



## 2015 Annual Periodic Review Report

Hyde Park Landfill  
Niagara Falls, New York

Glenn Springs Holdings, Inc.

April 29, 2016  
2055 Niagara Falls Boulevard Niagara Falls New York 14304  
001069 | Report No 363

## Executive Summary

The following report describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2015 at the Hyde Park Landfill Site (Site) located at 4825 Hyde Park Boulevard, Niagara Falls, Town of Niagara, Niagara County, New York. The Site covers approximately 58.6 acres and consists of thirty-two parcels owned by Occidental Chemical Corporation (OCC). One encompasses the landfill itself at 27.8 acres, and the others contain the treatment system at 1.9 acres and the Bloody Run area at 28.9 acres. 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 2015, the remedial system components at the Site performed as designed. The Source Control (SC), Overburden Requisite Remedial Technology (RRT), and Bedrock RRT Systems removed 25.1 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. No NAPL was shipped off Site for disposal in 2015.

The 2015 data indicate that there has been no significant change in chemical and hydrogeological conditions at the Site. Consistent with the recommendation in 2014 Annual Period Review Report, GSH reaffirms its recommendation that quarterly purging of the SC wells and subsequent water level and NAPL thickness measurements be discontinued.

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Appendix B      2015 Gorge Face Seep Survey Results

# 1. Introduction

The following Periodic Review Report (PRR) describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2015 at the Hyde Park Landfill-Bloody Run Area 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 occupies approximately 58.6 acres 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 landfill is bounded by Hyde Park Boulevard and Marshall Avenue to the west, University Drive and 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. and Penrose Street to the east. The Site is located approximately 2,000 feet east of the Niagara River Gorge (Gorge).

## 1.2 Site History

The Hyde Park Landfill is an inactive disposal facility where approximately 80,000 tons of liquid, sludge, and debris chemicals, primarily chlorobenzenes, were placed 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 property 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 2015 performance monitoring data for the overburden systems are presented as follows:

SC System Well Locations	Figure 1.2
2015 SC Well Pumping Summary	Table 3.1
Overburden RRT System	Figure 1.3
2015 Overburden Quarterly Groundwater Elevation Summary	Table 3.2
2015 Overburden NAPL Presence Monitoring	Table 3.3
2015 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 first quarter of 2015. The Bloody Run monitoring wells are sampled every 5 years, with the next event planned for 2016.

The 2015 performance monitoring data for the bedrock systems are presented as follows:

Bedrock Monitoring Program Locations	Figure 1.4
2015 Bedrock Quarterly Water Level Elevation Summary – Piezometers	Table 3.5
2015 Bedrock Purge Well Monthly Flow Rate Summary	Table 3.6
Analytical Results Summary: Quarterly Group B Bedrock Piezometer Sampling	Tables 3.7a-d
Analytical Results Summary: Fifth Quarter Group A Bedrock Piezometer Sampling, First Quarter 2015	Table 3.8
Bloody Run Monitoring Well Locations	Figure 3.1

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 2015 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 2015 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 2015 performance monitoring data for the community monitoring are presented as follows:

APL Flux Well Locations	Figure 3.2
2015 Analytical Results Summary: Annual AFW Composite	Table 3.9
Community Monitoring Locations	Figure 1.7
2015 Quarterly Hydraulic Gradient Summary	Table 3.10
2015 Community Monitoring Well Soil Vapor Monitoring	Table 3.11
2015 Gorge Seep Survey	Appendix B

## 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 2015 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 2015:

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 2015. 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 2015 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.

The 2015 SC well NAPL thickness and pumping data are summarized in Table 3.1. As prescribed by the 2006 PMP, this observed NAPL thickness provides an estimate of how much NAPL was removed during 2015 pumping operations. The NAPL thickness measurements result in an estimated NAPL volume of 52.9 percent of the total volume of APL/NAPL purged. Based on this, the amount of NAPL recovered in 2015 was estimated to be 64 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 during the monthly purging of the SC wells from 2006 through 2015 is 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

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. Monthly SC water level and NAPL thickness data from 2009 through 2015 show that the SC wells do not produce significant amounts of NAPL.

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 when manual removal of NAPL ceased due to cold temperatures. The declining volume of NAPL in this well supports the conclusion that the SC wells do not produce significant amounts of NAPL. The total amount of NAPL removed manually from SC-6 was 55.5 gallons.

#### 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 2015 Quarterly Operations Reports. These potentiometric surface maps indicated hydraulic containment for each quarter of 2015.

#### 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 4 of the 17 manholes monitored (MH-29, MH-30, MH-31, and MH-32) and in 1 of the 2 wet wells (Wet Well D). The four 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 2015.

### 5.1.5 Overburden Monitoring Conclusions

Based on the overburden data collected in 2015 as shown in Tables 3.1 through 3.4 and the potentiometric surface maps that were presented in the 2015 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 2015 and monitoring was conducted in accordance with the 2006 PMP. The results of the BMP in 2015 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 2015 Quarterly Operations Reports. The potentiometric surface maps for each monitored flow zone during each quarter of 2015 indicated containment.

### 5.2.2 Bedrock RRT System Flow Rates and Setpoints

The 2015 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 2015 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 2015.

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 517.15 feet AMSL throughout 2015, with a maximum elevation observed of 520.35 feet AMSL. The average and maximum elevations were below the 526 feet AMSL action elevation setpoint. 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 516.86 feet AMSL in 2015.

### 5.2.3 Bedrock Analytical Results

In accordance with the 2006 PMP, quarterly groundwater samples were collected from the Group B Bedrock piezometers in 2015. The quarterly groundwater sampling events were performed during March 2015, May/June 2015, August 2015, and November 2015. The annual (5th quarter Group "A" Bedrock piezometer sampling) event, as defined in the PMP, was performed during May/June 2015.

The 2015 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 2015 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-07, AGW-1M-09, AGW-1U-06, B2L-11, D1M-09, D1U-04, D1U-05, D2M-09, F2U-02, F2U-04, G6-04, G6-05, H5-09, H2M-09, H2U-02, J6-07
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, H2M-06
Tetrachloroethene	G6-01, G6-02, G6-04
Trichloroethene	G6-01, G6-02, G6-04, G6-05
Vinyl Chloride	AGW-1U-06, G6-01, G6-02, G6-04, G6-05, H2U-02
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-Ethylexylo)phthalate (DEHP)	ABP-7-09, E6-04, F6-11, G1L-11, G1M-06, G1U-01

The parameters identified at G6-05 were also present at this location during the 2003, 2007, 2011, and 2012 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-ethylhexyl)phthalate (DEHP) were generally consistent with results from the quarterly Group "B" piezometer and 5<sup>th</sup> quarter Group "A" Bedrock Piezometer sampling events conducted in previous years.

The Bloody Run Creek Monitoring Program is required to be conducted every 5 years. The next sampling event is scheduled to be conducted in 2016.

The bedrock groundwater data collected in 2015 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 2015 demonstrate that the APL and NAPL purge well systems are operating properly, and bedrock containment is being achieved in each of the flow zones.

### 5.3 Community Monitoring Program

There were no deviations from the CMP in 2015.

#### 5.3.1 APL Flux Monitoring Program

The APL plume flux composite sampling results are presented in Table 3.9. 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 3.10 presents a summary of groundwater elevations and vertical hydraulic gradients at the paired community monitoring wells for each quarter of 2015. 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 3.11. All five locations monitored exhibited no recordable concentrations of VOCs during the September 2015 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 conducted on August 25, 2015 and the results are presented in Appendix C. No remedial actions were recommended as a result of the survey. 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 2015 demonstrate that the community is being properly protected by Site remedial systems.

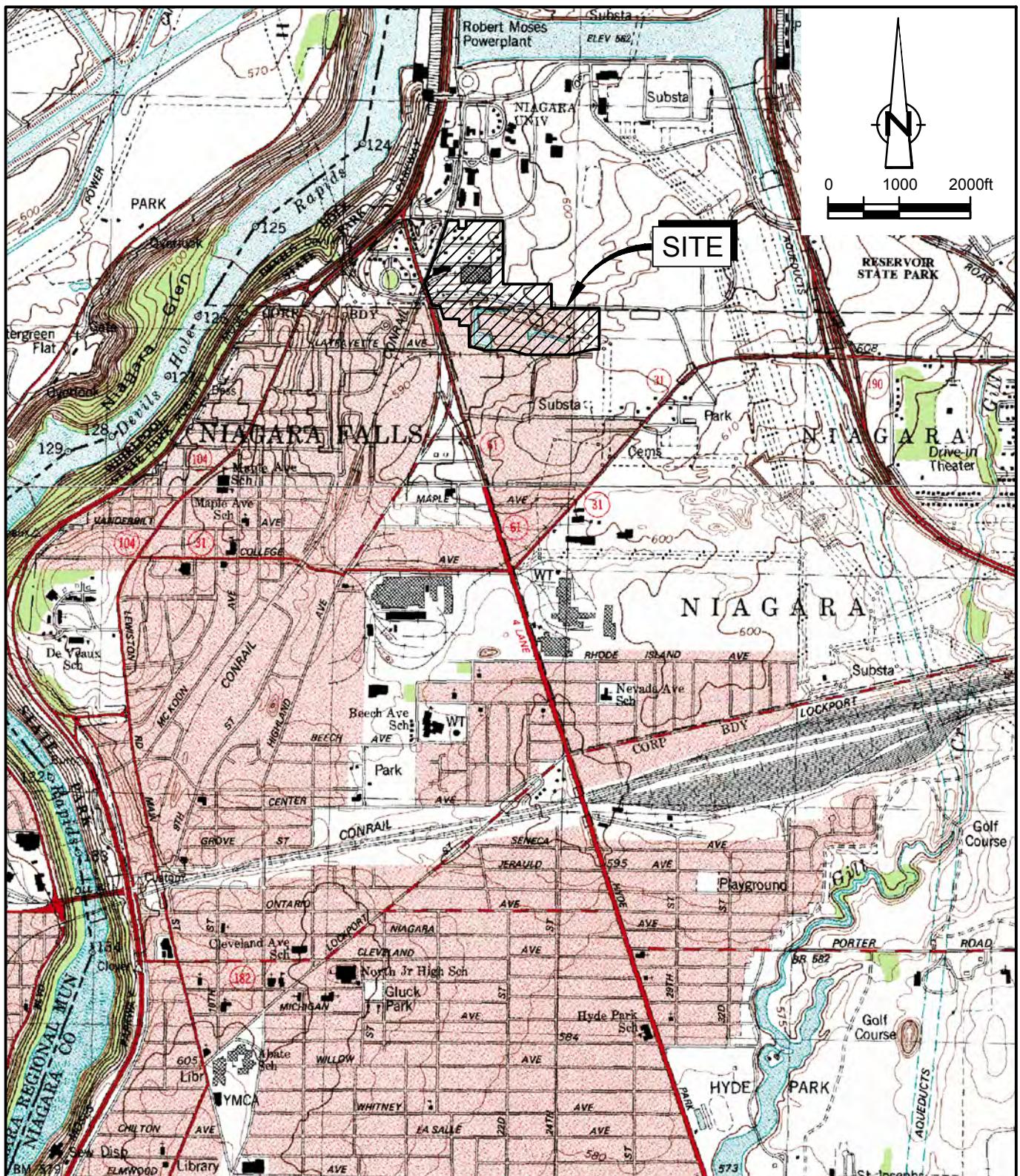
### 5.4 Site Operations and Maintenance

There were no deviations in 2015 from the treatment system monitoring specified in the 2006 PMP . Ongoing operations and maintenance issues are discussed in the 2015 Quarterly Operations Reports.

## 6. Recommendations

Based on the monthly SC water level and NAPL thickness data from 2009 through 2015 and the declining volume of NAPL removed from SC-6 via monthly manual removal in 2015, the SC wells do not produce significant amounts of NAPL. Therefore, GSH reaffirms its recommendation that quarterly purging of the SC wells and subsequent water level and NAPL thickness measurements be discontinued.

# Figures

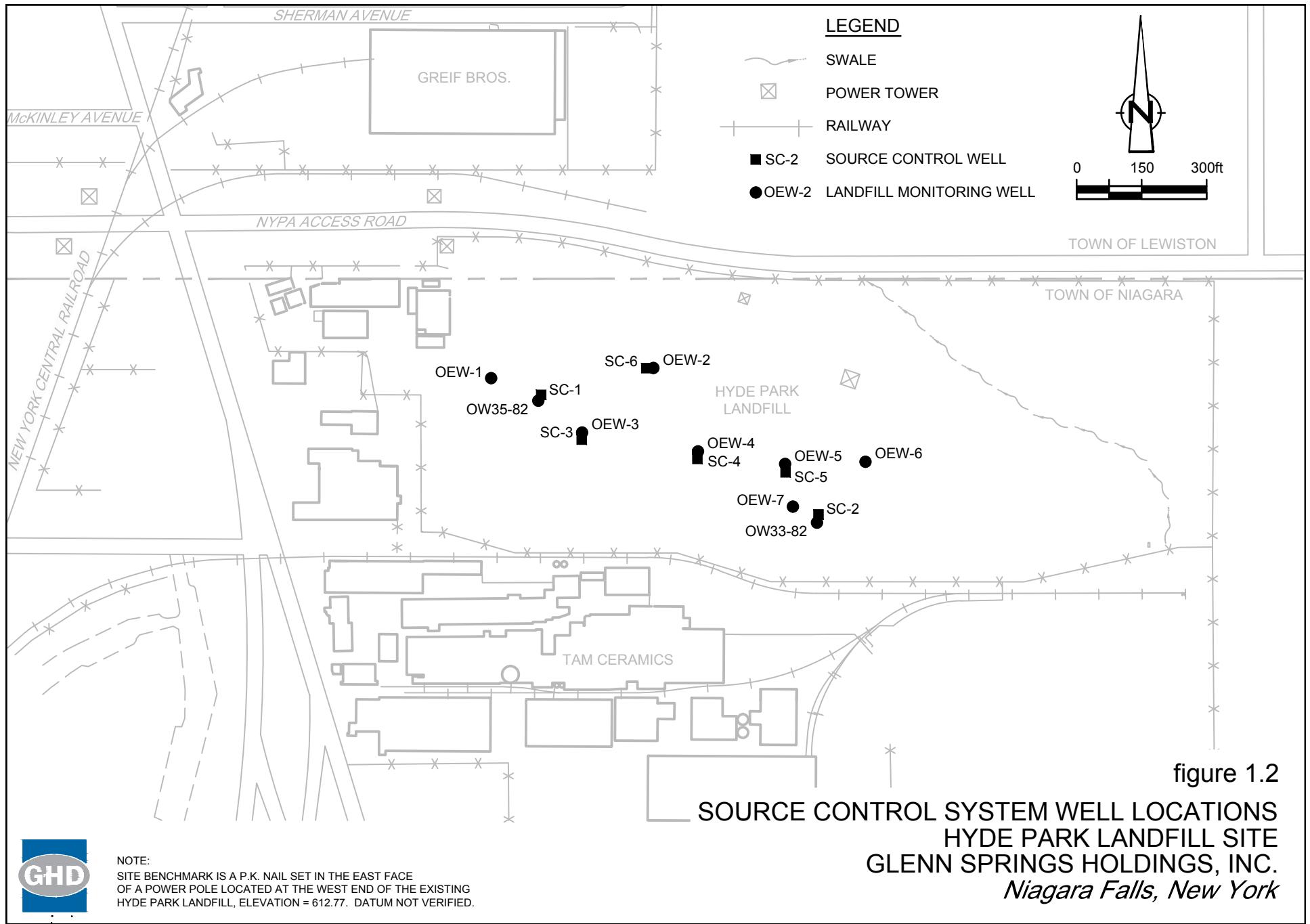


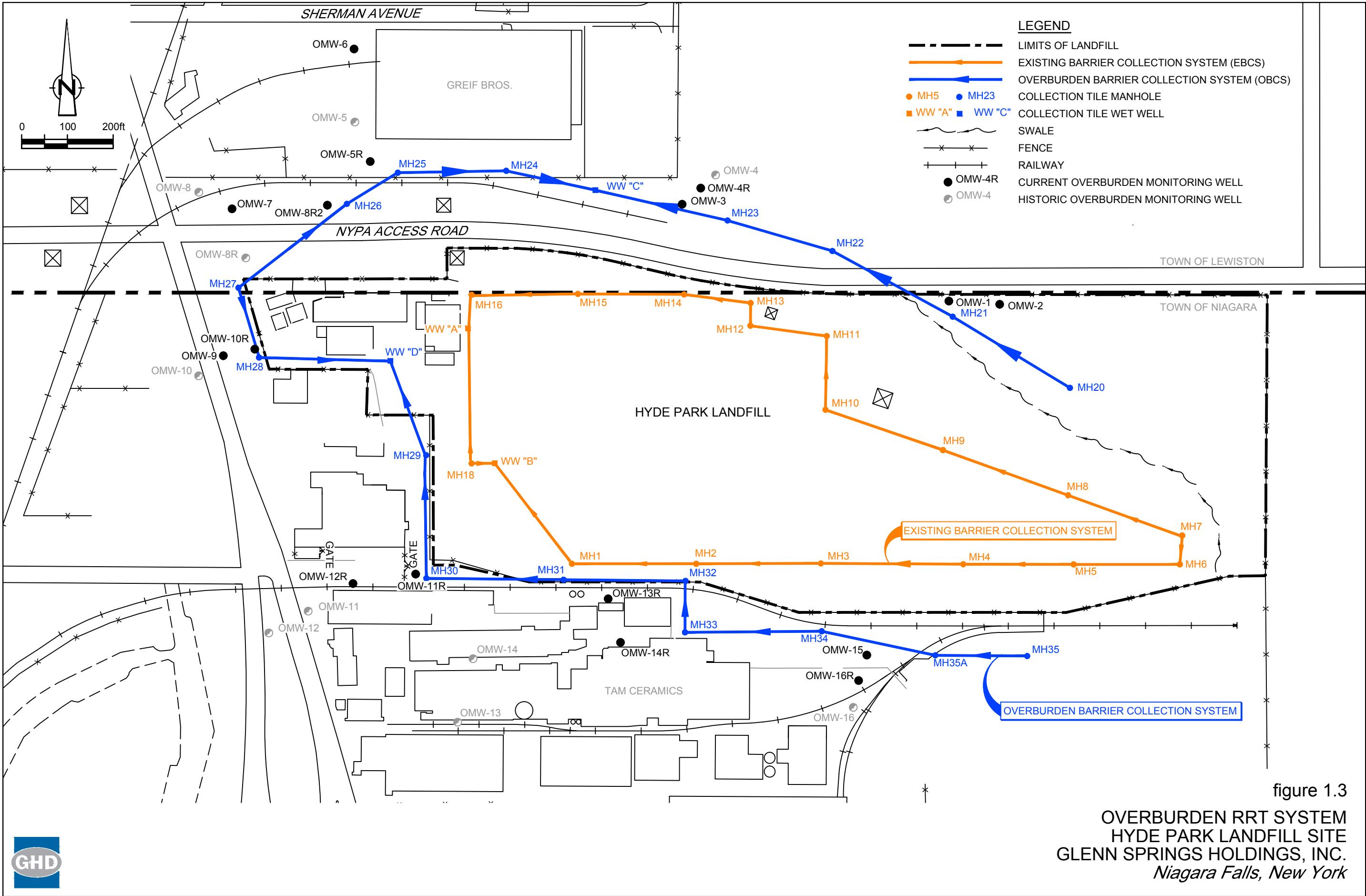
SOURCE: USGS QUADRANGLE MAPS;  
NIAGARA FALLS, NEW YORK - ONTARIO, 1980  
LEWISTON, NEW YORK, 1980

