2016 Annual Periodic Review Report

Hyde Park Landfill
Niagara Falls, New York
NYSDEC Site No. 932021

Glenn Springs Holdings, Inc.

GHD | 2055 Niagara Falls Boulevard Niagara Falls New York 14304 USA

001069 | Report No 364 | April 2017

Executive Summary

The following report describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2016 at the Hyde Park Landfill Site (Site) located at 4825 Hyde Park Boulevard, Niagara Falls, Town of Niagara, Niagara County, New York. The Site is approximately 30 acres in size and is comprised of two parcels owned by Occidental Chemical Corporation (OCC) and one parcel owned by National Grid (formerly Niagara Mohawk Power Corporation). These parcels contain the landfill (28.1 acres) and the treatment system and associated buildings (1.9 acres). OCC owns another 30 parcels that are located to the west and north of the Site that encompass a total area of approximately 29 acres. These parcels were purchased to act as a buffer to the Site or to facilitate remediation Management of the Site is performed on behalf of OCC by Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC. Since October 1, 2008, GHD Services Inc. (GHD), formerly Conestoga-Rovers & Associates (CRA), has performed OM&M and reporting activities for the Site under contract to and direct management of GSH.

During 2016, the remedial system components at the Site performed as designed. The Source Control (SC), Overburden Requisite Remedial Technology (RRT), and Bedrock RRT Systems removed 23.1 million gallons of groundwater from the Site and surrounding formations. The RRT systems continued to provide containment and Flow Zone 9 remained dewatered between the Site and the face of the Niagara River Gorge (Gorge). All aqueous phase liquid (APL) analytes were found below reporting levels in APL Flux Monitoring, indicating no chemical loading to the Gorge seeps. Non-aqueous phase liquid (NAPL) continues to be contained by the Overburden RRT System, with no NAPL being found in overburden monitoring wells (OMWs) outside of the system. The community continues to be protected by the Site remedial systems. In 2016, 64,964 lbs of NAPL was shipped off Site for disposal.

The 2016 data indicate that there has been no significant change in chemical and hydrogeological conditions at the Site. Quarterly manual NAPL removal from SC wells will continue in 2017 except at SC-3 where removal will be performed on an approximate monthly basis. The frequency and continued need for NAPL recovery from the SC wells will be reevaluated in the 2017 Annual PRR.

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1. Introduction

The following Periodic Review Report (PRR) describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2016 at the Hyde Park Landfill Site (Site) located at 4825 Hyde Park Boulevard, Niagara Falls, Town of Niagara, Niagara County, New York (Figure 1.1). Management of the Site is performed on behalf of Occidental Chemical Corporation (OCC) by Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC. Since October 1, 2008, GHD Services Inc. (GHD), formerly Conestoga-Rovers & Associates (CRA), has performed OM&M and reporting activities for the Site under contract to and direct management of GSH.

1.1 Site Location

The Site is located in the northwest corner of the Town of Niagara, New York, adjacent to the Town of Lewiston to the north and the City of Niagara Falls to the west. The location of the Site is shown on Figure 1.1. The Site is bounded by Hyde Park Boulevard to the west, the Power Authority Service Road (a New York Power Authority [NYPA] access road) to the north, Ferro Electronic Materials, Inc. (formerly TAM Ceramics) to the south, and vacant property owned by Armand Cerrone, Inc. to the east. The Site is located approximately 2,000 feet east of the Niagara River Gorge (Gorge).

The Site is approximately 30 acres in size and is comprised of two parcels owned by OCC and one parcel owned by National Grid (formerly Niagara Mohawk Power Corporation). These parcels contain the landfill (28.1 acres) and the treatment system and associated buildings (1.9 acres). OCC owns another 30 parcels that are located to the west and north of the Site that encompass a total area of approximately 29 acres. These parcels were purchased to act as a buffer to the Site or to facilitate remediation.

1.2 Site History

The Hyde Park Landfill is an closed disposal facility where Hooker Chemical placed liquid, sludge, and solid production waste from 1953 until 1975 when the landfill was closed. In 1978, OCC capped the landfill with clay. In 1981, OCC, the State of New York representing the New York State Department of Environmental Conservation (NYSDEC), and the United States of America representing the United States Environmental Protection Agency (USEPA) entered into a "Stipulation and Judgment Approving Settlement Agreement" (Settlement Agreement). Investigations as part of the approved Settlement Agreement indicated significant chemical migration into the bedrock, including the presence of non-aqueous phase liquid (NAPL). The USEPA added the Site to the National Priorities List in September 1983. Further negotiations among OCC, NYSDEC, and USEPA resulted in a second court agreement; the "Stipulation on Requisite Remedial Technology Program" (November 1985) (RRT Stipulation). In August 2010, OCC issued a "Declaration of Restrictive Covenants and Environmental Easement" (Environmental Easement) granting an easement on the portion of the Site owned by OCC to the Town of Niagara, guaranteeing that the institutional and engineering components of the Remedial Action (RA) will be maintained and transferred with ownership of the property.

In July 2011, NYSDEC reclassified the Site on the Registry of Inactive Hazardous Waste Disposal Sites to a Class 4 site, indicating that it no longer presents a significant threat to public health and/or

the environment. Effective October 23, 2013, USEPA deleted the Site from the National Priorities List. As published in the Federal Register, Vol. 78, No. 205, Pg. 63099, "The EPA and the State of New York, through the Department of Environmental Conservation, have determined that all appropriate response actions under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) other than operation, maintenance, and 5-year reviews, have been completed".

1.3 Remedial Goals

The original monitoring and remedial performance requirements for the Site were defined in the 1985 RRT Stipulation. Extensive remediation, investigation, and evaluation of the Site have been completed and documented in previous reports to the NYSDEC and USEPA since the RRT Stipulation was approved. The current monitoring and reporting requirements are detailed in the NYSDEC and USEPA-approved 2006 Performance Monitoring Plan (PMP). A checklist of all tasks required by the PMP is provided in Table 1.1. Action levels specified in the PMP are shown in the applicable analytical data tables.

1.4 Remedial Components and Monitoring

Site remedial components consist of the following:

- Source Control (SC) System, shown on Figure 1.2
    - Six SC wells installed within the landfill; only five are currently active
- Overburden RRT System, shown on Figure 1.3
    - Existing barrier collection system (EBCS) surrounding the original landfill
    - Overburden barrier collection system (OBCS) outside and to the north, west, and south of the original landfill
- Bedrock RRT System, shown on Figure 1.4
    - NAPL containment system (17 purge wells)
    - Aqueous Phase Liquids (APL) Plume containment system (two purge wells)

All groundwater collected by these components is treated in an on-Site granular activated carbon treatment system before discharge to the publicly owned treatment works (POTW) under Niagara Falls Water Board Significant Industrial User (SIU) Permit #49. NAPL decanted from the groundwater is stored on Site until a sufficient quantity is available for transport to an approved hazardous waste disposal facility.

The PMP requires annual evaluation of the effectiveness of these components using the following three monitoring programs:

- Overburden Monitoring Program (OMP), locations shown on Figure 1.5
- Bedrock Monitoring Program (BMP), locations shown on Figure 1.6
- Community Monitoring Program (CMP), locations shown on Figure 1.7

2. Institutional and Engineering Controls

The required Institutional and Engineering Controls are listed in the completed Institutional and Engineering Controls Certification Form included as Appendix A. Institutional controls include restrictions on uses of Site land, buildings, groundwater, and surface water, and require the implementation of both a Monitoring Plan and an Operation and Maintenance (O&M) Plan. The most recent versions of these documents are the NYSDEC and USEPA approved 2006 PMP and the 2015 Operation and Maintenance Manual (O&M Manual). Engineering controls include groundwater containment through a leachate collection system, collected groundwater treated on Site, a maintained cover system on the landfill, and restricted Site access controlled through perimeter fencing.

3. Site Monitoring Programs and Results

3.1 Overburden Monitoring Program

The OMP involves the monitoring of the SC wells and the Overburden RRT System. The SC wells are a series of production wells installed within the landfill to recover NAPL, while the Overburden RRT System is comprised of two collection systems designed to control the lateral migration of APL and NAPL in the overburden.

The 2016 performance monitoring data for the overburden systems are presented as follows:

SC System Well Locations	Figure 1.2
2016 SC Well Pumping Summary	Table 3.1
Overburden RRT System	Figure 1.3
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2016 Overburden NAPL Presence Monitoring	Table 3.3
2016 Overburden Collection Systems Monthly Average Flow Summary	Table 3.4
Total SC Wells APL/NAPL Purged, NAPL Presence in SC-2, -4, and -5	Figure 5.1

3.2 Bedrock Monitoring Program

The BMP includes the Lockport Bedrock APL and NAPL Plume Containment Systems and the Bloody Run Creek Monitoring Program. The Lockport Bedrock APL and NAPL Plume Containment Systems consist of 19 purge wells that control lateral migration of dissolved phase constituents and NAPL in the bedrock, while the Bloody Run Creek Monitoring Program ensures that Site-related parameters are not adversely impacting groundwater in the upper bedrock subsequent to the remediation of Bloody Run Creek. The Group B Bedrock Piezometers are sampled on a quarterly basis. Piezometers associated with the Lockport Bedrock APL and NAPL Plume Containment Systems are sampled on a routine basis in two groups. The Group A Bedrock Piezometers are sampled every fifth quarter, which occurred in the third quarter of 2016. The Bloody Run monitoring wells are sampled every 5 years, which occurred in July 2016, with the next event planned for 2021.

The 2016 performance monitoring data for the bedrock systems are presented as follows:

Bedrock Monitoring Program Locations	Figure 1.4
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The PMP also specifies water level setpoints for each of the purge wells in the Bedrock RRT System. Only major issues associated with achieving these setpoints are discussed in this PRR, while the day-to-day maintenance of these setpoints was previously presented in the 2016 Quarterly Operations Reports.

In addition to maintaining water levels within target setpoint ranges in the purge wells, the water level in flow zone FZ-09 in the area between the landfill and the APL purge wells (APW-1 and APW-2) is to be maintained at an elevation of 526 feet above mean sea level (AMSL) or lower. This level ensures that the FZ-09 outcrop along the NYPA access road remains unsaturated. Piezometer PMW-1M-09 is used to monitor the FZ-09 water level elevation in this area. A pressure transducer installed in PMW-1M-09 has been programmed to collect water level data at 1-hour intervals. These continuous water level elevation data were reported in the 2016 Quarterly Operation Reports.

3.3 Community Monitoring Program

The Community Monitoring program was developed to ensure that the public is not being adversely exposed to Site-related parameters. The Community Monitoring program includes the Gorge Face Seep Program, the APL Flux Monitoring Program, and the Residential Community Monitoring Program. The Gorge Face Seep Program involves biennial inspections of the Gorge to ensure that Site-specific parameters are not discharging to a publicly accessible area. The APL Flux Monitoring Program involves annual sampling and ensures that the mass loading via groundwater discharged to the Gorge is less than the defined Flux Action Level. The Residential Community Monitoring Program involves annual vapor monitoring and ensures that residents in the area are not adversely exposed to Site-related constituents in the groundwater or from soil vapors above the groundwater.

The 2016 performance monitoring data for the community monitoring are presented as follows:

APL Flux Well Locations	Figure 3.2
2016 Analytical Results Summary: Annual AFW Composite	Table 3.10
Community Monitoring Locations	Figure 1.7
2016 Quarterly Hydraulic Gradient Summary	Table 3.11
2016 Community Monitoring Well Soil Vapor Monitoring	Table 3.12

4. Site Operation and Maintenance

Maintaining the Site remedial elements is critical to the Site's remedial performance. Therefore, inspections of hydraulic and chemical monitoring points, the landfill cap, and the security fence surrounding the landfill have been included in the PMP and O&M Manual. Although not required by the PMP, the monitoring program for the Site groundwater treatment system is discussed briefly in this report. Full details on Site operation and maintenance activities are presented in the 2015 O&M Manual.

Analytical results from the treatment system monitoring program have been presented previously in the 2016 Quarterly Operations Reports. These include the following:

- Daily treated effluent total water flows and pH
- Weekly treated effluent APL sampling
- Quarterly treated effluent APL sampling

The following treatment system monitoring was also conducted in 2016:

Quarterly NAPL Decanter Volume Monitoring	Table 4.1
Weekly Carbon Interstage APL Sampling	Table 4.2
Quarterly Leachate Feed APL Sampling	Table 4.3
Quarterly Sac Bed Interstage APL Sampling	Table 4.4

The 2006 PMP also requires weekly fence inspections, annual well and piezometer inspections, and annual landfill cap inspections. All of the required inspections were performed in 2016. The inspections did not identify any issues of concern beyond routine maintenance items. Records of these inspections are maintained at the Site and are available upon request, in accordance with the 2006 PMP.

5. Evaluation and Conclusions

5.1 Overburden Monitoring Program

There were no deviations from the OMP in 2016 and monitoring was conducted in accordance with the 2006 PMP. The results of the OMP are discussed below and summarized in Tables 3.1 through 3.4.

5.1.1 Source Control System

The SC wells (SC-2 to SC-6) have been operated on a monthly basis to pump down the APL/NAPL level to approximately the top of the pump in each well. The 2014 Annual Periodic Review Report recommended that monthly purging of the SC wells and subsequent water level and NAPL thickness measurements be discontinued; however in order to provide additional data to support discontinuation, it also recommended that the frequency be changed to quarterly for one year. After one year, the original recommendation to discontinue would be reevaluated. NYSDEC approved the quarterly frequency of SC water level and NAPL thickness measurements in a letter dated

May 5, 2015; however, GSH maintained monthly water level and NAPL thickness measurements throughout 2015. Starting in 2016, the SC water levels and NAPL thickness were measured quarterly

The 2016 SC well NAPL thickness and recovery data are summarized in Table 3.1.The amount of NAPL recovered in 2016 was 65.5 gallons. Historical NAPL levels and percentages for each source control well are summarized in Table 5.1. An annual summary of the historical data is shown on Figure 5.1.

The APL/NAPL volumes removed from the SC wells from 2006 through 2016 are as follows:

Year	Gallons Purged from SC Wells
2006	799
2007	287
2008	236
2009	173
2010	155
2011	262
2012	339
2013	316
2014	265
2015	120
2016	65.5

The above purge data show that since the implementation of the 2006 PMP, the amount of APL/NAPL purged from the SC wells has declined and stabilized.

In an effort to further demonstrate that the SC wells do not produce significant amounts of NAPL, monthly manual NAPL removal from SC-6 was implemented in April 2015. The NAPL thickness in SC-6 prior to removal in April 2015 was approximately 10 feet. Approximately 18 gallons of NAPL were removed. In subsequent months, the volume of NAPL removed decreased from 8 gallons in May to 3 gallons in October 2015 when manual removal of NAPL ceased due to cold temperatures. Based on the declining amount of NAPL removed, the frequency was revised to quarterly. The volume of NAPL removed continued to decrease in 2016 to 1.5 gallons removed in September. The total amount of NAPL removed manually from SC-6 in 2016 was 10 gallons.

Based on the results of manual NAPL removal from SC-6, quarterly manual NAPL removal was implemented at SC-2, SC-3, SC-4, and SC-5 in October 2016. The volume of NAPL recovered from these wells was 5.5 gallons, 33.25 gallons, 15.25 gallons, and 1.5 gallons, respectively. Quarterly manual NAPL removal will continue in 2017 except at SC-3 where removal will be performed on an approximate monthly basis given the amount removed in October 2016.

5.1.2 Overburden Groundwater Elevations

The overburden groundwater elevation data, provided in Table 3.2, were used to generate potentiometric surface maps that were presented in the 2016 Quarterly Operations Reports. These potentiometric surface maps indicated hydraulic containment for each quarter of 2016.

5.1.3 Overburden NAPL Presence Monitoring

NAPL presence checks are to be completed annually in the OBCS, Overburden Monitoring Wells (OMWs), and the OBCS manholes. The NAPL presence monitoring data from the OMWs and manholes are presented in Table 3.3. The data indicate that NAPL was present in 3 of the 17 manholes monitored (MH-29, MH-30, and MH-31) and in 1 of the 2 wet wells (Wet Well D). The three manholes are located at the southwest corner of the landfill and all flow to Wet Well D. The data also indicate that NAPL is not present in any of the OMWs. These wells are located outside of the OBCS to the south, west, and northwest of the four manholes and one wet well where NAPL was present (see Figure 1.3). The lack of NAPL presence in these OMWs indicates that overburden NAPL is contained within the boundaries of the OBCS and is not bypassing the OBCS.

5.1.4 Overburden RRT System Flow Rates

The OBCS and EBCS monthly average flow rates, presented in Table 3.4, indicate seasonal fluctuations in flow rates with the highest average flow rates occurring during the spring months of 2016.

5.1.5 Overburden Monitoring Conclusions

Based on the overburden data collected in 2016 as shown in Tables 3.1 through 3.4 and the potentiometric surface maps that were presented in the 2016 Quarterly Operations Reports, the SC and Overburden RRT Systems are operating as designed, and overburden containment is being achieved.

5.2 Bedrock Monitoring Program

There were no deviations from the BMP in 2016 and monitoring was conducted in accordance with the 2006 PMP. The results of the BMP in 2016 are discussed below and summarized in Tables 3.5 through 3.8.

5.2.1 Bedrock Groundwater Elevations

The bedrock flow zone groundwater elevation data, presented in Table 3.5, were used to generate groundwater potentiometric surface maps for each of the monitored flow zones. These maps have been presented previously in the 2016 Quarterly Operations Reports. The potentiometric surface maps for each monitored flow zone during each quarter of 2016 indicated containment.

5.2.2 Bedrock RRT System Flow Rates and Setpoints

The 2016 bedrock purge well monthly average flow rate data, presented in Table 3.6, are consistent with historic flow rates.

Maintenance of operating water level setpoints by each of the purge wells has been discussed in the 2016 Quarterly Operations Reports. These reports indicate that, with the exception of the maintenance issues identified, the water levels were maintained within target setpoint ranges at each of the purge wells throughout 2016.

Based on the hourly data from the PMW-1M-09 pressure transducer, the water level elevation in this area of FZ-09 was maintained at an average elevation of 516.98 feet AMSL throughout 2016,

with a maximum elevation observed of 518.90 feet AMSL. The average and maximum elevations were below the 526 feet AMSL action elevation setpoint, which ensures that the FZ-09 outcrop along the NYPA access road remains unsaturated. The data were corroborated by the quarterly hand water level measurements of PMW-1M-09 presented in Table 3.5, which show an average water level of 516.80 feet AMSL in 2016.

5.2.3 Bedrock Analytical Results

In accordance with the 2006 PMP, quarterly groundwater samples were collected from the Group B Bedrock piezometers in 2016. The quarterly groundwater sampling events were performed during February 2016, May 2016, August 2016, and November 2016. The annual (5th quarter Group "A" Bedrock piezometer sampling) event, as defined in the PMP, was performed during August 2016.

The 2016 quarterly Group "B" Bedrock piezometer sampling results are presented in Tables 3.7a through 3.7d. Samples were analyzed for the Site-specific list of organic acids. Site-specific screening levels presented in the PMP have been added to these tables and exceedances of these values have been highlighted.

The 5th quarter sampling results for the Group "A" Bedrock piezometers are presented in Table 3.8. Analyses include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organic acids, and sulfate. The Site-specific screening levels presented in the PMP have been added to this table and exceedances of these values have been highlighted.

The 2016 data for the quarterly Group "B" Bedrock piezometer and the 5th quarter Group "A" Bedrock piezometer sampling events indicate that samples from a number of locations exhibited concentrations of Site Indicator Organics (SIOs) that exceeded the Site-specific screening levels, as summarized below:

Site Organic Indicators	Location Exceeding Site-Specific Screening Level
Chlorendic Acid	AGW-1M-09, AGW-1U, AGW-1U-06, B2L-11, C3-07, D1M-09, D1U-05, F2U-02, F2U-04, G6-04, H2U-02, H5-09
Benzene	B2L-11, D1L-11, E6-09, E6-11, F2L-11, F6-11, G1L-11, G6-04, G6-05, G6-11, H2M-09, H5-09, J6-11
1,1,2,2-tetrachloroethane	G6-01, G6-02, G6-04, G6-05, G6-06
Tetrachloroethene	G6-01, G6-02, G6-04
Trichloroethene	G6-01, G6-02, G6-04, G6-05. G6-06, H2M-06
Vinyl Chloride	G6-01, G6-02, G6-04, G6-05
cis-1,2-Dichloroethene	G6-05

The above exceedances are generally consistent with results from the quarterly Group "B" piezometer and 5th quarter Group "A" Bedrock piezometer sampling events conducted in previous years.

In addition to the above-noted exceedances, there were also a number of locations that exhibited concentrations of non-SOI parameters that exceeded the Site-specific screening levels, as summarized below:

Non-Site Organic Indicators	Location Exceeding Site-Specific Screening Level
Chloroform	G6-05
1,1,2-Trichloroethane	G6-05
bis(2-Ethylexyl)phthalate (DEHP)	E6-04

The parameters identified at G6-05 were also present at this location during the 2003, 2007, 2011, 2012 and 2015 sampling events. However, this well is located hydraulically upgradient of the Site and groundwater at this location would not be indicative of potential migration of Site materials. The above exceedances for bis(2-ethlyexyl)phthalate (DEHP) were generally consistent with results from the quarterly Group "B" piezometer and 5th quarter Group "A" Bedrock Piezometer sampling events conducted in previous years.

The bedrock groundwater data collected in 2016 demonstrate that the APL and NAPL purge well systems are operating properly and containment is being maintained in each of the flow zones. No changes to the bedrock purge or monitoring systems are recommended at this time.

5.2.4 Bedrock Monitoring Conclusions

The bedrock monitoring data collected in 2016 demonstrate that the APL and NAPL purge well systems are operating properly, and bedrock containment is being achieved in each of the flow zones.

5.2.5 5-Year Bloody Run Monitoring Conclusions

The sampling results from the 5-year Bloody Run Monitoring Event are presented on Table 3.9. Analysis included VOCs, SVOCs, and organic acids. A review of the 2016 Bloody Run sampling event data indicates the following exceedances for VOCs and organic acids.

VOCs	Location Exceeding Site-Specific Screening Level
Trichloroethene	BR-1
Organic acids	
Chlorendic acid	BR-2, BR-3, BR-4

The exceedance of chlorendic acid in BR-2, BR-3 and BR-4 is consistent with the 2011 sampling event where chlorendic acid exceeded the GSH screening levels in BR-2, BR-3 and BR-4. There was an additional exceedance of trichloroethene in BR-1 that was not previously seen during the historic sampling events. The data validation report and corresponding laboratory report have been included in Appendix B. The next sampling event is scheduled to be conducted in 2021.

5.3 Community Monitoring Program

There were no deviations from the CMP in 2016.

5.3.1 APL Flux Monitoring Program

The APL plume flux composite sampling results are presented in Table 3.10. None of the APL plume flux parameters were detected above their respective reporting levels. As a result, calculation of the flux to the Gorge is not required.

5.3.2 Quarterly Hydraulic Gradient Summary

Table 3.11 presents a summary of groundwater elevations and vertical hydraulic gradients at the paired community monitoring wells for each quarter of 2016. Downward vertical hydraulic gradients, as demonstrated by a higher groundwater elevation in the overburden monitoring well than in the corresponding bedrock groundwater monitoring well, were maintained at each of the well pairs throughout the year.

5.3.3 Soil Vapor Monitoring

Results of community monitoring well soil vapor monitoring are presented in Table 3.12. All five locations monitored exhibited no recordable concentrations of VOCs during the September 2016 monitoring event. Therefore, in accordance with the field procedure for community well vapor monitoring presented in Appendix B of the 2014 Annual Periodic Review Report, groundwater sampling was not required..

