in this document, for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made verification that this information is true, accurate and complete.


Donald G. Lee, Technical Manager



218593

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225615	2. Page 1 of 1	3. Emergency Response Phone (77) 818-0087	4. Manifest Picking Number 001062576 VES					
5. Generator's Name and Mailing Address NATIONAL GRID 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE, NY 11801		Generator's Site Address (if different than mailing address) EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211		Generator's Phone: 516 545-2586						
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				U.S. EPA ID Number NJ D 0 0 2 4 5 4 5 4 4						
Facility's Phone: 732 469-5100										
GENERATOR	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		
	X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s. (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001, D018)		1	T T	653	G	D001 B D018		
		2.								
		3.								
		4.								
14. Special Handling Instructions and Additional Information WATER / MARBULK5		ER Service Contracted by VESTS - 1) WIP 101578 - COAL TAR CONTAMINATED								
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(b) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.		Tender # 170 15 7 1/2" 5 inch								
Generator's/Offeror's Printed/Typed Name Edward Zygarovich		Signature Edward Zygarovich		Month 04		Day 06		Year 17		
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit:		Date leaving U.S.:					
	17. Transporter Acknowledgment of Receipt of Material's		Transporter 1 Printed/Typed Name John J Byers		Signature John J Byers		Month 04		Day 06	
DESIGNATED FACILITY	18. Discrepancy		18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		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.		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 Camille Olette		Signature Camille Olette		Month 04		Day 06		Year 17



Land Disposal Restriction Notification Form

Generator Name EQUITY WORKS MGP SITE

EPA ID Number NYR000225615

Manifest 001062576VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

This notice is also being provided in accordance with 6 NYCRR 376.1(g)(1).

Container Number: HN-2797739000-001 (1/ 1)

WIP / Approval Code:	101578 / MARBULK5
Form Designation / CWA Status:	Non-Wastewater / Non-CWA
Waste Codes (Subcategories):	D001 (IGNITABLE CHARACTERISTIC WASTE, LIQUIDS >= 10% TOC PER 261.2 1(a)(1)), D018
Constituents (F001 - F005):	None
UHCs Present:	NAPHTHALENE (CRUDE OR REFINED), TOLUENE
Treatment Requirements:	Restricted waste requires treatment to applicable standards.
Additional Notices:	

I hereby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature Edward Zappala

Title Operator

Date 4/6/17



PACKING SUMMARY

Generator Number: 840920
 EQUITY WORKS MGP SITE
 254 MASPETH AVENUE
 BROOKLYN, NY 11211

Manifest Number: 001062576VES
 Field System ID: HN
 Work Order Number: 2797739000
 Date Shipped: 04/06/2017

Attn: WILLIAM RYAN, PROJECT MANAGER
 EPA ID: NYR000225615

Container#: HN-2797739000-001 Waste Area: Manifest Page/Line: 01 / 1

WIP: 101578 Disposal Code: MARBULK5 PHY State: L

Date Accumulated: 04/06/2017 Gen Drum ID:

Shipping Name: UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ
 (D001,D018)

No. of Commons: 01 Outer Container: VACTRU-TT Inner Container:

Primary Waste Codes: D001,D018,B PCB Serial #: OOS Date: / /

Total Coms Wt: 1000 SIC: 1388 Source: G49 Form: W608 System: H061 Cubic Ft.: 825.00

Individual Common Weights: 1 @ 1000 (GALLONS)

<u>Units</u>	<u>Container Size</u>	<u>Net Weight</u>	<u>Chemical Name</u>	<u>EPA/State Codes</u>
1	TANKTR		BENZENE [21000B] NAPHTHALENE [57000B] TOLUENE [12000B] COAL TAR CONTAMINATED WATER [95%] MAY CONTAIN SOME COAL TAR SOLIDS [5%]	D001, D018, B