figure 1.1

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







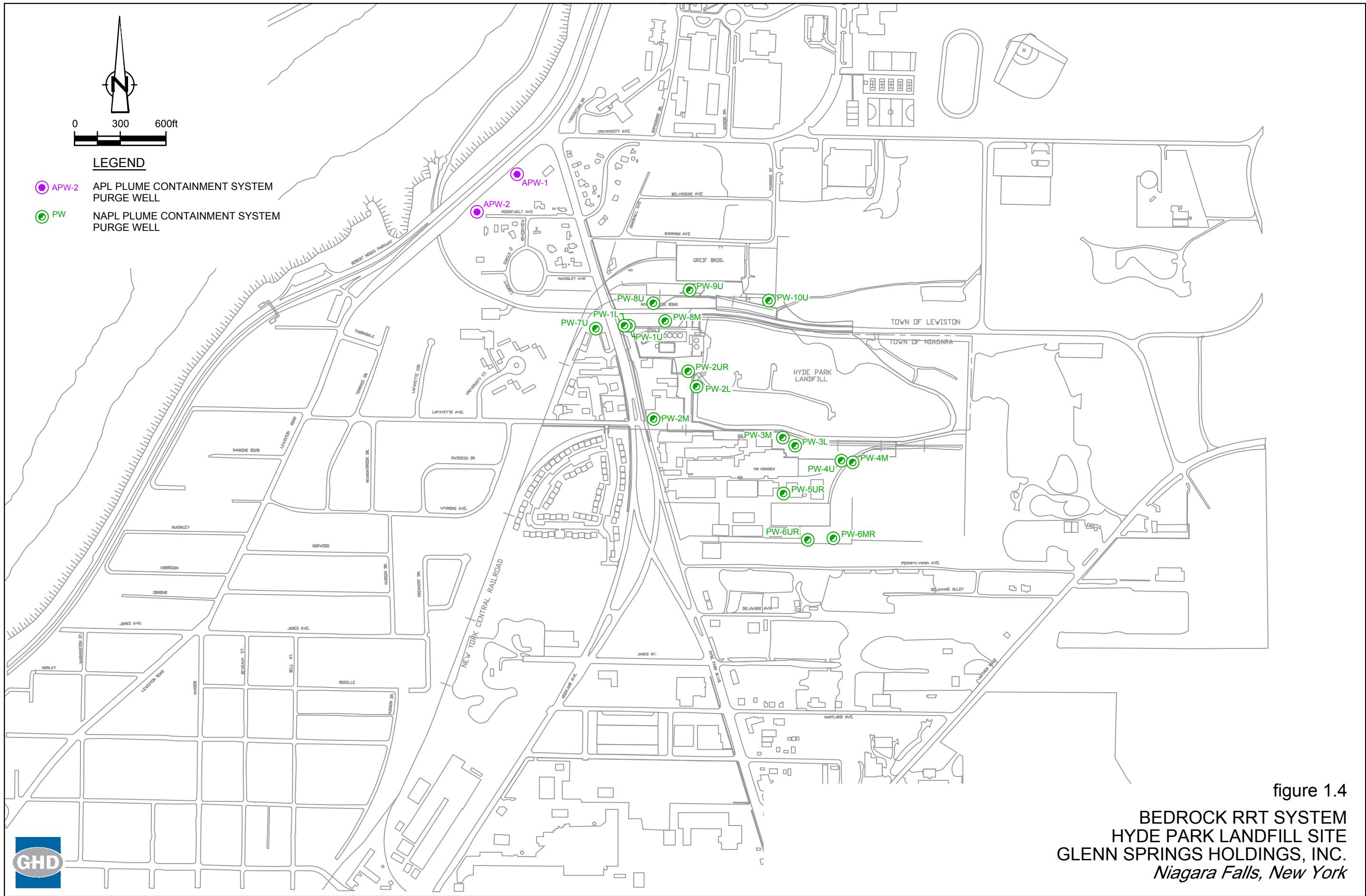
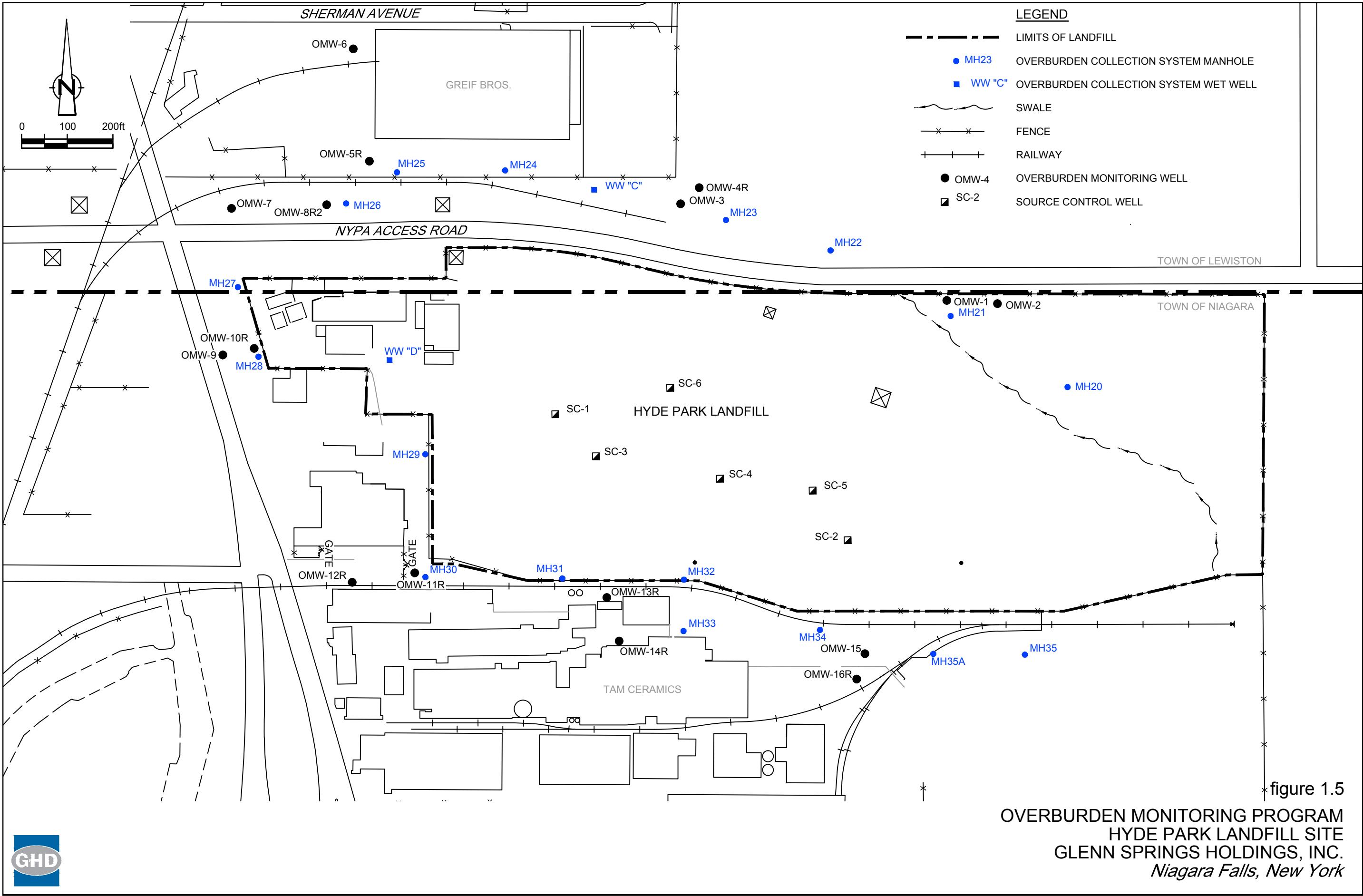
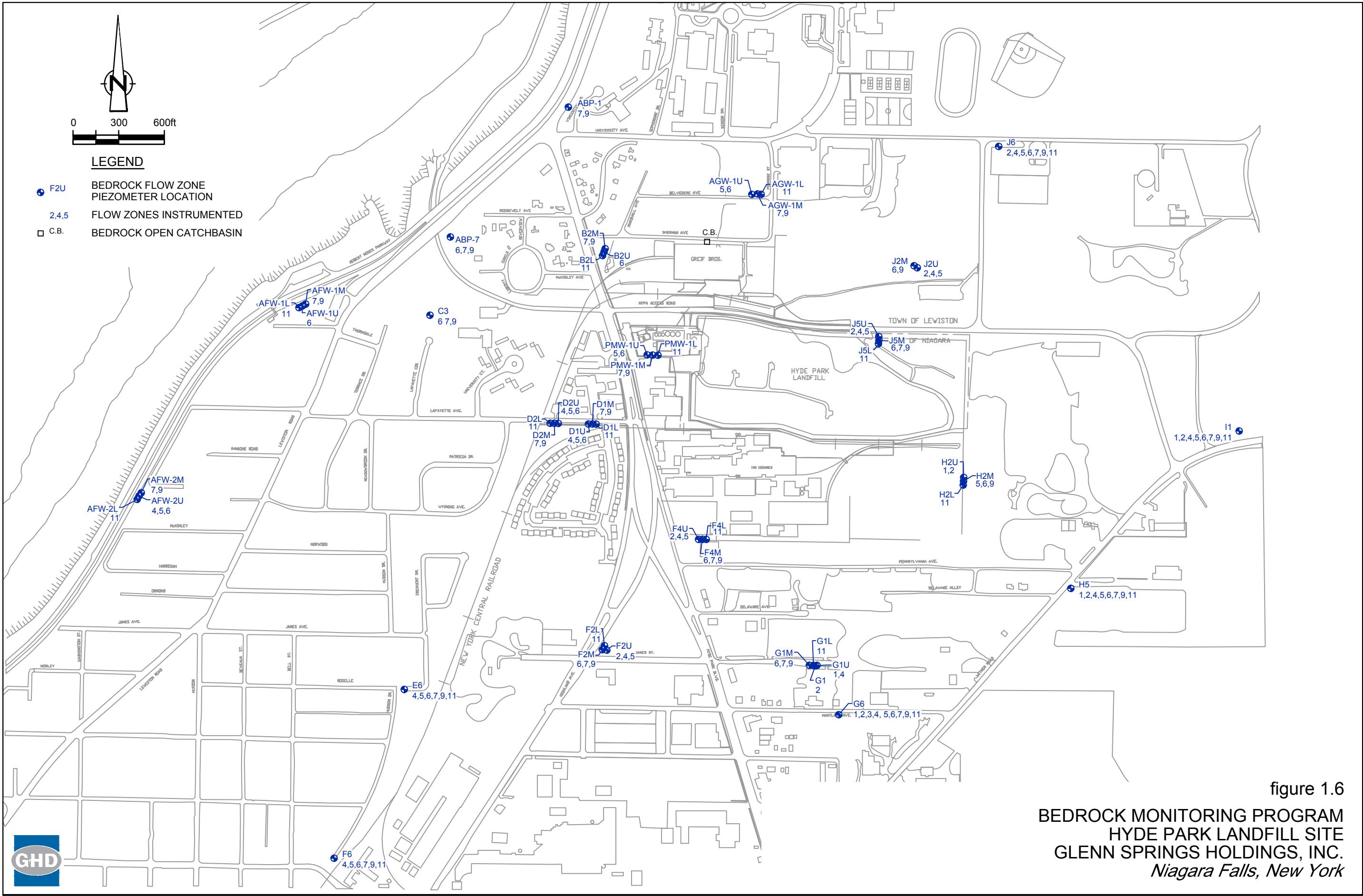
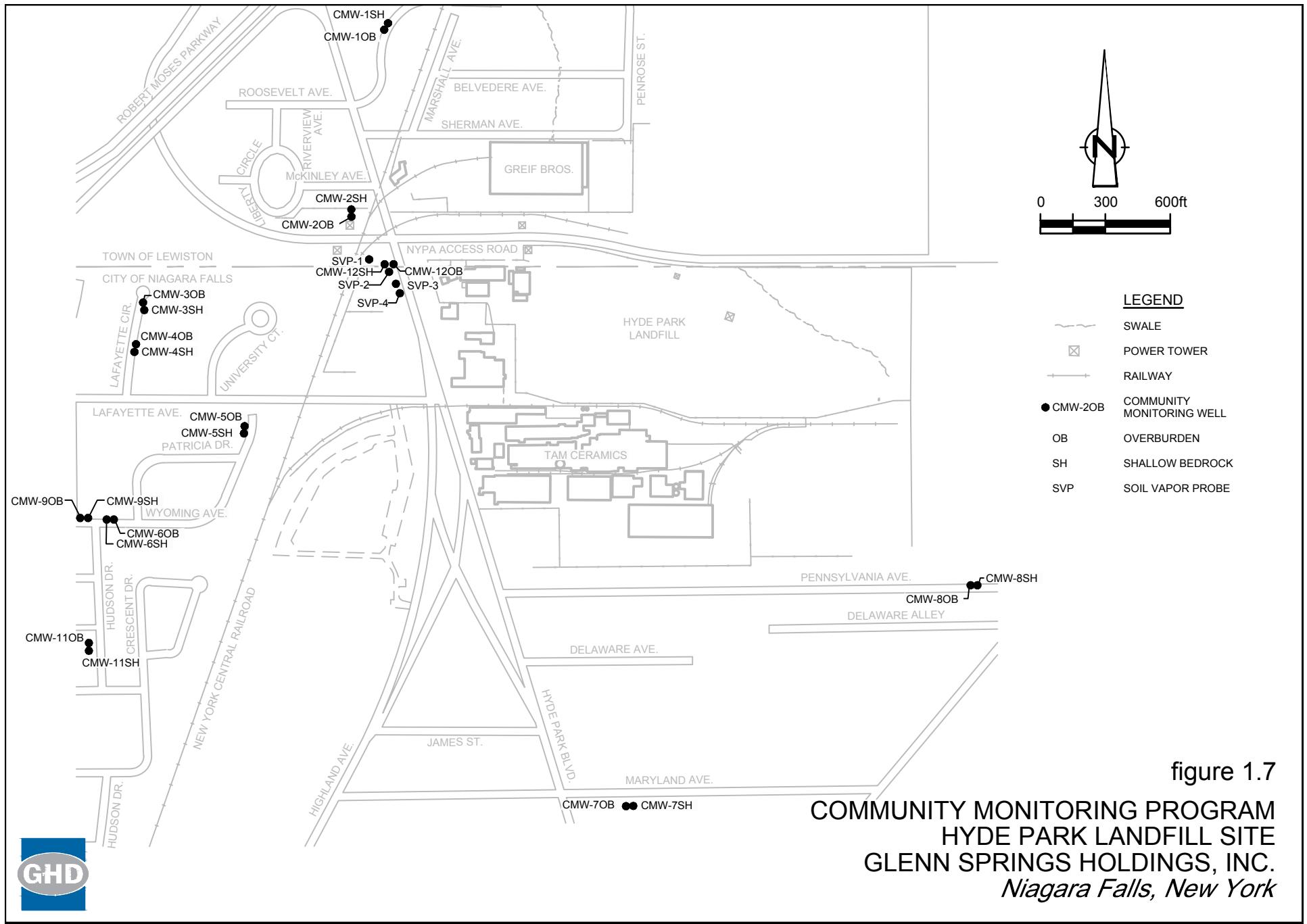


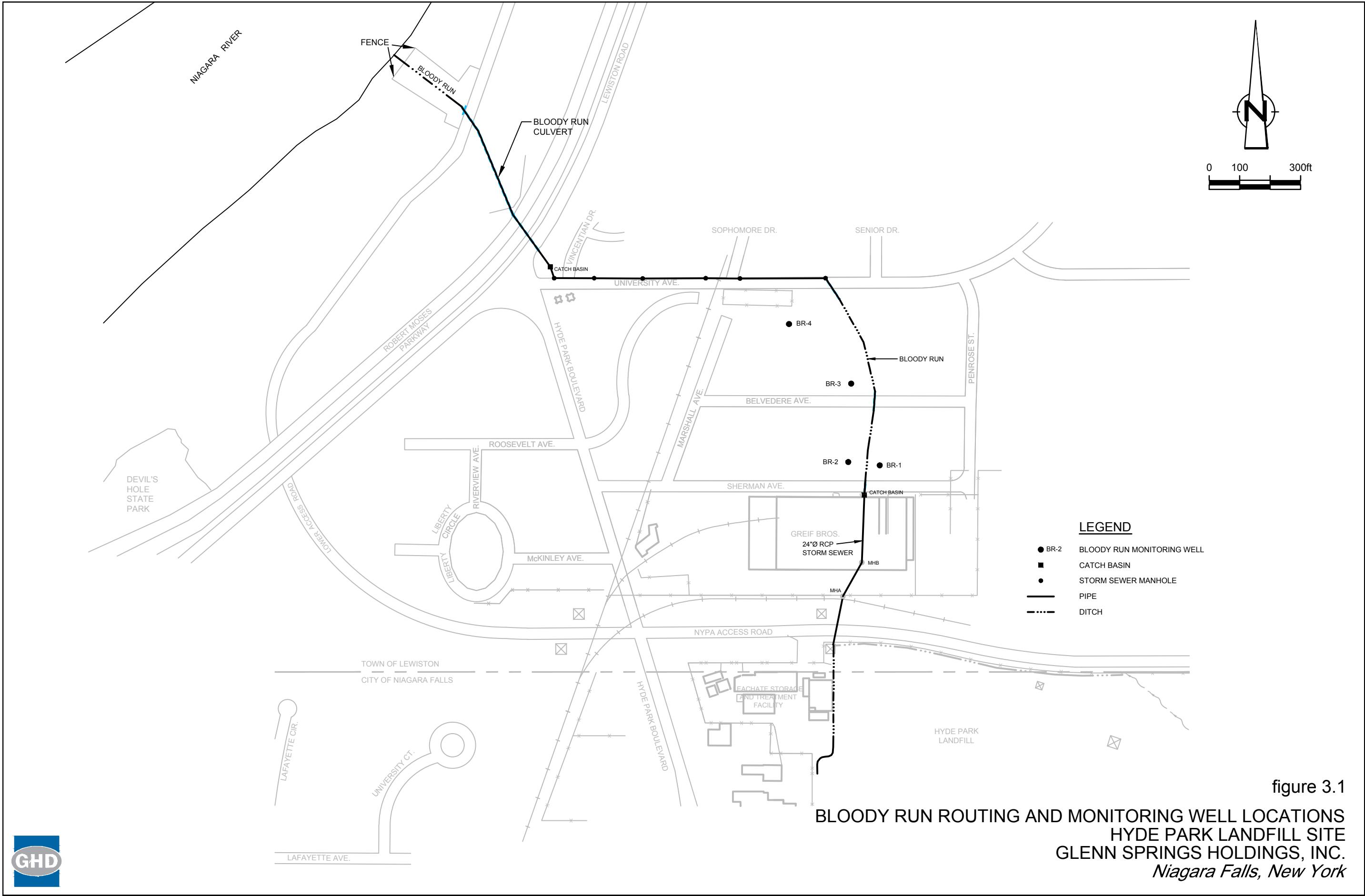
figure 1.4

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









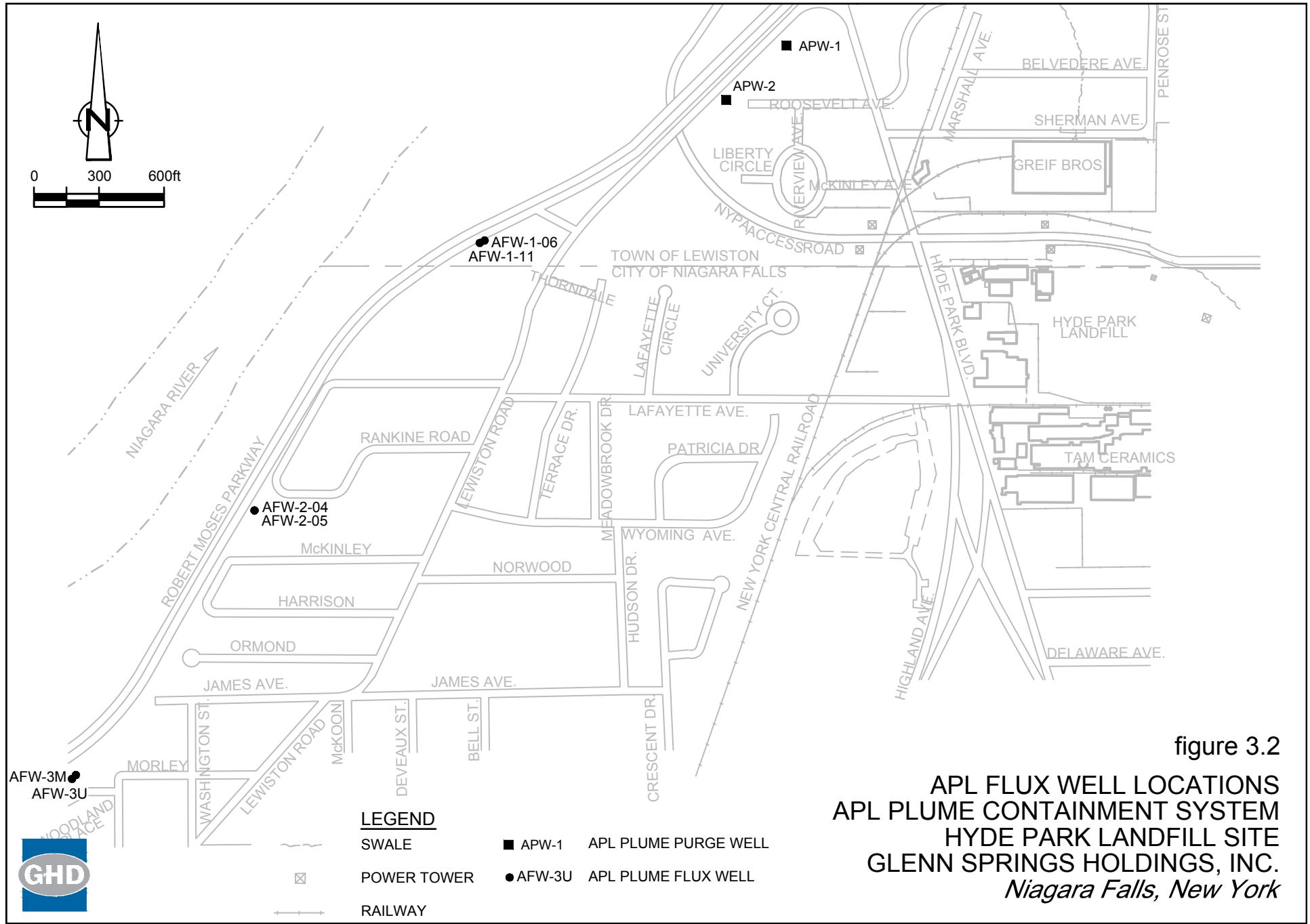


figure 3.2  
**APL FLUX WELL LOCATIONS**  
**APL PLUME CONTAINMENT SYSTEM**  
**HYDE PARK LANDFILL SITE**  
**GLENN SPRINGS HOLDINGS, INC.**  
*Niagara Falls, New York*