5.3.4 Gorge Face Seep Survey

The biennial Gorge Face Seep Survey was last conducted on August 25, 2015. The next Gorge Face Seep Survey will be conducted in the summer of 2017.

5.3.5 Community Monitoring Conclusions

The community monitoring data collected in 2016 demonstrate that the community is being properly protected by Site remedial systems.

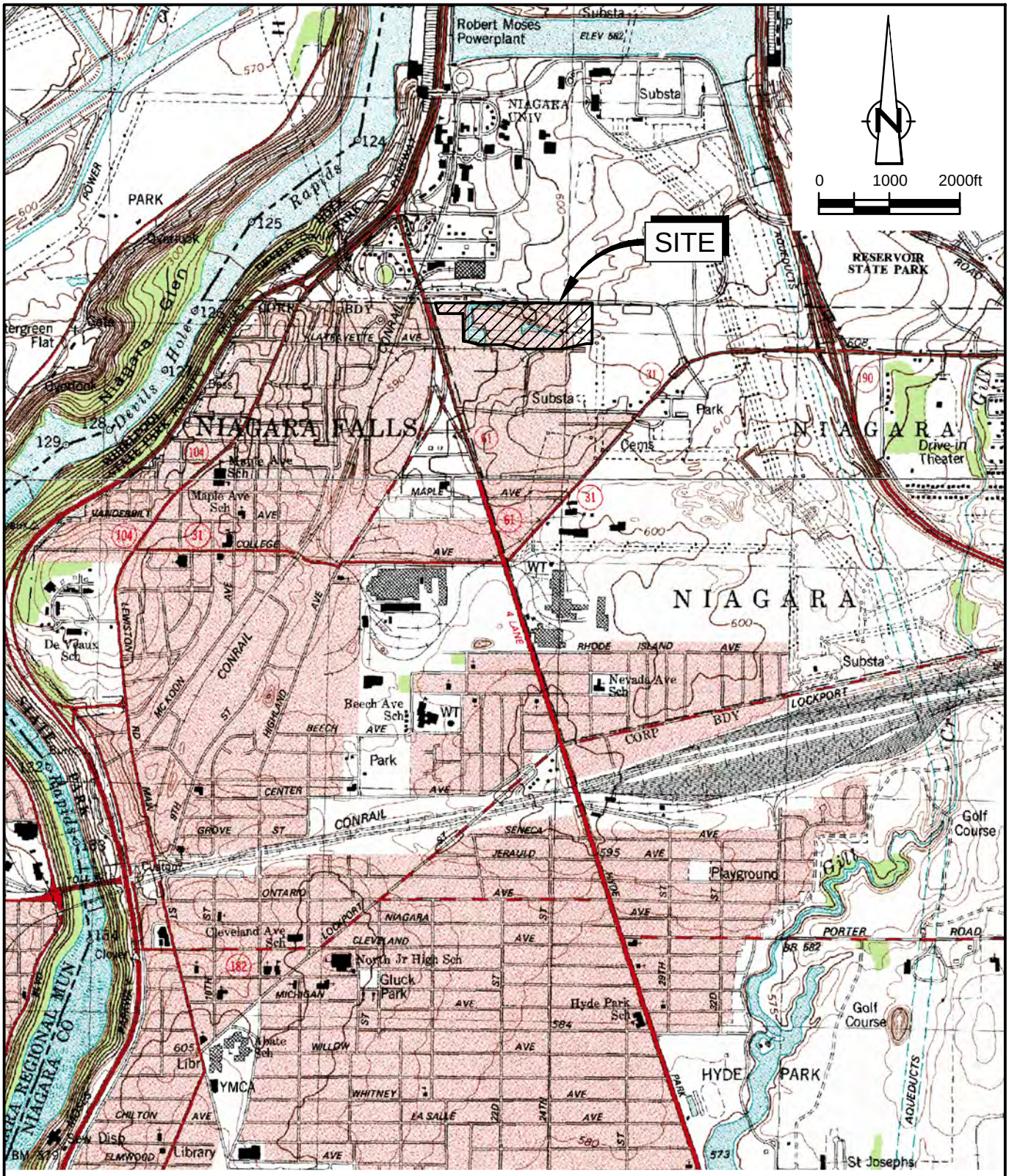
5.4 Site Operations and Maintenance

There were no deviations in 2016 from the treatment system monitoring specified in the 2006 PMP. Ongoing operations and maintenance issues are discussed in the 2016 Quarterly Operations Reports.

6. Recommendations

Quarterly manual NAPL removal from SC wells will continue in 2017 except at SC-3 where removal will be performed on an approximate monthly basis. The frequency and continued need for NAPL recovery from the SC wells will be reevaluated in the 2017 Annual PRR.

Figures



SOURCE: USGS QUADRANGLE MAPS;
NIAGARA FALLS, NEW YORK - ONTARIO, 1980
LEWISTON, NEW YORK, 1980

figure 1.1

SITE LOCATION
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

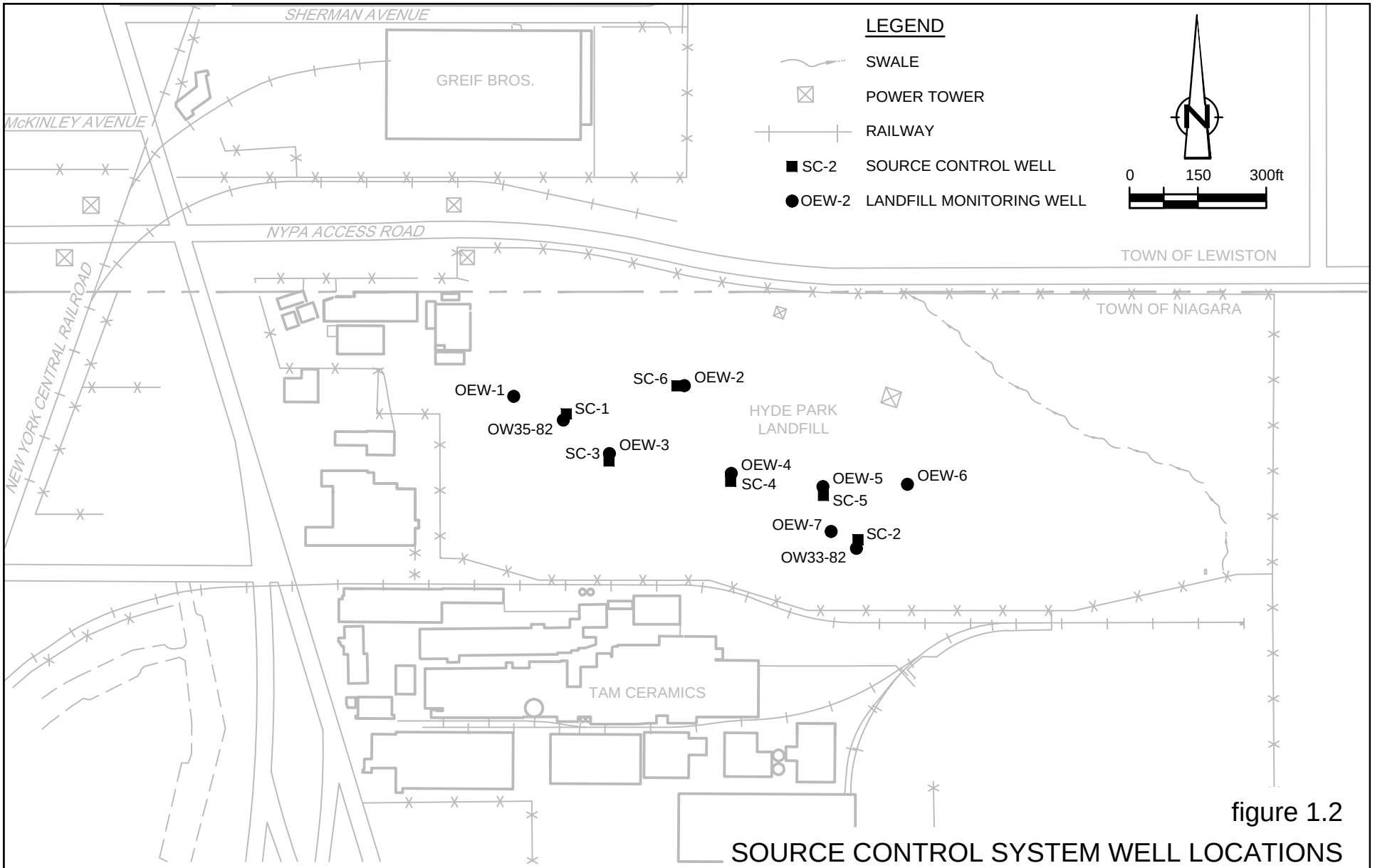


figure 1.2

SOURCE CONTROL SYSTEM WELL LOCATIONS
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

NOTE:
SITE BENCHMARK IS A P.K. NAIL SET IN THE EAST FACE OF A POWER POLE LOCATED AT THE WEST END OF THE EXISTING HYDE PARK LANDFILL, ELEVATION = 612.77. DATUM NOT VERIFIED.

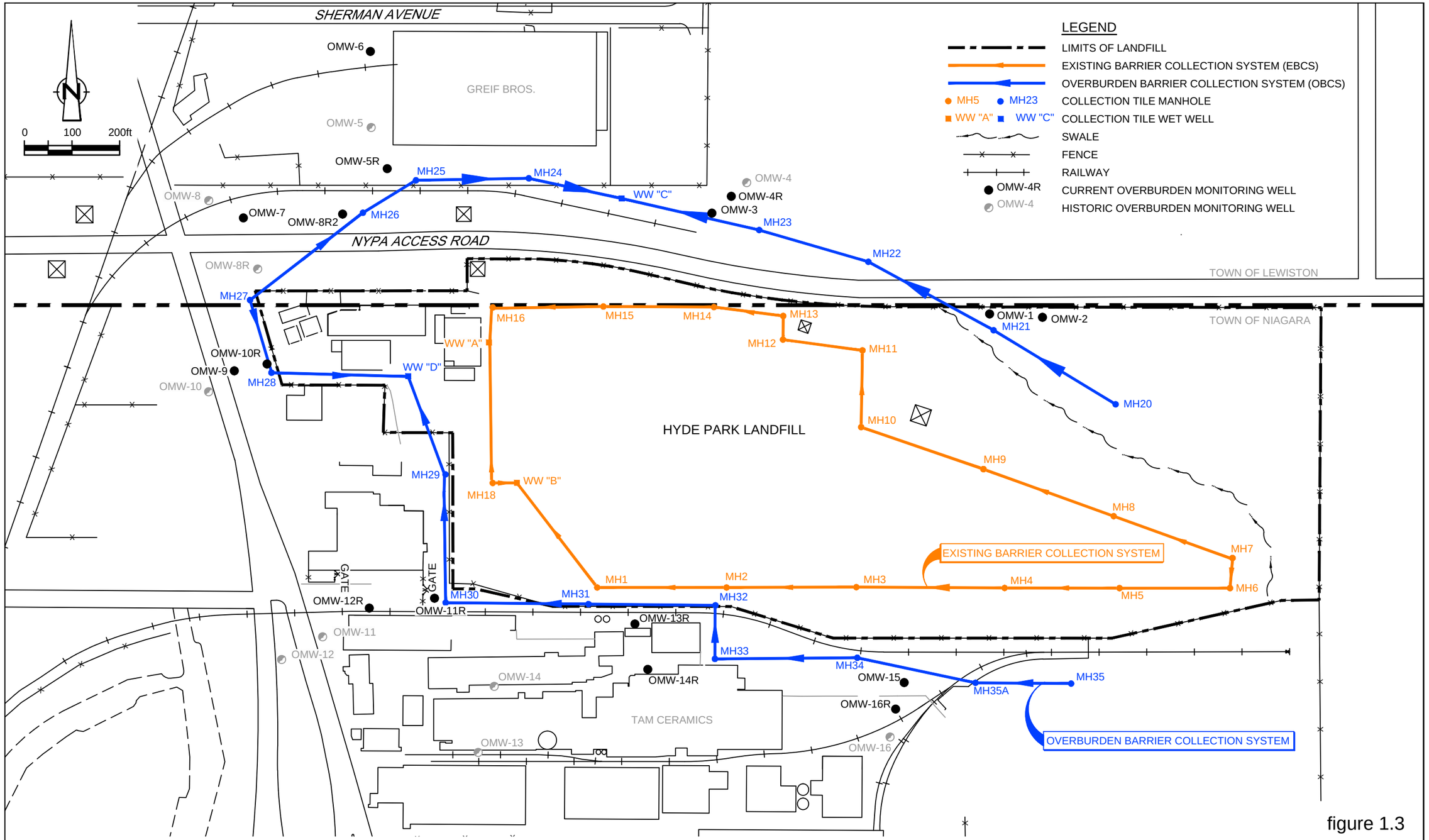


figure 1.3

OVERBURDEN RRT SYSTEM
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

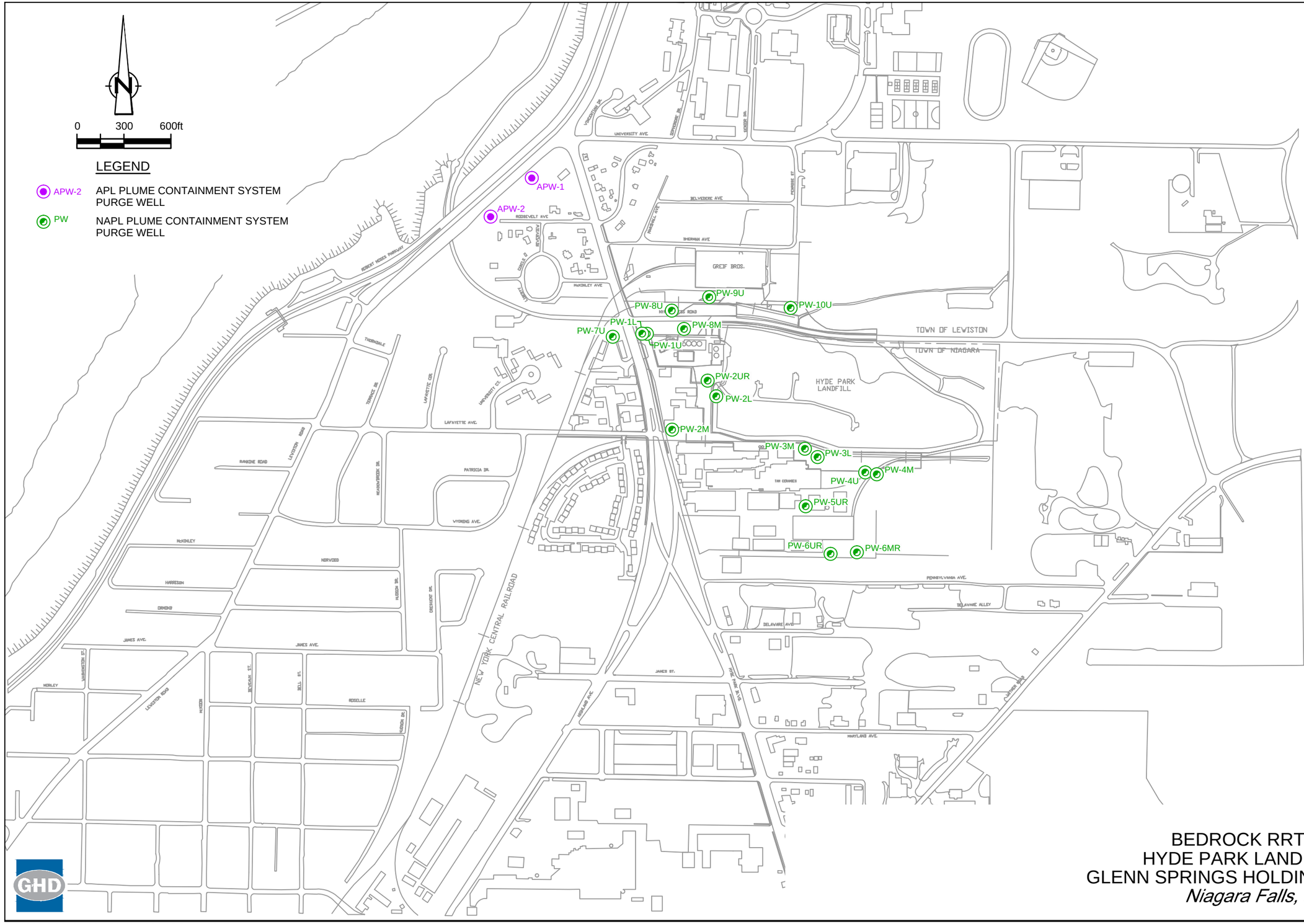


figure 1.4

BEDROCK RRT SYSTEM
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

GHD

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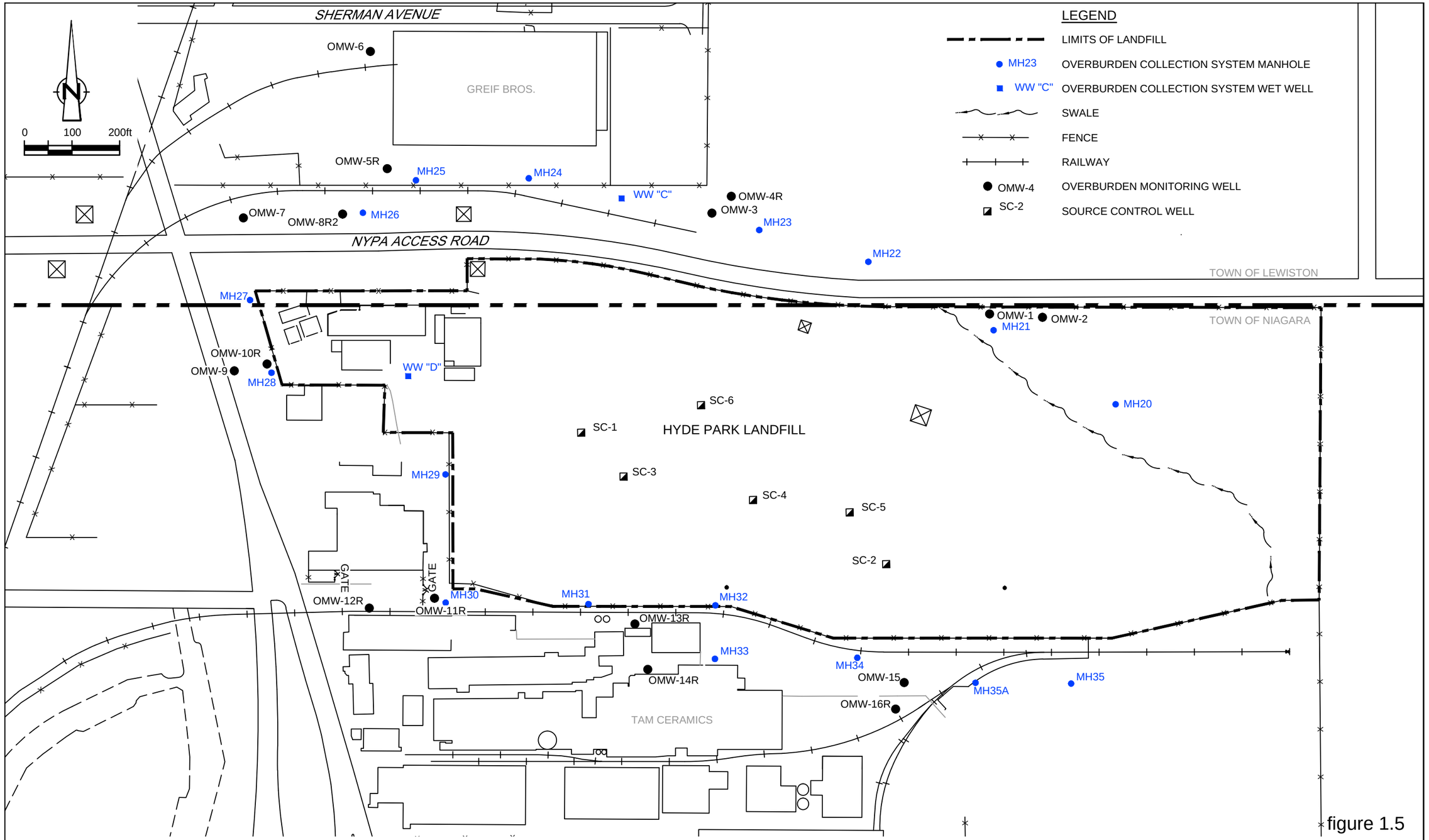

figure 1.5

OVERBURDEN MONITORING PROGRAM
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