Manifest Number: 001062576VES

Work Order Number: 2797739000

Page 1 of 1



Activity Report

JOB NO: 2797739000
BILL DOC NO HN70331532
GENERATOR NO 640920

WO NO: 2797739000
EPA ID: NYR000225615

BILL TO: NATIONAL GRID
175 E. OLD COUNTRY ROAD
SITE B
HICKSVILLE, NY 11801
(516) 545-2255

JOB SITE: EQUITY WORKS MGP SITE
254 MASPETH AVENUE
BROOKLYN, NY 11211
(516) 545-2586

CONTACT: JOSEPH ODIERNA

CONTACT: WILLIAM RYAN, PROJECT MANAGER

MANIFEST NUMBER(S):
001062576VES

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.			
		04/06/2017	N05			
DESCRIPTION	# CONT.	CONT./CODE	QTY	UOM	PGLN	WASTE AREA
Manifest # 001062576VES WIP 101578 / Approval MARBULK5 COAL TAR CONTAMINATED WATER	1	VACTRU-TT	253	G	1 / 1	

04/06/2017 Misc. - STATE REGULATORY FEES 4419 1 EACH

Total Hours: 0
of Containers: 1

Comments:

Signature: *Michael Grant* *Edward Zygaowski*

Print Name: Edward Zygaowski

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.



CERTIFICATE OF RECYCLING AND/OR DISPOSAL


By accepting the waste products described by the document number below on this certificate, Veolia ES Technical Solutions, L.L.C. certifies to the generator that the transportation, storage or processing methods employed are in accordance with the Veolia ES Technical Solutions, L.L.C permit parameters and all applicable federal, state and local laws.

CUSTOMER: 487403 NATIONAL GRID 175 EAST OLD COUNTRY ROAD HICKSVILLE NY 11801	GENERATOR: NYR000225615 EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN NY 11211	RETURN MANIFEST: 640920 EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE NY 11801	RECEIVING FACILITY: NJD002454544 VEOLIA ES TECHNICAL SOLUTIONS, L.L.C 125 FACTORY LANE MIDDLESEX NJ 08846
Manifest/Shipping Number: 001226630VES	Date Shipped: 5/22/2017	Date Received: 5/22/2017	

WASTE RECYCLED AND/OR DISPOSED:

<u>Manifest Line</u>	<u>Waste Profile No.</u>	<u>Wastestream Description</u>	<u>Container Number</u>	<u>Container</u>	<u>Quantity</u>	<u>UOM</u>
1	101578	COAL TAR CONTAMINATED WATER	HN 2823904000 001 01 0	VACTRU	520	G

Under civil and criminal penalties of law for making or submission of false statements or representations (18 U.S.C. 1001 and 15 U.S.C 2615), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified information in this document, for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made verification that this information is true, accurate and complete.


Donald G. Lee, Technical Manager



219352

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

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 001226630 VES			
5. Generator's Name and Mailing Address NATIONAL GRID 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE, NY 11801		Generator's Site Address (if different than mailing address) EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN, NY 11211						
Generator's Phone: 516 545-2586								
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				U.S. EPA ID Number NJ D 0 0 2 4 5 4 5 4 4				
Facility's Phone: 732 469-5100								
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	520	G	D001 B D018	
		2.						
		3.						
		4.						
14. Special Handling Instructions and Additional Information CONTAMINATED WATER ER Service Contracted by VESTS -(-) WIP 101578 / MARBULK5 - COAL TAR						cr 412		
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 Brian Berningham		Signature <i>(Signature)</i> (As Agent for National Grid)				Month Day Year 05 2 17		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> 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 Subian		Signature <i>(Signature)</i>				Month Day Year 05 22 17		
Transporter 2 Printed/Typed Name		Signature				Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____								
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 16a								
Printed/Typed Name Camille Dyette		Signature <i>(Signature)</i>				Month Day Year 05 22 17		



Land Disposal Restriction Notification Form

Generator Name EQUITY WORKS MGP SITE

EPA ID Number NYR000225615

Manifest 001226630VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

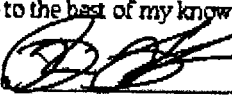
This notice is also being provided in accordance with 6 NYCRR 376.1(g)(1).