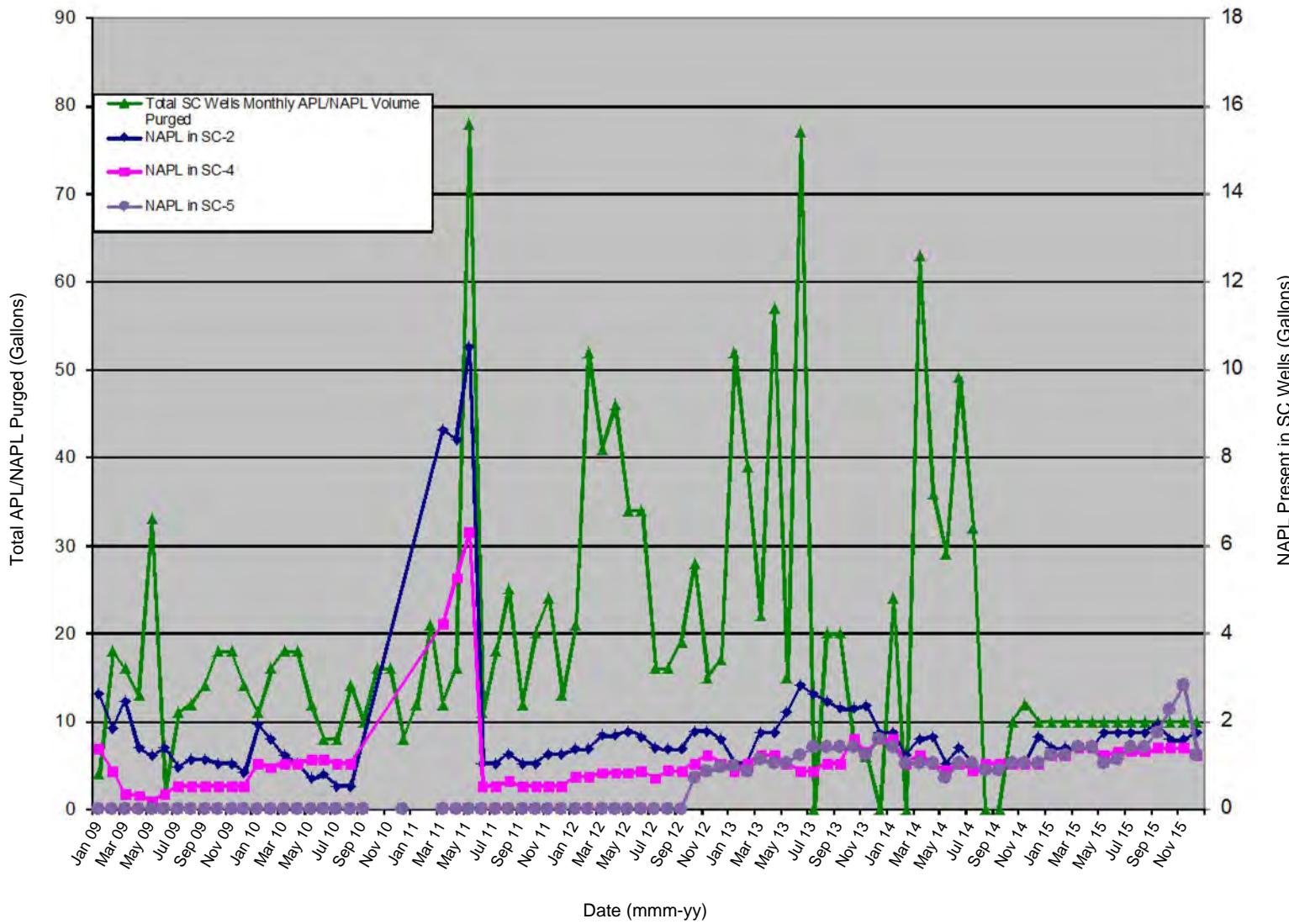


figure 5.1

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

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**PMP Monitoring Tasks - 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

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

Table 1.1

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**PMP Monitoring Tasks - 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

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

## 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

**2015 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)	
January	1.3	602.4	0.0	612.2	1.2	605.6	1.2	607.1	2.5	613.1	8.0
February	1.3	602.4	0.0	612.2	1.2	605.6	1.2	607.1	2.5	613.1	8.0
March	1.3	594.6	0.0	597.8	1.3	608.6	1.3	605.7	3.3	578.2	8.0
April	1.3	594.0	0.0	596.9	1.3	602.5	1.3	604.7	10 <sup>(1)</sup>	578.2	26 <sup>(1)</sup>
May	1.7	594.2	0.0	594.6	1.2	603.0	1.0	605.2	4.4 <sup>(2)</sup>	578.2	16 <sup>(1)</sup>
June	1.7	594.9	0.0	597.7	1.3	608.7	1.1	605.7	4.4 <sup>(2)</sup>	578.2	16 <sup>(1)</sup>
July	1.7	594.1	0.0	597.7	1.3	608.5	1.3	605.7	3.8 <sup>(2)</sup>	578.2	15 <sup>(1)</sup>
August	1.7	594.3	0.0	597.6	1.3	598.3	1.3	605.7	4.2 <sup>(2)</sup>	578.2	15.5 <sup>(1)</sup>
September	1.8	594.8	0.0	597.7	1.3	608.3	1.7	605.7	2.2 <sup>(2)</sup>	578.2	12 <sup>(1)</sup>
October	1.5	594.8	0.0	597.7	1.3	608.3	2.2	605.7	1.7 <sup>(2)</sup>	578.2	11 <sup>(1)</sup>
November	1.5	640.1	0.0	597.6	1.3	608.4	2.7	605.7	0.0	578.2	8.0
December	1.7	594.8	0.0	597.7	1.2	608.3	1.2	605.7	0.0	578.2	8.0

Notes:

ft. AMSL

- Feet Above Mean Sea Level

NAPL

- Non-aqueous Phase Liquid

<sup>(1)</sup>

- Manual NAPL removal performed in SC-6 April through October 2015

<sup>(2)</sup>

- Estimated NAPL thickness based on volume removed

Table 3.2

Page 1 of 1

**2015 Overburden Quarterly Groundwater Elevation Summary**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Well	Reference Elevation (ft. AMSL)	Water Level Elevation	Water Level Elevation	Water Level Elevation	Water Level Elevation
		Quarter 1 3/16/2015	Quarter 2 6/2/2015	Quarter 3 9/1/2015	Quarter 4 12/2/2015
		(ft. AMSL)	(ft. AMSL)	(ft. AMSL)	(ft. AMSL)
OMW-1	605.28	600.87	599.53	596.77	598.62
OMW-2	605.99	602.80	602.06	Dry	601.24
OMW-3	598.63	588.50	588.05	587.41	585.97
OMW-4R	601.17	590.87	589.88	588.93	588.50
OMW-5R	591.31	589.22	585.43	583.52	585.42
OMW-6	587.62	585.42	585.40	585.15	585.30
OMW-7	592.74	586.43	585.10	584.03	584.60
OMW-8R2	594.67	588.80	586.59	585.06	585.42
OMW-9	595.52	589.37	587.21	586.69	587.54
OMW-10R	595.13	590.04	586.07	585.96	586.26
OMW-11R	597.52	590.42	590.53	590.00	590.77
OMW-12R	597.20	590.51	591.35	590.70	591.44
OMW-13R	601.50	592.03	591.99	591.95	591.73
OMW-14R	599.64	(1)	592.71	591.81	592.93
OMW-15	607.48	602.09	602.21	600.78	600.76
OMW-16R	607.62	603.88	603.22	599.95	603.24
SC-2	625.61	593.80	594.90	594.30	640.2*
SC-3	638.72	597.80	597.70	597.60	597.70
SC-4	639.35	608.60	608.60	594.20	608.60
SC-5	634.07	605.70	605.70	605.70	605.70
SC-6	631.15	578.20	578.20	578.20	578.20
MH-20	605.87	601.24	601.19	600.90	600.94
MH-21	599.77	593.69	593.65	593.49	593.65
MH-22	593.37	586.71	586.54	586.27	586.35
MH-23	587.05	579.42	574.94	574.76	574.87
MH-24	582.57	581.36	576.03	576.15	576.07
MH-25	583.82	582.92	577.66	577.81	577.69
MH-26	584.48	581.99	576.80	576.95	576.79
MH-27	586.12	580.39	575.56	575.51	575.24
MH-28	585.23	579.60	568.97	569.28	568.71
MH-29	582.90	596.85	589.49	589.49	567.72
MH-30	588.37	591.91	589.46	589.44	Dry
MH-31	590.10	581.34	580.46	580.55	580.26
MH-32	592.01	582.41	582.39	582.35	582.38
MH-33	592.51	583.82	583.80	583.77	583.76
MH-34	597.64	591.26	591.22	591.16	590.47
MH-35	605.69	599.19	599.17	599.17	598.20
MH-35A	605.69	598.59	598.52	598.20	599.14

## Notes:

- Dry - No water present in well
- ft. AMSL - Feet Above Mean Sea Level
- \* - Indicates sensor error
- Not available
- (1) - Unable to locate well due to snow cover

**Table 3.3**

**2015 Overburden NAPL Presence Monitoring  
Hyde Park Landfill Site  
Town of Niagara, New York**

Well I.D.	April 6-22, 2015 (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	Yes
MH-33	No
MH-34	No
MH-35	No
MH-35A	No
Wet Well C	No
Wet Well D	Yes

**Table 3.4**

**2015 Overburden Collection Systems Monthly Average Flow (gpm) Summary**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

<b>Month</b>	<b>EBCS WET WELL A</b>	<b>OBCS WET WELL C</b>	<b>OBCS WET WELL D</b>	<b>Total EBCS</b>	<b>Total OBCS</b>
January	0.3	10.1	9.8	0.3	19.9
February	0.3	2.2	1.5	0.3	3.6
March	1.0	11.5	29.4	1.0	40.8
April	1.3	16.7	29.7	1.3	46.5
May	0.2	5.0	2.2	0.2	7.2
June	0.2	11.5	11.5	0.2	22.9
July	0.1	5.3	3.3	0.1	8.6
August	0.00	1.3	1.9	0.0	3.2
September	0.01	2.8	5.0	0.0	7.8
October	0.01	2.9	6.3	0.0	9.2
November	0.00	3.4	2.4	0.0	5.8
December	0.07	0.4	7.0	0.1	7.4
Annual Average	0.3	6.1	9.2	0.3	15.2

**Notes:**

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

Table 3.5

Page 1 of 3

**2015 Bedrock Quarterly Water Level Elevation Summary - Piezometers**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Well	Reference Elevation (ft. AMSL)	Water Level Elevation	Water Level Elevation	Water Level Elevation	Water Level Elevation
		Quarter 1 3/16/2015 (ft. AMSL)	Quarter 2 6/2/2015 (ft. AMSL)	Quarter 3 9/1/2015 (ft. AMSL)	Quarter 4 12/2/2015 (ft. AMSL)
<b>Flow Zone 1</b>					
G1U-01	617.08	602.78	603.20	599.22	599.06
G6-01	609.24	602.88	602.54	599.13	599.22
H2U-01	620.92	612.95	611.17	607.01	607.48
H5-01	617.61	595.46	596.44	593.19	594.54
I1-01	625.58	598.97	599.18	596.99	597.42
<b>Flow Zone 2</b>					
F2U-02	599.89	576.28	575.70	574.33	574.84
F4U-02	602.32	587.58	586.40	584.94	585.95
G1-02	616.86	592.48	592.07	590.39	591.25
G6-02	608.65	591.93	591.49	589.81	590.57
H2U-02	620.88	594.37	593.66	591.64	592.79
H5-02	617.47	594.02	593.58	591.68	592.76
I1-02	625.47	587.08	588.17	585.78	585.40
J2U-02	609.66	599.75	595.33	590.96	591.88
J5U-02	606.21	599.23	595.99	592.23	593.17
J6-02	609.23	600.50	595.05	591.54	592.64
<b>Flow Zone 4</b>					
AFW-2U-04	593.48	574.55	575.50	574.30	574.21
D1U-04	593.77	582.73	581.26	579.26	579.09
D2U-04	590.65	582.14	580.05	577.28	577.54
E6-04	578.23	565.45	564.63	565.52	564.55
F2U-04	599.76	579.04	578.14	576.16	576.72
F4U-04	602.19	586.76	585.82	584.39	585.98
F6-04	588.06	569.76	569.67	569.33	569.47
G1U-04	616.96	592.14	591.73	590.02	591.01
G6-04	609.15	592.29	591.84	590.17	590.98
H5-04	617.40	593.91	593.51	591.59	592.70
I1-04	625.30	584.42	586.24	582.68	583.74
J2U-04	609.42	597.21	593.00	588.70	589.60
J5U-04	606.05	588.14	586.07	583.47	584.63
J6-04	609.12	582.74	580.83	577.46	578.00
<b>Flow Zone 5</b>					
AFW-2U-05	593.33	574.51	575.65	574.01	574.12
AGW-1U-05	591.80	587.79	586.09	579.68	580.64
D1U-05	593.51	580.78	579.43	577.80	577.99
D2U-05	590.56	580.67	579.32	577.60	578.81
E6-05	578.04	567.74	566.86	566.46	564.71
F2U-05	599.64	579.29	578.25	576.55	577.26
F4U-05	602.06	586.00	585.29	583.77	585.39
F6-05	587.85	569.69	569.57	569.24	569.42
G6-05	609.13	592.01	591.51	589.81	590.58
H2M-05	621.59	592.24	592.40	590.64	552.96
H5-05	617.31	592.07	591.83	590.70	590.50
I1-05	625.25	554.25	555.00	552.47	591.57
J2U-05	609.30	581.30	579.44	575.76	577.74
J5U-05	605.87	581.32	579.45	575.80	576.47
J6-05	609.02	582.34	580.60	577.13	576.39
PMW-1U-05	598.00	578.24	576.51	576.40	577.48

Table 3.5

Page 2 of 3

**2015 Bedrock Quarterly Water Level Elevation Summary - Piezometers**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Well	Reference Elevation (ft. AMSL)	Water Level Elevation	Water Level Elevation	Water Level Elevation	Water Level Elevation
		Quarter 1 3/16/2015 (ft. AMSL)	Quarter 2 6/2/2015 (ft. AMSL)	Quarter 3 9/1/2015 (ft. AMSL)	Quarter 4 12/2/2015 (ft. AMSL)
<b>Flow Zone 6</b>					
ABP-7-06	575.78	-	-	-	-
AFW-1U-06	571.83	557.84	556.95	556.75	557.32
AFW-2U-06	593.22	545.20	545.22	545.20	545.14
AGW-1U-06	591.66	552.53	553.55	551.90	551.38
B2U-06	589.29	553.85	553.70	552.79	552.50
C3-06	585.78	-	-	-	-
D1U-06	593.25	546.47	547.06	546.59	545.64
D2U-06	590.38	547.39	547.79	547.30	547.67
E6-06	577.99	573.67	573.41	572.55	571.72
F2M-06	599.06	556.35	555.89	555.50	555.54
F4M-06	602.05	552.82	552.77	552.40	552.88
F6-06	587.84	573.65	573.41	572.54	572.81
G1M-06	616.75	573.79	573.54	572.70	572.93
G6-06	609.09	575.47	575.23	574.13	574.35
H2M-06	621.42	562.45	563.15	560.42	560.62
H5-06	617.17	591.96	591.07	590.82	589.91
I1-06	625.15	551.82	551.89	551.10	550.64
J2M-06	608.94	555.18	554.92	553.66	553.23
J5M-06	606.22	546.44	547.04	546.33	546.55
J6-06	608.93	555.76	555.93	555.14	554.74
PMW-1U-06	597.92	546.94	547.65	547.20	546.73
<b>Flow Zone 7</b>					
ABP-1-07	576.44	547.58	546.97	547.25	547.63
ABP-7-07	575.73	535.20	535.01	533.10	533.81
AFW-1M-07	571.41	-	-	-	-
AFW-2M-07	593.44	526.61	526.63	526.62	526.62
AGW-1M-07	592.91	550.88	556.05	552.08	545.69
B2M-07	589.52	537.31	533.74	532.09	532.54
C3-07	585.62	543.85	542.44	540.74	540.34
D1M-07	594.15	530.94	530.69	531.15	531.21
D2M-07	590.77	524.71	525.26	525.31	523.94
E6-07	577.91	554.31	554.28	554.21	553.08
F2M-07	598.91	517.58	517.92	517.55	517.21
F4M-07	601.91	529.21	530.82	529.20	529.80
F6-07	587.68	567.26	567.18	567.29	567.19
G1M-07	616.68	583.34	583.14	579.89	580.40
G6-07	609.06	582.87	582.79	579.77	580.16
H5-07	617.05	555.76	555.61	555.21	555.08
I1-07	625.14	550.62	557.05	550.29	546.12
J5M-07	606.07	550.58	557.18	551.46	546.84
J6-07	608.85	550.91	557.28	551.00	546.22
PMW-1M-07	598.50	531.32	531.28	531.99	532.02