GHD

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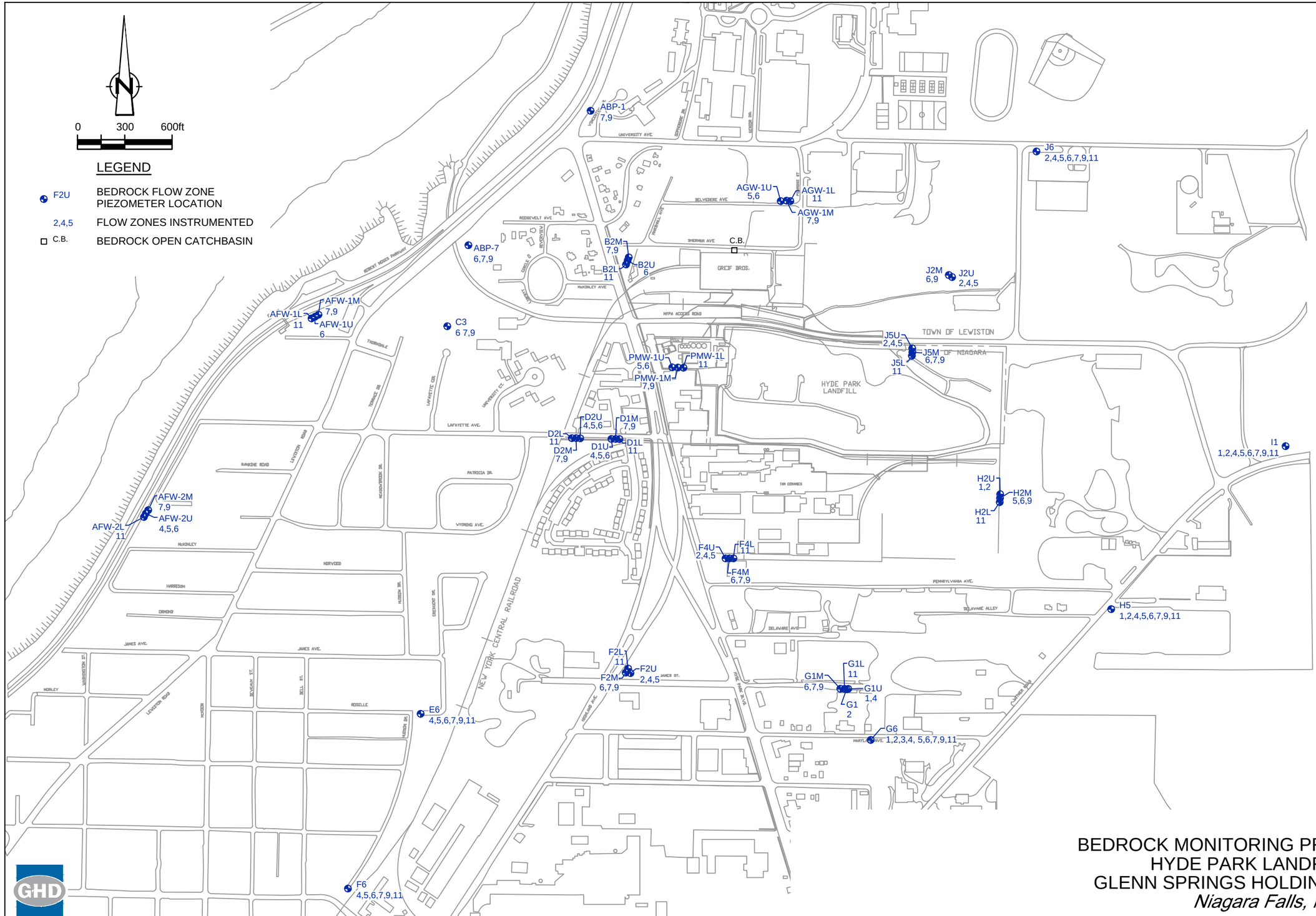

figure 1.6

BEDROCK MONITORING PROGRAM
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

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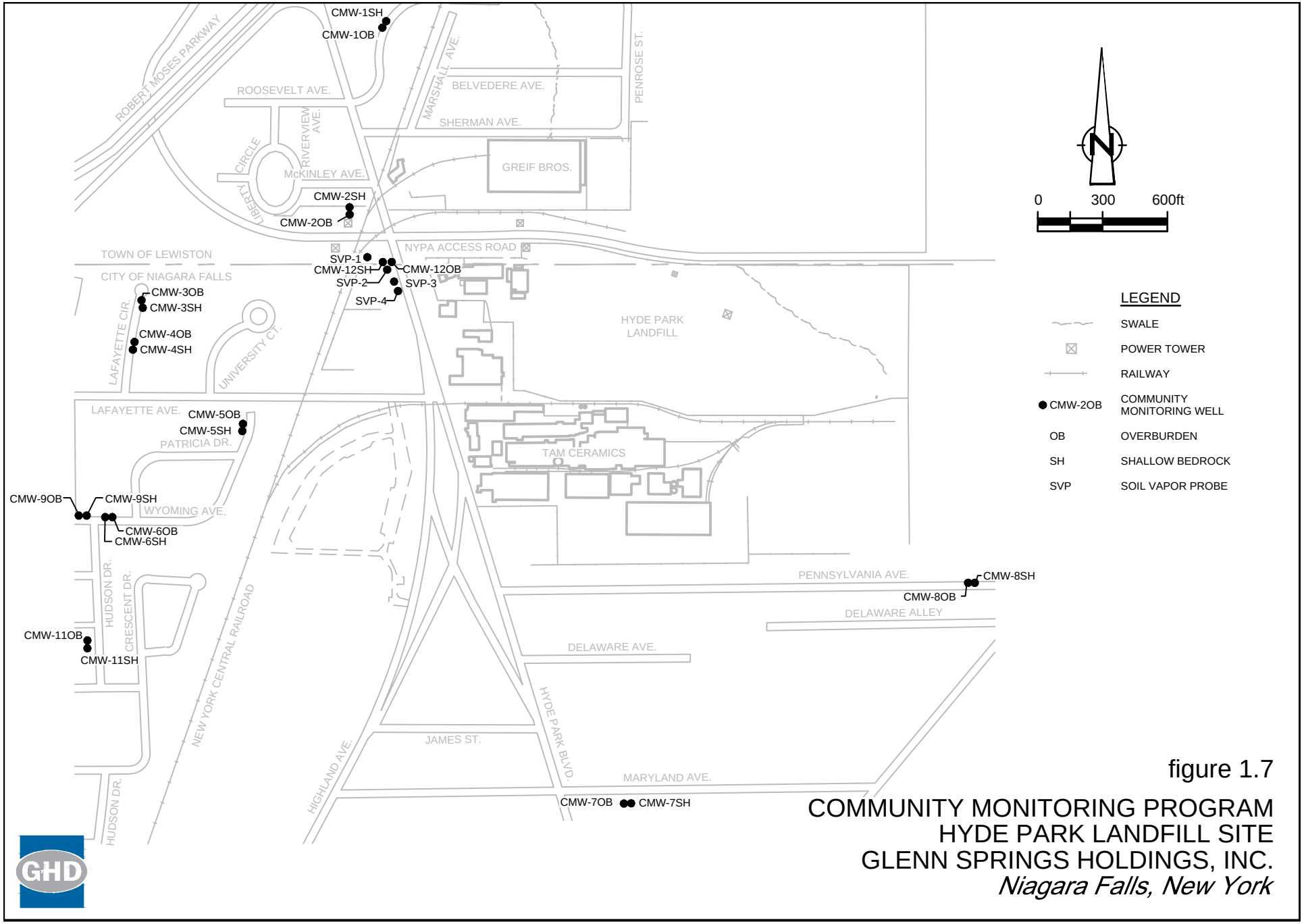

figure 1.7

COMMUNITY MONITORING PROGRAM
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

GHD

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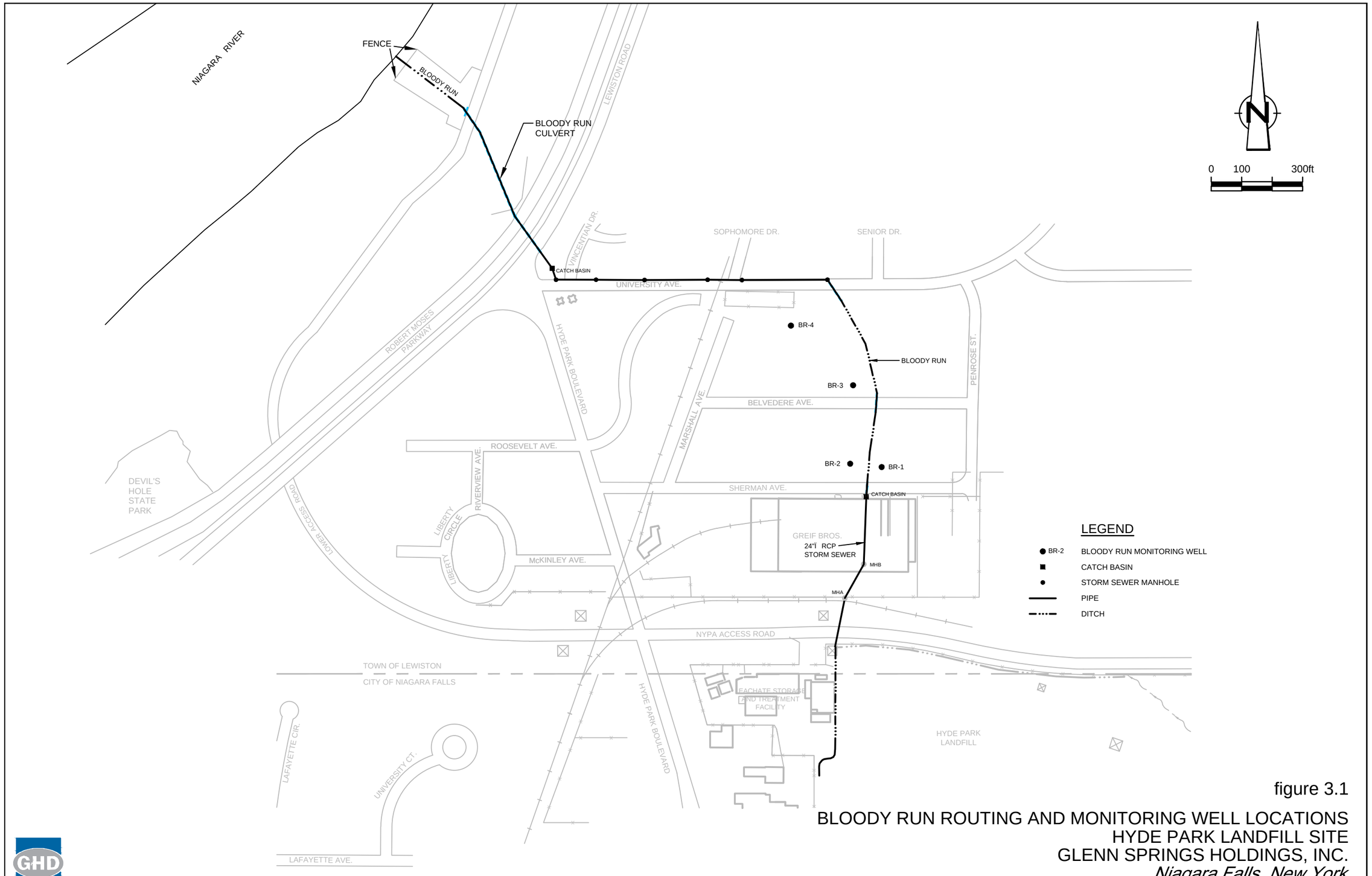

figure 3.1

BLOODY RUN ROUTING AND MONITORING WELL LOCATIONS
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

GHD

01069-D23101(364)GN-WA008 APR 13, 2017

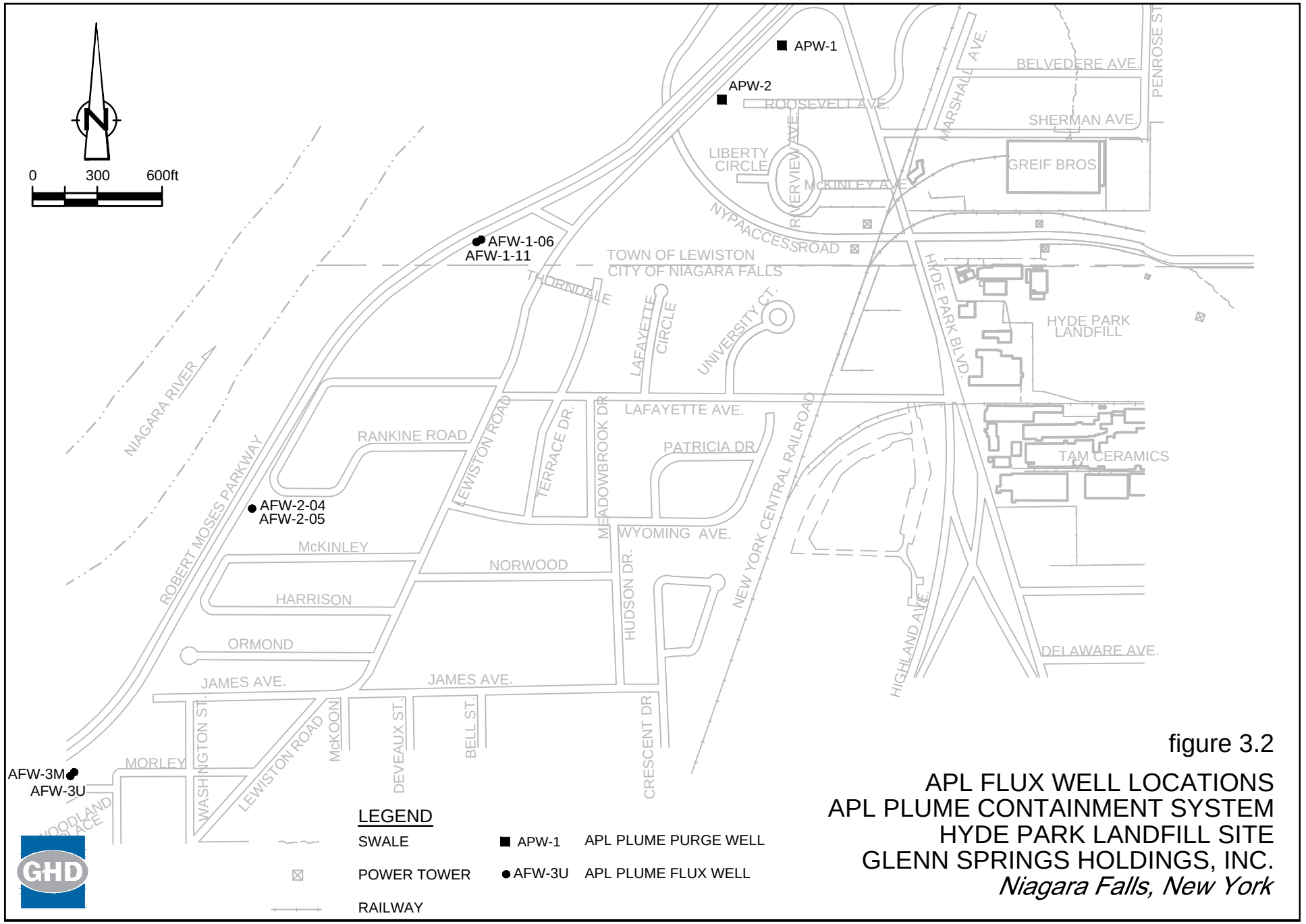

figure 3.2

APL FLUX WELL LOCATIONS
APL PLUME CONTAINMENT SYSTEM
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

01069-D23101(364)GN-WA009 APR 13, 2017

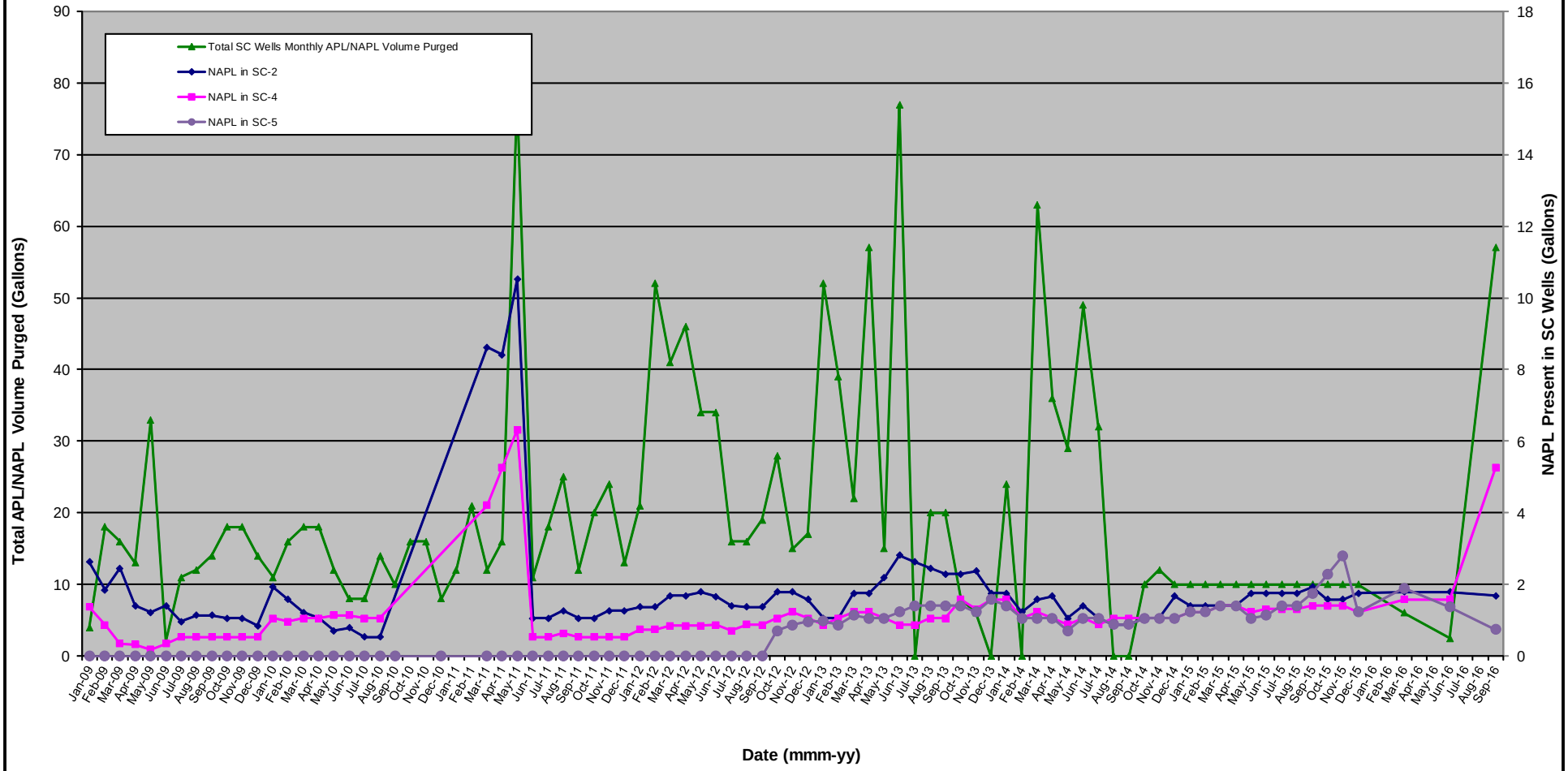

figure 5.1

TOTAL SC WELLS APL/NAPL PURGED, NAPL PRESENCE IN SC-2, -4, AND -5
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

Tables

Table 1.1

PMP Monitoring Tasks - 2016
Hyde Park Landfill Site
Town of Niagara, New York

Program	Frequency	Activity	Location/Description	PMP Table Reference	PRR Report Reference	Completed (Yes/No)	Comment
Overburden	Continuous	Water Level Measurement	Wet Wells	--	--	Yes	
	Daily	Total Water Flow	Decanters	--	--	Yes	
	Monthly	Purge NAPL	Source Control NAPL Recovery Wells	Table 3.3	Table 3.1	Yes	
		Water Level Measurement	Source Control NAPL Recovery Wells	Table 3.3	Table 3.1	Yes	
		NAPL Thickness	Source Control NAPL Recovery Wells	Table 3.3	Table 3.1	Yes	
	Quarterly	Hand Water Level Measurement	Manholes	Table 3.2	Table 3.2	Yes	
		Hand Water Level Measurement	OBCS Overburden Monitoring Wells	Table 3.2	Table 3.2	Yes	
		Hand Water Level Measurement	Source Control Monitoring Wells	Table 3.3	Table 3.2	Yes	
		NAPL Thickness	Source Control Monitoring Wells	Table 3.3	--	Yes	
	Annual	NAPL Presence	Manholes	Table 3.2	Table 3.3	Yes	
		NAPL Presence	OBCS Overburden Monitoring Wells	Table 3.2	Table 3.3	Yes	
Bedrock	Continuous	Water Level Measurement	NAPL and APL Purge Wells	Table 4.1	--	Yes	See quarterly reports
	Hourly	Water Level Measurement	Bedrock Piezometer PMW-1M-09	--	--	Yes	See quarterly reports
	Daily	Total Water Flow	Decanters	--	--	Yes	
	Monthly	Total Water Flow	Bedrock Purge Wells	--	Table 3.6	Yes	
	Quarterly	Hand Water Level Measurement	All Bedrock Piezometers	--	Table 3.5	Yes	
		APL Sampling	Group B Bedrock Piezometers	Table 4.2	Tables 3.7 a-d	Yes	
	Every Fifth Quarter	APL Sampling	Group A Bedrock Piezometers	Table 4.2	Table 3.8	Yes	
	Annual	APL Sampling	Open Catch Basin	--	Table 5.2	Yes	
		NAPL Presence	Open Catch Basin	--	--	Yes	None present
	Five-Year	APL Sampling	Bloody Run Monitoring Wells	Table 7.1	--	--	Completed in 2016
		APL Sampling	Operating APL and NAPL Purge Wells	Table 7.1	--	--	Completed in 2016
Community	Quarterly	Hand Water Level Measurement	Bedrock Monitoring Wells	Table 5.4	Table 3.10	Yes	
		Hand Water Level Measurement	Overburden Monitoring Wells	Table 5.4	Table 3.10	Yes	
	Annual	APL Plume Flux Composite Sample	APL Flux Piezometers and Purge Wells (APWs and AFWs)	Table 5.3/App D	Table 3.9	Yes	
		Vapor Monitoring	Overburden Monitoring Wells	Table 5.4	Table 3.11	Yes	
	Biennial	Gorge Face Seep Inspection	Seeps	Table 5.2	--	Yes	

Table 1.1

PMP Monitoring Tasks - 2016
Hyde Park Landfill Site
Town of Niagara, New York

Program	Frequency	Activity	Location/Description	PMP Table Reference	PRR Report Reference	Completed (Yes/No)	Comment
Treatment	Continuous	APL Sampling	Treated Effluent	Table 6.1	--	Yes	See quarterly reports
		Total Water Flow	Treated Effluent	Table 6.1	--	Yes	See quarterly reports
	Weekly	APL Sampling	Carbon Interstage	Table 6.1	Table 4.2	Yes	
		APL Sampling	Treated Effluent	Table 6.1	--	Yes	See quarterly reports
	Quarterly	NAPL Volumes	Decanters	--	Table 4.1	Yes	
		APL Sampling	Leachate Feed	Table 6.1	Table 4.3	Yes	
Estimated concentration		APL Sampling	Sac Bed Interstage	Table 6.1	Table 4.4	Yes	
		APL Sampling	Treated Effluent	Table 6.1	--	Yes	See quarterly reports
Maintenance	Weekly	Fence Inspections	--	App A	--	Yes	Available upon request
	Annual	Well Inspections	--	App A	--	Yes	Available upon request
		Cap Inspection	--	App A	--	Yes	Available upon request
Site-Wide	Quarterly	Report	--	--	--	Yes	Completed in 2016
	Annual	Report	--	--	--	Yes	Completed in 2017
	Five-Year	Report	--	--	--	Yes	Completed in 2017

Notes:

APL - Aqueous Phase Liquid
NAPL - Non-Aqueous Phase Liquid
OBCS - Overburden Barrier Collection System
PMP - Performance Monitoring Plan
PRR - Annual Periodic Review Report
-- - Not applicable

Table 3.1

2016 Source Control Well Pumping Summary
Hyde Park Landfill Site
Town of Niagara, New York

Month	SC-2		SC-3		SC-4		SC-5		SC-6		Total Fluid Volume Pumped (gallons)
	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	
March	1.7	637.5	0.0	597.6	1.5	608.4	1.8	589.2	1.1(3)	578.2	6(1)
June	1.7	641.8	0.0	597.7	1.5	608.8	1.3	605.7	0.4(3)	578.2	2.5(1)
September	1.6	602.7	3.0	597.7	5.0	600.8	0.7	605.7	0.3(3)	604.1	57(1)
December	-(2)	594.8	-(2)	597.7	-(2)	608.3	-(2)	605.7	-(2)	578.2	-(2)

Notes:

ft. AMSL - Feet Above Mean Sea Level
NAPL - Non-aqueous Phase Liquid
(1) - Manual NAPL removal performed March through October 2016
(2) - NAPL removal frequency changed to quarterly in October 2016, next event was January 2017

Table 3.2

2016 Overburden Quarterly Groundwater Elevation Summary
Hyde Park Landfill Site
Town of Niagara, New York

Well	Reference Elevation (ft. AMSL)	Water Level Elevation Quarter 1 3/1/2016 (ft. AMSL)	Water Level Elevation Quarter 2 6/7/2016 (ft. AMSL)	Water Level Elevation Quarter 3 9/7/2016 (ft. AMSL)	Water Level Elevation Quarter 4 12/7/2016 (ft. AMSL)
OMW-1	605.28	600.17	598.55	Dry	596.81
OMW-2	605.99	602.91	601.14	Dry	600.33
OMW-3	598.63	593.31	588.47	585.81	Dry
OMW-4R	601.17	590.28	589.73	586.70	Dry
OMW-5R	591.31	587.99	584.72	580.99	585.35
OMW-6	587.62	585.71	585.15	585.30	585.42
OMW-7	592.74	586.10	584.06	583.46	584.21
OMW-8R2	594.67	588.09	584.96	584.27	585.04
OMW-9	595.52	589.04	586.79	586.88	587.68
OMW-10R	595.13	588.65	585.89	586.14	586.45
OMW-11R	597.52	591.82	590.67	590.22	591.02
OMW-12R	597.20	592.73	591.59	590.71	591.71
OMW-13R	601.50	591.70	591.80	591.60	591.48
OMW-14R	599.64	593.33	592.92	591.66	592.13
OMW-15	607.48	602.99	601.98	599.56	599.86
OMW-16R	607.62	603.65	603.12	599.56	603.44
SC-2	625.61	637.50	641.80	602.73	578.30
SC-3	638.72	597.60	597.70	*	578.90
SC-4	639.35	608.40	608.80	600.83	577.50
SC-5	634.07	589.20	605.70	*	589.20
SC-6	631.15	578.20	578.20	604.13	578.20
MH-20	605.87	601.20	600.95	600.85	600.85
MH-21	599.77	593.65	593.66	593.54	593.49
MH-22	593.37	586.60	586.38	Dry	Dry
MH-23	587.05	577.42	574.92	574.72	Dry
MH-24	582.57	579.49	575.61	576.00	575.88
MH-25	583.82	581.16	577.24	577.64	577.53
MH-26	584.48	580.26	576.38	576.76	576.62
MH-27	586.12	578.59	575.54	575.54	575.39
MH-28	585.23	577.74	569.65	569.41	568.80
MH-29	582.90	594.97	589.37	589.37	Dry
MH-30	588.37	590.06	589.41	589.40	589.39
MH-31	590.10	579.51	580.48	580.50	580.49
MH-32	592.01	582.38	582.39	582.37	582.34
MH-33	592.51	583.83	583.81	583.81	583.77
MH-34	597.64	591.21	591.26	590.90	590.95
MH-35	605.69	599.16	599.14	599.16	599.14
MH-35A	605.69	598.55	598.51	598.19	598.20