Container Number HN-2823904000-001 (1/ 1)

WIP / Approval Code:	101578 / MARBULK5
Form Designation / CWA Status:	Non-Wastewater / Non-CWA
Waste Codes (Subcategories):	D001 (IGNITABLE CHARACTERISTIC WASTE, LIQUIDS >= 10% TOC PER 261.2 1(a)(1)), D018
Constituents (F001 - F005):	None
UHCs Present:	NAPHTHALENE (CRUDE OR REFINED), TOLUENE
Treatment Requirements:	Restricted waste requires treatment to applicable standards.
Additional Notices:	

I hereby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature

 (As Agent for National Grid)

Title

Project Manager

Date

5/22/17



Activity Report

JOB NO: 2823904000
BILL DOC NO HN70512578
GENERATOR NO 640920

WO NO: 2823904000
EPA ID: NYR000225615

BILL TO: NATIONAL GRID
175 E. OLD COUNTRY ROAD
SITE B
HICKSVILLE, NY 11801
(516) 545-2255

JOB SITE: EQUITY WORKS MGP SITE
254 MASPETH AVENUE
BROOKLYN, NY 11211
(516) 545-2586

CONTACT: JOSEPH ODIERNA

CONTACT: WILLIAM RYAN, PROJECT MANAGER

MANIFEST NUMBER(S):
001226630VES

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
		05/22/2017	N05

DESCRIPTION	# CONT.	CONT./CODE	QTY	UOM	PG/LN	WASTE AREA
Manifest # 001226630VES MP 101578 / Approval MARBULK5 COAL TAR CONTAMINATED WATER	1	VACTRU-TT	520	G	1 / 1	


05/22/2017 Misc. - STATE REGULATORY FEES 4419 1 EACH
(EACH)

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Total Hours: 0
of Containers: 1

Comments:

Signature:

 (As Agent for National Grid)

Print Name:

Brian Bermingham

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.



PACKING SUMMARY

Generator Number: 840920
 EQUITY WORKS MGP SITE
 254 MASPETH AVENUE
 BROOKLYN, NY 11211

Manifest Number: 001226630VES
 Field System ID: HN
 Work Order Number: 2823904000
 Date Shipped: 05/22/2017

Attn: WILLIAM RYAN, PROJECT MANAGER
 EPA ID: NYR000225615

Container#: HN-2823904000-001 Waste Area: Manifest Page/Line: 01 / 1

WIP: 101576 Disposal Code: MARBULK5 PHY State: L

Date Accumulated: 05/22/2017 Gen Drum ID:

Shipping Name: UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ
 (D001, D018)

No. of Commons: 01 Outer Container: VACTRU-TT Inner Container:

Primary Waste Codes: D001, D018, B PCB Serial #: OOS Date: / /

Total Crns Wt: 5000 SIC: 1389 Source: G49 Form: W606 System: H061 Cubic Ft.: 625.00

Individual Common Weights: 1 @ 5000 (GALLONS)

Units	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	TANKTR		BENZENE (21000B) NAPHTHALENE (57000B) TOLUENE (12000B) COAL TAR CONTAMINATED WATER (95%) MAY CONTAIN SOME COAL TAR SOLIDS (5%)	D001, D018, B

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000225613		2. Page 1 of 1		3. Emergency Response Phone (77) 818-0087		4. Manifest Tracking Number 001226659 VES				
		5. Generator's Name and Mailing Address NATIONAL GRID 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE, NY 11801 Generator's Phone: 516 545-3586						Generator's Site Address (if different than mailing address) 354 WASPETH AVENUE 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 VEOLIA 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				
GENERATOR	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		
	X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s. (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ (D001, D018)				1	T T	466	G	D001	B	
		2.								D018		
		3.										
		4.										
14. Special Handling Instructions and Additional Information 1015 787 MANBULKS SR Service Conducted by VES15 - (1) COND TAR CONTAMINATED WATER - WIP												
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								Signature		Month	Day	Year
										0	7	8
TRANSPORTER INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____											
	17. Transporter Acknowledgment of Receipt of Materials											
	Transporter 1 Printed/Typed Name JAM-S Bisculli								Signature		Month	Day
										0	7	8
Transporter 2 Printed/Typed Name								Signature		Month	Day	Year
DESIGNATED FACILITY	18. Discrepancy											
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection											
	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.			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								Signature		Month	Day	Year