Table 3.5

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**2015 Bedrock Quarterly Water Level Elevation Summary - Piezometers**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Well	Reference Elevation (ft. AMSL)	Water Level Elevation	Water Level Elevation	Water Level Elevation	Water Level Elevation
		Quarter 1 3/16/2015 (ft. AMSL)	Quarter 2 6/2/2015 (ft. AMSL)	Quarter 3 9/1/2015 (ft. AMSL)	Quarter 4 12/2/2015 (ft. AMSL)
<b>Flow Zone 9</b>					
ABP-1-09	575.49	535.07	534.27	534.38	534.96
ABP-7-09	575.67	535.09	534.54	530.26	532.44
AFW-1M-09	571.12	526.59	525.79	524.68	524.61
AFW-2M-09	593.32	521.13	521.11	521.13	521.11
AGW-1M-09	592.75	551.24	556.24	551.72	546.13
B2M-09	589.34	-	-	-	-
C3-09	585.00	540.70	540.76	539.57	539.22
D1M-09	594.02	517.15	517.33	516.97	516.57
D2M-09	590.66	516.86	517.25	516.87	516.61
E6-09	577.82	553.73	553.45	553.03	552.56
F2M-09	598.71	516.62	517.09	516.69	516.40
F4M-09	601.79	516.59	516.99	516.60	516.23
F6-09	587.53	574.41	574.21	573.65	572.80
G1M-09	616.58	579.09	581.27	579.30	578.63
G6-09	608.98	584.01	583.79	580.54	580.99
H2M-09	621.32	550.22	553.73	548.62	545.15
H5-09	616.93	550.51	556.64	548.96	546.07
I1-09	624.91	563.13	563.33	562.12	562.68
J2M-09	608.77	551.35	557.15	550.59	546.56
J5M-09	605.82	551.13	557.04	550.94	546.91
J6-09	608.76	565.92	565.03	561.95	563.68
PMW-1M-09	598.34	516.83	517.21	516.82	516.56
<b>Flow Zone 11</b>					
AFW-1L-11	572.10	517.06	508.24	505.16	506.17
AFW-2L-11	593.43	495.37	495.75	495.30	495.15
AGW-1L-11	592.71	578.67	580.14	579.38	579.64
B2L-11	589.65	499.06	499.03	498.98	498.98
D1L-11	593.80	504.66	504.48	504.20	503.41
D2L-11	590.21	518.19	518.36	518.09	518.01
E6-11	577.72	535.33	536.72	553.97	534.33
F2L-11	598.94	558.86	550.09	556.90	557.49
F4L-11	602.22	579.00	580.87	578.12	577.83
F6-11	587.40	529.74	530.75	530.48	530.03
G1L-11	616.84	560.20	560.61	557.05	557.18
G6-11	608.89	563.52	563.93	560.36	560.17
H2L-11	620.73	558.14	557.69	556.79	556.19
H5-11	616.81	548.88	548.46	546.01	546.36
I1-11	624.75	549.61	549.46	549.31	549.36
J5L-11	607.20	546.67	548.88	545.37	545.29
J6-11	608.68	586.18	585.37	584.89	584.57
PMW-1L-11	598.84	509.19	510.56	510.96	510.96

Notes:

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

Table 3.6

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**2015 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 <sup>(1)</sup>	PW-5UR	PW-6UR	PW-6MR
January	0.07	2.62	0.83	10.56	0.38	0.10	2.26	0.07	0.00	3.59	0.43	2.88
February	0.04	0.75	0.74	9.40	0.25	0.09	2.28	0.05	0.00	3.85	0.37	2.63
March	0.06	1.19	0.66	8.12	0.57	0.08	1.81	0.05	0.00	3.33	0.38	2.37
April	0.06	2.61	0.86	10.77	0.43	0.10	2.27	0.07	0.00	4.02	0.55	2.75
May	0.06	1.14	0.63	8.62	0.23	0.08	1.76	0.05	0.00	3.04	0.38	2.18
June	0.09	1.35	0.71	10.16	0.33	0.09	2.07	0.07	0.00	3.46	0.45	2.57
July	0.21	0.90	0.71	10.08	0.27	0.08	2.58	0.07	0.00	3.47	0.43	2.51
August	0.20	0.65	0.58	8.31	0.21	0.06	2.23	0.06	0.00	2.91	0.31	2.13
September	0.23	0.68	0.62	8.82	0.22	0.07	2.40	0.09	0.00	3.34	0.33	2.38
October	0.23	0.69	0.61	8.40	0.22	0.06	2.28	0.09	0.00	2.24	0.32	2.39
November	0.28	0.66	0.61	8.48	0.21	0.06	2.23	0.08	0.00	2.53	0.34	2.25
December	0.29	0.62	0.63	7.81	0.25	0.08	2.24	0.08	0.00	2.70	0.31	2.53
Annual Average	0.15	1.16	0.68	9.13	0.30	0.08	2.20	0.07	0.00	3.21	0.38	2.46
Month	PW-7U	PW-8M <sup>(1)</sup>	PW-8U	PW-9U	PW-10U	APW-1	APW-2					
January	0.52	0.00	0.10	0.81	2.63	0.60	0.26					
February	0.51	0.00	0.21	0.75	2.41	0.49	0.21					
March	0.44	0.07	1.14	0.67	2.37	0.55	0.26					
April	0.50	0.04	1.24	0.61	3.03	0.59	0.45					
May	0.39	0.01	0.64	0.67	2.40	0.37	0.23					
June	0.47	0.00	0.65	0.85	2.94	0.52	0.28					
July	0.47	0.00	0.54	0.40	2.89	0.43	0.24					
August	0.39	0.00	0.38	0.16	2.37	0.37	0.17					
September	0.44	0.00	0.41	0.48	2.57	0.36	0.19					
October	0.43	0.00	0.41	0.51	2.39	0.36	0.20					
November	0.44	0.00	0.27	0.50	2.38	0.36	0.23					
December	0.45	0.00	0.40	0.61	2.31	0.34	0.22					
Annual Average	0.45	0.01	0.53	0.59	2.56	0.44	0.24					

## 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

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**Analytical Results Summary**  
**Quarterly Group B Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

<b>Sample Location:</b>	ABP-7-09	AGW-1M-07	AGW-1M-09	AGW-1U-06	B2L-11
<b>Sample ID:</b>	ABP-7-09-0315	AGW-1M-07-0315	AGW-1M-09-0315	AGW-1U-06-0315	B2L-11-0315
<b>Sample Date:</b>	3/23/2015	3/23/2015	3/23/2015	3/24/2015	3/23/2015

<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
		ABP-7-09	AGW-1M-07	AGW-1M-09	AGW-1U-06	B2L-11
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	9.7 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	250 U	79 J	120 J	180 J
						130 J

<b>Sample Location:</b>	C3-07	C3-09	D1M-09	D1U-04	D1U-05
<b>Sample ID:</b>	C3-07-0315	C3-09-0315	D1M-09-0315	D1U-04-0315	D1U-05-0315
<b>Sample Date:</b>	3/23/2015	3/23/2015	3/20/2015	3/20/2015	3/20/2015

<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	250 U	25 J	220 J	55 J
						66 J

<b>Sample Location:</b>	F2M-09	F2U-02	F2U-04	G1U-01	G6-01
<b>Sample ID:</b>	F2M-09-0315	F2U-02-0315	F2U-04-0315	G1U-01-0315	G6-01-0315
<b>Sample Date:</b>	3/20/2015	3/20/2015	3/20/2015	3/23/2015	3/20/2015

<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	15 J	240 J	380	250 U
						250 U

<b>Sample Location:</b>	G6-01	G6-04	G6-06	H2U-02	H5-09
<b>Sample ID:</b>	W7-10-0315	G6-04-0315	G6-06-0315	H2U-02-3015	H5-09-0315
<b>Sample Date:</b>	3/20/2015	3/20/2015	3/20/2015	3/24/2015	3/23/2015

<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	360	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	1900	30 U	20 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	57 J	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	89 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

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**Analytical Results Summary**  
**Quarterly Group B Bedrock Piezometer Sampling**  
**Second Quarter 2015**  
**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-7-09-0515	AGW-1M-07-0515	AGW-1M-09-0515	AGW-1U-06-0515	B2L-11-0515
Sample Date:		6/9/2015	6/5/2015	6/5/2015	6/5/2015	6/8/2015
Parameters	Units	Screening Level				
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	8.1 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	26 J	61 J	120 J	170 J
						150 J
Sample Location:		C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:		C3-07-0515	C3-09-0515	D1M-09-0515	D1U-04-0515	D1U-05-0515
Sample Date:		5/22/2015	5/22/2015	5/19/2015	5/19/2015	5/19/2015
 <b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	5.0 J	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	250U	25 J	240 J	30 J
						78 J
Sample Location:		F2M-09	F2U-02	F2U-04	G1U-01	G6-01
Sample ID:		F2M-09-0515	F2U-02-0515	F2U-04-0515	G1U-01-0515	G6-01-0515
Sample Date:		5/19/2015	5/19/2015	5/19/2015	6/9/2015	5/21/2015
 <b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	18 J	220 J	380	250 U
						250 U
Sample Location:		G6-04	G6-06	H2U-02	H5-09	
Sample ID:		G6-04-0515	G6-06-0515	H2U-02-0515	H5-09-0515	
Sample Date:		5/21/2015	5/21/2015	6/4/2015	6/4/2015	
 <b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	860	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	4300	30 U	8.7 J	30 U
4-Chlorobenzoic acid	µg/L	7,300	4000	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	210 J	250 U	94 J	85 J

Notes:

- Micrograms per liter
  - 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 2015**  
**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-7-09-0815	AGW-1M-07-0815	AGW-1M-09-0815	AGW-1U-06-0815	B2L-11-0815
Sample Date:		8/26/2015	8/25/2015	8/25/2015	8/25/2015	8/26/2015
Parameters	Units	Screening Level				
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	10 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	39 J	36 J	<b>130 J</b>	<b>77 J</b>
						<b>130 J</b>
<b>Sample Location:</b>		<b>C3-07</b>	<b>C3-09</b>	<b>D1M-09</b>	<b>D1U-04</b>	<b>D1U-05</b>
<b>Sample ID:</b>		C3-07-0815	C3-09-0815	D1M-09-0815	D1U-04-0815	D1U-05-0815
<b>Sample Date:</b>		8/26/2015	8/26/2015	8/25/2015	8/25/2015	8/25/2015
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	17 J	250 U	<b>230 J</b>	17 J
						<b>79 J</b>
<b>Sample Location:</b>		<b>F2M-09</b>	<b>F2U-02</b>	<b>F2U-04</b>	<b>G1U-01</b>	<b>G6-01</b>
<b>Sample ID:</b>		F2M-09-0815	F2U-02-0815	F2U-04-0815	G1U-01-0815	G6-01-0815
<b>Sample Date:</b>		8/25/2015	8/25/2015	8/25/2015	8/26/2015	8/25/2015
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	17 J	<b>200 J</b>	<b>400</b>	250 U
						250 U
<b>Sample Location:</b>		<b>G6-01</b>	<b>G6-04</b>	<b>G6-06</b>	<b>H2U-02</b>	<b>H5-09</b>
<b>Sample ID:</b>		W7-10-0815	G6-04-0815	G6-06-0815	H2U-02-0815	H5-09-0815
<b>Sample Date:</b>		8/25/2015 (Duplicate)	8/25/2015	8/25/2015	8/26/2015	8/26/2015
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	480	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	2700	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	1000	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>140 J</b>	250 U	<b>73 J</b>
						<b>85 J</b>

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

Page 1 of 1

**Analytical Results Summary**  
**Quarterly Group B Bedrock Piezometer Sampling**  
**Fourth Quarter 2015**  
**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-7-09-1115	AGW-1M-07-1115	AGW-1M-09-1115	AGW-1U-06-1115	B2L-11-1115
Sample Date:		11/20/2015	11/19/2015	11/19/2015	11/19/2015	11/20/2015
Parameters	Units	Screening Level				
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	9.9 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	16 J	50 J	140 J	160 J
						98 J
Sample Location:		C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:		C3-07-1115	C3-09-1115	D1M-09-1115	D1U-04-1115	D1U-05-1115
Sample Date:		11/20/2015	11/20/2015	11/19/2015	11/19/2015	11/19/2015
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	11 J	19 J	190 J	18 J
						75 J
Sample Location:		F2M-09	F2U-02	F2U-04	G1U-01	G6-01
Sample ID:		F2M-09-1115	F2U-02-1115	F2U-04-1115	G1U-01-1115	G6-01-1115
Sample Date:		11/19/2015	11/19/2015	11/19/2015	11/23/2015	11/19/2015
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	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	19 J	220 J	390	250 U
						250 U
Sample Location:		G6-01	G6-04	G6-06	H2U-02	H5-09
Sample ID:		W7-10-1115	G6-04-1115	G6-06-1115	H2U-02-1115	H5-09-1115
Sample Date:		11/19/2015	11/19/2015	11/19/2015	11/23/2015	11/20/2015
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	170	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	1100	30 U	12 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	170 J	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	13 J	57 J	250 U	91 J
						83 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**  
**First Quarter 2015**  
**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-07
Sample ID:		ABP-1-09-0515	ABP-7-09-0515	AFW-1L-11-0515	AFW-2U-04-0515	AFW-2U-05-0515	AGW-1M-07-0515
Sample Date:		6/9/2015	6/9/2015	6/9/2015	6/8/2015	6/9/2015	6/5/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Tetrachloroethane	µg/L	0.053	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
1,1-Dichloroethane	µg/L	800	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
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J
1,2-Dichloroethane	µg/L	5	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
1,3-Dichlorobenzene	µg/L	180	1.0 U	0.15 J	1.0 U	1.0 U	0.89 J
1,4-Dichlorobenzene	µg/L	75	1.0 U	0.38 J	1.0 U	1.0 U	0.71 J
2-Chlorotoluene	µg/L	120	1.5	1.1	1.0 U	1.0 U	2.4
3-Chlorotoluene	µg/L	120	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
Benzene	µg/L	5	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
Bromoform	µg/L	80	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
Carbon disulfide	µg/L	1000	0.49 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
Chlorobenzene	µg/L	100	1.0 U	5.5	1.0 U	1.0 U	7.0
Chloroethane	µg/L	3.6	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
Chloromethane (Methyl chloride)	µg/L	190	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	1.0 U	1.0 U	1.0 U	0.27 J
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Dichlorodifluoromethane (CFC-12)	µg/L	350	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
Methylene chloride	µg/L	30	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	0.73 J
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	0.18 J	1.0 U	1.0 U	1.0
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	0.53 J	1.0 U	1.0 U	2.4
Styrene	µg/L	NA	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
Toluene	µg/L	1000	0.34 J	1.0 U	0.21 J	1.0 U	0.19 J

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**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-07
Sample ID:		ABP-1-09-0515	ABP-7-09-0515	AFW-1L-11-0515	AFW-2U-04-0515	AFW-2U-05-0515	AGW-1M-07-0515
Sample Date:		6/9/2015	6/9/2015	6/9/2015	6/8/2015	6/9/2015	6/5/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	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 UJ
Trichloroethene	µg/L	5	0.16 J	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
Vinyl acetate	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	11 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4-Dichlorophenol	µg/L	110	11 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4-Dimethylphenol	µg/L	730	11 UJ	9.4 UJ	9.4 UJ	9.5 UJ	9.4 U
Estimated concentration	µg/L	73	53 U	47 U	47 U	48 U	47 U
2-Chloronaphthalene	µg/L	490	11 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Chlorophenol	µg/L	30	11 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Nitrophenol	µg/L	50	11 U	9.4 U	9.4 U	9.5 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	53 U	47 U	47 U	48 U	47 U
4-Chloro-3-methylphenol	µg/L	50	11 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Nitrophenol	µg/L	50	53 U	47 U	47 U	48 U	47 U
Acenaphthene	µg/L	370	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Acenaphthylene	µg/L	310	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Anthracene	µg/L	1800	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	11 U	9.4 U	9.4 U	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	11 U	9.4 U	9.4 U	9.5 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	21 U	12 J	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Chrysene	µg/L	9.2	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Diethyl phthalate	µg/L	29000	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Dimethyl phthalate	µg/L	370000	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	11 U	9.4 U	9.4 U	9.5 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	11 U	9.4 U	9.4 U	9.5 U	9.4 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**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-07
Sample ID:		ABP-1-09-0515	ABP-7-09-0515	AFW-1L-11-0515	AFW-2U-04-0515	AFW-2U-05-0515	AGW-1M-07-0515
Sample Date:		6/9/2015	6/9/2015	6/9/2015	6/8/2015	6/9/2015	6/5/2015
Parameters	Units	Screening Level					
<b>Semi-volatile Organic Compounds (Continued)</b>							
Fluoranthene	µg/L	1500	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluorene	µg/L	240	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobenzene	µg/L	1	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	53 U	47 U	47 U	47 U	R
Hexachloroethane	µg/L	4.8	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Isophorone	µg/L	70	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	6.5	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Octachlorocyclopentene	µg/L	NA	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Pentachlorophenol	µg/L	1	53 U	47 U	47 U	47 U	47 U
Phenanthrene	µg/L	310	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenol	µg/L	11000	11 U	9.4 U	9.4 U	9.4 U	9.4 U
Pyrene	µg/L	180	11 U	9.4 U	9.4 U	9.4 U	9.4 U
<b>Organic Acid</b>							
2-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	26 J	250 U	250 U	61 J
<b>General Chemistry</b>							
Sulfate	mg/L	NA	1700	290	180	85	220
							1400

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	AGW-1M-09	AGW-1U-05	AGW-1U-06	B2L-11	C3-07	C3-09
Sample ID:	AGW-1M-09-0515	AGW-1U-05-0515	AGW-1U-06-0515	B2L-11-0515	C3-07-0515	C3-09-0515
Sample Date:	6/5/2015	6/5/2015	6/5/2015	6/8/2015	5/22/2015	5/22/2015
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Volatile Organic Compounds</b>						
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	0.34 J	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
1,2,4-Trichlorobenzene	µg/L	70	0.85 J	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	2.3	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	4.5	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	2.7	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	24	1.0 U	1.0 U	0.81 J
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	0.33 J	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	1.0 U	32
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	0.28 J	1.0 U	1.0 U	0.52 J
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	31	1.0 U	1.0 U	4.4
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	0.88 J
cis-1,2-Dichloroethene	µg/L	70	0.43 J	1.0 U	1.0	0.33 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	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
Methylene chloride	µg/L	30	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	3.8	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	7.4	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	10	1.0 U	1.0 U	0.18 J
Styrene	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	0.18 J	1.0 U	1.0 U
Toluene	µg/L	1000	0.50 J	1.0 U	1.0 U	0.19 J

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		AGW-1M-09	AGW-1U-05	AGW-1U-06	B2L-11	C3-07	C3-09
Sample ID:		AGW-1M-09-0515	AGW-1U-05-0515	AGW-1U-06-0515	B2L-11-0515	C3-07-0515	C3-09-0515
Sample Date:		6/5/2015	6/5/2015	6/5/2015	6/8/2015	5/22/2015	5/22/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	0.17 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
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	0.15 J	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	1.0	1.0 U	3.8	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	0.59 J	3.0 U	3.0 U	3.0 U	3.0 U
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Estimated concentration	µg/L	73	47 U	47 U	48 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	48 U	47 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	48 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.5 U	9.4 U	9.4 U

**Table 3.8**

**Analytical Results Summary  
Fifth Quarter Group A Bedrock Piezometer Sampling  
First Quarter 2015  
Hyde Park Landfill Site  
Town of Niagara, New York**

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	C3-09	D1L-11	D1M-09	D1U-04	D1U-05	D2M-09
Sample ID:	Z7-10-0515	D1L-11-0515	D1M-09-0515	D1U-04-0515	D1U-05-0515	D2M-09-0515
Sample Date:	5/22/2015 (Duplicate)	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015
Parameters	Units	Screening Level				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	200	1.0 U	3.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	3.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	3.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	3.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	3.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	3.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	3.0 U	0.45 J	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	3.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	3.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	3.0 U	3.1	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	3.0 U	1.1	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	3.0 U	5.2	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	3.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	3.0 U	1.0 U	1.0 U
Benzene	µg/L	5	1.0 U	81	4.1	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	3.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	3.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	3.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	1.0 U	3.0 U	0.44 J	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	3.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	0.26 J	3.0 U	21	1.0 U
Chloroethane	µg/L	3.6	1.0 U	3.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	3.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	2.9 J	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	3.0 U	0.44 J	1.0 U
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	3.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	3.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.5 J	1.0 U	1.0 U
Methylene chloride	µg/L	30	1.0 U	3.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	3.0 U	0.33 J	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	3.0 U	0.45 J	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	3.0 U	1.0	1.0 U
Styrene	µg/L	NA	1.0 U	3.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	3.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	1.0 U	2.1 J	0.24 J	1.0 U
						0.18 J