Notes:

Dry - No water present in well
ft. AMSL - Feet Above Mean Sea Level
* - Well obstructed

Table 3.3

2016 Overburden NAPL Presence Monitoring
Hyde Park Landfill Site
Town of Niagara, New York

Well I.D.	April 13-15, 2016 (Yes/No)
OMW-1	No
OMW-2	No
OMW-3	No
OMW-4R	No
OMW-5R	No
OMW-6	No
OMW-7	No
OMW-8R2	No
OMW-9	No
OMW-10R	No
OMW-11	No
OMW-12R	No
OMW-13R	No
OMW-14R	No
OMW-15	No
OMW-16R	No
MH-20	No
MH-21	No
MH-22	No
MH-23	No
MH-24	No
MH-25	No
MH-26	No
MH-27	No
MH-28	No
MH-29	Yes
MH-30	Yes
MH-31	Yes
MH-32	No
MH-33	No
MH-34	No
MH-35	No
MH-35A	No
Wet Well C	No
Wet Well D	Yes

Table 3.4

2016 Overburden Collection Systems Monthly Average Flow (gpm) Summary
Hyde Park Landfill Site
Town of Niagara, New York

Month	EBCS WET WELL A	OBCS WET WELL C	OBCS WET WELL D	Total EBCS	Total OBCS
January	0.3	4.9	16.1	0.3	21.0
February	1.1	11.5	23.8	1.1	35.4
March	1.5	12.8	38.1	1.5	50.9
April	1.5	13.2	30.5	1.5	43.6
May	0.2	7.7	4.2	0.2	11.8
June	0.0	1.4	1.9	0.0	3.3
July	0.0	0.2	1.2	0.0	1.4
August	0.00	0.5	1.6	0.0	2.1
September	0.00	0.4	1.7	0.0	2.1
October	0.00	1.9	3.0	0.0	4.9
November	0.00	1.8	3.2	0.0	5.0
December	0.00	3.0	4.3	0.0	7.3
Annual Average	0.4	4.9	10.8	0.4	15.7

Notes:

GPM - Gallons per minute
EBCS - Existing Barrier Collection System
OBCS - Overburden Barrier Collection System

Table 3.5

2016 Bedrock Quarterly Water Level Elevation Summary - Piezometers
Hyde Park Landfill Site
Town of Niagara, New York

Well	Reference Elevation (ft. AMSL)	Water Level Elevation Quarter 1 3/1/2016 (ft. AMSL)	Water Level Elevation Quarter 2 6/7/2016 (ft. AMSL)	Water Level Elevation Quarter 3 9/7/2016 (ft. AMSL)	Water Level Elevation Quarter 4 12/7/2016 (ft. AMSL)
Flow Zone 1					
G1U-01	617.08	604.38	603.67	598.63	597.39
G6-01	609.24	604.22	601.57	596.34	600.66
H2U-01	620.92	613.22	609.86	605.82	606.60
H5-01	617.61	597.72	595.10	592.49	592.50
I1-01	625.58	601.16	599.93	597.26	597.05
Flow Zone 2					
F2U-02	599.89	576.12	575.50	573.38	573.97
F4U-02	602.32	587.06	585.13	583.22	575.77
G1-02	616.86	593.14	591.62	588.10	588.85
G6-02	608.65	592.21	591.11	589.76	589.29
H2U-02	620.88	594.98	593.44	590.35	591.14
H5-02	617.47	594.56	593.38	590.34	591.13
I1-02	625.47	592.48	587.59	583.94	583.60
J2U-02	609.66	599.76	593.95	590.44	592.63
J5U-02	606.21	599.78	594.78	591.41	591.86
J6-02	609.23	601.42	594.28	591.69	593.15
Flow Zone 4					
AFW-2U-04	593.48	576.37	575.89	573.11	573.19
D1U-04	593.77	582.87	580.69	577.86	565.41
D2U-04	590.65	581.94	579.17	576.42	579.18
E6-04	578.23	566.89	565.58	565.42	577.63
F2U-04	599.76	578.65	577.75	575.37	575.77
F4U-04	602.19	586.47	584.52	582.15	583.09
F6-04	588.06	569.82	570.06	569.18	569.16
G1U-04	616.96	593.04	591.27	587.97	588.70
G6-04	609.15	592.59	591.46	588.96	589.67
H5-04	617.40	594.50	593.35	590.26	591.05
I1-04	625.30	589.21	585.21	581.89	581.78
J2U-04	609.42	596.50	591.26	588.20	583.45
J5U-04	606.05	588.82	585.26	583.13	589.39
J6-04	609.12	583.21	579.23	577.99	577.98
Flow Zone 5					
AFW-2U-05	593.33	576.33	575.94	573.01	573.04
AGW-1U-05	591.80	587.63	583.23	580.19	582.20
D1U-05	593.51	581.16	579.36	577.18	578.13
D2U-05	590.56	581.03	579.16	576.96	577.93
E6-05	578.04	566.91	565.59	565.43	576.16
F2U-05	599.64	579.00	577.87	575.71	565.43
F4U-05	602.06	586.76	580.87	578.86	579.96
F6-05	587.85	569.79	569.62	569.00	569.05
G6-05	609.13	592.18	591.19	588.63	589.34
H2M-05	621.59	592.98	591.99	588.36	588.64
H5-05	617.31	593.47	592.22	589.60	551.93
I1-05	625.25	552.38	553.54	553.43	590.26
J2U-05	609.30	581.42	577.47	576.23	576.30
J5U-05	605.87	581.44	577.48	576.25	576.28
J6-05	609.02	582.84	578.88	577.80	577.73
PMW-1U-05	598.00	578.88	577.52	576.49	576.93

Table 3.5

2016 Bedrock Quarterly Water Level Elevation Summary - Piezometers
Hyde Park Landfill Site
Town of Niagara, New York

Well	Reference Elevation (ft. AMSL)	Water Level Elevation Quarter 1 3/1/2016 (ft. AMSL)	Water Level Elevation Quarter 2 6/7/2016 (ft. AMSL)	Water Level Elevation Quarter 3 9/7/2016 (ft. AMSL)	Water Level Elevation Quarter 4 12/7/2016 (ft. AMSL)
Flow Zone 6					
ABP-7-06	575.78	Dry	Dry	Dry	Dry
AFW-1U-06	571.83	557.31	557.05	556.90	557.23
AFW-2U-06	593.22	545.18	545.14	545.04	545.00
AGW-1U-06	591.66	552.30	551.98	551.68	551.25
B2U-06	589.29	554.16	552.99	552.54	552.51
C3-06	585.78	548.34	Dry	Dry	Dry
D1U-06	593.25	546.94	547.40	546.27	545.96
D2U-06	590.38	548.02	548.51	547.25	547.00
E6-06	577.99	573.99	573.20	571.84	571.94
F2M-06	599.06	555.53	555.29	554.97	554.86
F4M-06	602.05	553.37	552.77	552.26	572.01
F6-06	587.84	573.94	573.18	571.85	557.85
G1M-06	616.75	573.96	573.40	571.96	571.91
G6-06	609.09	575.63	575.27	573.27	573.19
H2M-06	621.42	562.68	564.73	558.89	562.00
H5-06	617.17	590.34	591.23	589.81	549.66
I1-06	625.15	549.87	549.86	549.71	545.80
J2M-06	608.94	554.70	553.30	553.76	589.77
J5M-06	606.22	547.03	547.17	546.30	552.36
J6-06	608.93	555.24	555.88	555.22	554.86
PMW-1U-06	597.92	546.71	547.53	546.50	546.25
Flow Zone 7					
ABP-1-07	576.44	548.21	547.40	547.03	547.37
ABP-7-07	575.73	534.20	533.90	533.65	534.05
AFW-1M-07	571.41	Dry	Dry	Dry	Dry
AFW-2M-07	593.44	526.61	526.63	526.62	526.61
AGW-1M-07	592.91	549.58	550.03	554.68	544.18
B2M-07	589.52	533.45	532.34	531.61	531.91
C3-07	585.62	545.03	542.38	539.11	538.83
D1M-07	594.15	531.45	531.61	530.53	531.04
D2M-07	590.77	525.38	526.25	524.95	525.05
E6-07	577.91	554.28	554.39	554.13	554.71
F2M-07	598.91	518.13	518.08	516.96	516.66
F4M-07	601.91	531.24	530.59	528.62	527.95
F6-07	587.68	567.35	567.42	567.16	567.27
G1M-07	616.68	584.76	582.43	576.71	576.31
G6-07	609.06	584.29	582.17	577.31	576.47
H5-07	617.05	554.28	555.08	554.39	554.38
I1-07	625.14	550.02	548.42	552.23	542.97
J5M-07	606.07	549.95	549.38	553.36	543.66
J6-07	608.85	550.44	548.02	551.66	543.64
PMW-1M-07	598.50	530.18	530.01	530.41	529.41

Table 3.5

2016 Bedrock Quarterly Water Level Elevation Summary - Piezometers
Hyde Park Landfill Site
Town of Niagara, New York

Well	Reference Elevation (ft. AMSL)	Water Level Elevation Quarter 1 3/1/2016 (ft. AMSL)	Water Level Elevation Quarter 2 6/7/2016 (ft. AMSL)	Water Level Elevation Quarter 3 9/7/2016 (ft. AMSL)	Water Level Elevation Quarter 4 12/7/2016 (ft. AMSL)
Flow Zone 9					
ABP-1-09	575.49	534.84	534.65	534.62	534.31
ABP-7-09	575.67	533.75	532.80	531.45	524.70
AFW-1M-09	571.12	526.24	525.40	524.60	532.19
AFW-2M-09	593.32	521.04	521.10	521.13	544.56
AGW-1M-09	592.75	549.95	549.93	554.27	521.09
B2M-09	589.34	529.53	-	-	-
C3-09	585.00	542.47	541.23	538.48	538.26
D1M-09	594.02	517.77	517.36	517.31	516.62
D2M-09	590.66	517.66	517.31	516.24	516.08
E6-09	577.82	553.24	553.91	552.90	553.33
F2M-09	598.71	517.41	517.17	516.02	515.93
F4M-09	601.79	517.30	517.06	515.98	515.83
F6-09	587.53	572.87	572.84	572.45	571.73
G1M-09	616.58	580.68	581.30	577.31	575.23
G6-09	608.98	585.34	583.02	577.79	576.96
H2M-09	621.32	549.13	550.72	552.67	545.77
H5-09	616.93	549.88	547.70	551.12	543.56
I1-09	624.91	562.72	563.32	562.26	562.42
J2M-09	608.77	550.65	548.21	551.77	544.55
J5M-09	605.82	550.50	549.02	552.65	544.05
J6-09	608.76	569.69	564.32	564.67	562.54
PMW-1M-09	598.34	517.63	517.32	516.15	516.10
Flow Zone 11					
AFW-1L-11	572.10	512.49	507.22	504.93	505.87
AFW-2L-11	593.43	496.47	496.05	494.85	494.70
AGW-1L-11	592.71	580.02	580.04	579.93	580.28
B2L-11	589.65	501.60	499.02	499.93	504.57
D1L-11	593.80	504.50	504.65	503.87	503.99
D2L-11	590.21	517.72	519.62	517.68	517.40
E6-11	577.72	536.65	536.43	533.71	532.98
F2L-11	598.94	558.37	558.79	538.83	554.03
F4L-11	602.22	578.13	579.24	574.80	527.72
F6-11	587.40	529.89	530.98	528.72	575.92
G1L-11	616.84	558.24	579.47	571.03	555.73
G6-11	608.89	561.10	580.71	572.78	568.55
H2L-11	620.73	555.64	555.80	556.02	570.54
H5-11	616.81	546.20	546.07	546.49	544.43
I1-11	624.75	547.87	548.84	548.71	548.80
J5L-11	607.20	547.21	550.83	550.37	546.93
J6-11	608.68	585.15	585.95	584.12	583.76
PMW-1L-11	598.84	511.21	510.62	511.65	511.40

Notes:

ft. AMSL - Feet Above Mean Sea Level
\- - Not available due to obstruction

Table 3.6

2016 Bedrock Purge Well Monthly Flow Rate (gpm) Summary
Hyde Park Landfill Site
Town of Niagara, New York

Month	PW-1U	PW-1L	PW-2UR	PW-2M	PW-2L	PW-3M	PW-3L	PW-4U	PW-4M [(1)]	PW-5UR	PW-6UR	PW-6MR
January	0.26	0.76	0.82	9.23	0.31	0.09	2.52	0.10	0.48	3.54	0.37	2.65
February	0.29	0.91	0.85	9.78	0.44	0.07	2.49	0.12	0.22	3.64	0.45	2.63
March	0.29	1.92	0.91	11.26	0.53	0.08	2.60	0.16	0.05	3.81	0.56	2.96
April	0.31	2.79	0.92	12.27	0.51	0.09	2.71	0.15	0.21	3.84	0.60	3.05
May	0.20	1.62	0.82	11.24	0.33	0.08	2.51	0.11	0.22	3.54	0.48	3.18
June	0.19	0.69	0.69	10.02	0.28	0.07	2.33	0.08	0.35	3.51	0.38	2.78
July	0.14	0.59	0.53	8.38	0.22	0.06	2.09	0.05	0.26	3.26	0.23	2.58
August	0.15	0.61	0.59	7.78	0.20	0.07	2.12	0.04	0.10	2.93	0.16	2.20
September	0.29	0.62	0.55	7.96	0.20	0.07	2.01	0.04	0.39	2.75	0.07	2.42
October	0.12	0.63	0.51	7.59	0.17	0.08	1.99	0.03	0.33	2.57	0.19	2.07
November	0.18	0.63	0.52	8.10	0.21	0.08	2.10	0.04	0.24	2.68	0.23	2.32
December	0.12	0.62	0.53	8.30	0.23	0.08	1.24	0.05	0.34	2.71	0.25	2.50
Annual Average	0.21	1.03	0.69	9.33	0.30	0.08	2.23	0.08	0.26	3.23	0.33	2.61

Month	PW-7U	PW-8M [(1)]	PW-8U	PW-9U	PW-10U	APW-1	APW-2
January	0.48	0.00	0.01	0.62	0.96	0.03	0.01
February	0.50	0.01	0.31	0.73	2.92	0.36	0.12
March	0.52	0.00	0.50	0.81	3.24	0.56	0.11
April	0.51	0.00	0.75	0.74	3.42	0.21	0.24
May	0.46	0.00	0.00	0.59	3.05	0.10	0.00
June	0.43	0.00	0.00	0.48	2.75	0.00	0.00
July	0.40	0.00	0.00	0.38	2.61	0.00	0.00
August	0.37	0.00	0.00	0.39	2.54	0.00	0.00
September	0.36	0.00	0.00	0.50	2.51	0.00	0.00
October	0.35	0.00	0.00	0.47	2.44	0.01	0.00
November	0.38	0.00	0.00	0.32	2.38	0.01	0.00
December	0.37	0.00	0.00	0.36	2.33	0.01	0.00
Annual Average	0.43	0.00	0.13	0.53	2.60	0.11	0.04

Notes:

GPM - Gallons per minute

(1) - PW-4M and PW-8M typically run at set point and do not require frequent pumping

Table 3.7a

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
First Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-7-09	AGW-1M-07	AGW-1M-09	AGW-1U-06	B2L-11
Sample ID:			ABP-7-09-0216	AGW-1M-07-0216	AGW-1M-09-0216	AGW-1U-06-0216	B2L-11-0216
Sample Date:			02/03/2016	02/03/2016	02/03/2016	02/03/2016	02/02/2016
Parameters	**Units**	**Screening Level**					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	13 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	32 J	41 J	**130 J**	**180 J**	**140 J**

Sample Location:			C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:			C3-07-0216	C3-09-0216	D1M-09-0216	D1U-04-0216	D1U-05-0216
Sample Date:			02/02/2016	02/02/2016	02/03/2016	02/03/2016	02/03/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	24 J	31 J	**180 J**	21 J	**71 J**

Sample Location:			F2M-09	F2U-02	F2U-04	G1U-01	G6-01
Sample ID:			F2M-09-0216	F2U-02-0216	F2U-04-0216	G1U-01-0216	G6-01-0216
Sample Date:			02/02/2016	02/02/2016	02/02/2016	02/03/2016	02/02/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	24 J	**230 J**	**390**	250 U	12 J

Sample Location:			G6-01	G6-04	G6-06	H2U-02	H5-09
Sample ID:			W7-10-0216	G6-04-0216	G6-06-0216	H2U-02-0216	H5-09-0216
Sample Date:			02/02/2016 Duplicate	02/02/2016	02/02/2016	02/03/2016	02/03/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	340	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	2000	30 U	23 J	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	1200	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	14 J	**120 J**	250 U	**100 J**	**100 J**

Notes:

µg/L - Micrograms per liter
J - Estimated concentration
U - Not detected at the associated reporting limit
0.3 - Concentration exceeds Screening Level

Table 3.7b

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-7-09	AGW-1M-07	AGW-1M-09	AGW-1U-06	B2L-11
Sample ID:			ABP-7-09-0516	AGW-1M-07-0516	AGW-1M-09-0516	AGW-1U-06-0516	B2L-11-0516
Sample Date:			05/18/2016	05/17/2016	05/17/2016	05/17/2016	05/18/2016
Parameters	**Units**	**Screening Level**					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	16 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	43 J	250 U	**120 J**	**120 J**	**120 J**

Sample Location:			C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:			C3-07-0516	C3-09-0516	D1M-09-0516	D1U-04/0516	D1U-05-0516
Sample Date:			05/18/2016	05/18/2016	05/17/2016	05/17/2016	05/17/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	16 J	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	**120**	250 U	**220 J**	14 J	**60 J**

Sample Location:			F2M-09	F2U-02	F2U-04	G1U-01	G6-01
Sample ID:			F2M-09-0516	F2U-02/0516	F2U-04/0516	G1U-01-0516	G6-01-0516
Sample Date:			05/17/2016	05/17/2016	05/17/2016	05/18/2016	05/17/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	13 J	**200 J**	**380**	250 U	250 U

Sample Location:			G6-01	G6-04	G6-06	H2U-02	H5-09
Sample ID:			W7-10-0516	G6-04-0516	G6-06-0516	H2U-02-0516	H5-09-0516
Sample Date:			05/17/2016	05/17/2016	05/17/2016	05/18/2016	05/18/2016
			Duplicate				
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	590	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	3200	30 U	13 J	230
4-Chlorobenzoic acid	µg/L	7,300	300 U	2100	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	**150 J**	250 U	**82 J**	**110 J**

Notes:

µg/L - Micrograms per liter
J - Estimated concentration
U - Not detected at the associated reporting limit
- - Data not available
0.3 - Concentration exceeds Screening Level

Table 3.7c

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Third Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-7-09	AGW-1M	AGW-1M-09	AGW-1U	B2L-11
Sample ID:			ABP-7-09-0816	AGW-1M-07-0816	AGW-1M-09-0816	AGW-1U-06-0816	B2L-11-0816
Sample Date:			08/25/2016	08/16/2016	08/16/2016	08/16/2016	08/30/2016
Parameters	**Units**	**Screening Level**					--
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 UJ	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 UJ	30 U	30 U	15 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 UJ	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 UJ	100 U	100 U	100 U
Chlorendic acid	µg/L	50	30 J	36 J	**110 J**	**190 J**	**180 J**

Sample Location:			C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:			C3-07-0816	C3-09-0816	D1M-09-0816	D1U-04-0816	D1U-05-0816
Sample Date:			08/15/2016	08/15/2016	08/19/2016	08/19/2016	08/19/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	15 J	16 J	**210 J**	250 U	**79 J**

Sample Location:			F2M-09	F2U-02	F2U-04	G1U-01	G6-01
Sample ID:			F2M-09-0816	F2U-04-0816	Z7-10-0816	G1U-01-0816	G6-01-0816
Sample Date:			08/29/2016	08/29/2016	08/29/2016	08/18/2016	08/15/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	20 J	**410**	**390**	250 U	250 U

Sample Location:			G6-04	G6-06	H2U-02	H5-09
Sample ID:			G6-04-0816	G6-06-0816	H2U-02-0816	H5-09-0816
Sample Date:			08/15/2016	08/15/2016	08/30/2016	08/18/2016
Organic Acids						
2-Chlorobenzoic acid	µg/L	7,300	360	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	1800	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	560	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	**91 J**	250 U	**94 J**	**110 J**

Notes:

µg/L -Micrograms per liter
J -Estimated concentration
U - Not detected at the associated reporting limit
0.3 - Concentration exceeds Screening Level

Table 3.7d

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Fourth Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-7-09	AGW-1M-07	AGW-1M-09	AGW-1U-06	B2L-11
Sample ID:			ABP-7-09-1116	AGW-1M-07-1116	AGW-1M-09-1116	AGW-1U-06-1116	B2L-11-1116
Sample Date:			11/17/2016	11/16/2016	11/16/2016	11/16/2016	11/17/2016
Parameters	**Units**	**Screening Level**					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	16 J
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	14 J	45 J	**170 J**	**160 J**	**110 J**

Sample Location:			C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:			C3-07-1116	C3-09-1116	D1M-09-1116	D1U-04-1116	D1U-05-1116
Sample Date:			11/16/2016	11/16/2016	11/16/2016	11/16/2016	11/16/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	17 J	24 J	**200 J**	15 J	**95 J**

Sample Location:			F2M-09	F2U-02	F2U-04	G1U-01	G6-01
Sample ID:			F2M-09-1116	F2U-02-1116	F2U-04-1116	G1U-01-1116	G6-01-1116
Sample Date:			11/16/2016	11/16/2016	11/16/2016	11/17/2016	11/16/2016
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	20 J	**300**	**430**	250 U	13 J

Sample Location:			G6-01	G6-04	G6-06	H2U-02	H5-09
Sample ID:			W7-10-1116	G6-04-1116	G6-06-1116	H2U-02-1116	H5-09-1116
Sample Date:			11/16/2016	11/16/2016	11/16/2016	11/17/2016	11/17/2016
			Duplicate				
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	300	26 J	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	1500	110	12 J	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	1400	200	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	15 J	**86 J**	250 U	**98 J**	**85 J**

Notes:

µg/L - Micrograms per liter
J - Estimated concentration
U - Not detected at the associated reporting limit
0.3 - Concentration exceeds Screening Level