Land Disposal Restriction Notification Form

Generator Name EQUITY WORKS MGP SITE

EPA ID Number NYR000225615

Manifest 001226659VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

This notice is also being provided in accordance with 6 NYCRR 376.1(g)(1).

Container Number HN-2868637000-001 (1/ 1)

WIP / Approval Code: 101578 / MARBULK5

Form Designation / CWA Status: Non-Wastewater / Non-CWA

Waste Codes (Subcategories): D001 (IGNITABLE CHARACTERISTIC WASTE, LIQUIDS >= 10% TOC PER 261.2 1(a)(1)), D018

Constituents (F001 - F005): None

UHCs Present: NAPHTHALENE (CRUDE OR REFINED), TOLUENE

Treatment Requirements: Restricted waste requires treatment to applicable standards.

Additional Notices:

I hereby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature 

Title 

Date 4/2/17



Activity Report

JOB NO: 2868637000
BILL DOC NO HN70724532
GENERATOR NO 640920

WO NO: 2868637000
EPA ID: NYR000225615

BILL TO: NATIONAL GRID
175 E. OLD COUNTRY ROAD
SITE B
HICKSVILLE, NY 11801
(516) 545-2255

JOB SITE: EQUITY WORKS MGP SITE
254 MASPETH AVENUE
BROOKLYN, NY 11211
(516) 545-2586

CONTACT: JOSEPH ODIERNA

CONTACT: WILLIAM RYAN, PROJECT MANAGER

MANIFEST NUMBER(S):
001226659VES

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
		07/28/2017	N05

DESCRIPTION	# CONT.	CONT./CODE	QTY	UOM	PG/LN	WASTE AREA
Manifest # 001226659VES WP 101578 / Approval MARBULK5 COAL TAR CONTAMINATED WATER	1	VACTRU-TT		G	1 / 1	

07/28/2017 Misc. - STATE REGULATORY FEES 4419 1 EACH
(EACH)

Total Hours: 0
of Containers: 1

Comments:

Signature: _____

Print Name: _____

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.

PACKING SUMMARY

Generator Number: 640820
 EQUITY WORKS MGP SITE
 254 MASPETH AVENUE
 BROOKLYN, NY 11211

Manifest Number: 00122865
 Field System ID: HN
 Work Order Number: 28686370
 Date Shipped: 07/28/2017

Attn: WILLIAM RYAN, PROJECT MANAGER
 EPA ID: NYR000225615

Container#: HN-2868637000-001 Waste Area: Manifest Page/Line: 01

WP: 101578 DisposalCode: MARBULK5 PHY State: L

Date Accumulated: 07/24/2017 Gen Drum ID:

Shipping Name: UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, PETROLEUM DISTILLATES), 3, II, RQ
 (D001,D018)

No. of Commons: 01 Outer Container: VACTRU-TT Inner Container:

Primary Waste Codes: D001,D018,B PCB Serial #: OOS Date: / /

Total Crns Wt: 5000 SIC: 1389 Source: G49 Form: W606 System: H061 Cubic Ft.: 625.0

Individual Common Weights: 1 @ 5000 (GALLONS)

<u>Units</u>	<u>Container Size</u>	<u>Net Weight</u>	<u>Chemical Name</u>	<u>EPA/State C</u>
1	TANKTR		BENZENE [21000B] NAPHTHALENE [57000B] TOLUENE [12000B] COAL TAR CONTAMINATED WATER [95%] MAY CONTAIN SOME COAL TAR SOLIDS [5%]	D001, D018,