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	C3-09	D1L-11	D1M-09	D1U-04	D1U-05	D2M-09
Sample ID:	Z7-10-0515	D1L-11-0515	D1M-09-0515	D1U-04-0515	D1U-05-0515	D2M-09-0515
Sample Date:	5/22/2015 (Duplicate)	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015
Parameters	Units	Screening Level				
<b>Volatile Organic Compounds (Continued)</b>						
trans-1,2-Dichloroethene	µg/L	100	1.0 U	3.0 U	0.67 J	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	3.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	3.0 U	0.22 J	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	3.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	1.0 U	3.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	1.0 U	3.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	19	3.0 U	3.0 U
<b>Semi-volatile Organic Compounds</b>						
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.6 U	9.4 U	9.5 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.6 U	9.4 U	9.5 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.6 U	9.4 U	9.5 U
Estimated concentration	µg/L	73	47 U	48 U	47 U	48 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.6 U	9.4 U	9.5 U
2-Chlorophenol	µg/L	30	9.4 U	9.6 U	9.4 U	9.5 U
2-Nitrophenol	µg/L	50	9.4 U	9.6 U	9.4 U	9.5 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	48 U	47 U	48 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.6 U	9.4 U	9.5 U
4-Nitrophenol	µg/L	50	47 U	48 U	47 U	48 U
Acenaphthene	µg/L	370	9.4 U	9.6 U	9.4 U	9.5 U
Acenaphthylene	µg/L	310	9.4 U	9.6 U	9.4 U	9.5 U
Anthracene	µg/L	1800	9.4 U	9.6 U	9.4 U	9.5 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.6 U	9.4 U	9.5 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.6 U	9.4 U	9.5 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.6 U	9.4 U	9.5 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.6 U	9.4 U	9.5 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.6 U	9.4 U	9.5 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.6 U	9.4 U	9.5 U
Chrysene	µg/L	9.2	9.4 U	9.6 U	9.4 U	9.5 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.6 U	9.4 U	9.5 U
Diethyl phthalate	µg/L	29000	9.4 U	9.6 U	9.4 U	9.5 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.6 U	9.4 U	9.5 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.6 U	9.4 U	9.5 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.6 U	9.4 U	9.5 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	C3-09	D1L-11	D1M-09	D1U-04	D1U-05	D2M-09
Sample ID:	Z7-10-0515	D1L-11-0515	D1M-09-0515	D1U-04-0515	D1U-05-0515	D2M-09-0515
Sample Date:	5/22/2015 (Duplicate)	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015
Parameters	Units	Screening Level				
<b>Semi-volatile Organic Compounds (Continued)</b>						
Fluoranthene	µg/L	1500	9.4 U	9.6 U	9.4 U	9.5 U
Fluorene	µg/L	240	9.4 U	9.6 U	9.4 U	9.5 U
Hexachlorobenzene	µg/L	1	9.4 U	9.6 U	9.4 U	9.5 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.6 U	9.4 U	9.5 U
Hexachlorocyclopentadiene	µg/L	50	47 U	48 U	47 U	48 U
Hexachloroethane	µg/L	4.8	9.4 U	9.6 U	9.4 U	9.5 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.6 U	9.4 U	9.5 U
Isophorone	µg/L	70	9.4 U	9.6 U	9.4 U	9.5 U
Naphthalene	µg/L	6.5	9.4 U	9.6 U	9.4 U	9.5 U
Octachlorocyclopentene	µg/L	NA	9.4 U	9.6 U	9.4 U	9.5 U
Pentachlorophenol	µg/L	1	47 U	48 U	47 U	48 U
Phenanthrene	µg/L	310	9.4 U	9.6 U	9.4 U	9.5 U
Phenol	µg/L	11000	9.4 U	2.0 J	9.4 U	9.5 U
Pyrene	µg/L	180	9.4 U	9.6 U	9.4 U	9.5 U
<b>Organic Acid</b>						
2-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	30 U	8.4 J	5.0 J	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	27 J	250 U	240 J	78 J
<b>General Chemistry</b>						
Sulfate	mg/L	NA	150	1200	1100	110
					260	750

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	D2U-04	D2U-05	E6-04	E6-05	E6-06	E6-09
Sample ID:	D2U-04-0515	D2U-05-0515	E6-04-0515	E6-05-0515	E6-06-0515	E6-09-0515
Sample Date:	5/19/2015	5/19/2015	6/9/2015	6/8/2015	6/8/2015	6/8/2015
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Volatile Organic Compounds</b>						
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	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
1,2,4-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	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
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	0.21 J	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	0.28 J	0.26 J	0.23 J
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	1.0 U
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	0.38 J
cis-1,2-Dichloroethene	µg/L	70	1.0 U	1.0 U	1.0 U	2.6
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 UJ
Dichlorodifluoromethane (CFC-12)	µg/L	350	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
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	0.15 J	1.0 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		D2U-04	D2U-05	E6-04	E6-05	E6-06	E6-09
Sample ID:		D2U-04-0515	D2U-05-0515	E6-04-0515	E6-05-0515	E6-06-0515	E6-09-0515
Sample Date:		5/19/2015	5/19/2015	6/9/2015	6/8/2015	6/8/2015	6/8/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl acetate	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	3.0 U	3.0 U	43
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.6 U	9.5 U	9.4 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.6 U	9.5 UJ	9.5 UJ	9.4 UJ
Estimated concentration	µg/L	73	47 U	48 U	48 U	48 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	48 U	48 U	48 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	48 U	48 U	48 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	19 U	34	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.6 U	9.5 U	9.5 U	9.4 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	D2U-04	D2U-05	E6-04	E6-05	E6-06	E6-09
Sample ID:	D2U-04-0515	D2U-05-0515	E6-04-0515	E6-05-0515	E6-06-0515	E6-09-0515
Sample Date:	5/19/2015	5/19/2015	6/9/2015	6/8/2015	6/8/2015	6/8/2015
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Semi-volatile Organic Compounds (Continued)</b>						
Fluoranthene	µg/L	1500	9.4 U	9.6 U	9.5 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.6 U	9.5 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.6 U	9.5 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.6 U	9.5 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	47 U	48 U	48 U	47 U
Hexachloroethane	µg/L	4.8	9.4 U	9.6 U	9.5 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.6 U	9.5 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.6 U	9.5 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.6 U	9.5 U	9.4 U
Octachlorocyclopentene	µg/L	NA	9.4 U	9.6 U	9.5 U	9.4 U
Pentachlorophenol	µg/L	1	47 U	48 U	48 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.6 U	9.5 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.6 U	9.5 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.6 U	9.5 U	9.4 U
<b>Organic Acid</b>						
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	25 J	16 J	250 U	24 J
<b>General Chemistry</b>						
Sulfate	mg/L	NA	97	99	1500	1400
					1500	1000

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	E6-11	F2L-11	F2M-09	F2U-02	F2U-04	F6-04
Sample ID:	E6-11-0515	F2L-11-0515	F2M-09-0515	F2U-02-0515	F2U-04-0515	F6-04-0515
Sample Date:	6/8/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015	6/8/2015
Parameters	Units	Screening Level				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	200	1.0 U	2.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	0.053	1.0 U	2.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.0 U	2.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	2.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	2.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	2.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	2.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	2.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	2.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	2.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	2.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	2.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	2.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	2.0 U	1.0 U	1.0 U
Benzene	µg/L	5	47	17	0.55 J	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	2.0 U	1.0 U	1.0 U
Bromoform	µg/L	80	1.0 U	2.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	2.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1000	0.48 J	2.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	2.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.0 U	2.0 U	1.0 U	1.0 U
Chloroethane	µg/L	3.6	1.0 U	2.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	2.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	9.4	2.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	1.0 U	2.0 U	0.88 J	0.49 J
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	2.0 U	1.0 U	0.27 J
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	2.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	1.7	0.47 J	0.24 J	1.0 U
Methylene chloride	µg/L	30	1.0 U	2.4	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	2.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	2.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	2.0 U	1.0 U	1.0 U
Styrene	µg/L	NA	1.0 U	2.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	2.0 U	1.0 U	1.0 U
Toluene	µg/L	1000	23	7.8	1.0 U	1.0 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		E6-11	F2L-11	F2M-09	F2U-02	F2U-04	F6-04
Sample ID:		E6-11-0515	F2L-11-0515	F2M-09-0515	F2U-02-0515	F2U-04-0515	F6-04-0515
Sample Date:		6/8/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015	6/8/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	27	7.5	0.66 J	3.0 U	3.0 U
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	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
2,4-Dimethylphenol	µg/L	730	9.4 UJ	9.4 U	9.4 U	9.4 U	9.4 UJ
Estimated concentration	µg/L	73	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
2-Chlorophenol	µg/L	30	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
4,6-Dinitro-2-methylphenol	µg/L	3.7	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
4-Nitrophenol	µg/L	50	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
Acenaphthylene	µg/L	310	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
Benzo(a)anthracene	µg/L	0.092	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
Benzo(b)fluoranthene	µg/L	0.092	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
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	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
Dibenz(a,h)anthracene	µg/L	0.0092	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
Dimethyl phthalate	µg/L	370000	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
Di-n-octyl phthalate (DnOP)	µg/L	1500	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**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	E6-11	F2L-11	F2M-09	F2U-02	F2U-04	F6-04
Sample ID:	E6-11-0515	F2L-11-0515	F2M-09-0515	F2U-02-0515	F2U-04-0515	F6-04-0515
Sample Date:	6/8/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015	6/8/2015
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Semi-volatile Organic Compounds (Continued)</b>						
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	47 U	47 U	47 U	47 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	9.4 U	9.4 U	9.4 U	9.4 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
<b>Organic Acid</b>						
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 U	18 J	220 J
					380	250 U
<b>General Chemistry</b>						
Sulfate	mg/L	NA	1400	60	1500	110
					150	470

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		F6-06	F6-11	G1L-11	G1M-06	G1U-01	G6-01
Sample ID:		F6-06-0515	F6-11-0515	G1L-11-0515	G1M-06-0515	G1U-01-0515	G6-01-0515
Sample Date:		6/8/2015	6/9/2015	6/9/2015	6/9/2015	6/9/2015	5/21/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	µg/L	200	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,1,2-Tetrachloroethane	µg/L	0.053	1.0 U	1.0 U	5.0 U	1.0 U	5.1
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	5.0 U	1.0 U	0.85 J
1,1-Dichloroethane	µg/L	800	0.16 J	1.0 U	5.0 U	1.0 U	3.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
2-Chlorotoluene	µg/L	120	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Benzene	µg/L	5	1.0 U	25	74	1.0 U	3.0 U
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Bromoform	µg/L	80	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Carbon disulfide	µg/L	1000	0.42 J	0.28 J	1.4 J	1.0 U	3.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Chlorobenzene	µg/L	100	0.14 J	1.0 U	5.0 U	1.0 U	1.7 J
Chloroethane	µg/L	3.6	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Chloromethane (Methyl chloride)	µg/L	190	0.96 J	6.9	5.0	1.0 U	3.0 U
cis-1,2-Dichloroethene	µg/L	70	1.6	1.0 U	5.0 U	1.0 U	40
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	3.7 J	1.0 U	3.0 U
Methylene chloride	µg/L	30	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	5.0 U	1.0 U	1.1 J
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	5.0 U	0.12 J	1.4 J
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	5.0 U	0.26 J	6.5
Styrene	µg/L	NA	1.0 U	1.0 U	5.0 U	1.0 U	3.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	5.0 U	1.0 U	15
Toluene	µg/L	1000	0.20 J	1.0 U	1.4 J	1.0 U	3.0 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		F6-06	F6-11	G1L-11	G1M-06	G1U-01	G6-01
Sample ID:		F6-06-0515	F6-11-0515	G1L-11-0515	G1M-06-0515	G1U-01-0515	G6-01-0515
Sample Date:		6/8/2015	6/9/2015	6/9/2015	6/9/2015	6/9/2015	5/21/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	1.7	1.0 U	5.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	0.45 J	1.0 U	5.0 U	0.44 J	1.2
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	0.93 J	3.0 U	28	3.0 U	3.0 U
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 UJ	9.4 UJ	9.4 UJ	9.5 UJ	9.4 U
Estimated concentration	µg/L	73	47 U	47 U	47 U	47 U	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	48 U	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	48 U	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	22	22	17 J	29
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		F6-06	F6-11	G1L-11	G1M-06	G1U-01	G6-01
Sample ID:		F6-06-0515	F6-11-0515	G1L-11-0515	G1M-06-0515	G1U-01-0515	G6-01-0515
Sample Date:		6/8/2015	6/9/2015	6/9/2015	6/9/2015	6/9/2015	5/21/2015
Parameters	Units	Screening Level					
<b>Semi-volatile Organic Compounds (Continued)</b>							
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Fluorene	µg/L	240	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	47 U	47 U	47 U	48 U	47 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Octachlorocyclopentene	µg/L	NA	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Pentachlorophenol	µg/L	1	47 U	47 U	47 U	48 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.4 U	9.5 U	9.4 U
<b>Organic Acid</b>							
2-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	13 J	250 U	250 U	250 U
<b>General Chemistry</b>							
Sulfate	mg/L	NA	1300	2000	1300	1300	81
							77

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	G6-02	G6-04	G6-05	G6-06	G6-07	G6-11
Sample ID:	G6-02-0515	G6-04-0515	G6-05-0515	G6-06-0515	G6-07-0515	G6-11-0515
Sample Date:	5/21/2015	5/21/2015	5/21/2015	5/21/2015	5/21/2015	5/21/2015
Parameters	Units	Screening Level				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	200	5.0 U	5.0 U	10 U	1.0 U
1,1,2-Tetrachloroethane	µg/L	0.053	4.1 J	19	110	1.0 U
1,1,2-Trichloroethane	µg/L	5	1.1 J	2.7 J	16	1.0 U
1,1-Dichloroethane	µg/L	800	5.0 U	1.6 J	5.2 J	0.22 J
1,1-Dichloroethene	µg/L	7	5.0 U	5.0 U	10 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	5.0 U	5.0 U	10 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	5.0 U	5.0 U	10 U	1.0 U
1,2-Dichloroethane	µg/L	5	5.0 U	5.0 U	10 U	1.0 U
1,2-Dichloropropane	µg/L	5	5.0 U	5.0 U	10 U	1.0 U
1,3-Dichlorobenzene	µg/L	180	5.0 U	5.0 U	10 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	5.0 U	5.0 U	10 U	1.0 U
2-Chlorotoluene	µg/L	120	5.0 U	5.0 U	10 U	1.0 U
3-Chlorotoluene	µg/L	120	5.0 U	5.0 U	10 U	1.0 U
4-Chlorotoluene	µg/L	120	5.0 U	5.0 U	10 U	1.0 U
Benzene	µg/L	5	5.0 U	66 J	240	1.0 U
Bromodichloromethane	µg/L	80	5.0 U	5.0 U	10 U	1.0 U
Bromoform	µg/L	80	5.0 U	5.0 U	10 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	8.5	5.0 U	5.0 U	10 U	1.0 U
Carbon disulfide	µg/L	1000	5.0 U	1.1 J	6.3 J	1.0 U
Carbon tetrachloride	µg/L	5	5.0 U	5.0 U	10 U	1.0 U
Chlorobenzene	µg/L	100	1.6 J	3.6 J	14	1.0 U
Chloroethane	µg/L	3.6	5.0 U	5.0 U	10 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	5.0 U	55	430	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	5.0 U	5.0 U	10 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	57	39	110	0.88 J
cis-1,3-Dichloropropene	µg/L	0.44	5.0 U	5.0 U	10 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	5.0 U	5.0 U	10 U	1.0 U
Ethylbenzene	µg/L	700	5.0 U	5.0 U	10 U	1.0 U
Methylene chloride	µg/L	30	5.0 U	7.3 U	10 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	0.75 J	0.61 J	10 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	0.95 J	0.88 J	10 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	4.3 J	3.7 J	10 U	0.35 J
Styrene	µg/L	NA	5.0 U	5.0 U	10 U	1.0 U
Tetrachloroethene	µg/L	5	12	6.3	2.0 J	0.36 J
Toluene	µg/L	1000	5.0 U	1.4 J	7.4 J	1.0 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		G6-02	G6-04	G6-05	G6-06	G6-07	G6-11
Sample ID:		G6-02-0515	G6-04-0515	G6-05-0515	G6-06-0515	G6-07-0515	G6-11-0515
Sample Date:		5/21/2015	5/21/2015	5/21/2015	5/21/2015	5/21/2015	5/21/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	4.8 J	18	36	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	0.44	5.0 U	5.0 U	10 U	1.0 U	1.0 U
Trichloroethene	µg/L	5	59	53	200	1.6	0.27 J
Trichlorofluoromethane (CFC-11)	µg/L	NA	5.0 U	5.0 U	10 U	1.0 U	1.0 U
Vinyl acetate	µg/L	NA	5.0 U	5.0 U	10 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	6.0	20	49	1.0 U	1.0 U
Xylenes (total)	µg/L	10000	15 U	15 U	30 U	3.0 U	3.0 U
							29
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U				
2,4-Dichlorophenol	µg/L	110	9.4 U				
2,4-Dimethylphenol	µg/L	730	9.4 U				
Estimated concentration	µg/L	73	47 U				
2-Chloronaphthalene	µg/L	490	9.4 U				
2-Chlorophenol	µg/L	30	9.4 U				
2-Nitrophenol	µg/L	50	9.4 U	9.4 UJ	9.4 U	9.4 U	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U				
4-Chloro-3-methylphenol	µg/L	50	9.4 U				
4-Nitrophenol	µg/L	50	47 U	47 UJ	47 U	47 U	47 U
Acenaphthene	µg/L	370	9.4 U				
Acenaphthylene	µg/L	310	9.4 U				
Anthracene	µg/L	1800	9.4 U				
Benzo(a)anthracene	µg/L	0.092	9.4 U				
Benzo(a)pyrene	µg/L	0.2	9.4 U				
Benzo(b)fluoranthene	µg/L	0.092	9.4 U				
Benzo(g,h,i)perylene	µg/L	310	9.4 U				
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U				
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U				
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U				
Chrysene	µg/L	9.2	9.4 U				
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U				
Diethyl phthalate	µg/L	29000	9.4 U				
Dimethyl phthalate	µg/L	370000	9.4 U				
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U				
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U				

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		G6-02	G6-04	G6-05	G6-06	G6-07	G6-11
Sample ID:		G6-02-0515	G6-04-0515	G6-05-0515	G6-06-0515	G6-07-0515	G6-11-0515
Sample Date:		5/21/2015	5/21/2015	5/21/2015	5/21/2015	5/21/2015	5/21/2015
Parameters	Units	Screening Level					
<b>Semi-volatile Organic Compounds (Continued)</b>							
Fluoranthene	µg/L	1500	9.4 U				
Fluorene	µg/L	240	9.4 U				
Hexachlorobenzene	µg/L	1	9.4 U				
Hexachlorobutadiene	µg/L	0.86	9.4 U				
Hexachlorocyclopentadiene	µg/L	50	47 U	R	47 U	47 U	47 U
Hexachloroethane	µg/L	4.8	9.4 U				
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U				
Isophorone	µg/L	70	9.4 U				
Naphthalene	µg/L	6.5	9.4 U				
Octachlorocyclopentene	µg/L	NA	9.4 U				
Pentachlorophenol	µg/L	1	47 U				
Phenanthrene	µg/L	310	9.4 U				
Phenol	µg/L	11000	9.4 U				
Pyrene	µg/L	180	9.4 U				
<b>Organic Acid</b>							
2-Chlorobenzoic acid	µg/L	7300	30 U	860	1900	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	30 U	4300	8200	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	4000	15000	300 U	300 U
Benzoic acid	µg/L	150000	100 U	100 U	1000 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	210 J	390 J	250 U	250 U
<b>General Chemistry</b>							
Sulfate	mg/L	NA	73	260	1100	250	280
							1500