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-1-09	ABP-7-09	AFW-1L-11	AFW-2U-04	AFW-2U-05	AGW-1M
Sample ID:			ABP-1-09-0816	ABP-7-09-0816	AFW-1L-11-0816	AFW-2U-04-0816	AFW-2U-05-0816	AGW-1M-07-0816
Sample Date:			08/30/2016	08/25/2016	08/27/2016	08/27/2016	08/27/2016	08/16/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.52 J
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.55 J
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1
1,4-Dichlorobenzene	µg/L	75	1.0 U	0.59 J	1.0 U	1.0 U	1.0 U	1.1
2-Chlorotoluene	µg/L	120	1.0 U	2.1	1.0 U	1.0 U	1.0 U	2.6
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	11	1.0 U	1.0 U	1.0 U	8.3
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	0.28 J	1.0 U	0.56 J	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.88 J
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	0.51 J	1.0 U	1.0 U	1.0 U	2.9
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-1-09	ABP-7-09	AFW-1L-11	AFW-2U-04	AFW-2U-05	AGW-1M
Sample ID:			ABP-1-09-0816	ABP-7-09-0816	AFW-1L-11-0816	AFW-2U-04-0816	AFW-2U-05-0816	AGW-1M-07-0816
Sample Date:			08/30/2016	08/25/2016	08/27/2016	08/27/2016	08/27/2016	08/16/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	4.8 J	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-1-09	ABP-7-09	AFW-1L-11	AFW-2U-04	AFW-2U-05	AGW-1M
Sample ID:			ABP-1-09-0816	ABP-7-09-0816	AFW-1L-11-0816	AFW-2U-04-0816	AFW-2U-05-0816	AGW-1M-07-0816
Sample Date:			08/30/2016	08/25/2016	08/27/2016	08/27/2016	08/27/2016	08/16/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 UJ
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 UJ
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 UJ
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 UJ
Chlorendic acid	µg/L	50	0.25 U	0.030 J	0.25 U	0.25 U	0.25 U	0.036 J
General Chemistry								
Sulfate	mg/L	NA	1680	281	181	81.2	192	1640

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			AGW-1M-09	AGW-1U	AGW-1U-05	B2L-11	C3-07	C3-09
Sample ID:			AGW-1M-09-0816	AGW-1U-06-0816	AGW-1U-05-0816	B2L-11-0816	C3-07-0816	C3-09-0816
Sample Date:			08/16/2016	08/16/2016	08/16/2016	08/30/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	0.35 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.4	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	5.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	3.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	32	1.0 U	1.0 U	1.2	1.0 U	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	0.37 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	1.0 U	**27**	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	39	1.0 U	0.48 J	5.0	0.70 J	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	0.71 J	1.4	0.62 J	0.52 J	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	4.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	8.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	0.54 J	1.0 U	1.0 U	0.36 J	0.23 J	0.23 J

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			AGW-1M-09	AGW-1U	AGW-1U-05	B2L-11	C3-07	C3-09
Sample ID:			AGW-1M-09-0816	AGW-1U-06-0816	AGW-1U-05-0816	B2L-11-0816	C3-07-0816	C3-09-0816
Sample Date:			08/16/2016	08/16/2016	08/16/2016	08/30/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	0.84 J	2.0	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	1.2 J	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	1.3 J	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 UJ	9.4 UJ	9.4 UJ	2.0 J	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			AGW-1M-09	AGW-1U	AGW-1U-05	B2L-11	C3-07	C3-09
Sample ID:			AGW-1M-09-0816	AGW-1U-06-0816	AGW-1U-05-0816	B2L-11-0816	C3-07-0816	C3-09-0816
Sample Date:			08/16/2016	08/16/2016	08/16/2016	08/30/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 UJ	4.7 UJ	4.7 UJ	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 UJ	9.4 UJ	9.4 UJ	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.015 J	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.11 J	0.19 J	0.25 U	0.18 J	0.015 J	0.016 J
General Chemistry								
Sulfate	mg/L	NA	1650	405	191	1400	179	189

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			D1L-11	D1M-09	D1U-04	D1U-05	D2M-09	D2U-04
Sample ID:			D1L-11-0816	D1M-09-0816	D1U-04-0816	D1U-05-0816	D2M-09-0816	D2U-04-0816
Sample Date:			08/29/2016 (Duplicate)	08/19/2016	08/19/2016	08/19/2016	08/29/2016	08/29/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	0.69 J	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	4.8	1.0 U	1.0 U	0.21 J	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.6	1.0 U	1.0 U	0.25 J	1.0 U
2-Chlorotoluene	µg/L	120	0.22 J	7.7	1.0 U	1.0 U	1.2	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	0.41 J	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	**97**	3.2	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	21	1.0 U	0.83 J	4.6	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	0.55 J	1.0 U	1.0 U	0.96 J	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	0.46 J	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	0.69 J	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	2.3	0.41 J	1.0 U	0.21 J	0.20 J	1.0 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			D1L-11	D1M-09	D1U-04	D1U-05	D2M-09	D2U-04
Sample ID:			D1L-11-0816	D1M-09-0816	D1U-04-0816	D1U-05-0816	D2M-09-0816	D2U-04-0816
Sample Date:			08/29/2016 (Duplicate)	08/19/2016	08/19/2016	08/19/2016	08/29/2016	08/29/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	0.62 J	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.5	1.3	3.6	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	0.52 J	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	21	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	1.7 J	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	1.5 J	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			D1L-11	D1M-09	D1U-04	D1U-05	D2M-09	D2U-04
Sample ID:			D1L-11-0816	D1M-09-0816	D1U-04-0816	D1U-05-0816	D2M-09-0816	D2U-04-0816
Sample Date:			08/29/2016 (Duplicate)	08/19/2016	08/19/2016	08/19/2016	08/29/2016	08/29/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	10	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.0085 J	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.25 U	0.21 J	0.25 U	0.079 J	0.16 J	0.034 J
General Chemistry								
Sulfate	mg/L	NA	978	1320	110	178	1090	144

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			D2U-05	E6-04	E6-05	E6-06	E6-09	E6-11
Sample ID:			D2U-05-0816	E6-04-0816	E6-05-0816	E6-06-0816	E6-09-0816	E6-11-0816
Sample Date:			08/29/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	0.69 J	0.26 J
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.24 J
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	0.36 J	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	**110**	**39**
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	1.0 U	4.9	0.22 J	1.8	0.36 J	0.26 J
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	0.36 J	1.0 U	1.0 U	1.0 U	7.1	4.3
cis-1,2-Dichloroethene	µg/L	70	1.0 U	1.0 U	1.0 U	3.5	0.36 J	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	1.0 U	1.0 U	2.6	1.2
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	1.0 U	1.0 U	1.0 U	1.0 U	53	14

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			D2U-05	E6-04	E6-05	E6-06	E6-09	E6-11
Sample ID:			D2U-05-0816	E6-04-0816	E6-05-0816	E6-06-0816	E6-09-0816	E6-11-0816
Sample Date:			08/29/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	0.76 J	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	0.41 J	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	3.0 U	3.0 U	65	18
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	19 U	9.4 U	9.4 U	2.9 J	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	94 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	94 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	94 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	**220 J**	1.5 J	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			D2U-05	E6-04	E6-05	E6-06	E6-09	E6-11
Sample ID:			D2U-05-0816	E6-04-0816	E6-05-0816	E6-06-0816	E6-09-0816	E6-11-0816
Sample Date:			08/29/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	9.4 UJ	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	94 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	19 U	9.4 U	9.4 U	9.3 J	9.4 U
Pyrene	µg/L	180	9.4 U	19 UJ	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.11 J	0.25 U	0.25 U	0.25 U	0.25 U	0.019 J
General Chemistry								
Sulfate	mg/L	NA	344	1650	1660	1610	1110	1730

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F2L-11	F2M-09	F2U-04	F2U-04	F6-04	F6-06
Sample ID:			F2L-11-0816	F2M-09-0816	F2U-04-0816	Z7-10-0816	F6-04-0816	F6-06-0816
Sample Date:			08/29/2016	08/29/2016	08/29/2016	08/29/2016	08/11/2016	08/11/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	0.26 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	**25**	0.73 J	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	8.2	8.1	1.0 U	1.0 U	1.9	2.1
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	0.40 J	1.0 U	0.30 J	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	0.81 J	1.0 U	1.0 U	1.0 U	2.2
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.3	0.31 J	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	12	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F2L-11	F2M-09	F2U-04	F2U-04	F6-04	F6-06
Sample ID:			F2L-11-0816	F2M-09-0816	F2U-04-0816	Z7-10-0816	F6-04-0816	F6-06-0816
Sample Date:			08/29/2016	08/29/2016	08/29/2016	08/29/2016	08/11/2016	08/11/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.58 J
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	16	0.95 J	3.0 U	3.0 U	3.0 U	1.2 J
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F2L-11	F2M-09	F2U-04	F2U-04	F6-04	F6-06
Sample ID:			F2L-11-0816	F2M-09-0816	F2U-04-0816	Z7-10-0816	F6-04-0816	F6-06-0816
Sample Date:			08/29/2016	08/29/2016	08/29/2016	08/29/2016	08/11/2016	08/11/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.25 U	0.020 J	0.41	0.39	0.25 U	0.25 U
General Chemistry								
Sulfate	mg/L	NA	63.9	1440	137	137	467	1510

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F6-11	G1L-11	G1M-06	G1U-01	G6-01	G6-02
Sample ID:			F6-11-0816	G1L-11-0816	G1M-06-0816	G1U-01-0816	G6-01-0816	G6-02-0816
Sample Date:			08/11/2016	08/18/2016	08/18/2016	08/18/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	**4.0**	**3.3**
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	0.60 J	0.60 J
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	0.73 J	1.0
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J	0.26 J
2-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	0.61 J	0.56 J
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	**28**	**110**	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	0.27 J	0.28 J	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.6
Chloroethane	µg/L	3.6	1.0 U	0.98 J	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	5.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	0.92 J	1.0 U	5.7	37	55
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	6.6	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.2
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	2.1	1.9
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	0.44 J	1.0 U	8.3	7.7
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	**16**	**16**
Toluene	µg/L	1000	0.24 J	1.2	1.0 U	1.0 U	1.0 U	1.0 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			**F6-11**	**G1L-11**	**G1M-06**	**G1U-01**	**G6-01**	**G6-02**
Sample ID:			**F6-11-0816**	**G1L-11-0816**	**G1M-06-0816**	**G1U-01-0816**	**G6-01-0816**	**G6-02-0816**
Sample Date:			**08/11/2016**	**08/18/2016**	**08/18/2016**	**08/18/2016**	**08/15/2016**	**08/15/2016**
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	0.59 J	3.4	5.1
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	0.40 J	0.48 J	3.8	**65**	**82**
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	0.42 J	1.0 U	1.0 U	**3.9**	**6.8**
Xylenes (total)	µg/L	10000	3.0 U	57	3.0 U	3.0 U	3.0 U	3.0 U
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	2.3 J	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F6-11	G1L-11	G1M-06	G1U-01	G6-01	G6-02
Sample ID:			F6-11-0816	G1L-11-0816	G1M-06-0816	G1U-01-0816	G6-01-0816	G6-02-0816
Sample Date:			08/11/2016	08/18/2016	08/18/2016	08/18/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.015 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
General Chemistry								
Sulfate	mg/L	NA	2130	1650	1300	125	116	106

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			G6-04	G6-05	G6-06	G6-07	G6-11	G6-11
Sample ID:			G6-04-0816	G6-05-0816	G6-06-0816	G6-07-0816	G6-11-0816	X7-10-0816
Sample Date:			08/15/2016	08/15/2016	08/15/2016	08/15/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	2.6	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	**4.5**	**110**	**0.78 J**	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	0.77 J	**17**	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	0.96 J	5.3	0.24 J	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	0.64 J	3.0	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	0.29 J	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	0.55 J	0.52 J	1.0 U	1.0 U	0.40 J	0.60 J
3-Chlorotoluene	µg/L	120	0.51 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J	0.52 J
Benzene	µg/L	5	**23**	**280**	1.0 U	1.0 U	**110**	**110**
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	1.0 U	8.7	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.9	18	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	0.65 J	0.73 J
Chloroform (Trichloromethane)	µg/L	80	9.2	**490**	2.1	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	1.0 U	1.0 U	10	10
cis-1,2-Dichloroethene	µg/L	70	33	**120**	5.1	1.0 U	4.3	4.6
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.2	1.0 U	1.0 U	6.9	7.3
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.2	1.0 U	1.0 U	1.0 U	0.23 J	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.7	0.26 J	1.0 U	1.0 U	0.35 J	0.42 J
p-Monochlorobenzotrifluoride	µg/L	50	7.4	0.64 J	0.68 J	0.30 J	1.2	1.3
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	0.23 J	1.0 U
Tetrachloroethene	µg/L	5	**11**	4.3	1.2	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	0.46 J	8.6	1.0 U	1.0 U	4.1	4.4

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			**G6-04**	**G6-05**	**G6-06**	**G6-07**	**G6-11**	**G6-11**
Sample ID:			**G6-04-0816**	**G6-05-0816**	**G6-06-0816**	**G6-07-0816**	**G6-11-0816**	**X7-10-0816**
Sample Date:			**08/15/2016**	**08/15/2016**	**08/15/2016**	**08/15/2016**	**08/15/2016**	**08/15/2016**
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	9.8	38	0.60 J	1.0 U	0.82 J	0.88 J
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	**48**	**280**	**7.9**	0.66 J	2.2	2.1
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	**12**	**70**	1.0 U	1.0 U	0.59 J	0.78 J
Xylenes (total)	µg/L	10000	3.0 U	5.8	3.0 U	3.0 U	44	46
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	2.0 J	2.0 J
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			G6-04	G6-05	G6-06	G6-07	G6-11	G6-11
Sample ID:			G6-04-0816	G6-05-0816	G6-06-0816	G6-07-0816	G6-11-0816	X7-10-0816
Sample Date:			08/15/2016	08/15/2016	08/15/2016	08/15/2016	08/15/2016	08/15/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.36	2.2	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	1.8	9.5	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.56	19	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.091 J	0.55 J	0.25 U	0.25 U	0.25 U	0.25 U
General Chemistry								
Sulfate	mg/L	NA	180	1180	270	296	1640	1650

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-02
Sample ID:			H2M-06-0816	H2M-09-0816	H2U-01-0816	H2U-02-0816	H5-02-0816	Y7-10-0816
Sample Date:			08/30/2016	08/30/2016	08/30/2016	08/30/2016	08/18/2016	08/18/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	10 U	1.0 U	1.0 U	2.6	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	10 U	2.4	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	10 U	1.8	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	10 U	1.0 U	1.0 U	0.43 J	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	10 U	1.7	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	10 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	10 U	25	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	120	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	10 U	**43**	1.0 U	4.1	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	55	1.0 U	1.0 U	1.0 U	0.27 J	0.35 J
Carbon tetrachloride	µg/L	5	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	10 U	13	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	3.6	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	9.8 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	16	1.6	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	10 U	0.78 J	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	10 U	3.6	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	10 U	8.8	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	10 U	15	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	10 U	0.48 J	1.0 U	1.0 U	0.45 J	0.38 J

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-02
Sample ID:			H2M-06-0816	H2M-09-0816	H2U-01-0816	H2U-02-0816	H5-02-0816	Y7-10-0816
Sample Date:			08/30/2016	08/30/2016	08/30/2016	08/30/2016	08/18/2016	08/18/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	10	1.5	1.0 U	0.67 J	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	**7.6 J**	3.1	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	10 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	30 U	4.8	3.0 U	3.0 U	3.0 U	3.0 U
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-02
Sample ID:			H2M-06-0816	H2M-09-0816	H2U-01-0816	H2U-02-0816	H5-02-0816	Y7-10-0816
Sample Date:			08/30/2016	08/30/2016	08/30/2016	08/30/2016	08/18/2016	08/18/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	3.8 J	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.033	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.29	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.019 J	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.25	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.033 J	0.028 J	0.25 U	0.094 J	0.25 U	0.25 U
General Chemistry								
Sulfate	mg/L	NA	1740 J	1720	119	206	164	162

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			H5-04	H5-05	H5-07	H5-09	I1-01	I1-02
Sample ID:			H5-04-0816	H5-05-0816	H5-07-0816	H5-09-0816	I1-01-0816	I1-02-0816
Sample Date:			08/18/2016	08/18/2016 (Duplicate)	08/18/2016	08/18/2016	08/25/2016	08/25/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	0.37 J	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	2.3	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	5.9	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	2.2	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	24	1.0 U	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	0.58 J	**26**	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	0.33 J	0.23 J	1.9	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	1.0 U	1.0 U	29	1.0 U	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	1.0 U	1.0 U	0.93 J	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	1.0 U	0.91 J	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	3.5	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	7.2	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	9.8	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	0.37 J	1.0 U	1.0 U	8.2	1.0 U	1.0 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			H5-04	H5-05	H5-07	H5-09	I1-01	I1-02
Sample ID:			H5-04-0816	H5-05-0816	H5-07-0816	H5-09-0816	I1-01-0816	I1-02-0816
Sample Date:			08/18/2016	08/18/2016 (Duplicate)	08/18/2016	08/18/2016	08/25/2016	08/25/2016
Parameters	**Units**	**Screening Level**						
Volatile Organic Compounds (Continued)								
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.4	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	0.85 J	6.3	3.0 U	3.0 U
Semi-volatile Organic Compounds								
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	1.8 J	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			H5-04	H5-05	H5-07	H5-09	I1-01	I1-02
Sample ID:			H5-04-0816	H5-05-0816	H5-07-0816	H5-09-0816	I1-01-0816	I1-02-0816
Sample Date:			08/18/2016	08/18/2016 (Duplicate)	08/18/2016	08/18/2016	08/25/2016	08/25/2016
Parameters	**Units**	**Screening Level**						
Semi-volatile Organic Compounds (Continued)								
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid								
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.25 U	0.25 U	0.25 U	0.11 J	0.25 U	0.25 U
General Chemistry								
Sulfate	mg/L	NA	1050	1500	1890	1560	286	293

Table 3.8

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			**I1-04**	**I1-07**	**J6-02**	**J6-04**	**J6-05**	**J6-07**	**J6-11**
Sample ID:			**I1-04-0816**	**I1-07-0816**	**J6-02-0816**	**J6-04-0816**	**J6-05-0816**	**J6-07-0816**	**J6-11-0816**
Sample Date:			**08/25/2016**	**08/25/2016**	**08/16/2016**	**08/16/2016**	**08/16/2016**	**08/16/2016**	**08/16/2016**
Parameters	**Units**	**Screening Level**							
Volatile Organic Compounds									
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	0.26 J	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**86**
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	0.89 J	1.0 U	1.0 U	1.0 U	12	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	0.23 J	1.0 U	1.0 U	1.0 U	11
cis-1,2-Dichloroethene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.91 J	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.7
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.55 J	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.90 J	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	0.34 J	0.27 J

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			I1-04	I1-07	J6-02	J6-04	J6-05	J6-07	J6-11
Sample ID:			I1-04-0816	I1-07-0816	J6-02-0816	J6-04-0816	J6-05-0816	J6-07-0816	J6-11-0816
Sample Date:			08/25/2016	08/25/2016	08/16/2016	08/16/2016	08/16/2016	08/16/2016	08/16/2016
Parameters	**Units**	**Screening Level**							
Volatile Organic Compounds (Continued)									
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	9.6
Semi-volatile Organic Compounds									
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U

Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Second Quarter 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			I1-04	I1-07	J6-02	J6-04	J6-05	J6-07	J6-11
Sample ID:			I1-04-0816	I1-07-0816	J6-02-0816	J6-04-0816	J6-05-0816	J6-07-0816	J6-11-0816
Sample Date:			08/25/2016	08/25/2016	08/16/2016	08/16/2016	08/16/2016	08/16/2016	08/16/2016
Parameters	**Units**	**Screening Level**							
Semi-volatile Organic Compounds (Continued)									
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Organic Acid									
2-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
3-Chlorobenzoic acid	µg/L	7300	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
4-Chlorobenzoic acid	µg/L	7300	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Benzoic acid	µg/L	150000	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chlorendic acid	µg/L	50	0.25 U	0.052 J	0.25 U	0.25 U	0.25 U	0.11 J	0.25 U
General Chemistry									
Sulfate	mg/L	NA	333	1400	102	114	207	1720	1740

Notes:

mg/L - Milligrams per liter
µg/L - Micrograms per liter
J - Estimated concentration
NA - Not available
U - Not detected at the associated reporting limit
R - Data Rejected
Value exceeds associated screening level

Table 3.9

Analytical Results Summary
5-Year Bloody Run Sampling
July 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			**BR-1**	**BR-2**	**BR-3**	**BR-4**
Sample ID:			**BR-1-0716**	**BR-2-0716**	**BR-3-0716**	**BR-4-0716**
Sample Date:			**7/13/2016**	**7/13/2016**	**7/13/2016**	**7/13/2016**
Parameters	**Units**	**Screening Level**				
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	24	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	0.32 J	1.0 U	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	1.0 U	1	1.0 U	1.4
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	1.0 U	1.0 U	0.46 J
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.1	0.84 J	1.0 U	0.80 J
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	0.30 J	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	**70**	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	µg/L	2	0.49 J	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	3.0 U	3.0 U

Table 3.9

Analytical Results Summary
5-Year Bloody Run Sampling
July 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			**BR-1**	**BR-2**	**BR-3**	**BR-4**
Sample ID:			**BR-1-0716**	**BR-2-0716**	**BR-3-0716**	**BR-4-0716**
Sample Date:			**7/13/2016**	**7/13/2016**	**7/13/2016**	**7/13/2016**
Parameters	**Units**	**Screening Level**				
Semi-volatile Organic Compounds						
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	73	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	9.4 U	9.4 U	9.4 U	9.4 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	9.4 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	4.7 U	4.7 U	4.7 U	4.7 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.4 U

Table 3.9

Analytical Results Summary
5-Year Bloody Run Sampling
July 2016
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			**BR-1**	**BR-2**	**BR-3**	**BR-4**
Sample ID:			**BR-1-0716**	**BR-2-0716**	**BR-3-0716**	**BR-4-0716**
Sample Date:			**7/13/2016**	**7/13/2016**	**7/13/2016**	**7/13/2016**
Parameters	**Units**	**Screening Level**				
Organic Acid						
2-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	**250**	**75 J**	**320**
General Chemistry						
Sulfate	mg/L	NA	268	363	234	244

Notes:

mg/L - Milligrams per liter
µg/L - Micrograms per liter
J - Estimated concentration
NA - Not available
U - Not detected at the associated reporting limit
R - Data Rejected
Value exceeds associated screening level

Table 3.10

2016 Analytical Results Summary
Annual AFW Composite
Hyde Park Landfill Site
Town of Niagara, New York

		Sample Location:	**AFWCOMPOSITE**
		Sample ID:	**AFW-C-1116**
		Sample Date:	**11/18/2016**
Parameters	**Units**	**Reporting Level**	
Polychlorinated Biphenyls (PCBs)			
Pentachlorobiphenyl	µg/L	1	0.0061 J
Tetrachlorobiphenyl	µg/L	1	0.020
Trichlorobiphenyl	µg/L	1	0.011
Pesticides			
alpha-BHC	µg/L	1	-
beta-BHC	µg/L	1	-
delta-BHC	µg/L	1	-
gamma-Chlordane	µg/L	1	-
Mirex	µg/L	1	-
Dioxin Furans			
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	500	4.80 U

Notes:

BHC - Benzene Hexachloride
pg/L - Picograms per liter
µg/L - Micrograms per liter
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 3.10

2016 Analytical Results Summary
Annual AFW Composite
Hyde Park Landfill Site
Town of Niagara, New York

		AFWCOMPOSITE AFW-C-1116-RS 12/22/2016
Parameters	**Units**	
Polychlorinated Biphenyls (PCBs)		
Pentachlorobiphenyl	µg/L	-
Tetrachlorobiphenyl	µg/L	-
Trichlorobiphenyl	µg/L	-
Pesticides		
alpha-BHC	µg/L	0.051
beta-BHC	µg/L	0.047 U
delta-BHC	µg/L	0.030 J
gamma-Chlordane	µg/L	0.038 J
Mirex	µg/L	0.047 U
Dioxin Furans		
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	-

Notes:

BHC - Benzene Hexachloride
pg/L - Picograms per liter
µg/L - Micrograms per liter
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 3.11

2016 Quarterly Hydraulic Gradient Summary
Community Monitoring Program
Hyde Park Landfill Site
Town of Niagara, New York

Gradient Pairing		3/1/2016			6/7/2016			9/7/2016			12/7/2016		
Overburden	Bedrock	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)
CMW-1OB	CMW-1SH	573.39	564.54	0.805	571.32	564.00	0.665	570.99	562.96	0.730	571.18	563.01	0.743
CMW-2OB	CMW-2SH	590.58	572.78	1.259	587.47	572.14	1.072	577.29	570.14	0.500	571.91	570.49	0.099
CMW-3OB	CMW-3SH	573.73	549.52	1.729	574.65	548.40	1.875	569.14	548.57	1.469	567.41	548.29	1.366
CMW-4OB	CMW-4SH	574.02	567.46	0.578	573.91	566.66	0.646	572.28	565.61	0.565	572.10	566.04	0.698
CMW-5OB	CMW-5SH	Surcharged	577.46	0.004	582.67	575.48	0.455	580.89	573.04	0.497	583.24	574.36	0.562
CMW-6OB	CMW-6SH	571.71	562.25	0.985	571.64	562.16	0.988	571.67	561.50	1.059	571.57	561.56	1.043
CMW-7OB	CMW-7SH	- (1)	600.54	0.731	- (1)	598.90	0.846	- (1)	596.38	1.022	- (1)	596.70	1.000
CMW-8OB	CMW-8SH	- (2)	611.65	0.429	- (2)	607.38	0.839	- (2)	605.47	1.023	- (2)	605.72	0.999
CMW-9OB	CMW-9SH	569.42	560.37	1.740	- (3)	559.78	2.304	- (3)	559.77	2.306	- (3)	559.90	2.281
CMW-11OB	CMW-11SH	570.96	565.21	0.599	569.03	565.02	0.418	569.11	560.44	0.903	570.03	564.84	0.541
CMW-12OB	CMW-12SH	591.31	571.11	1.074	581.62	570.80	0.576	573.22	569.06	0.221	572.56	569.13	0.182

Notes:

ft. AMSL - Feet Above Mean Sea Level

ft./ft. - Feet per foot

- Negative number indicates an upward vertical gradient. Positive number indicates a downward vertical gradient.