CUSTOMER 15011

PO# _____

DROP

SPOT: _____
Date Time

DRIVER: _____ TRACTOR#: _____ TRAILER#: _____

FACILITY NAME _____ ADDRESS _____

TIME IN: _____ TIME OUT: _____

COMMENTS: _____

PRINT: _____ SIGNATURE: _____

PICK-UP

PICK UP: 72817 1200
Date Time

DRIVER: _____ TRACTOR#: 345 TRAILER#: 193

FACILITY NAME _____ ADDRESS _____

TIME IN: 1000h TIME OUT: 2000h

COMMENTS: _____

PRINT: _____ SIGNATURE: _____

**INTERMEDIATE/
SITE WORK**

INT./SITE WORK: _____
Date Time

DRIVER: _____ TRACTOR#: _____ TRAILER#: _____

FACILITY NAME _____ ADDRESS _____

TIME IN: _____ TIME OUT: _____

COMMENTS: _____

PRINT: _____ SIGNATURE: _____

UNLOAD

UNLOAD: 72817 600h
Date Time

DRIVER: _____ TRACTOR#: _____ TRAILER#: _____

FACILITY NAME _____ ADDRESS 350 ?

TIME IN: _____ TIME OUT: _____

COMMENTS: _____

PRINT: _____ SIGNATURE: _____

DUMP BOX VAN TANK ROLL OFF

ROLLOFF#: _____

LINER: _____

MANIFEST#: 001226658

SPOT CHARGE: \$ _____

PRELOAD CHARGE: \$ _____

RENTAL:

_____ @ \$ _____ = \$ _____
of Days Per Day

PICK/UP DEMURRAGE:

_____ @ \$ _____ = \$ _____
of Hrs. Per Hr.

INT. STOP CHARGE: \$ _____

INTERMEDIATE/SITE WORK:

_____ @ \$ _____ = \$ _____
of Hrs. Per Hr.

UNLOAD DEMURRAGE:

_____ @ \$ _____ = \$ _____
of Hrs. Per Hr.

LINER: \$ _____

TANK WASH: \$ _____

_____ TONS @ \$ _____ = \$ _____

_____ LOADS @ \$ _____ = \$ _____

LINE HAUL RATE: \$ _____

F/S _____ % = \$ _____

PERMITS: \$ _____

TOLLS: \$ _____

INVOICE TOTAL: \$ _____



CERTIFICATE OF RECYCLING AND/OR DISPOSAL


By accepting the waste products described by the document number below on this certificate, Veolia ES Technical Solutions, L.L.C. certifies to the generator that the transportation, storage or processing methods employed are in accordance with the Veolia ES Technical Solutions, L.L.C permit parameters and all applicable federal, state and local laws.

CUSTOMER: 487403 NATIONAL GRID 175 EAST OLD COUNTRY ROAD SITE B HICKSVILLE NY 11801	GENERATOR: 640920 NYR000225615 EQUITY WORKS MGP SITE 254 MASPETH AVENUE BROOKLYN NY 11211	RETURN MANIFEST: 640920 EQUITY WORKS MGP SITE 175 E. OLD COUNTRY ROAD ATTN: JOE ODIERNA HICKSVILLE NY 11801	RECEIVING FACILITY: NJD002454544 VEOLIA ES TECHNICAL SOLUTIONS, L.L.C. 125 FACTORY LANE MIDDLESEX NJ 08846
Manifest/Shipping Number: 001226659VES	Date Shipped: 7/28/2017	Date Received: 7/28/2017	

WASTE RECYCLED AND/OR DISPOSED:

<u>Manifest Line</u>	<u>Waste Profile No.</u>	<u>Wastestream Description</u>	<u>Container Number</u>	<u>Container</u>	<u>Quantity</u>	<u>UOM</u>
1	101578	COAL TAR CONTAMINATED WATER	HN 2868637000 001 01 0	VACTRU	466	G

Under civil and criminal penalties of law for making or submission of false statements or representations (18 U.S.C. 1001 and 15 U.S.C 2615), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified information in this document, for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made verification that this information is true, accurate and complete.


Donald G. Lee, Technical Manager