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-04
Sample ID:	H2M-06-0515	H2M-09-0515	H2U-01-0515	H2U-02-0515	H5-02-0515	H5-04-0515
Sample Date:	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015
Parameters	Units	Screening Level				
<b>Volatile Organic Compounds</b>						
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	0.42 J	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	0.49 J	0.22 J	1.0 U	2.7
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	3.7	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.9	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	1.0 U	0.47 J
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	0.20 J	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	2.1	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.7	1.0 U	1.0 U
2-Chlorotoluene	µg/L	120	0.42 J	23	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	0.30 J	0.37 J	1.0 U	1.0 U
Benzene	µg/L	5	1.2	35	1.0 U	3.9
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	3.5	1.0 U	1.0 U	0.36 J
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	1.6	18	1.0 U	1.0 U
Chloroethane	µg/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	80	2.5	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	3.2	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	70	11	0.73 J	1.0 U	0.26 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	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	700	0.59 J	0.96 J	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	0.12 J	3.7	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	0.48 J	11	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	0.53 J	15	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	0.59 J	1.0 U	1.0 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-04
Sample ID:		H2M-06-0515	H2M-09-0515	H2U-01-0515	H2U-02-0515	H5-02-0515	H5-04-0515
Sample Date:		6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	9.0	1.6	1.0 U	4.0	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
Trichloroethene	µg/L	5	4.5	2.0	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
Vinyl acetate	µg/L	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2	1.0 U	0.97 J	1.0 U	2.9	1.0 U
Xylenes (total)	µg/L	10000	1.6 J	4.3	3.0 U	3.0 U	3.0 U
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Estimated concentration	µg/L	73	47 U	47 U	47 U	49 U	48 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	47 U	49 U	48 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
4-Nitrophenol	µg/L	50	47 U	47 U	47 U	49 U	48 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.4 U	9.7 U	9.6 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-04
Sample ID:	H2M-06-0515	H2M-09-0515	H2U-01-0515	H2U-02-0515	H5-02-0515	H5-04-0515
Sample Date:	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015
Parameters	Units	Screening Level				
<b>Semi-volatile Organic Compounds (Continued)</b>						
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	9.7 U	9.4 U
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.7 U	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.7 U	9.4 U
Hexachlorocyclopentadiene	µg/L	50	47 U	47 U	47 U	47 U
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.7 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.7 U	9.4 U
Isophorone	µg/L	70	9.4 U	9.4 U	9.7 U	9.4 U
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.7 U	9.4 U
Octachlorocyclopentene	µg/L	NA	9.4 U	9.4 U	9.7 U	9.4 U
Pentachlorophenol	µg/L	1	47 U	47 U	49 U	47 U
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.7 U	9.4 U
Phenol	µg/L	11000	9.4 U	9.4 U	9.7 U	9.4 U
Pyrene	µg/L	180	9.4 U	9.4 U	9.7 U	9.4 U
<b>Organic Acid</b>						
2-Chlorobenzoic acid	µg/L	7300	18 J	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	230	30 U	8.7 J	30 U
4-Chlorobenzoic acid	µg/L	7300	17 J	300 U	300 U	300 U
Benzoic acid	µg/L	150000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	46 J	80 J	250 U	94 J
<b>General Chemistry</b>						
Sulfate	mg/L	NA	1500	1600	120	170
					180	1000

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	H5-05	H5-05	H5-07	H5-07	H5-09	H5-09
Sample ID:	H5-05-0515	Y7-10-0515	H5-07-0515	H5-07-0515	H5-09-0515	H5-09-0515
Sample Date:	6/4/2015	6/4/2015	6/4/2015	6/5/2015	6/4/2015	6/5/2015
Parameters	Units	Screening Level				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	200	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
1,1,2-Trichloroethane	µg/L	5	1.0 U	1.0 U	-	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	1.0 U	-	0.24 J
1,1-Dichloroethene	µg/L	7	1.0 U	1.0 U	-	1.0 U
1,2,4-Trichlorobenzene	µg/L	70	1.0 U	1.0 U	-	0.74 J
1,2-Dichlorobenzene	µg/L	600	1.0 U	1.0 U	-	1.7
1,2-Dichloroethane	µg/L	5	1.0 U	1.0 U	-	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	1.0 U	-	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	1.0 U	-	4.7
1,4-Dichlorobenzene	µg/L	75	1.0 U	1.0 U	-	1.7
2-Chlorotoluene	µg/L	120	1.0 U	1.0 U	-	19
3-Chlorotoluene	µg/L	120	1.0 U	1.0 U	-	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	1.0 U	-	1.0 U
Benzene	µg/L	5	1.0 U	1.0 U	0.58 J	9.8
Bromodichloromethane	µg/L	80	1.0 U	1.0 U	-	1.0 U
Bromoform	µg/L	80	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
Carbon disulfide	µg/L	1000	0.31 J	0.38 J	2.5	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	1.0 U	-	1.0 U
Chlorobenzene	µg/L	100	1.0 U	1.0 U	-	21
Chloroethane	µg/L	3.6	1.0 U	1.0 U	-	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	1.0 U	-	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	1.0 U	-	11
cis-1,2-Dichloroethene	µg/L	70	1.0 U	1.0 U	-	0.35 J
cis-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	-	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	1.0 U	-	1.0 U
Ethylbenzene	µg/L	700	1.0 U	1.0 U	-	0.52 J
Methylene chloride	µg/L	30	1.0 U	1.0 U	-	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	1.0 U	-	3.2
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	-	6.5
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	1.0 U	-	8.7
Styrene	µg/L	NA	1.0 U	1.0 U	-	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	1.0 U	-	1.0 U
Toluene	µg/L	1000	1.0 U	1.0 U	0.17 J	2.6

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		H5-05	H5-05	H5-07	H5-07	H5-09	H5-09
Sample ID:		H5-05-0515	Y7-10-0515 <td>H5-07-0515</td> <th>H5-07-0515</th> <td>H5-09-0515</td> <td>H5-09-0515</td>	H5-07-0515	H5-07-0515	H5-09-0515	H5-09-0515
Sample Date:		6/4/2015	6/4/2015	6/4/2015	(Duplicate)	6/4/2015	6/5/2015
Parameters	Units	Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	1.0 U	1.0 U	1.0 U	-	0.18 J
trans-1,3-Dichloropropene	µg/L	0.44	1.0 U	1.0 U	1.0 U	-	1.0 U
Trichloroethene	µg/L	5	1.0 U	1.0 U	0.20 J	-	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	1.0 U	1.0 U	1.0 U	-	1.0 U
Vinyl chloride	µg/L	2	1.0 U	1.0 U	1.0 U	-	0.57 J
Xylenes (total)	µg/L	10000	3.0 U	3.0 U	0.85 J	-	3.1
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.4 U	9.4 U	9.6 U	-	9.4 U
2,4-Dichlorophenol	µg/L	110	9.4 U	9.4 U	9.6 U	-	9.4 U
2,4-Dimethylphenol	µg/L	730	9.4 U	9.4 U	9.6 U	-	9.4 U
Estimated concentration	µg/L	73	47 U	47 U	48 U	-	47 U
2-Chloronaphthalene	µg/L	490	9.4 U	9.4 U	9.6 U	-	9.4 U
2-Chlorophenol	µg/L	30	9.4 U	9.4 U	9.6 U	-	9.4 U
2-Nitrophenol	µg/L	50	9.4 U	9.4 U	9.6 U	-	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	47 U	47 U	48 U	-	47 U
4-Chloro-3-methylphenol	µg/L	50	9.4 U	9.4 U	9.6 U	-	9.4 U
4-Nitrophenol	µg/L	50	47 U	47 U	48 U	-	47 U
Acenaphthene	µg/L	370	9.4 U	9.4 U	9.6 U	-	9.4 U
Acenaphthylene	µg/L	310	9.4 U	9.4 U	9.6 U	-	9.4 U
Anthracene	µg/L	1800	9.4 U	9.4 U	9.6 U	-	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.4 U	9.4 U	9.6 U	-	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.4 U	9.4 U	9.6 U	-	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.4 U	9.4 U	9.6 U	-	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.4 U	9.4 U	9.6 U	-	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.4 U	9.4 U	9.6 U	-	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	19 U	19 U	-	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.4 U	9.4 U	9.6 U	-	9.4 U
Chrysene	µg/L	9.2	9.4 U	9.4 U	9.6 U	-	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.4 U	9.4 U	9.6 U	-	9.4 U
Diethyl phthalate	µg/L	29000	9.4 U	9.4 U	9.6 U	-	9.4 U
Dimethyl phthalate	µg/L	370000	9.4 U	9.4 U	9.6 U	-	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.4 U	9.4 U	9.6 U	-	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.4 U	9.4 U	9.6 U	-	9.4 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	H5-05	H5-05	H5-07	H5-07	H5-09	H5-09
Sample ID:	H5-05-0515	Y7-10-0515	H5-07-0515	H5-07-0515	H5-09-0515	H5-09-0515
Sample Date:	6/4/2015	6/4/2015	6/4/2015	6/5/2015	6/4/2015	6/5/2015
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Semi-volatile Organic Compounds (Continued)</b>						
Fluoranthene	µg/L	1500	9.4 U	9.4 U	9.6 U	-
Fluorene	µg/L	240	9.4 U	9.4 U	9.6 U	-
Hexachlorobenzene	µg/L	1	9.4 U	9.4 U	9.6 U	-
Hexachlorobutadiene	µg/L	0.86	9.4 U	9.4 U	9.6 U	-
Hexachlorocyclopentadiene	µg/L	50	47 U	47 U	48 U	-
Hexachloroethane	µg/L	4.8	9.4 U	9.4 U	9.6 U	-
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.4 U	9.4 U	9.6 U	-
Isophorone	µg/L	70	9.4 U	9.4 U	9.6 U	-
Naphthalene	µg/L	6.5	9.4 U	9.4 U	9.6 U	-
Octachlorocyclopentene	µg/L	NA	9.4 U	9.4 U	9.6 U	-
Pentachlorophenol	µg/L	1	47 U	47 U	48 U	-
Phenanthrene	µg/L	310	9.4 U	9.4 U	9.6 U	-
Phenol	µg/L	11000	9.4 U	9.4 U	9.6 U	-
Pyrene	µg/L	180	9.4 U	9.4 U	9.6 U	-
<b>Organic Acid</b>						
2-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	-
3-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	-
4-Chlorobenzoic acid	µg/L	7300	300 U	300 U	300 U	-
Benzoic acid	µg/L	150000	100 U	100 U	100 U	-
Chlorendic acid	µg/L	50	250 U	250 U	250 U	85 J
<b>General Chemistry</b>						
Sulfate	mg/L	NA	1500	1500	1800	-
					1700	-

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	I1-01	I1-01	I1-02	I1-02	I1-04	I1-04	I1-07
Sample ID:	I1-01-0515	I1-01-0515	I1-02-0515	I1-02-0515	I1-04-0515	I1-04-0515	I1-07-0515
Sample Date:	5/18/2015	5/19/2015	5/18/2015	5/19/2015	5/18/2015	5/19/2015	5/18/2015
<b>Parameters</b>							
Units		Screening Level					
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	µg/L	200	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
1,1,2-Trichloroethane	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
1,1-Dichloroethane	µg/L	800	1.0 U	-	1.0 U	-	1.0 U
1,1-Dichloroethene	µg/L	7	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
1,2-Dichlorobenzene	µg/L	600	1.0 U	-	1.0 U	-	1.0 U
1,2-Dichloroethane	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
1,2-Dichloropropane	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
1,3-Dichlorobenzene	µg/L	180	1.0 U	-	1.0 U	-	1.0 U
1,4-Dichlorobenzene	µg/L	75	1.0 U	-	1.0 U	-	1.0 U
2-Chlorotoluene	µg/L	120	1.0 U	-	1.0 U	-	1.0 U
3-Chlorotoluene	µg/L	120	1.0 U	-	1.0 U	-	1.0 U
4-Chlorotoluene	µg/L	120	1.0 U	-	1.0 U	-	1.0 U
Benzene	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
Bromodichloromethane	µg/L	80	1.0 U	-	1.0 U	-	1.0 U
Bromoform	µg/L	80	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
Carbon disulfide	µg/L	1000	1.0 U	-	1.0 U	-	1.0 U
Carbon tetrachloride	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
Chlorobenzene	µg/L	100	1.0 U	-	1.0 U	-	1.3
Chloroethane	µg/L	3.6	1.0 U	-	1.0 U	-	1.0 U
Chloroform (Trichloromethane)	µg/L	80	1.0 U	-	1.0 U	-	1.0 U
Chloromethane (Methyl chloride)	µg/L	190	1.0 U	-	1.0 U	-	1.0 U
cis-1,2-Dichloroethene	µg/L	70	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
Dichlorodifluoromethane (CFC-12)	µg/L	350	1.0 U	-	1.0 U	-	1.0 U
Ethylbenzene	µg/L	700	1.0 U	-	1.0 U	-	1.0 U
Methylene chloride	µg/L	30	1.0 U	-	1.0 U	-	1.0 U
m-Monochlorobenzotrifluoride	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
o-Monochlorobenzotrifluoride	µg/L	50	1.0 U	-	1.0 U	-	1.0 U
p-Monochlorobenzotrifluoride	µg/L	50	1.0 U	-	1.0 U	-	1.0 U
Styrene	µg/L	NA	1.0 U	-	1.0 U	-	1.0 U
Tetrachloroethene	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
Toluene	µg/L	1000	1.0 U	-	1.0 U	-	1.0 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	I1-01	I1-01	I1-02	I1-02	I1-04	I1-04	I1-07
Sample ID:	I1-01-0515	I1-01-0515	I1-02-0515	I1-02-0515	I1-04-0515	I1-04-0515	I1-07-0515
Sample Date:	5/18/2015	5/19/2015	5/18/2015	5/19/2015	5/18/2015	5/19/2015	5/18/2015
<b>Parameters</b>							
Units		Screening Level					
<b>Volatile Organic Compounds (Continued)</b>							
trans-1,2-Dichloroethene	µg/L	100	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
Trichloroethene	µg/L	5	1.0 U	-	1.0 U	-	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	1.0 U	-	1.0 U	-	1.0 U
Vinyl acetate	µg/L	NA	1.0 U	-	1.0 U	-	1.0 U
Vinyl chloride	µg/L	2	1.0 U	-	1.0 U	-	1.0 U
Xylenes (total)	µg/L	10000	3.0 U	-	3.0 U	-	3.0 U
<b>Semi-volatile Organic Compounds</b>							
2,4,6-Trichlorophenol	µg/L	6.1	9.5 U	-	9.5 U	-	9.4 U
2,4-Dichlorophenol	µg/L	110	9.5 U	-	9.5 U	-	9.4 U
2,4-Dimethylphenol	µg/L	730	9.5 U	-	9.5 U	-	9.4 U
Estimated concentration	µg/L	73	48 U	-	48 U	-	47 U
2-Chloronaphthalene	µg/L	490	9.5 U	-	9.5 U	-	9.4 U
2-Chlorophenol	µg/L	30	9.5 U	-	9.5 U	-	9.4 U
2-Nitrophenol	µg/L	50	9.5 U	-	9.5 U	-	9.4 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	48 U	-	48 U	-	47 U
4-Chloro-3-methylphenol	µg/L	50	9.5 U	-	9.5 U	-	9.4 U
4-Nitrophenol	µg/L	50	48 U	-	48 U	-	47 U
Acenaphthene	µg/L	370	9.5 U	-	9.5 U	-	9.4 U
Acenaphthylene	µg/L	310	9.5 U	-	9.5 U	-	9.4 U
Anthracene	µg/L	1800	9.5 U	-	9.5 U	-	9.4 U
Benzo(a)anthracene	µg/L	0.092	9.5 U	-	9.5 U	-	9.4 U
Benzo(a)pyrene	µg/L	0.2	9.5 U	-	9.5 U	-	9.4 U
Benzo(b)fluoranthene	µg/L	0.092	9.5 U	-	9.5 U	-	9.4 U
Benzo(g,h,i)perylene	µg/L	310	9.5 U	-	9.5 U	-	9.4 U
bis(2-Chloroethoxy)methane	µg/L	5	9.5 U	-	9.5 U	-	9.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	19 U	-	19 U	-	19 U
Butyl benzylphthalate (BBP)	µg/L	NA	9.5 U	-	9.5 U	-	9.4 U
Chrysene	µg/L	9.2	9.5 U	-	9.5 U	-	9.4 U
Dibenz(a,h)anthracene	µg/L	0.0092	9.5 U	-	9.5 U	-	9.4 U
Diethyl phthalate	µg/L	29000	9.5 U	-	9.5 U	-	9.4 U
Dimethyl phthalate	µg/L	370000	9.5 U	-	9.5 U	-	9.4 U
Di-n-butylphthalate (DBP)	µg/L	3700	9.5 U	-	9.5 U	-	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	9.5 U	-	9.5 U	-	9.4 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	I1-01	I1-01	I1-02	I1-02	I1-04	I1-04	I1-07
Sample ID:	I1-01-0515	I1-01-0515	I1-02-0515	I1-02-0515	I1-04-0515	I1-04-0515	I1-07-0515
Sample Date:	5/18/2015	5/19/2015	5/18/2015	5/19/2015	5/18/2015	5/19/2015	5/18/2015
<b>Parameters</b>							
Units		Screening Level					
<b>Semi-volatile Organic Compounds (Continued)</b>							
Fluoranthene	µg/L	1500	9.5 U	-	9.5 U	-	9.4 U
Fluorene	µg/L	240	9.5 U	-	9.5 U	-	9.4 U
Hexachlorobenzene	µg/L	1	9.5 U	-	9.5 U	-	9.4 U
Hexachlorobutadiene	µg/L	0.86	9.5 U	-	9.5 U	-	9.4 U
Hexachlorocyclopentadiene	µg/L	50	48 U	-	48 U	-	47 U
Hexachloroethane	µg/L	4.8	9.5 U	-	9.5 U	-	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	9.5 U	-	9.5 U	-	9.4 U
Isophorone	µg/L	70	9.5 U	-	9.5 U	-	9.4 U
Naphthalene	µg/L	6.5	9.5 U	-	9.5 U	-	9.4 U
Octachlorocyclopentene	µg/L	NA	9.5 U	-	9.5 U	-	9.4 U
Pentachlorophenol	µg/L	1	48 U	-	48 U	-	47 U
Phenanthrene	µg/L	310	9.5 U	-	9.5 U	-	9.4 U
Phenol	µg/L	11000	9.5 U	-	9.5 U	-	9.4 U
Pyrene	µg/L	180	9.5 U	-	9.5 U	-	9.4 U
<b>Organic Acid</b>							
2-Chlorobenzoic acid	µg/L	7300	-	30 U	-	30 U	-
3-Chlorobenzoic acid	µg/L	7300	-	30 U	-	30 U	-
4-Chlorobenzoic acid	µg/L	7300	-	300 U	-	300 U	-
Benzoic acid	µg/L	150000	-	100 U	-	100 U	-
Chlorendic acid	µg/L	50	-	250 U	-	250 U	-
<b>General Chemistry</b>							
Sulfate	mg/L	NA	290	-	280	-	440
							1300

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	I1-07	J6-02	J6-04	J6-05	J6-05	J6-07	J6-11
Sample ID:	I1-07-0515	J6-02-0515	J6-04-0515	J6-05-0515	X7-10-0515	J6-07-0515	J6-11-0515
Sample Date:	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015 (Duplicate)	5/19/2015	5/19/2015
<b>Parameters</b>							
Units	Screening Level						
<b>Volatile Organic Compounds</b>							
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	1.0 U	1.0 U	0.17 J
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	0.31 J
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	0.13 J
1,4-Dichlorobenzene	µg/L	75	-	1.0 U	1.0 U	1.0 U	0.35 J
2-Chlorotoluene	µg/L	120	-	1.0 U	1.0 U	1.0 U	3.0
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	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	5	-	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	100	-	1.0 U	1.0 U	1.0 U	12
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	-	1.0 U	1.0 U	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	0.32 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	0.79 J
p-Monochlorobenzotrifluoride	µg/L	50	-	1.0 U	1.0 U	1.0 U	1.8
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	-	0.28 J	1.0 U	1.0 U	0.20 J