Surcharged - Well full of water to top of casing

-(1) - Well CMW-7OB was recorded as inaccessible/not available during this event. Bottom of well depth (611.0 ft. AMSL) was used to calculate gradient.

-(2) - Well CMW-8OB was recorded as dry during this event. Bottom of well depth (616.11 ft. AMSL) was used to calculate gradient.

-(3) - Well CMW-9OB was recorded as dry during this event. Bottom of well depth (571.76 ft. AMSL) was used to calculate gradient.

Table 3.12

2016 Community Monitoring Well Soil Vapor Monitoring
Community Monitoring Program
Hyde Park Landfill Site
Town of Niagara, New York

September 29, 2016
Sun, 60°F, Winds ENE 10-15 MPH

Well I.D.	Time Intervals	Sampling Time (hhmm)	VOC Readings (ppmv)
SVP-1	Background	1227	0
	At 1 minute	1228	0
	At 2 minutes	1229	0
	At 3 minutes	1230	0
	At 4 minutes	1231	0
	At 5 minutes	1232	0
	At 6 minutes	1233	0
	At 7 minutes	1234	0
	At 8 minutes	1235	0
	At 9 minutes	1236	0
	At 10 minutes	1237	0
SVP-2	Background	1240	0
	At 1 minute	1241	0
	At 2 minutes	1242	0
	At 3 minutes	1243	0
	At 4 minutes	1244	0
	At 5 minutes	1245	0
	At 6 minutes	1246	0
	At 7 minutes	1247	0
	At 8 minutes	1248	0
	At 9 minutes	1249	0
	At 10 minutes	1250	0
SVP-3	Background	1254	0
	At 1 minute	1255	37
	At 2 minutes	1256	7
	At 3 minutes	1257	0
	At 4 minutes	1258	0
	At 5 minutes	1259	0
	At 6 minutes	1300	0
	At 7 minutes	1301	0
	At 8 minutes	1302	0
	At 9 minutes	1303	0
	At 10 minutes	1304	0
SVP-4	Background	1305	0
	At 1 minute	1306	0
	At 2 minutes	1307	0
	At 3 minutes	1308	0
	At 4 minutes	1309	0
	At 5 minutes	1310	0
	At 6 minutes	1311	0
	At 7 minutes	1312	0
	At 8 minutes	1313	0
	At 9 minutes	1314	0
	At 10 minutes	1315	0

Table 3.12

2016 Community Monitoring Well Soil Vapor Monitoring
Community Monitoring Program
Hyde Park Landfill Site
Town of Niagara, New York

September 29, 2016
Sun, 60°F, Winds ENE 10-15 MPH

Well I.D.	Time Intervals	Sampling Time (hhmm)	VOC Readings (ppmv)
CMW-7OB	Background	1205	0
	At 1 minute	1206	0
	At 2 minutes	1207	0
	At 3 minutes	1208	0
	At 4 minutes	1209	0
	At 5 minutes	1210	0
	At 6 minutes	1211	0
	At 7 minutes	1212	0
	At 8 minutes	1213	0
	At 9 minutes	1214	0
	At 10 minutes	1215	0
CMW-8OB	Background	1148	17
	At 1 minute	1149	0
	At 2 minutes	1150	0
	At 3 minutes	1151	0
	At 4 minutes	1152	0
	At 5 minutes	1153	0
	At 6 minutes	1154	0
	At 7 minutes	1155	0
	At 8 minutes	1156	0
	At 9 minutes	1157	0
	At 10 minutes	1158	0

Notes:

ppmv - Parts per million by volume
VOC - Volatile Organic Compound
MPH - Miles Per Hour
°F - Degrees Fahrenheit

Table 4.1

2016 NAPL Decanter Volume Monitoring
Hyde Park Landfill Site
Town of Niagara, New York

	Decanter #1	Decanter #2	Decanter #3
First Quarter 2016			
March 1, 2016			
Thickness (feet)	23.55	5.30	5.10
Level (%)	58	67	48
Volume[(1)] (gallons)	6,496.00	7,504.00	5,376.00
Second Quarter 2016			
June 7, 2016			
Thickness (feet)	26.85	5.45	6.80
Level (%)	70	65	67
Volume[(1)] (gallons)	7,840.00	7,280.00	7,504.00
Third Quarter 2016			
September 7, 2016			
Thickness (feet)	28.10	5.40	6.20
Level (%)	71	30	30
Volume[(1)] (gallons)	7,952.00	3,360.00	3,360.00
Fourth Quarter 2016			
December 7, 2016			
Thickness (feet)	17.00	5.10	4.95
Level (%)	30	27	24
Volume[(1)] (gallons)	3,360.00	3,024.00	2,688.00

Notes:

(1) - Based on level percentage of NAPL in 11,200-gallon decanters
NAPL - Non-Aqueous Phase Liquid

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP1814INT-D (interstage)	HP11514INT-D (interstage)	HP12214INT-D (interstage)	HP12914INT-D (interstage)	HP2514INT-D (interstage)
Sample Date:		1/6/2016	1/13/2016	1/20/2016	1/24/2016	2/3/2016
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	0.52 J	1.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Benzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Carbon disulfide	µg/L	35	2.0 U	2.0 U	2.0 U	30
Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP1814INT-D (interstage)	HP11514INT-D (interstage)	HP12214INT-D (interstage)	HP12914INT-D (interstage)	HP2514INT-D (interstage)
Sample Date:		1/6/2016	1/13/2016	1/20/2016	1/24/2016	2/3/2016
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	0.37 J
Toluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	2.0 U
Vinyl chloride	µg/L	260	230	230	210	310
Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP21214INT-D (interstage)	HP21914INT-D (interstage)	HP22614 INT-D (interstage)	HP3514INT-D (interstage)	HP31214INT-D (interstage)
Sample Date:		2/10/2016	2/17/2016	2/24/2016	03/02/16	03/09/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	25	26	28	21	30
Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP21214INT-D (interstage)	HP21914INT-D (interstage)	HP22614 INT-D (interstage)	HP3514INT-D (interstage)	HP31214INT-D (interstage)
Sample Date:		2/10/2016	2/17/2016	2/24/2016	03/02/16	03/09/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	280	320	280	280	310
Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP31914 INT-D (interstage)	HP32614INT-D (interstage)	HP43014INT-D (interstage)	HP4214INT-D (interstage)	HP4914 INT-D (interstage)
Sample Date:		03/16/16	03/23/16	03/30/16	04/06/16	04/13/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Benzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Bromoform	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Carbon disulfide	µg/L	18	20	22	17 J	27
Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP31914 INT-D (interstage)	HP32614INT-D (interstage)	HP43014INT-D (interstage)	HP4214INT-D (interstage)	HP4914 INT-D (interstage)
Sample Date:		03/16/16	03/23/16	03/30/16	04/06/16	04/13/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Styrene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Toluene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	10 U	10 U
Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	20 U	20 U
Vinyl chloride	µg/L	300	280	310	220	310
Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	10 U	10 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP41614I NT-D (interstage)	HP42314INT-D (interstage)	HP5714 INT-D (interstage)	HP51514 INT-D (interstage)	HP52114INT-D (interstage)
Sample Date:		04/22/16	04/27/16	05/05/16	05/12/16	05/18/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Benzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Bromoform	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	20 U	20 U	1.0 U	2.0 U	2.0 U
Carbon tetrachloride	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Chloroethane	µg/L	10 U	10 U	1.0 U	2.0 U	1.6 J
Chloroform (Trichloromethane)	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	10 U	10 U	1.0 U	2.0 U	2.5
cis-1,2-Dichloroethene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP41614I NT-D (interstage)	HP42314INT-D (interstage)	HP5714 INT-D (interstage)	HP51514 INT-D (interstage)	HP52114INT-D (interstage)
Sample Date:		04/22/16	04/27/16	05/05/16	05/12/16	05/18/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U
Styrene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Toluene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	1.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	20 U	20 U	2.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	400	380	270 J	310	360
Xylenes (total)	µg/L	10 U	10 U	3.0 U	6.0 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP52814INT-D (interstage)	HP6414 INT-D (interstage)	HP61114 INT-D (interstage)	HP61814INT-D (interstage)	HP62514INT-D (interstage)
Sample Date:		05/25/16	6/1/2016	6/8/2016	6/15/2016	6/22/2016
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Benzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Bromoform	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	20 U	11 J	0.48 J	2.0 U	8.0
Carbon tetrachloride	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Chloroethane	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP52814INT-D (interstage)	HP6414 INT-D (interstage)	HP61114 INT-D (interstage)	HP61814INT-D (interstage)	HP62514INT-D (interstage)
Sample Date:		05/25/16	6/1/2016	6/8/2016	6/15/2016	6/22/2016
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Styrene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Toluene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	2.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	20 U	20 U	4.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	380	450	430	470	380
Xylenes (total)	µg/L	10 U	10 U	6.0 U	6.0 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP7214 INT-D (interstage)	HP7914INT-D (interstage)	HP71614INT-D (interstage)	HP72314 INT-D (interstage)	HP73014INT-D (interstage)
Sample Date:		6/29/2016	07/06/16	07/13/16	07/20/16	07/27/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	0.63 J	12	15	23	17
Carbon tetrachloride	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP7214 INT-D (interstage)	HP7914INT-D (interstage)	HP71614INT-D (interstage)	HP72314 INT-D (interstage)	HP73014INT-D (interstage)
Sample Date:		6/29/2016	07/06/16	07/13/16	07/20/16	07/27/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Styrene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.5 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	5.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	460	490	580	510	550
Xylenes (total)	µg/L	7.5 U	6.0 U	6.0 U	6.0 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP8614 INT-D (interstage)	HP81314 INT-D (interstage)	HP81814 INT-D (interstage)	HP82714 INT-D (interstage)	HP9414INT-D (interstage)
Sample Date:		08/03/16	08/10/16	08/17/16	08/24/16	08/31/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
2-Chlorotoluene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
3-Chlorotoluene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
4-Chlorotoluene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Benzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	3.6 J	2.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	23	5.7	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.8 J	5.0 U	2.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP8614 INT-D (interstage)	HP81314 INT-D (interstage)	HP81814 INT-D (interstage)	HP82714 INT-D (interstage)	HP9414INT-D (interstage)
Sample Date:		08/03/16	08/10/16	08/17/16	08/24/16	08/31/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
m-Monochlorobenzotrifluoride	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
o-Monochlorobenzotrifluoride	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
p-Monochlorobenzotrifluoride	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	23	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U
Vinyl acetate	µg/L	10 U	10 U	4.0 U	10 U	10 U
Vinyl chloride	µg/L	470	540	690	480	680
Xylenes (total)	µg/L	15 U	15 U	6.0 U	15 U	15 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP91114INT-D (interstage)	HP91614INT-D (interstage)	HP92414INT-D (interstage)	HP92414INT-D (interstage)	HP10114 INT-D (interstage)
Sample Date:		09/08/16	09/14/16	09/21/16	09/28/16	10/04/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,1-Dichloroethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,1-Dichloroethene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	0.48 J
1,2-Dichlorobenzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,2-Dichloroethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,2-Dichloropropane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	0.48 J
2-Chlorotoluene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
3-Chlorotoluene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
4-Chlorotoluene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Benzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Bromodichloromethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Bromoform	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Carbon disulfide	µg/L	16	5.0 U	1.3 J	5.0 U	2.0 U
Carbon tetrachloride	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Chlorobenzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Chloroethane	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Ethylbenzene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP91114INT-D (interstage)	HP91614INT-D (interstage)	HP92414INT-D (interstage)	HP92414INT-D (interstage)	HP10114 INT-D (interstage)
Sample Date:		09/08/16	09/14/16	09/21/16	09/28/16	10/04/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Styrene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Tetrachloroethene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Toluene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Trichloroethene	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U
Vinyl acetate	µg/L	4.0 U	10 U	4.0 U	10 U	4.0 U
Vinyl chloride	µg/L	510	510	490	530	550
Xylenes (total)	µg/L	6.0 U	15 U	6.0 U	15 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP10814 INT-D (interstage)	HP101514INT-D (interstage)	HP102214 INT-D (interstage)	HP102914 INT-D (interstage)	HP11514 INT-D (interstage)
Sample Date:		10/11/16	10/20/16	10/26/16	11/02/16	11/09/16
Parameters	**Units**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	0.66 J	2.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	2.0 U	11	0.60 J	10	9.5
Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP10814 INT-D (interstage)	HP101514INT-D (interstage)	HP102214 INT-D (interstage)	HP102914 INT-D (interstage)	HP11514 INT-D (interstage)
Sample Date:		10/11/16	10/20/16	10/26/16	11/02/16	11/09/16
Parameters	**Units**					
Volatile Organic Compounds						
Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	4.8	2.0 U
Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	550	670	430	500	540
Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP111214 INT-D (interstage)	HP112515 INT-D (interstage)	HP112514 INT-D (interstage)	HP12215 INT-D (interstage)
Sample Date:		11/15/16	11/22/16	11/30/16	12/07/16
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	12	11	3.9	2.0 U
Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		**HP-INTER-D-01**	**HP-INTER-D-01**	**HP-INTER-D-01**	**HP-INTER-D-01**
Sample ID:		**HP111214 INT-D (interstage)**	**HP112515 INT-D (interstage)**	**HP112514 INT-D (interstage)**	**HP12215 INT-D (interstage)**
Sample Date:		**11/15/16**	**11/22/16**	**11/30/16**	**12/07/16**
Parameters	**Units**				
Volatile Organic Compounds					
Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	590	520	430	490
Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		**HP-INTER-D-01**	**HP-INTER-D-01**	**HP-INTER-D-01**
Sample ID:		**HP12915 INT-D (interstage)**	**HP121615 INT-D (interstage)**	**HP122215 INT-D (interstage)**
Sample Date:		**12/14/16**	**12/21/16**	**12/28/16**
Parameters	**Units**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	1.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L	1.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L	1.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L	1.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L	1.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L	1.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L	1.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L	1.0 U	2.0 U	2.0 U
Benzene	µg/L	1.0 U	0.44 J	2.0 U
Bromodichloromethane	µg/L	1.0 U	2.0 U	2.0 U
Bromoform	µg/L	1.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L	1.4	2.2	11
Carbon tetrachloride	µg/L	1.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L	1.0 U	2.0 U	2.0 U
Chloroethane	µg/L	1.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	0.68 J	2.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L	1.0 U	2.0 U	2.0 U

Table 4.2

2016 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		**HP-INTER-D-01**	**HP-INTER-D-01**	**HP-INTER-D-01**
Sample ID:		**HP12915 INT-D (interstage)**	**HP121615 INT-D (interstage)**	**HP122215 INT-D (interstage)**
Sample Date:		**12/14/16**	**12/21/16**	**12/28/16**
Parameters	**Units**			
Volatile Organic Compounds				
Methylene chloride	µg/L	1.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	2.0 U	2.0 U
Styrene	µg/L	1.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L	1.0 U	2.0 U	2.0 U
Toluene	µg/L	1.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	2.0 U	2.0 U
Trichloroethene	µg/L	1.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L	2.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L	380 J	430	360
Xylenes (total)	µg/L	3.0 U	6.0 U	6.0 U

Notes:

APL - Aqueous Phase Liquid
J - Estimated concentration
U - Not detected at the associated reporting limit
µg/L - Micrograms per liter
UJ - Not detected; associated reporting limit is estimate

Table 4.3

2016 Quarterly Leachate Feed APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		**PMPTKOUTLET**	**PMPTKOUTLET**	**PMPTKOUTLET**	**PMPTKOUTLET**
Sample ID:		**HP32916 INF**	**HP62116 INF**	**HP92816 INF**	**HP121416 INF**
Sample Date:		**3/29/2016**	**06/21/2016**	**09/28/2016**	**12/14/2016**
Parameters	**Units**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	3.0 J	4.9 J	10 U	4.1 J
1,1,2,2-Tetrachloroethane	µg/L	67	140	77	81
1,1,2-Trichloroethane	µg/L	6.4 J	14	11	11
1,1-Dichloroethane	µg/L	25 U	2.0 J	10 U	1.6 J
1,1-Dichloroethene	µg/L	25 U	10 U	10 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	380	630	420	360
1,2-Dichlorobenzene	µg/L	52	95	72	64
1,2-Dichloroethane	µg/L	25 U	17	11	13
1,2-Dichloropropane	µg/L	25 U	10 U	2.6 J	1.5 J
1,3-Dichlorobenzene	µg/L	15 J	32	27	24
1,4-Dichlorobenzene	µg/L	66	120	89	80
2-Chlorotoluene	µg/L	590	1000	800	680
3-Chlorotoluene	µg/L	4.5 J	13	6.1 J	4.3 J
4-Chlorotoluene	µg/L	430	750	560	470
Benzene	µg/L	140	320	230	200
Bromodichloromethane	µg/L	25 U	10 U	10 U	5.0 U
Bromoform	µg/L	25 U	10 U	10 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	25 U	10 U	10 U	5.0 U
Carbon disulfide	µg/L	5.5 J	8.0 J	7.3 J	7.1
Carbon tetrachloride	µg/L	23 J	26	13	15
Chlorobenzene	µg/L	400	770	560	480
Chloroethane	µg/L	25 U	10 U	10 U	5.0 U
Chloroform (Trichloromethane)	µg/L	240	460	370	310
Chloromethane (Methyl chloride)	µg/L	25 U	10 U	10 U	5.0 U
cis-1,2-Dichloroethene	µg/L	230	620	530	390
cis-1,3-Dichloropropene	µg/L	25 U	10 U	10 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	10 U	10 U	5.0 U
Ethylbenzene	µg/L	140	240	170	140
Methylene chloride	µg/L	20 J	49	37	31
m-Monochlorobenzotrifluoride	µg/L	67	91	66	58
o-Monochlorobenzotrifluoride	µg/L	150	270	190	160
p-Monochlorobenzotrifluoride	µg/L	260	350	260	210
Styrene	µg/L	25 U	10 U	10 U	5.0 U
Tetrachloroethene	µg/L	270	320	180	120
Toluene	µg/L	650	1200	820	740
trans-1,2-Dichloroethene	µg/L	7.2 J	11	10	7.6
trans-1,3-Dichloropropene	µg/L	25 U	10 U	10 U	5.0 U
Trichloroethene	µg/L	300	480	340	320
Trichlorofluoromethane (CFC-11)	µg/L	3.0 J	2.9 J	2.8 J	2.4 J

Table 4.3

2016 Quarterly Leachate Feed APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET
Sample ID:		HP32916 INF	HP62116 INF	HP92816 INF	HP121416 INF
Sample Date:		3/29/2016	06/21/2016	09/28/2016	12/14/2016
Parameters	**Units**				
Volatile Organic Compounds (Continued)					
Vinyl acetate	µg/L	50 U	20 U	20 U	10 U
Vinyl chloride	µg/L	59	110	110	88
Xylenes (total)	µg/L	760	1300	920	770
Semi-volatile Organic Compounds					
2,4,6-Trichlorophenol	µg/L	2.7 J	94 U	47 U	28 U
2,4-Dichlorophenol	µg/L	110	30 J	14 J	150
2,4-Dimethylphenol	µg/L	2.1 J	94 U	47 U	28 U
2,4-Dinitrophenol	µg/L	47 U	470 U	240 U	140 U
2-Chlorobenzoic acid	µg/L	730	1800	1.2	1.2 J
2-Chloronaphthalene	µg/L	9.4 U	94 U	47 U	28 U
2-Chlorophenol	µg/L	6.6 J	94 U	7.8 J	8.3 J
2-Nitrophenol	µg/L	9.4 U	94 U	47 U	28 U
3-Chlorobenzoic acid	µg/L	1900	4200	3.2	3.1 J
4,6-Dinitro-2-methylphenol	µg/L	47 U	470 U	240 U	140 U
4-Chloro-3-methylphenol	µg/L	2.1 J	94 U	47 U	28 U
4-Chlorobenzoic acid	µg/L	1400	4000	2.7	2.6 J
4-Nitrophenol	µg/L	47 U	470 U	240 U	140 U
Acenaphthene	µg/L	9.4 U	94 U	47 U	28 U
Acenaphthylene	µg/L	9.4 U	94 U	47 U	28 U
Anthracene	µg/L	9.4 U	94 U	47 U	28 U
Benzo(a)anthracene	µg/L	9.4 U	94 U	47 U	28 U
Benzo(a)pyrene	µg/L	9.4 U	94 U	47 U	28 U
Benzo(b)fluoranthene	µg/L	9.4 U	94 U	47 U	28 U
Benzo(g,h,i)perylene	µg/L	9.4 U	94 U	47 U	28 U
Benzoic acid	µg/L	930	11000	5.4	7.6 J
bis(2-Chloroethoxy)methane	µg/L	9.4 U	94 U	47 U	28 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	9.4 U	94 U	47 U	28 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	94 U	47 U	28 U
Chlorendic acid	µg/L	2400	4900	4.3	4.1 J
Chrysene	µg/L	9.4 U	94 U	47 U	28 U
Dibenz(a,h)anthracene	µg/L	9.4 U	94 U	47 U	28 U
Diethyl phthalate	µg/L	9.4 U	94 U	47 U	28 U
Dimethyl phthalate	µg/L	9.4 U	94 U	47 U	28 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	94 U	47 U	28 U
Di-n-octyl phthalate (DnOP)	µg/L	1.1 J	94 U	47 U	28 U
Fluoranthene	µg/L	9.4 U	94 U	47 U	28 U
Fluorene	µg/L	9.4 U	94 U	47 U	28 U
Hexachlorobenzene	µg/L	4.8 J	94 U	47 U	4.1 J