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:		I1-07	J6-02	J6-04	J6-05	J6-05	J6-07	J6-11
Sample ID:		I1-07-0515	J6-02-0515	J6-04-0515	J6-05-0515	X7-10-0515	J6-07-0515	J6-11-0515
Sample Date:		5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015
Parameters	Units	Screening Level						
<b>Volatile Organic Compounds (Continued)</b>								
trans-1,2-Dichloroethene	µg/L	100	-	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	0.44	-	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichloroethene	µg/L	5	-	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	NA	-	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl acetate	µg/L	NA	-	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl chloride	µg/L	2	-	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Xylenes (total)	µg/L	10000	-	3.0 U	3.0 U	3.0 U	3.0 U	2.6 J
<b>Semi-volatile Organic Compounds</b>								
2,4,6-Trichlorophenol	µg/L	6.1	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
2,4-Dichlorophenol	µg/L	110	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
2,4-Dimethylphenol	µg/L	730	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Estimated concentration	µg/L	73	-	47 U	47 U	47 U	47 U	48 U
2-Chloronaphthalene	µg/L	490	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
2-Chlorophenol	µg/L	30	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
2-Nitrophenol	µg/L	50	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
4,6-Dinitro-2-methylphenol	µg/L	3.7	-	47 U	47 U	47 U	47 U	48 U
4-Chloro-3-methylphenol	µg/L	50	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
4-Nitrophenol	µg/L	50	-	47 U	47 U	47 U	47 U	48 U
Acenaphthene	µg/L	370	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Acenaphthylene	µg/L	310	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Anthracene	µg/L	1800	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Benzo(a)anthracene	µg/L	0.092	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Benzo(a)pyrene	µg/L	0.2	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Benzo(b)fluoranthene	µg/L	0.092	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Benzo(g,h,i)perylene	µg/L	310	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
bis(2-Chloroethoxy)methane	µg/L	5	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	6	-	19 U				
Butyl benzylphthalate (BBP)	µg/L	NA	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Chrysene	µg/L	9.2	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Dibenz(a,h)anthracene	µg/L	0.0092	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Diethyl phthalate	µg/L	29000	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Dimethyl phthalate	µg/L	370000	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Di-n-butylphthalate (DBP)	µg/L	3700	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U
Di-n-octyl phthalate (DnOP)	µg/L	1500	-	9.4 U	9.4 U	9.4 U	9.4 U	9.5 U

Table 3.8

**Analytical Results Summary**  
**Fifth Quarter Group A Bedrock Piezometer Sampling**  
**First Quarter 2015**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	I1-07	J6-02	J6-04	J6-05	J6-05	J6-07	J6-11
Sample ID:	I1-07-0515	J6-02-0515	J6-04-0515	J6-05-0515	X7-10-0515	J6-07-0515	J6-11-0515
Sample Date:	5/19/2015	5/19/2015	5/19/2015	5/19/2015	5/19/2015 (Duplicate)	5/19/2015	5/19/2015
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>					
<b>Semi-volatile Organic Compounds (Continued)</b>							
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	9.5 U
Hexachlorobenzene	µg/L	1	-	9.4 U	9.4 U	9.4 U	9.5 U
Hexachlorobutadiene	µg/L	0.86	-	9.4 U	9.4 U	9.4 U	9.5 U
Hexachlorocyclopentadiene	µg/L	50	-	47 U	47 U	47 U	48 U
Hexachloroethane	µg/L	4.8	-	9.4 U	9.4 U	9.4 U	9.5 U
Indeno(1,2,3-cd)pyrene	µg/L	0.092	-	9.4 U	9.4 U	9.4 U	9.5 U
Isophorone	µg/L	70	-	9.4 U	9.4 U	9.4 U	9.5 U
Naphthalene	µg/L	6.5	-	9.4 U	9.4 U	9.4 U	9.5 U
Octachlorocyclopentene	µg/L	NA	-	9.4 U	9.4 U	9.4 U	9.5 U
Pentachlorophenol	µg/L	1	-	47 U	47 U	47 U	48 U
Phenanthrene	µg/L	310	-	9.4 U	9.4 U	9.4 U	9.5 U
Phenol	µg/L	11000	-	9.4 U	9.4 U	9.4 U	9.5 U
Pyrene	µg/L	180	-	9.4 U	9.4 U	9.4 U	9.5 U
<b>Organic Acid</b>							
2-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	43 J	250 U	250 U	250 U	120 J
<b>General Chemistry</b>							
Sulfate	mg/L	NA	-	300	280	210	1600
							1500

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**

**2015 Analytical Results Summary**  
**Annual AFW Composite**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

	<b>Sample Location:</b>	<b>AFWCOMPOSITE</b>	
	<b>Sample ID:</b>	<b>AFW-C-1115</b>	
	<b>Sample Date:</b>	<b>11/18/2015</b>	
<b>Parameters</b>	<b>Units</b>	<b>Reporting</b>	
		<b>Level</b>	
<b>Polychlorinated Biphenyls (PCBs)</b>			
Pentachlorobiphenyl	µg/L	1	0.20 U
Tetrachlorobiphenyl	µg/L	1	0.20 UJ
Trichlorobiphenyl	µg/L	1	0.099 UJ
<b>Pesticides</b>			
alpha-BHC	µg/L	1	0.050 U
beta-BHC	µg/L	1	0.050 U
delta-BHC	µg/L	1	0.031 J
gamma-Chlordane	µg/L	1	0.050 U
Mirex	µg/L	1	0.050 U
<b>Dioxin Furans</b>			
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	500	9.47 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

**2015 Quarterly Hydraulic Gradient Summary**  
**Community Monitoring Program**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

		3/16/2015			6/2/2015			9/1/2015			12/2/2015		
<b>Gradient Pairing</b>		<b>Overburden</b>	<b>Bedrock</b>		<b>Overburden</b>	<b>Bedrock</b>		<b>Overburden</b>	<b>Bedrock</b>		<b>Overburden</b>	<b>Bedrock</b>	
		Elevation (ft. AMSL)	Elevation (ft. AMSL)	Gradient (ft./ft.)									
<b>Overburden Bedrock</b>													
CMW-1OB	CMW-1SH	571.61	564.70	0.628	571.90	563.75	0.741	571.17	563.07	0.736	571.26	563.51	0.705
CMW-2OB	CMW-2SH	Surcharged	572.80	1.258	586.71	571.12	1.090	582.17	570.44	0.820	584.22	571.29	0.904
CMW-3OB	CMW-3SH	581.49	549.60	2.278	574.83	548.43	1.886	572.04	548.36	1.691	569.85	548.29	1.540
CMW-4OB	CMW-4SH	Surcharged	567.94	0.537	Surcharged	566.66	0.646	574.02	566.11	0.670	572.09	566.67	0.645
CMW-5OB	CMW-5SH	Surcharged	Surcharged	0.004	581.95	576.05	0.373	580.14	574.07	0.384	582.88	574.11	0.555
CMW-6OB	CMW-6SH	571.71	562.93	0.915	571.82	562.34	0.988	571.65	561.62	1.045	571.67	560.86	1.126
CMW-7OB	CMW-7SH	- <sup>(1)</sup>	599.43	0.809	- <sup>(1)</sup>	599.36	0.814	- <sup>(1)</sup>	598.04	0.906	- <sup>(1)</sup>	598.19	0.896
CMW-8OB	CMW-8SH	- <sup>(2)</sup>	609.55	0.631	- <sup>(2)</sup>	608.46	0.736	- <sup>(2)</sup>	605.27	1.042	- <sup>(2)</sup>	605.02	1.066
CMW-9OB	CMW-9SH	569.74	560.88	1.704	- <sup>(3)</sup>	560.12	2.238	- <sup>(3)</sup>	559.71	2.317	- <sup>(3)</sup>	559.84	2.292
CMW-11OB	CMW-11SH	572.15	565.24	0.720	570.14	565.16	0.519	569.05	564.90	0.432	569.97	563.91	0.631
CMW-12OB	CMW-12SH	584.02	570.46	0.721	586.05	569.14	0.899	576.58	568.69	0.420	573.15	569.30	0.205

Notes:

ft. AMSL - Feet Above Mean Sea Level

ft./ft. - Feet per foot

Dry - No water present in well

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

Surcharged - Well full of water to top of casing

- 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.

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

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

**Table 3.11**

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**2015 Community Monitoring Well Soil Vapor Monitoring  
Community Monitoring Program  
Hyde Park Landfill Site  
Town of Niagara, New York**

**September 11, 2015  
Sun, 65°F, Winds N 0-5 MPH**

<b>Well I.D.</b>	<b>Time Intervals</b>	<b>Sampling Time (hhmm)</b>	<b>VOC Readings (ppmv)</b>
<b>SVP-1</b>	Background	905	0
	At 1 minute	906	0
	At 2 minutes	907	0
	At 3 minutes	908	0
	At 4 minutes	909	0
	At 5 minutes	910	0
	At 6 minutes	911	0
	At 7 minutes	912	0
	At 8 minutes	913	0
	At 9 minutes	914	0
<b>SVP-2</b>	Background	1020	0
	At 1 minute	1021	0
	At 2 minutes	1022	0
	At 3 minutes	1023	0
	At 4 minutes	1024	0
	At 5 minutes	1025	0
	At 6 minutes	1026	0
	At 7 minutes	1027	0
	At 8 minutes	1028	0
	At 9 minutes	1029	0
<b>SVP-3</b>	Background	1036	0
	At 1 minute	1037	0
	At 2 minutes	1038	0
	At 3 minutes	1039	0
	At 4 minutes	1040	0
	At 5 minutes	1041	0
	At 6 minutes	1042	0
	At 7 minutes	1043	0
	At 8 minutes	1044	0
	At 9 minutes	1045	0
<b>SVP-4</b>	Background	1057	0
	At 1 minute	1058	0
	At 2 minutes	1059	0
	At 3 minutes	1100	0
	At 4 minutes	1101	0
	At 5 minutes	1102	0
	At 6 minutes	1103	0
	At 7 minutes	1104	0
	At 8 minutes	1105	0
	At 9 minutes	1106	0
	At 10 minutes	1107	0

**Table 3.11**

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**2015 Community Monitoring Well Soil Vapor Monitoring  
Community Monitoring Program  
Hyde Park Landfill Site  
Town of Niagara, New York**

**September 11, 2015  
Sun, 65°F, Winds N 0-5 MPH**

<b>Well I.D.</b>	<b>Time Intervals</b>	<b>Sampling Time (hhmm)</b>	<b>VOC Readings (ppmv)</b>
<b>CMW-7OB</b>	Background	829	0
	At 1 minute	830	0
	At 2 minutes	831	0
	At 3 minutes	832	0
	At 4 minutes	833	0
	At 5 minutes	834	0
	At 6 minutes	835	0
	At 7 minutes	836	0
	At 8 minutes	837	0
	At 9 minutes	838	0
<b>CMW-8OB</b>	Background	803	0
	At 1 minute	804	0
	At 2 minutes	805	0
	At 3 minutes	806	0
	At 4 minutes	807	0
	At 5 minutes	808	0
	At 6 minutes	809	0
	At 7 minutes	810	0
	At 8 minutes	811	0
	At 9 minutes	812	0
	At 10 minutes	813	0

**Notes:**

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

**Table 4.1**

**2015 NAPL Decanter Volume Monitoring**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

	<b>Decanter #1</b>	<b>Decanter #2</b>	<b>Decanter #3</b>
<b>First Quarter 2015</b>			
March 16, 2015			
Thickness (feet)	22.12	5.62	4.9*
Level (%)	52	13	50
Volume <sup>(1)</sup> (gallons)	5,824.00	1,456.00	5,600.00
<b>Second Quarter 2015</b>			
June 2, 2015			
Thickness (feet)	24.00	3.40	5.85
Level (%)	52	14	4
Volume <sup>(1)</sup> (gallons)	5,824.00	1,568.00	448.00
<b>Third Quarter 2015</b>			
September 1, 2015			
Thickness (feet)	26.00	5.90	5.60
Level (%)	54	54	52
Volume <sup>(1)</sup> (gallons)	6,048.00	6,048.00	5,824.00
<b>Fourth Quarter 2015</b>			
December 2, 2015			
Thickness (feet)	20.40	3.35	4.60
Level (%)	54	60	58
Volume <sup>(1)</sup> (gallons)	6,048.00	6,720.00	6,496.00

**Notes:**

(1)

- Based on level percentage of NAPL in 11,200-gallon decanters

NAPL

- Non-Aqueous Phase Liquid

\*

- Could not reach bottom of tank, weight stopped at 27.75 feet from top of cam-lock fitting

**Table 4.2**

**2015 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:	1/7/2015	1/14/2015	1/21/2015	1/28/2015	2/5/2014
<b>Parameters</b>		<b>Units</b>			
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.2	1.6	0.27 J	0.23 J
1,1-Dichloroethene	µg/L	0.45 J	0.48 J	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	6.2	8.7	0.89 J	0.84 J
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1	1.2	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	0.65	0.27 J	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	0.14 J	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.6	2	0.34 J	0.3 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	35	37	1.7	1.4
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	1/7/2015	1/14/2015	1/21/2015	1/28/2015	2/5/2014
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	0.25 J	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	0.17 J	0.24 J	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	0.28 J	0.32	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	240 J	220	500	410
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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:	2/11/2015	2/18/2015	2/25/2015	3/4/2015	3/11/2015
<b>Parameters</b>		<b>Units</b>			
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	0.2 J	1.0 U	0.22 J	0.22 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	0.92 J	0.88 J	0.74 J	0.84 J
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.24 J	0.26 J	0.23 J	0.29 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.2	1.3	1.2	1.6
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	2/11/2015	2/18/2015	2/25/2015	3/4/2015	3/11/2015
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	400	320	390	330
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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	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:	3/18/2015	3/24/2015	4/9/2015	4/1/2015		4/15/2015
<b>Parameters</b>						<b>Units</b>
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	0.21 J	0.31 J	0.32 J	0.2 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	0.88 J	0.89 J	0.81 J
1,2-Dichloropropane	µg/L	0.73 J	0.85 J	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	0.2 J	0.33 J	0.31 J	0.27 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1	1.1	1.6	1.8	1.4 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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	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:	3/18/2015	3/24/2015	4/9/2015	4/1/2015		4/15/2015
<b>Parameters</b>						<b>Units</b>
<b>Volatile Organic Compounds</b>						
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	250	250	300	300	180 J
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Table 4.2

**2015 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:	4/22/2015	4/29/2015	5/6/2015	5/12/2015	5/20/2015
<b>Parameters</b>					<b>Units</b>
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1-Dichloroethane	µg/L	0.31 J	1.0 U	0.36 UJ	0.33 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2-Dichloroethane	µg/L	1.2 J	1.2	1.1	1.2
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 UJ	0.34 J
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Chloroform (Trichloromethane)	µg/L	0.28 J	0.31 J	0.31 UJ	0.32 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
cis-1,2-Dichloroethene	µg/L	1.5 J	1.5	1.8	2.1
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U

**Table 4.2**

**2015 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:	4/22/2015	4/29/2015	5/6/2015	5/12/2015	5/20/2015
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	13 J	1.0 U	1.0 UJ	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Vinyl chloride	µg/L	280	230	200	200
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 UJ	3.0 U

**Table 4.2**

**2015 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:	5/27/2015	6/3/2015	6/10/2015	6/17/2015	6/24/2015
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	0.44 J	0.33 J	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.6	1.2	1.1	1.4
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	0.23 J	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	0.33 J	0.28	0.24 J	0.22 J
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	0.16 J	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.41 J	0.31 J	0.31 J	0.33 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	2.3	1.9	2.1	2.2
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	5/27/2015	6/3/2015	6/10/2015	6/17/2015	6/24/2015
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	180	170	170	150
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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	HP-INTER-D-01
Sample ID:	HP7214 INT-D (interstage)	HP7914INT-D (interstage)	HP71614INT-D (interstage)	HP72314 INT-D (interstage)	HP73014INT-D (interstage)	HP73014INT-D (interstage)
Sample Date:	7/1/2015	7/9/2014	7/15/2015	7/22/2015	7/30/2015	7/30/2015
<b>Parameters</b>		<b>Units</b>				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	0.44 J	1.0 U	0.47 J	0.5 J	0.48 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.5	1.0 U	1.6	1.6	1.8
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	0.3	0.25 J	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.4 J	1.0 U	0.38 J	0.4 J	0.41 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	2.6	1.0 U	2.8	2.7	3.2
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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	HP-INTER-D-01
Sample ID:	HP7214 INT-D (interstage)	HP7914INT-D (interstage)	HP71614INT-D (interstage)	HP72314 INT-D (interstage)	HP73014INT-D (interstage)	HP73014INT-D (interstage)
Sample Date:	7/1/2015	7/9/2014	7/15/2015	7/22/2015	7/30/2015	7/30/2015
<b>Parameters</b>		<b>Units</b>				
<b>Volatile Organic Compounds</b>						
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	190	160	160	160	190
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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:	8/6/2015	8/12/2015	8/19/2015	8/26/2015	9/2/2015
<b>Parameters</b>		<b>Units</b>			
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	0.53 J	0.6 J	0.57 J	0.62 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.8	1.7	2.2	2.3
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	0.77 J	0.64 J	0.55 J
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.42 J	0.42 J	0.43 J	0.46 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	3.2	3.3	3.6	3.6
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	8/6/2015	8/12/2015	8/19/2015	8/26/2015	9/2/2015
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	170	220	160	190
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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:	9/9/2015	9/16/2015	9/23/2015	9/30/2015	10/7/2015
<b>Parameters</b>					
<b>Units</b>					
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	0.52 J	0.64 J	0.59 J	0.71 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	2	2	2	2.3
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	0.36 J	1.0 U	1.0 U	0.42 J
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.39 J	1.0 U	1.0 U	0.46 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	3.8	3.8	3.9	4.4
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	9/9/2015	9/16/2015	9/23/2015	9/30/2015	10/7/2015
<b>Parameters</b>					
	Units				
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	220	190	270	290
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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	HP-INTER-D-01
Sample ID:	HP10814 INT-D (interstage)	HP101514INT-D (interstage)	HP102214 INT-D (interstage)	HP102914 INT-D (interstage)	HP102914 INT-D (interstage)	HP11514 INT-D (interstage)
Sample Date:	10/14/2015	10/21/2015	10/28/2015	11/4/2015		11/11/2015
<b>Parameters</b>		<b>Units</b>				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	0.68 J	0.68 J	0.69 J	0.81 J	0.8 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	2.3	2.3	2.3	2.5	2.7
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	0.42 J	0.48 J	0.6 J	0.25 J	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.49 J	0.51 J	1.0 U	0.56 J	0.58 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	4.9	4.8	4.7	5.2	5.5
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	10/14/2015	10/21/2015	10/28/2015	11/4/2015	11/11/2015
<b>Parameters</b>		<b>Units</b>			
<b>Volatile Organic Compounds</b>					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	210	250	260	330
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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:	11/18/2015	11/25/2015	11/25/2014	12/2/2015
<b>Parameters</b>				
<b>Units</b>				
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	2.4
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	0.65 J
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	2.8	3.4	13
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.3
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	0.38 J	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.6 J	0.74 J	8.6
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	6.1	6.9	75
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U

**Table 4.2**

**2015 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:	11/18/2015	11/25/2015	11/25/2014	12/2/2015
<b>Parameters</b>				
<b>Units</b>				
<b>Volatile Organic Compounds</b>				
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	0.27 J
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	0.31 J
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	530	1.0 U
Vinyl chloride	µg/L	620	3.0 U	780
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U

**Table 4.2**

**2015 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:	HP12915 INT-D (interstage)	HP121615 INT-D (interstage)	HP122215 INT-D (interstage)	HPI123015 INT-D (interstage)
Sample Date:	12/9/2015	12/16/2015	12/22/2015	12/30/2015
<b>Parameters</b>		<b>Units</b>		
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	7.3
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	150
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	17
1,1-Dichloroethane	µg/L	1.0 U	0.97 J	2.8
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	4.1
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	32
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	27
1,2-Dichloroethane	µg/L	3.1	3.5	25
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	2.3
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	5.6
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	25
2-Chlorotoluene	µg/L	1.0 U	1.0 U	330
3-Chlorotoluene	µg/L	1.0 U	1.0 U	4.7
4-Chlorotoluene	µg/L	1.0 U	1.0 U	180
Benzene	µg/L	1.0 U	1.0 U	330
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	3.5	2.2	3.2
Carbon tetrachloride	µg/L	1.0 U	1.0 U	6.6
Chlorobenzene	µg/L	1.0 U	1.0 U	550
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	0.72 J	0.79 J	560
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	0.97 J
cis-1,2-Dichloroethene	µg/L	6.5	6.2	270
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	150

**Table 4.2**

**2015 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:	HP12915 INT-D (interstage)	HP121615 INT-D (interstage)	HP122215 INT-D (interstage)	HPI123015 INT-D (interstage)
Sample Date:	12/9/2015	12/16/2015	12/22/2015	12/30/2015
<b>Parameters</b>		<b>Units</b>		
<b>Volatile Organic Compounds</b>				
Methylene chloride	µg/L	1.0 U	1.0 U	37
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	48
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	120
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	150
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	36
Toluene	µg/L	1.0 U	1.0 U	1000
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	7.3
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	300
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	520	600	640
Vinyl chloride	µg/L	3.0 U	3.0 U	730
Xylenes (total)	µg/L	R	3.0 U	3.0 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**