Table 4.3

2016 Quarterly Leachate Feed APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		**PMPTKOUTLET**	**PMPTKOUTLET**	**PMPTKOUTLET**	**PMPTKOUTLET**
Sample ID:		**HP32916 INF**	**HP62116 INF**	**HP92816 INF**	**HP121416 INF**
Sample Date:		**3/29/2016**	**06/21/2016**	**09/28/2016**	**12/14/2016**
Parameters	**Units**				
Semi-volatile Organic Compounds (Continued)					
Hexachlorobutadiene	µg/L	15	16 J	12 J	12 J
Hexachlorocyclopentadiene	µg/L	9.4 U	94 U	47 U	28 U
Hexachloroethane	µg/L	6.5 J	94 U	6.3 J	4.4 J
Indeno(1,2,3-cd)pyrene	µg/L	9.4 U	94 U	47 U	28 U
Isophorone	µg/L	9.4 U	94 U	47 U	28 U
Naphthalene	µg/L	1.7 J	94 U	47 U	28 U
Octachlorocyclopentene	µg/L	4.7 U	47 U	24 U	14 U
Pentachlorophenol	µg/L	47 U	470 U	240 U	140 U
Phenanthrene	µg/L	9.4 U	94 U	47 U	28 U
Phenol	µg/L	9.4 U	770	290	340
Pyrene	µg/L	9.4 U	94 U	47 U	28 U

Notes:

APL - Aqueous Phase Liquid
J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
µg/L - Micrograms per liter

Table 4.4

2016 Quarterly Sac Bed Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		**SAC INTERSTAGE**	**SAC INTERSTAGE**	**SAC INTERSTAGE**	**SAC INTERSTAGE**
Sample ID:		**HP SAC 32916**	**HP SAC 62116**	**HP SAC 62116**	**HP SAC 121416**
Sample Date:		**03/29/2016**	**06/21/2016**	**09/28/2016**	**12/14/2016**
Parameters	**Units**				
Polychlorinated Biphenyls					
Pentachlorobiphenyl	µg/L	0.35 J	*	0.031	0.089 J
Tetrachlorobiphenyl	µg/L	0.62 J	*	0.058	0.13 J
Trichlorobiphenyl	µg/L	0.15 J	*	0.0047 UJ	0.052 J
Total PCBs	µg/L	1.12 J	*	0.089 J	0.271J
Dioxin Furans					
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	1960	776	230	310

Notes:

APL - Aqueous Phase Liquid
pg/L - Picograms per liter
µg/L - Micrograms per liter
* - Lab issue, PCB analysis not reported
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 5.1

Summary of Source Control Well Pumping 2009 - Present
Hyde Park Landfill Site
Town of Niagara, New York

Month	SC-2		SC-3		SC-4		SC-5		SC-6		Total	Estimated
	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	Fluid Volume Pumped (gallons)	NAPL Percentage
January-09	2.5	602.41	0.0	598.52	1.3	616.65	0.0	Dry	0.0	611.65	4	99.9%
February-09	1.8	602.71	0.0	559.82	0.8	617.55	0.0	Dry	0.0	592.65	18	15.1%
March-09	2.3	602.71	0.0	559.82	0.3	617.55	0.0	Dry	0.0	612.15	16	17.7%
April-09	1.3	605.51	0.0	602.12	0.3	618.75	0.0	Dry	0.0	613.75	13	13.2%
May-09	1.2	604.61	0.0	602.12	0.2	618.25	0.0	Dry	0.0	613.05	33	4.3%
June-09	1.3	605.21	0.0	604.62	0.3	618.45	0.0	Dry	0.0	613.75	2	87.3%
July-09	0.9	606.31	0.0	604.72	0.5	618.75	0.0	Dry	0.0	613.95	11	13.6%
August-09	1.1	606.41	0.0	605.12	0.5	619.25	0.0	Dry	0.0	614.15	12	13.9%
September-09	1.1	606.01	0.0	605.72	0.5	620.25	0.0	Dry	0.0	615.05	14	11.9%
October-09	1.0	606.41	0.0	608.72	0.5	621.25	0.0	Dry	0.0	614.55	18	8.8%
November-09	1.0	606.61	0.0	608.7	0.5	621.85	0.0	Trace	0.0	614.95	18	8.8%
December-09	0.8	607.11	0.0	610.52	0.5	622.25	0.0	Dry	0.0	614.85	14	9.8%
January-10	1.8	602.91	0.0	598.92	1.0	617.65	0.0	Trace	0.0	612.35	11	27.1%
February-10	1.5	603.71	0.0	600.02	0.9	618.35	0.0	Dry	0.0	613.95	16	15.8%
March-10	1.2	605.71	0.0	606.52	1.0	619.55	0.0	Trace	0.0	614.95	18	12.6%
April-10	1.0	606.41	0.0	605.52	1.0	619.85	0.0	Dry	0.0	614.45	18	11.7%
May-10	0.7	605.51	0.0	604.52	1.1	619.65	0.0	Dry	0.0	614.05	12	15.3%
June-10	0.8	606.41	0.0	603.72	1.1	620.25	0.0	Dry	0.0	614.95	8	24.1%
July-10	0.5	606.71	0.0	604.52	1.0	620.35	0.0	Dry	0.0	614.75	8	19.7%
August-10	0.5	606.71	0.0	605.02	1.0	620.46	0.0	Dry	0.0	614.52	14	11.3%
September-10	-	603.24	-	596.97	-	600.92	0.0	Dry	-	613.45	10	--
October-10	-	-	-	-	-	-	-	-	-	-	16	--
November-10	-	-	-	-	-	-	-	-	-	-	16	--
December-10	-	603.16	-	597.22	-	601.23	-	Dry	-	616.43	8	--
January-11	-	-	-	-	-	-	-	-	-	-	12	--
February-11	-	-	-	-	-	-	-	-	-	-	21	--
March-11	8.2	600.5	0.0	604.0	4.0	619.3	0.0	606.8	0.0	600.3	12	106.9%
April-11	8.0	600.6	0.0	604.5	5.0	619.8	0.0	607.2	0.0	600.6	16	85.5%
May-11	10.0	603.1	0.0	606.6	6.0	620.8	0.0	608.0	0.0	601.1	78	21.6%
June-11	1.0	603.5	0.0	606.1	0.5	620.5	0.0	607.5	0.0	600.7	11	14.3%
July-11	1.0	602.7	0.0	605.8	0.5	620.3	0.0	607.0	0.0	600.4	18	8.8%
August-11	1.2	603.5	0.0	607.4	0.6	620.3	0.0	607.2	0.0	604.2	25	7.6%
September-11	1.0	603.5	0.0	598.8	0.5	600.0	0.0	606.0[(1)]	0.0	611.9	12	13.1%
October-11	1.0	603.0	0.0	598.6	0.5	599.5	0.0	606.0[(1)]	0.0	611.9	20	7.9%
November-11	1.2	605.0	0.0	603.4	>0.5	603.1	0.0	606.0[(1)]	0.0	614.9	24	--

Table 5.1

Summary of Source Control Well Pumping 2009 - Present
Hyde Park Landfill Site
Town of Niagara, New York

Month	SC-2		SC-3		SC-4		SC-5		SC-6		Total	Estimated
	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	Fluid Volume Pumped (gallons)	NAPL Percentage
December-11	1.2	605.4	0.0	606.4	>0.5	607.3	0.0	606.0[1]	0.0	615.0	13	--
January-12	1.3	605.7	0.0	606.6	0.7	609.1	0.0	606.0[1]	0.0	617.0	21	10.0%
February-12	1.3	605.4	0.0	605.7	0.7	608.5	0.0	606.0[1]	0.0	616.1	52	4.0%
March-12	1.6	601.4	0.0	604.6	0.8	606.3	0.0	606.0[1]	0.0	613.8	41	6.2%
April-12	1.6	601.8	0.0	605.5	0.8	607.2	0.0	606.0[1]	0.0	614.2	46	5.5%
May-12	1.7	601.6	0.0	605.9	0.8	606.8	0.0	606.0[1]	0.0	613.8	34	7.7%
June-12	1.6	601.4	0.0	605.8	0.8	606.6	0.0	606.0[1]	0.0	613.5	34	7.5%
July-12	1.3	601.3	0.0	605.8	0.7	606.8	0.0	606.0[1]	0.0	613.3	16	13.1%
August-12	>1.3	601.0	0.0	605.8	0.8	606.5	0.0	606.0 [1]	Trace	613.2	16	--
September-12	>1.3	600.8	0.0	605.8	0.8	607.2	0.0	606.0 [1]	Trace	613.8	19	--
October-12	1.7	601.0	0.0	604.4	1.0	613.1	0.7	607.82	0.0	614.0	28	12.7%
November-12	1.7	601.0	0.0	604.1	1.2	612.9	0.8	608.02	0.0	614.1	15	25.9%
December-12	1.5	601.9	0.0	605.0	1.0	613.4	0.9	607.92	0.0	614.2	17	21.1%
January-13	1.0	602.2	0.0	606.1	0.8	613.7	0.9	608.85	0.0	615.1	52	5.6%
February-13	1.0	603.2	0.0	606.3	1.0	613.9	0.8	609.06	0.0	615.2	39	7.6%
March-13	1.7	603.2	0.0	606.1	1.2	612.9	1.1	607.85	0.0	614.8	22	18.7%
April-13	1.7	604.6	0.0	606.4	1.2	612.1	1.0	606.97	0.0	614.1	57	7.1%
May-13	2.1	605.6	0.0	608.5	1.0	613.1	1.0	606.93	0.0	614.2	15	28.6%
June-13	2.7	606.5	0.0	608.8	0.8	615.1	1.2	607.13	0.0	614.9	77	6.4%
July-13	2.5	606.0	0.0	608.4	0.8	613.1	1.3	607.17	0.0	615.1	0	--
August-13	2.3	605.4	0.0	607.3	1.0	612.0	1.3	607.06	0.0	613.9	20 [2]	--
September-13	2.2	598.6	0.0	606.4	1.0	611.9	1.3	607.12	0.0	612.8	20 [2]	--
October-13	2.2	598.6	0.0	606.4	1.5	603.9	1.3	607.08	0.0	612.1	8	65.7%
November-13	2.3	598.6	0.0	606.3	1.3	603.5	1.2	607.65	0.0	611.2	6	81.9%
December-13	1.7	601.4	0.0	608.3	1.5	605.2	1.5	607.56	0.0	612.1	0	--
January-14	1.7	602.6	0.0	608.2	1.5	604.7	1.3	607.4	0.0	612.2	24	19.7%
February-14	1.2	602.6	0.0	608.2	1.0	605.1	1.0	607.6	0.0	612.1	0	--
March-14	1.5	602.4	0.0	608.3	1.2	605.2	1.0	609.5	0.0	611.6	63	6.1%
April-14	1.6	602.5	0.0	608.1	1.0	604.7	1.0	607.5	0.0	612.0	36	10.5%
May-14	1.0	602.4	0.0	608.0	0.8	604.6	0.7	607.2	0.0	612.0	29	9.1%
June-14	1.3	601.4	0.0	607.8	1.0	604.4	1.0	607.1	0.0	611.3	49	7.2%
July-14	1.0	601.4	0.0	610.0	0.8	606.5	1.0	607.1	0.0	611.3	32	9.3%
August-14	0.8	601.0	0.0	609.7	1.0	606.5	0.8	609.1	1.3	611.2	0	--
September-14	0.8	602.6	0.0	608.2	1.0	605.1	0.8	607.6	1.2	612.1	0	--
October-14	1.0	602.4	0.0	608.1	1.0	605.2	1.0	607.4	1.0	611.9	10	42.1%

Table 5.1

Summary of Source Control Well Pumping 2009 - Present
Hyde Park Landfill Site
Town of Niagara, New York

Month	SC-2		SC-3		SC-4		SC-5		SC-6		Total	Estimated
	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	Fluid Volume Pumped (gallons)	NAPL Percentage
November-14	1.0	603.4	0.0	610.4	1.0	605.4	1.0	607.4	2.0	610.9	12	43.8%
December-14	1.6	602.6	0.0	610.1	1.0	605.4	1.0	607.2	2.0	612.9	10	58.7%
January-15	1.3	602.4	0.0	612.2	1.2	605.6	1.2	607.1	2.5	613.1	8	81.1%
February-15	1.3	602.4	0.0	612.2	1.2	605.6	1.2	607.1	2.5	613.1	8	81.1%
March-15	1.3	594.6	0.0	597.8	1.3	608.6	1.3	605.7	3.3	578.2	8	96.4%
April-15	1.3	594.0	0.0	596.9	1.3	602.5	1.3	604.7	10(3)	578.2	26(3)	56.6%
May-15	1.7	594.2	0.0	594.6	1.2	603.0	1.0	605.2	4.4(4)	578.2	16(3)	54.1%
June-15	1.7	594.9	0.0	597.7	1.3	608.7	1.1	605.7	4.4(4)	578.2	16(3)	55.2%
July-15	1.7	594.1	0.0	597.7	1.3	608.5	1.3	605.7	3.8(4)	578.2	15(3)	56.5%
August-15	1.7	594.3	0.0	597.6	1.3	598.3	1.3	605.7	4.2(4)	578.2	15.5(3)	57.3%
September-15	1.8	594.8	0.0	597.7	1.3	608.3	1.7	605.7	2.2(4)	578.2	12(3)	61.7%
October-15	1.5	594.8	0.0	597.7	1.3	608.3	2.2	605.7	1.7(4)	578.2	11(3)	64.1%
November-15	1.5	640.1	0.0	597.6	1.3	608.4	2.7	605.7	0.0	578.2	8	72.3%
December-15	1.7	594.8	0.0	597.7	1.2	608.3	1.2	605.7	0.0	578.2	8	52.6%
March-16	1.7	637.5	0.0	597.6	1.5	608.4	1.8	589.2	1.1(4)	578.2	6(5)	87.7%
June-16	1.7	641.8	0.0	597.7	1.5	608.8	1.3	605.7	0.4(4)	578.2	2.5(5)	189.0%
September-16	1.6	602.7	3.0	597.7	5.0	600.8	0.7	605.7	0.3(4)	604.1	57(5)	19.0%
December-16	-(6)	594.8	-(6)	597.7	-(6)	608.3	-(6)	605.7	-(6)	578.2	-(6)	0.0%

Notes:

ft. AMSL - Feet Above Mean Sea Level
NAPL - Non-Aqueous Phase Liquid
"-" - Not measured due to miscommunication betwe Site operator and field technicians
"--" - Percentage cannot be calculated due to lack of measurement or pumping
(1) - Well obstructed during water level reading
(2) - Estimated volume due to totalizer problems
(3) - Manual NAPL removal performed in SC-6 April through October 2015
(4) - Estimated NAPL thickness based on volume removed
(5) - Manual NAPL removal performed March through October 2016
(6) - NAPL removal frequency changed to quarterly in October 2016, next event was January 2017

Table 5.2

Analytical Results Summary
Annual Bedrock Open Catch Basin
November 2016
Hyde Park Landfill Site
Town of Niagara, New York

	Sample Location:	**BR-OpenCatchBasin**
	Sample ID:	**HPOPENCB-1116**
	Sample Date:	**11/1/2016**
Parameters	**Units**	
Organic Acids		
2-Chlorobenzoic acid	µg/L	30 U
3-Chlorobenzoic acid	µg/L	30 U
4-Chlorobenzoic acid	µg/L	300 U
Benzoic acid	µg/L	100 U
Chlorendic acid	µg/L	250 U

Notes:

U - Not detected at the associated reporting limit

Appendices

Appendix A
Institutional and Engineering Controls Certification Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

2/15/2017

Joseph Branch
Project Manager
OXY-Glenn Springs Holdings, Inc.
7601 Old Channel Trail
Montague, MI 49437

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Hooker-Hyde Park Landfill
Site No.: 932021
Site Address: 4825 Hyde Park Boulevard
Town Of Niagara, NY 14305

Dear Joseph Branch:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **April 30, 2017**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
http://www.dec.ny.gov/regulations/2586.html

The signed certification forms should be sent to Brian Sadowski, Project Manager, at the following address:

New York State Department of Environmental Conservation
270 Michigan Ave
Buffalo, NY 14203-2915

Phone number: 716-851-7220. E-mail: brian.sadowski@dec.ny.gov

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures
Brian Sadowski, Project Manager
Mary Mcintosh, Section Chief
Chad Staniszewski, Hazardous Waste Remediation Engineer, Region 9

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2

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

Site Details **Box 1**

Site No. 932021

Site Name Hooker-Hyde Park Landfill

Site Address: 4825 Hyde Park Boulevard Zip Code: 14305
City/Town: Town Of Niagara
County: Niagara
Site Acreage: ~~22.8~~ 30

Reporting Period: March 31, 2016 to March 31, 2017

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

Box 2

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

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

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

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

SITE NO. 932021 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
130.11-1-3	Occidental Chemical Corporation	Ground Water Use Restriction Landuse Restriction Monitoring Plan O&M Plan
		Surface Water Use Restriction

Same as parcel with SBL number 130.11-4.1

130.11-1-4.1	Occidental Chemical Corporation	Ground Water Use Restriction Landuse Restriction Building Use Restriction Surface Water Use Restriction Monitoring Plan O&M Plan

Occidental, the United States and State of New York:

Stipulation and Judgement Approving Settlement Agreement; January 19, 1981
Stipulation on Requisite Remedial Technology; November 1, 1985
Enforcement Decision Document for Requisite Remedial Technology; November 11, 1985
Performance Monitoring Plan; July 31, 2006
Declaration of Restrictive Covenants and Environmental Easement; August 11, 2010

Legacy Restriction: "3. Restrictions on Use: The following restrictions apply to the use of the Property, run with the land, and are binding on the Grantor: the Property shall not be used in any manner that would interfere with or adversely affect the implementation, integrity, or effectiveness of the Response Action performed at the Site, including, but not limited to, a) the extraction of on-site groundwater, b) any digging, excavation, extraction of materials, construction, or other activity outside the requirements of the Response Action that would disturb the cap placed upon the Landfill at the Site, or c) other activity that would disturb or interfere with any portion of the Response Action for the Site enumerated in the RRT Stipulation."

130.11-1-5.1 7.2 acre portion only	Niagara Mohawk Power Corp	Monitoring Plan O&M Plan

Occidental, the United States and State of New York:

Stipulation and Judgment Approving Settlement Agreement; January 19, 1981
Stipulation on Requisite Remedial Technology; November 1, 1985
Enforcement Decision Document for Requisite Remedial Technology; November 11, 1985
Performance Monitoring Plan; July 31, 2006

Box 4

Description of Engineering Controls

Parcel	Engineering Control
130.11-1-3	Point-of-Entry Water Treatment Groundwater Treatment System Groundwater Containment Fencing/Access Control

Liquid waste treatment facility that handles aqueous phase leachate (APL) and non-aqueous phase leachate (NAPL) generated from the landfill and offsite sources.

130.11-1-4.1	Cover System Groundwater Containment Leachate Collection Fencing/Access Control Groundwater Treatment System

The below engineering controls are from the Declaration of Restrictive Covenants and Environmental Easement; August 11, 2010 and other documentation that are the most applicable to the parcel and community wide remediation.

Landfill cap.
Landfill cap source control wells.
Landfill perimeter capping.
Collection and containment of aqueous phase liquids (APL) and non-aqueous phase liquids (NAPL) in the overburden.
Collection and containment of APL and NAPL in the bedrock.
Industrial protection program by sealing of sumps and manholes.
Bloody run excavation with new culvert installation, cleaned of existing and/or slip lined.
Niagara Gorge face soil and visibly contaminated rock excavated and disposed in the landfill.
Niagara Gorge face seeps remediation by APL plume pumping wells through groundwater flow zones.

130.11-1-5.1 7.2acre portionaly	Groundwater Treatment System Cover System Groundwater Containment Leachate Collection Fencing/Access Control

The below engineering controls are from documentation that are the most applicable to the parcel and community wide remediation.

Landfill cap.
Landfill cap source control wells.
Landfill perimeter capping.
Collection and containment of aqueous phase liquids (APL) and non-aqueous phase liquids (NAPL) in the overburden.
Collection and containment of APL and NAPL in the bedrock.
Industrial protection program by sealing of sumps and manholes.

Periodic Review Report (PRR) Certification Statements **Box 5**

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

RGL 04/25/17

a) the Periodic Review report and all attachments were ~~prepared under the direction of, and~~ reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES	NO
☑	☐

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

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 932021

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I Joseph A Branch (print name) at 7401 Old Channel Trail (print business address).

am certifying as Owner (Owner or Remedial Party)

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

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

Date 4/27/2012

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I ROBERT G. ADAMS (print name) at GHD CONSULTING SERVICES INC. 285 DELAWARE AVE, BUFFALO NY 14202 (print business address)

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

STATE OF NEW YORK ★ ROBERT G. ADAMS ★ LICENSED PROFESSIONAL ENGINEER 064918

Robert G. Adams

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

Stamp (Required for PE)

04/25/17

Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

Appendix B
Bloody Run Analytical Results Validation Memo

Memorandum

August 12, 2016

To:	Clint Babcock	Ref. No.:	001069
From:	Sheri Finn/adh/274	Tel:	716-297-6150
CC:	Joe Branch, Dennis Hoyt, Joel Spring, Samantha Sasnow		

Subject: **Analytical Results and Reduced Validation**
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

1. Introduction

This document details a reduced validation of analytical results for water samples collected in support of the quarterly 5-Year Bloody Run Sampling Program at the Hyde Park Landfill site during July 2016. The samples were submitted to ALS Labs located in Rochester, New York. A summary of the analytical methodology is presented in Table 1. The validated analytical results are summarized in Table 2.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody form, finished report forms, method blank data, and recovery data from surrogate spikes/laboratory control samples (LCS) and matrix spike/matrix spike duplicates (MS/MSD).

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 1 and applicable guidance from the documents entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", United States Environmental Protection Agency (USEPA) 540-R-08-01, June 2008

ii) USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review", USEPA 540-R-10-011, January 2010

Items i) and ii) will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 1. The sample chain of custody document and analytical report were used to determine sample holding times. The samples were prepared and analyzed within the required holding times.

The samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QA/QC samples analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for VOC and SVOC determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the laboratory criteria.

5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch. The LCS was also analyzed in duplicate (LCSD) to assess analytical precision.

The LCS contained all compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision with the exception of a high 1,1-dichloroethane recovery. The associated detected results were qualified as estimated (see Table 3).

6. Matrix Spike/Matrix Spike Duplicate Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

The laboratory performed site-specific MS/MSD analyses internally.

The MS/MSD sample was spiked with the analytes of interest. The percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision with the exception of some SVOCs and chlorendic acid recoveries. The associated sample results were qualified (see Table 4).

7. Field QA/QC Samples

The field QA/QC consisted of two trip blank samples.

7.1 Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, two trip blanks were submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each compound. Positive detections less than the reporting limit (RL) but greater than the MDL were reported as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

The 1,2,4-Trichlorobenzene result for sample PW-9U-0716 exceeded the calibration range of the instrument and was qualified as estimated (J) in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the qualifications and exceptions noted.

Table 1

Summary of Analytical Methods
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Parameter	Method	Matrix	Holding Time
TCL VOCs	SW-846 8260[1]	Water	- 14 days from sample collection to completion of analysis
TCL SVOCs	SW-846 8270[1]	Water	- 7 days from collection to extraction/40 days from extraction to analysis
Organic Acids *	OxyChem/HPLC	Water	- 30 days
Sulfate	EPA 300.0	Water	- 28 days

Notes:

TCL - Target Compound List
VOCs - Volatile Organic Compounds
SVOCs - Semi-volatile Organic Compounds
HPLC - High Performance Liquid Chromatography
* - Benzoic, m/p/o-chlorobenzoic acid, and chlorendic acid
OxyChem - Occidental Chemical Corporation

[1] Method References:
SW-846 - Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, Third Edition, 1986, with subsequent revisions
EPA - "Methods for Chemical Analysis of Water and Waste", EPA-600/4-79-020, revised March 1983, with subsequent revisions

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		APW-1	APW-2	BR-1	BR-2	BR-3	BR-4	PW-1L	PW-1U
Sample Name:		APW-1-0716	APW-2-0716	BR-1-0716	BR-2-0716	BR-3-0716	BR-4-0716	PW-1L-0716	PW-1U-0716
Sample Date:		07/12/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/12/2016
Parameters	**Unit**								
VOCs									
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	34
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	24	1.0 U	1.0 U	1.0 U	20 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.5	1400
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.4	170
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,3-Dichlorobenzene	µg/L	0.21 J	0.27 J	1.0 U	1.0 U	1.0 U	1.0 U	83	61
1,4-Dichlorobenzene	µg/L	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	29	170
2-Chlorotoluene	µg/L	0.74 J	0.43 J	1.0 U	0.32 J	1.0 U	1.0 U	68	2000
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	21
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1300
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	78
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Carbon disulfide	µg/L	1.3	1.0 U	1.0 U	1.0	1.0 U	1.4	2.1	100
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Chlorobenzene	µg/L	5.6	2.0	1.0 U	1.0 U	1.0 U	0.46 J	95	600
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	120
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
cis-1,2-Dichloroethene	µg/L	0.43 J	1.0 U	1.1	0.84 J	1.0 U	0.80 J	1.3	1300
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Dichlorofluoromethane	µg/L	0.28 J	1.0 U	1.0 U	0.30 J	1.0 U	1.0 U	0.28 J	9.2 J
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42 J	350
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	240
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	27

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		APW-1	APW-2	BR-1	BR-2	BR-3	BR-4	PW-1L	PW-1U
Sample Name:		APW-1-0716	APW-2-0716	BR-1-0716	BR-2-0716	BR-3-0716	BR-4-0716	PW-1L-0716	PW-1U-0716
Sample Date:		07/12/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/12/2016
Parameters	**Unit**								
VOCs-Continued									
o-Monochlorobenzotrifluoride	µg/L	0.20 J	0.41 J	1.0 U	1.0 U	1.0 U	1.0 U	4.9	440
p-Monochlorobenzotrifluoride	µg/L	0.48 J	0.96 J	1.0 U	1.0 U	1.0 U	1.0 U	9.3	780
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	110
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	950
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.6	20 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Trichloroethene	µg/L	1.0 U	0.23 J	70	1.0 U	1.0 U	1.0 U	1.1	970
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 J
Vinyl acetate	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	40 U
Vinyl chloride	µg/L	1.0 U	1.0 U	0.49 J	1.0 U	1.0 U	1.0 U	1.0 U	30
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	2.5 J	1900
SVOCs									
2,4,6-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
2,4-Dichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
2,4-Dimethylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
2,4-Dinitrophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U	940 U
2-Chloronaphthalene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
2-Chlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
2-Nitrophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U	940 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
4-Nitrophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U	940 U
Acenaphthene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Acenaphthylene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Anthracene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Benzo(a)anthracene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Benzo(a)pyrene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Benzo(b)fluoranthene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		APW-1	APW-2	BR-1	BR-2	BR-3	BR-4	PW-1L	PW-1U
Sample Name:		APW-1-0716	APW-2-0716	BR-1-0716	BR-2-0716	BR-3-0716	BR-4-0716	PW-1L-0716	PW-1U-0716
Sample Date:		07/12/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/12/2016
Parameters	**Unit**								
SVOCs-Continued									
Benzo(g,h,i)perylene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	9.4 U	8.5 J	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	41 J
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Chrysene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Dibenz(a,h)anthracene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Diethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Dimethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Fluoranthene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Fluorene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Hexachlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	850
Hexachlorobutadiene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	1100
Hexachlorocyclopentadiene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Hexachloroethane	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	61 J
Indeno(1,2,3-cd)pyrene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Isophorone	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Naphthalene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Octachlorocyclopentene	µg/L	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	94 U
Pentachlorophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U	940 U
Phenanthrene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Phenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	1300
Pyrene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	190 U
Organic Acids									
2-Chlorobenzoic acid	µg/L	30 U	30 U	30 U	30 U	30 U	30 U	30 U	730
3-Chlorobenzoic acid	µg/L	30 U	30 U	30 U	30 U	30 U	30 U	30 U	860

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		APW-1	APW-2	BR-1	BR-2	BR-3	BR-4	PW-1L	PW-1U
Sample Name:		APW-1-0716	APW-2-0716	BR-1-0716	BR-2-0716	BR-3-0716	BR-4-0716	PW-1L-0716	PW-1U-0716
Sample Date:		07/12/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/13/2016	07/12/2016
Parameters	**Unit**								
Organic Acids-Continued									
4-Chlorobenzoic acid	µg/L	300 U	300 U	300 U	300 U	300 U	300 U	300 U	1600
Benzoic acid	µg/L	100 U	100 U	100 U	100 U	100 U	100 U	100 U	7500
Chlorendic acid	µg/L	270	180 J	250 U	250	75 J	320	280	8500
Wet Chemistry									
Sulfate	mg/L	1040	2.0 U	268	363	234	244	1820	234

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-2L	PW-2M	PW-2UR	PW-3L	PW-3M	PW-4U	PW-5UR
Sample Name:		PW-2L-0716	PW-2M-0716	PW-2UR-0716	PW-3L-0716	PW-3M-0716	PW-4U-0716	PW-5UR-0716
Sample Date:		07/13/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016
Parameters	**Unit**							
VOCs								
1,1,1-Trichloroethane	µg/L	10 U	1.0 U	96 J	10 U	98	160	22 J
1,1,2,2-Tetrachloroethane	µg/L	32	1.0 U	1000	67	2000	8900	400
1,1,2-Trichloroethane	µg/L	10 U	1.0 U	210	4.5 J	220	240	46
1,1-Dichloroethane	µg/L	10 U	1.0 U	20 J	10 U	54	28 J	11 J
1,1-Dichloroethene	µg/L	10 U	1.0 U	100 U	10 U	72	100 U	16 J
1,2,4-Trichlorobenzene	µg/L	920	7.7	4000	380	6200	11000	300
1,2-Dichlorobenzene	µg/L	110	2.7	590	87	670	1200	130
1,2-Dichloroethane	µg/L	10 U	1.0 U	620	4.7 J	50 U	100 U	25 U
1,2-Dichloropropane	µg/L	10 U	1.0 U	100 U	10 U	23 J	100 U	25 U
1,3-Dichlorobenzene	µg/L	39	29	120	32	140	57 J	22 J
1,4-Dichlorobenzene	µg/L	110	7.5	800	110	580	670	95
2-Chlorotoluene	µg/L	1100	35	6600	1200	7900	11000	1800
3-Chlorotoluene	µg/L	7.0 J	0.36 J	82 J	10 U	50 U	100 U	17 J
4-Chlorotoluene	µg/L	570	2.0	4700	810	5200	8900	1100
Benzene	µg/L	40	0.49 J	2700	110	9200	320	2000
Bromodichloromethane	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Bromoform	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Bromomethane (Methyl bromide)	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Carbon disulfide	µg/L	16	2.6	360	23	540	540	120
Carbon tetrachloride	µg/L	10 U	1.0 U	610	10 U	340	2600	190
Chlorobenzene	µg/L	420	28	7800	680	6500	2700	1500
Chloroethane	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Chloroform (Trichloromethane)	µg/L	88	0.81 J	6700	100	3200	5900	2500
Chloromethane (Methyl chloride)	µg/L	10 U	1.0 U	75 J	10 U	50 U	100 U	25 U
cis-1,2-Dichloroethene	µg/L	960	1.1	340	1300	2600	8900	1800
cis-1,3-Dichloropropene	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Dichlorofluoromethane	µg/L	6.2 J	0.52 J	97 J	5.8 J	38 J	100 U	8.8 J
Ethylbenzene	µg/L	170	0.56 J	2000	270	1800	3200	400
m-Monochlorobenzotrifluoride	µg/L	110	4.5	690	110	860	1500	190
Methylene chloride	µg/L	6.0 J	1.0 U	740	9.6 J	1100	530	230

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-2L	PW-2M	PW-2UR	PW-3L	PW-3M	PW-4U	PW-5UR
Sample Name:		PW-2L-0716	PW-2M-0716	PW-2UR-0716	PW-3L-0716	PW-3M-0716	PW-4U-0716	PW-5UR-0716
Sample Date:		07/13/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016
Parameters	**Unit**							
VOCs-Continued								
o-Monochlorobenzotrifluoride	µg/L	210	6.5	1300	240	2500	6600	650
p-Monochlorobenzotrifluoride	µg/L	370	13	2600	410	3500	5900	830
Styrene	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Tetrachloroethene	µg/L	15	1.0 U	8300	24	580	19000	670
Toluene	µg/L	260	0.37 J	17000	260	3700	5100	3600
trans-1,2-Dichloroethene	µg/L	3.7 J	0.59 J	100 U	7.0 J	400	190	80
trans-1,3-Dichloropropene	µg/L	10 U	1.0 U	100 U	10 U	50 U	100 U	25 U
Trichloroethene	µg/L	66	18	5100	51	5300	6800	1300
Trichlorofluoromethane (CFC-11)	µg/L	10 U	1.0 U	210	10 U	23 J	100 U	5.0 J
Vinyl acetate	µg/L	20 U	2.0 U	200 U	20 U	100 U	200 U	50 U
Vinyl chloride	µg/L	31	1.5	76 J	77	6600	780	1400
Xylenes (total)	µg/L	700	2.9 J	11000	1300	9500	17000	2100
SVOCs								
2,4,6-Trichlorophenol	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
2,4-Dichlorophenol	µg/L	14 J	9.4 U	3600 J	94 U	17 J	1000 U	190 U
2,4-Dimethylphenol	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
2,4-Dinitrophenol	µg/L	94 U	47 U	25000 U	470 U	470 U	5000 U	R
2-Chloronaphthalene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
2-Chlorophenol	µg/L	2.3 J	9.4 U	5000 U	94 U	14 J	1000 U	190 U
2-Nitrophenol	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
4,6-Dinitro-2-methylphenol	µg/L	94 U	47 U	25000 U	470 U	470 U	5000 U	R
4-Chloro-3-methylphenol	µg/L	6.9 J	9.4 U	5000 U	94 U	94 U	1000 U	190 U
4-Nitrophenol	µg/L	94 U	47 U	25000 U	470 U	470 U	5000 U	R
Acenaphthene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Acenaphthylene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Anthracene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Benzo(a)anthracene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Benzo(a)pyrene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Benzo(b)fluoranthene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-2L	PW-2M	PW-2UR	PW-3L	PW-3M	PW-4U	PW-5UR
Sample Name:		PW-2L-0716	PW-2M-0716	PW-2UR-0716	PW-3L-0716	PW-3M-0716	PW-4U-0716	PW-5UR-0716
Sample Date:		07/13/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016
Parameters	**Unit**							
SVOCs-Continued								
Benzo(g,h,i)perylene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
bis(2-Chloroethoxy)methane	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Butyl benzylphthalate (BBP)	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Chrysene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Di-n-butylphthalate (DBP)	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Di-n-octyl phthalate (DnOP)	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Dibenz(a,h)anthracene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Diethyl phthalate	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Dimethyl phthalate	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Fluoranthene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Fluorene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Hexachlorobenzene	µg/L	34	9.4 U	540 J	18 J	54 J	590 J	190 U
Hexachlorobutadiene	µg/L	51	9.4 U	700 J	15 J	45 J	300 J	190 U
Hexachlorocyclopentadiene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	420 J	R
Hexachloroethane	µg/L	19 U	9.4 U	5000 U	17 J	94 U	440 J	27 J
Indeno(1,2,3-cd)pyrene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Isophorone	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Naphthalene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 U
Octachlorocyclopentene	µg/L	9.4 U	4.7 U	2500 U	47 U	47 U	560	94 U
Pentachlorophenol	µg/L	94 U	47 U	25000 U	470 U	470 U	5000 U	R
Phenanthrene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Phenol	µg/L	140	9.4 U	48000	920	1200	14000	1100
Pyrene	µg/L	19 U	9.4 U	5000 U	94 U	94 U	1000 U	190 UJ
Organic Acids								
2-Chlorobenzoic acid	µg/L	210	30 U	33000	670	4900	5900	4600
3-Chlorobenzoic acid	µg/L	380	30 U	81000	1000	16000	31000	16000

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-2L	PW-2M	PW-2UR	PW-3L	PW-3M	PW-4U	PW-5UR
Sample Name:		PW-2L-0716	PW-2M-0716	PW-2UR-0716	PW-3L-0716	PW-3M-0716	PW-4U-0716	PW-5UR-0716
Sample Date:		07/13/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016
Parameters	**Unit**							
Organic Acids-Continued								
4-Chlorobenzoic acid	µg/L	510	300 U	44000 J	1300	18000	45000	17000
Benzoic acid	µg/L	410	100 U	610000	1100	15000	140000	15000
Chlorendic acid	µg/L	2200	210 J	110000	3200	4100	25000 U	3800 J
Wet Chemistry								
Sulfate	mg/L	1660	1390	589	1280	74.8	318	71.6

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-6MR	PW-6UR	PW-7U	PW-8U	PW-9U	PW-10U	PW-10U
Sample Name:		PW-6MR-0716	PW-6UR-0716	PW-7U-0716	PW-8U-0716	PW-9U-0716	PW-10U-0716	PW-11U-0716
Sample Date:		07/12/2016	07/12/2016	07/13/2016	07/12/2016	07/13/2016	07/12/2016	07/12/2016
								Duplicate
Parameters	**Unit**							
VOCs								
1,1,1-Trichloroethane	µg/L	17 J	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	1.8 J
1,1,2,2-Tetrachloroethane	µg/L	400	53	1.0 U	12	14	23	24
1,1,2-Trichloroethane	µg/L	41	3.7 J	1.0 U	2.5	3.4 J	4.1 J	4.1 J
1,1-Dichloroethane	µg/L	12 J	5.0 U	1.0 U	0.63 J	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	15 J	4.3 J	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	260	85	1.6	120	870 J	160	160
1,2-Dichlorobenzene	µg/L	110	28	1.0 U	29	33	49	49
1,2-Dichloroethane	µg/L	25 U	5.0 U	1.0 U	10	3.3 J	17	16
1,2-Dichloropropane	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	24 J	4.8 J	0.60 J	29	13	35	37
1,4-Dichlorobenzene	µg/L	95	21	0.63 J	33	44	52	54
2-Chlorotoluene	µg/L	1400	290	0.55 J	330	330	540	570
3-Chlorotoluene	µg/L	25 U	5.0 U	1.0 U	3.4	3.4 J	6.1	5.9
4-Chlorotoluene	µg/L	900	150	0.38 J	210	200	370	390
Benzene	µg/L	1900	100	1.0 U	79	58	88	91
Bromodichloromethane	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	120	8.8	1.0 U	14	4.9 J	19	20
Carbon tetrachloride	µg/L	140	4.8 J	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	1400	260	0.38 J	250	140	410	410
Chloroethane	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	2400	140	0.41 J	83	58	160	180
Chloromethane (Methyl chloride)	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1700	1100	2.3	270	150	540	580
cis-1,3-Dichloropropene	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Dichlorofluoromethane	µg/L	8.8 J	1.9 J	0.37 J	5.2	2.8 J	4.7 J	4.6 J
Ethylbenzene	µg/L	330	55	1.0 U	65	69	110	110
m-Monochlorobenzotrifluoride	µg/L	140	64	5.6	34	76	47	47
Methylene chloride	µg/L	220	5.9	1.0 U	6.1	16	11	11

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-6MR	PW-6UR	PW-7U	PW-8U	PW-9U	PW-10U	PW-10U
Sample Name:		PW-6MR-0716	PW-6UR-0716	PW-7U-0716	PW-8U-0716	PW-9U-0716	PW-10U-0716	PW-11U-0716
Sample Date:		07/12/2016	07/12/2016	07/13/2016	07/12/2016	07/13/2016	07/12/2016	07/12/2016
								Duplicate
Parameters	**Unit**							
VOCs-Continued								
o-Monochlorobenzotrifluoride	µg/L	480	210	8.6	56	110	89	87
p-Monochlorobenzotrifluoride	µg/L	590	260	19	96	230	140	140
Styrene	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	330	5.2	8.4	18	200	8.5	7.8
Toluene	µg/L	3100	300	1.0 U	300	210	570	600
trans-1,2-Dichloroethene	µg/L	74	14	1.0 U	1.7 J	5.0 U	2.2 J	2.1 J
trans-1,3-Dichloropropene	µg/L	25 U	5.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	1100	250	32	70	170	120	130
Trichlorofluoromethane (CFC-11)	µg/L	25 U	5.0 U	1.0 U	2.1 J	1.3 J	4.8 J	4.6 J
Vinyl acetate	µg/L	50 U	10 U	2.0 U	5.0 U	10 U	10 U	10 U
Vinyl chloride	µg/L	1200	140	1.0 U	20	7.8	25	27
Xylenes (total)	µg/L	1700	250	3.0 U	290	280	530	540
SVOCs								
2,4,6-Trichlorophenol	µg/L	94 U	19 U	9.4 U	28 U	190 U	100	47 U
2,4-Dichlorophenol	µg/L	14 J	12 J	9.4 U	3.7 J	190 U	5.3 J	6.7 J
2,4-Dimethylphenol	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
2,4-Dinitrophenol	µg/L	470 U	94 U	47 U	140 U	940 U	140 U	240 U
2-Chloronaphthalene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
2-Chlorophenol	µg/L	10 J	2.7 J	9.4 U	28 U	190 U	28 U	47 U
2-Nitrophenol	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	470 U	94 U	47 U	140 U	940 U	140 U	240 U
4-Chloro-3-methylphenol	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
4-Nitrophenol	µg/L	470 U	94 U	47 U	140 U	940 U	140 U	240 U
Acenaphthene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Acenaphthylene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Anthracene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Benzo(a)anthracene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Benzo(a)pyrene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Benzo(b)fluoranthene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-6MR	PW-6UR	PW-7U	PW-8U	PW-9U	PW-10U	PW-10U
Sample Name:		PW-6MR-0716	PW-6UR-0716	PW-7U-0716	PW-8U-0716	PW-9U-0716	PW-10U-0716	PW-11U-0716
Sample Date:		07/12/2016	07/12/2016	07/13/2016	07/12/2016	07/13/2016	07/12/2016	07/12/2016 Duplicate
Parameters	**Unit**							
SVOCs-Continued								
Benzo(g,h,i)perylene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
bis(2-Chloroethoxy)methane	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	94 U	19 U	9.4 U	28 U	55 J	28 U	47 U
Butyl benzylphthalate (BBP)	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Chrysene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Di-n-butylphthalate (DBP)	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Di-n-octyl phthalate (DnOP)	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Dibenz(a,h)anthracene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Diethyl phthalate	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Dimethyl phthalate	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Fluoranthene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Fluorene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Hexachlorobenzene	µg/L	94 U	38	9.4 U	28 U	1300	28 U	47 U
Hexachlorobutadiene	µg/L	94 U	53	2.2 J	28 U	950	28 U	47 U
Hexachlorocyclopentadiene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Hexachloroethane	µg/L	17 J	17 J	9.4 U	28 U	24 J	28 U	47 U
Indeno(1,2,3-cd)pyrene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Isophorone	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Naphthalene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Octachlorocyclopentene	µg/L	47 U	10	4.7 U	14 U	94 U	14 U	24 U
Pentachlorophenol	µg/L	470 U	94 U	47 U	140 U	940 U	140 U	240 U
Phenanthrene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Phenol	µg/L	880	190	9.4 U	290	950	290	370
Pyrene	µg/L	94 U	19 U	9.4 U	28 U	190 U	28 U	47 U
Organic Acids								
2-Chlorobenzoic acid	µg/L	4700	440	30 U	560	430	600	600
3-Chlorobenzoic acid	µg/L	16000	990	30 U	1800	850	2400	2400

Table 2

Analytical Results Summary
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Location ID:		PW-6MR	PW-6UR	PW-7U	PW-8U	PW-9U	PW-10U	PW-10U
Sample Name:		PW-6MR-0716	PW-6UR-0716	PW-7U-0716	PW-8U-0716	PW-9U-0716	PW-10U-0716	PW-11U-0716
Sample Date:		07/12/2016	07/12/2016	07/13/2016	07/12/2016	07/13/2016	07/12/2016	07/12/2016 Duplicate
Parameters	**Unit**							
Organic Acids-Continued								
4-Chlorobenzoic acid	µg/L	18000	1100	300 U	780 J	810	1100	1100
Benzoic acid	µg/L	15000	1500	100 U	2300	3400	4100	4200
Chlorendic acid	µg/L	4200	800	800	10000	4100	2800	2700
Wet Chemistry								
Sulfate	mg/L	72.2	1190	285	355	462	522	512

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
VOCs - Volatile Organic Compounds
SVOCs - Semi-volatile Organic Compounds
R - Rejected

Table 3

Qualified Sample Results Due to Outlying Laboratory Control Sample Results
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Parameter	Analyte	LCS Date (mm/dd/yyyy)	LCS % Recovery	Control Limits % Recovery	Associated Sample ID	Qualified Results	Units
VOCs	1,1-Dichloroethane	07/20/2016	118	78-117	PW-8U-0716	0.63 J	µg/L
					PW-5UR-0716	11 J	µg/L
					PW-2UR-0716	20 J	µg/L

Notes:

LCS - Laboratory Control Sample
J - Estimated concentration
VOCs - Volatile Organic Compounds

Table 4

Qualified Sample Results Due to Outlying MS/MSD Results
5-Year Bloody Run Sampling
Glenn Springs Holdings, Inc.
Hyde Park Landfill
Niagara Falls, New York
July 2016

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result		Units
SVOCs	PW-5UR-0716	2,4-Dinitrophenol	0	0	NA	21-168	30		R	µg/L
		2-Chloronaphthalene	43	43	0	57-103	30	190	UJ	µg/L
		4,6-Dinitro-2-methylphenol	0	0	NA	52-142	30		R	µg/L
		4-Nitrophenol	0	0	NA	16-89	30		R	µg/L
		Acenaphthene	48	57	17	62-108	30	190	UJ	µg/L
		Acenaphthylene	45	42	7	61-108	30	190	UJ	µg/L
		Anthracene	53	47	12	68-110	30	190	UJ	µg/L
		Benzo(a)anthracene	58	53	9	66-113	30	190	UJ	µg/L
		Benzo(b)fluoranthene	53	46	14	62-115	30	190	UJ	µg/L
		Chrysene	60	43	12	64-117	30	190	UJ	µg/L
		Di-n-butylphthalate (DBP)	64	53	19	68-117	30	190	UJ	µg/L
		Diethyl phthalate	56	53	6	64-117	30	190	UJ	µg/L
		Dimethyl phthalate	58	62	7	63-112	30	190	UJ	µg/L
		Fluoranthene	56	57	2	62-120	30	190	UJ	µg/L
		Fluorene	54	54	0	66-107	30	190	UJ	µg/L
		Hexachlorocyclopentadiene	0	0	NA	10-103	30		R	µg/L
		Pentachlorophenol	0	0	NA	34-159	30		R	µg/L
		Phenanthrene	56	53	6	58-118	30	190	UJ	µg/L
		Pyrene	53	46	14	62-123	30	190	UJ	µg/L
Organic Acids	PW-5UR-0716	Chlorendic acid	179	148	9	32-186	30	3800	J	µg/L

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated
R - Rejected
SVOCs - Semi-volatile Organic Compounds
NA - Not applicable