**2015 Quarterly Leachate Feed APL Sampling**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET
Sample ID:	HP32515 INF	HP61615 INF	HP92315 INF	HP121615 INF
Sample Date:	3/25/2015	06/16/2015	09/23/2015	12/16/2015
<b>Parameters</b>	<b>Units</b>			
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	µg/L	40 U	50 U	50 U
1,1,2,2-Tetrachloroethane	µg/L	77	91	140
1,1,2-Trichloroethane	µg/L	40 U	50 U	13 J
1,1-Dichloroethane	µg/L	40 U	50 U	100 U
1,1-Dichloroethene	µg/L	40 U	50 U	100 U
1,2,4-Trichlorobenzene	µg/L	380	540	600
1,2-Dichlorobenzene	µg/L	59	68	110
1,2-Dichloroethane	µg/L	18 J	17 J	27 J
1,2-Dichloropropane	µg/L	40 U	50 U	100 U
1,3-Dichlorobenzene	µg/L	13 J	19 J	28 J
1,4-Dichlorobenzene	µg/L	79	93	130
2-Chlorotoluene	µg/L	650	810	1200
3-Chlorotoluene	µg/L	40 U	50 U	15 J
4-Chlorotoluene	µg/L	470	600	910
Benzene	µg/L	140	150	300
Bromodichloromethane	µg/L	40 U	50 U	50 U
Bromoform	µg/L	40 U	50 U	50 U
Bromomethane (Methyl bromide)	µg/L	40 U	50 U	50 U
Carbon disulfide	µg/L	9.3 J	50 U	15 J
Carbon tetrachloride	µg/L	40	27 J	34 J
Chlorobenzene	µg/L	460	550	890
Chloroethane	µg/L	40 U	50 U	50 U
Chloroform (Trichloromethane)	µg/L	240	300	550
Chloromethane (Methyl chloride)	µg/L	40 U	50 U	50 U
cis-1,2-Dichloroethene	µg/L	200	270	510
cis-1,3-Dichloropropene	µg/L	40 U	50 U	50 U
Dichlorodifluoromethane (CFC-12)	µg/L	40 U	50 U	50 U
Ethylbenzene	µg/L	160	200	290
Methylene chloride	µg/L	23 J	92	130
m-Monochlorobenzotrifluoride	µg/L	75	50 U	29 J
o-Monochlorobenzotrifluoride	µg/L	170	240	330
p-Monochlorobenzotrifluoride	µg/L	260	330	450
Styrene	µg/L	40 U	13 J	50 U
Tetrachloroethene	µg/L	530	360	460
Toluene	µg/L	770	850	1400
trans-1,2-Dichloroethene	µg/L	6.8 J	50 U	9.7 J
trans-1,3-Dichloropropene	µg/L	40 U	50 U	50 U
Trichloroethene	µg/L	230	390	600
Trichlorofluoromethane (CFC-11)	µg/L	40 U	50 U	100 U

**Table 4.3**

**2015 Quarterly Leachate Feed APL Sampling**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET
Sample ID:	HP32515 INF	HP61615 INF	HP92315 INF	HP121615 INF
Sample Date:	3/25/2015	06/16/2015	09/23/2015	12/16/2015
<b>Parameters</b>				
<b>Units</b>				
<b>Volatile Organic Compounds (Continued)</b>				
Vinyl acetate	µg/L	40 U	50 U	50 U
Vinyl chloride	µg/L	72	78	140
Xylenes (total)	µg/L	860	1100	1700
<b>Semi-volatile Organic Compounds</b>				
2,4,6-Trichlorophenol	µg/L	280 U	94 UJ	290 U
2,4-Dichlorophenol	µg/L	66 J	87 J	190 J
2,4-Dimethylphenol	µg/L	280 U	94 U	290 U
2,4-Dinitrophenol	µg/L	1400 U	470 U	1400 U
2-Chlorobenzoic acid	µg/L	610	930	1700
2-Chloronaphthalene	µg/L	280 U	94 U	290 U
2-Chlorophenol	µg/L	280 U	94 U	290 U
2-Nitrophenol	µg/L	280 U	94 UJ	290 U
3-Chlorobenzoic acid	µg/L	1500	2400	3800
4,6-Dinitro-2-methylphenol	µg/L	1400 U	470 U	1400 U
4-Chloro-3-methylphenol	µg/L	280 U	94 U	290 U
4-Chlorobenzoic acid	µg/L	1300	2100	3900
4-Nitrophenol	µg/L	1400 U	470 U	1400 U
Acenaphthene	µg/L	280 U	94 U	290 U
Acenaphthylene	µg/L	280 U	94 U	290 U
Anthracene	µg/L	280 U	94 U	290 U
Benzo(a)anthracene	µg/L	280 U	94 U	290 U
Benzo(a)pyrene	µg/L	280 U	94 U	290 U
Benzo(b)fluoranthene	µg/L	280 U	94 U	290 U
Benzo(g,h,i)perylene	µg/L	280 U	94 U	290 U
Benzoic acid	µg/L	1700	2600	9900
bis(2-Chloroethoxy)methane	µg/L	280 U	94 U	290 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	570 U	190 U	570 U
Butyl benzylphthalate (BBP)	µg/L	280 U	94 U	290 U
Chlorendic acid	µg/L	2100	3300	4800
Chrysene	µg/L	280 U	94 U	290 U
Dibenz(a,h)anthracene	µg/L	280 U	94 U	290 U
Diethyl phthalate	µg/L	280 U	94 U	290 U
Dimethyl phthalate	µg/L	280 U	94 U	290 U
Di-n-butylphthalate (DBP)	µg/L	280 U	94 U	290 U
Di-n-octyl phthalate (DnOP)	µg/L	280 U	94 U	290 U
Fluoranthene	µg/L	280 U	94 U	290 U
Fluorene	µg/L	280 U	94 U	290 U
Hexachlorobenzene	µg/L	280 U	19 J	18 J
				94 U

**Table 4.3**

**2015 Quarterly Leachate Feed APL Sampling**  
**Hyde Park Landfill Site**  
**Town of Niagara, New York**

Sample Location:	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET
Sample ID:	HP32515 INF	HP61615 INF	HP92315 INF	HP121615 INF
Sample Date:	3/25/2015	06/16/2015	09/23/2015	12/16/2015
<b>Parameters</b>				
<b>Units</b>				
<b>Semi-volatile Organic Compounds (Continued)</b>				
Hexachlorobutadiene	µg/L	14 J	23 J	25 J
Hexachlorocyclopentadiene	µg/L	1400 U	470 U	1400 U
Hexachloroethane	µg/L	280 U	6.0 J	290 U
Indeno(1,2,3-cd)pyrene	µg/L	280 U	94 U	290 U
Isophorone	µg/L	280 U	94 U	290 U
Naphthalene	µg/L	280 U	94 U	290 U
Octachlorocyclopentene	µg/L	280 U	94 U	290 U
Pentachlorophenol	µg/L	1400 U	470 U	1400 U
Phenanthrene	µg/L	280 U	94 U	290 U
Phenol	µg/L	520	200	2200
Pyrene	µg/L	280 U	94 U	290 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**

**2015 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 32515	HP SAC 61615	HP SAC 92315	HP SAC 121615
Sample Date:	3/25/2015	6/16/2015	09/23/2015	12/16/2015
<b>Parameters</b>				
	<b>Units</b>			
<b>Polychlorinated Biphenyls</b>				
Pentachlorobiphenyl	µg/L	0.17 J	0.46 J	0.31
Tetrachlorobiphenyl	µg/L	0.14 J	0.36 J	0.26
Trichlorobiphenyl	µg/L	0.027 J	0.25 J	0.096 U
Total PCBs	µg/L	0.337J	1.07J	0.57
<b>Dioxin Furans</b>				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	2150	8830	3520
				1810

Notes:

APL - Aqueous Phase Liquid

pg/L - Picograms per liter

µg/L - Micrograms per liter

J - Estimated concentration

U - Not detected at the associated reporting limit

Table 5.1

Page 1 of 3

**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 Fluid Volume	Estimated NAPL Percentage
	NAPL Thickness	Water Level (ft. AMSL)										
	(feet)	(ft. AMSL)										
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%

Table 5.1

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**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 Fluid Volume	Estimated NAPL Percentage
	NAPL Thickness	Water Level (ft. AMSL)										
	(feet)	(ft. AMSL)										
September-11	1.0	603.5	0.0	598.8	0.5	600.0	0.0	606.0 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	0.0	614.9	24	--
December-11	1.2	605.4	0.0	606.4	>0.5	607.3	0.0	606.0 <sup>(1)</sup>	0.0	615.0	13	--
January-12	1.3	605.7	0.0	606.6	0.7	609.1	0.0	606.0 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	Trace	613.2	16	--
September-12	>1.3	600.8	0.0	605.8	0.8	607.2	0.0	606.0 <sup>(1)</sup>	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 <sup>(2)</sup>	--
September-13	2.2	598.6	0.0	606.4	1.0	611.9	1.3	607.12	0.0	612.8	20 <sup>(2)</sup>	--
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%

Table 5.1

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**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 Fluid Volume	Estimated NAPL Percentage
	NAPL Thickness	Water Level (feet)	NAPL Thickness	Water Level (feet)								
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%
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 <sup>(3)</sup>	578.2	26 <sup>(3)</sup>	56.6%
May-15	1.7	594.2	0.0	594.6	1.2	603.0	1.0	605.2	4.4 <sup>(4)</sup>	578.2	16 <sup>(3)</sup>	54.1%
June-15	1.7	594.9	0.0	597.7	1.3	608.7	1.1	605.7	4.4 <sup>(4)</sup>	578.2	16 <sup>(3)</sup>	55.2%
July-15	1.7	594.1	0.0	597.7	1.3	608.5	1.3	605.7	3.8 <sup>(4)</sup>	578.2	15 <sup>(3)</sup>	56.5%
August-15	1.7	594.3	0.0	597.6	1.3	598.3	1.3	605.7	4.2 <sup>(4)</sup>	578.2	15.5 <sup>(3)</sup>	57.3%
September-15	1.8	594.8	0.0	597.7	1.3	608.3	1.7	605.7	2.2 <sup>(4)</sup>	578.2	12 <sup>(3)</sup>	61.7%
October-15	1.5	594.8	0.0	597.7	1.3	608.3	2.2	605.7	1.7 <sup>(4)</sup>	578.2	11 <sup>(3)</sup>	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%

## Notes:

- ft. AMSL      - Feet Above Mean Sea Level
- NAPL      - Non-Aqueous Phase Liquid
- "      - Not measured due to miscommunication between Site operator and field technicians
- "      - Percentage cannot be calculated due to lack of measurement or pumping
- <sup>(1)</sup>      - Well obstructed during water level reading
- <sup>(2)</sup>      - Estimated volume due to totalizer problems
- <sup>(3)</sup>      - Manual NAPL removal performed in SC-6 April through October 2015
- <sup>(4)</sup>      - Estimated NAPL thickness based on volume removed

# Appendices

# Appendix A

## Institutional and Engineering Controls Certification Form

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

Division of Environmental Remediation

625 Broadway, 11<sup>th</sup> Floor, Albany, NY 12233-7020

P: (518)402-9543 | F: (518)402-9547

[www.dec.ny.gov](http://www.dec.ny.gov)

3/3/2016

Joseph Branch  
Project Manager  
OCC/Glenn Springs Holdings, Inc.  
7601 Old Channel Trail  
P.O. Box 146  
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 Mr. 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, 2016. 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](mailto: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

cc: w/ enclosures

Occidental Chemical Corporation

ec: w/ enclosures

Brian Sadowski, Project Manager  
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 No. 932021

**Site Details**

Box 1

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 *53.6*

Reporting Period: January 1, 2015 to December 31, 2015

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

Address	SBL	Parcel ID	Area (acre)
5955 Marshall Ave	130.07-1-18	5843	
5941 Marshall Ave	130.07-1-2	5827	3.91
College Ave	130.07-1-4	5829	4.3
College Ave	130.07-1-5	5830	0.18
College Ave	130.07-1-6	5831	8.73
College Ave	130.07-1-7	5832	9.36
College Ave	130.07-1-8	5833	4.3
477 Belvedere Ave	130.07-1-9	5834	27.8
Belvedere Ave	130.07-1-23	5848	Total
Belvedere Ave	130.07-1-24	5849	58.6
457 Belvedere Ave	130.07-1-25	5850	
451 Belvedere Ave	130.07-1-26	5851	
447 Belvedere Ave	130.07-1-27	5852	
478 Belvedere Ave	130.07-1-10	5835	
Belvedere Ave	130.07-1-22	5847	
Belvedere Ave	130.07-1-21	5846	
Belvedere Ave	130.07-1-20	5845	
Sherman Ave	130.07-1-17	5842	
Sherman Ave	130.07-1-16	5841	
Sherman Ave	130.07-1-15	5840	
461 Sherman Ave	130.07-1-14	5839	
Sherman Ave	130.07-1-13	5838	
Sherman Ave	130.07-1-12	5837	
438 Sherman Ave	130.07-1-11	5836	
4901 Hyde Park Blvd	115.00-1-14.1	4942	
Hyde Park Blvd-New Rd	115.00-1-14.3	4943	
Hyde Park Blvd-New Rd	115.00-1-24	4951	
New Rd	115.00-1-23	4950	
4715 Hyde Park Blvd	130.11-1-1	1	
Hyde Park Blvd	130.11-1-4.1	5	
4825 Hyde Park Blvd	130.11-1-3	4	
Hyde Park Blvd	130.06-1-9	5799	

SITE NO. 932021

Box 3

**Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
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
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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."

Box 4

**Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
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.

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

Box 5

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

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

RGA 04/26/16

- 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

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 Branch at 7601 OLD CHANNEL TRAIL 49437  
print name 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

4-27-2016  
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

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

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

Robert G. Adams

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



04/26/16

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

## Gorge Face Seep Survey

## Appendix B

### B. Gorge Face Seep Survey

The 2015 Biennial Gorge Face Seep Survey of seeps and culverts located along accessible pathways along the Niagara Gorge between the New York Power Authority (NYPA) fence on the Lower Access Road and the Garfield Avenue Outfall Sewer was conducted by GHD Services Inc. (GHD), along with representatives from Glenn Springs Holdings, Inc. (GSH), the United States Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of Health (NYSDOH). The purpose of the survey is to monitor the status of previously identified seeps/wet areas and to identify new flowing seeps/wet areas. This was the fourth biennial survey conducted since August 2006. The team of survey members who participated on August 25, 2015 consisted of:

- John Raby – GHD
- John Pentilchuk – GHD
- Jim Thornton – GHD
- Joel Spring - GHD
- Joseph Branch – GSH
- Ben McPherson - NYSDEC
- Brian Sadowski – NYSDEC
- Matt Forcucci – NYSDOH

The weather was warm (~75°F) with partly cloudy skies. There was no rainfall during the survey.

#### B.1 Seep Survey Results

During the survey, all of the seep/wet areas identified during previous surveys were reexamined, and a reevaluation of the proposed remedial action was conducted. The seep locations are presented on Figure B.1. It should be noted that NYPA added slope stability fence fabric along portions of the gorge face in the spring of 2000 to protect the access road.

A total of 24 seep locations and 8 culverts, as well as the Garfield Street Outfall Sewer and the Bloody Run outlet, were visited and inspected for variations in flow and exposed wet areas. Descriptions of the observations from each remaining seep are listed in the following summary of survey results.

As observed during previous surveys, vegetation and rock is covering large portions of Seep 7, this seep is no longer composed of nine distinct parts (labeled a through i). Therefore, the summary has combined areas of this seep together under common descriptions.

It should be noted that during this inspection, it was decided that odor would only be mentioned if it was present at the time of inspection. However, the inspection found no chemical odors present at any seeps or culverts.

SEEP SURVEY RESULTS		
Seep No.	Description	Notes
1	Dry, normal vegetation, seep basin is clear and dry. No flow.	Same conditions as noted in 2013.
2 (Culv. 6)	Damp area 0 to 30 feet north of seep (from Lockport/Rochester contact). Flow, minor green algae and grass on face of Rochester Shale, several wet and dripping areas, seep basin totally full of rock.	Same conditions as noted in 2013.
2 (Ditch line)	No odor, green moss, heavy vegetation. Heavy talus in ditch.	Same conditions as noted in 2013

## Appendix B

<b>SEEP SURVEY RESULTS</b>		
<b>Seep No.</b>	<b>Description</b>	<b>Notes</b>
3 (Top)	Heavy phragmites reeds and other vegetation on north and south sides of Bloody Run concrete box culvert. Area too heavily vegetated to safely approach seep. Seep not visible from roadway.	Area fenced. Same conditions as in 2013.
3 (Bottom) Culvert 5	Heavy vegetation. Seep basin is clear. Rocks are dry and no standing water in basin (deepest portion) at Bloody Run Culvert.	Remediated. Same conditions as in 2013.
4	Steady flow (flow only heard, not observed]). Very heavy vegetation.	Same conditions as in 2013.
5	Dry rock face.	Remediated. Same as 2013 but dry.
6	Dry rock face.	Remediated. Same as 2013 but dry..
7 a,b	Covered with local rock. Vegetation. Dry to moist.	Remediated. Same as 2013.
7 c	Dry to moist. Sparse vegetation.	Remediated. Same as 2013.
7 d	Wet and flowing (10 to 15 GPM) over top of Irondequoit (waterfall). Algae on face of rock.	Remediated. Same as 2013.
7 e,f,g,h,i	No audible flowing water beneath rocks. Some vegetation.	No action required. Same as 2013.
8	Standing water, no flow observed. Some vegetation.	No action required. Same as 2013.
11a	Inlet area at water's edge covered with local rock. Sediment infilling. Light to moderate flow. No sheen.	Remediated. Same as 2013.
11b	Light to moderate flow. No sheen. (south of Bloody Run fence).	Same as 2013.
12	Steady flow out of Culvert from NYPA south tunnel. Flow approximately 30 GPM. Heavy vegetation.	Same conditions as 2013.
14	Approximately 80 feet to 100 feet south of the south fence line of Seep 3. Moist face on Reynales approximately 30 feet wide. Some moist areas originate from the Irondequoit/Reynales contact.	No action required. Same conditions as 2013.
16	Not located.	No action required.
17a	North – area approximately 150 feet north of the north wall of Seep 2. Slightly dripping.	No action required. Same conditions as 2013.
17b	South – dry.	No action required. Same conditions as 2013.
18	Seep is 0 to 75 feet north of the north wall of Seep 3. Vegetation on dry rock face (Upper Grimsby).	No action required. Same conditions as 2013.
19	Not observed due to NYPA improvements.	No action required.
20	Not observed due to NYPA improvements.	No action required.
21	Area 375 feet south of Seep 7 (Devil's Hole Stairs) by the river. Dry.	Same as 2013.

## Appendix B

SEEP SURVEY RESULTS		
Seep No.	Description	Notes
Bloody Run	Fenced-in area by the river shoreline. No visible flow, no flow heard, no odor, heavy talus and vegetation. Fence is in place and in good condition.	Same as 2013.

During the seep survey, the following culverts were also inspected and the observed conditions were as follows:

CULVERT SURVEY RESULTS		
Culvert No.	Description	Notes
1	Picks up ditch flow to Drop Inlet at bottom of NYPA access road. Dry, no flow. Heavy vegetation.	No action required.
2	No flow observed due to vegetation. Outlet reconstructed by NYPA, significant vegetation, no flow.	No action required.
3	Cannot find inlet— heavy overgrowth. Outlet is open, very slight flow.	No action required.
4	Inlet is dry. Cannot access inlet due to presence of NYPA fence. No flow observed. Pipe separated 10 feet before outlet, erosion observed.	No action required.
5	Inlet is open. Slightly flowing. Outlet is open and is damp, no visible flow. Heavy vegetation.	No action required.
6	Cannot locate.	No action required.
7	Dry.	No action required.
8	Inlet and outlet dry. Well vegetated.	No action required.
Garfield Avenue Sewer	Dripping and moist at exposed original outlet, typical sewer odor, continual caving into former archway (Whirlpool Sandstone). No standing water in pipe. Additional washouts since 1998. Parks Department built a pedestrian walkway (with two 36-inch diameter culverts) across the path in the summer of 1999. One culvert inlet completely buried and the other is approximately 95 percent buried. Walkway is broken and deteriorated.	No action required.

Figure B.1 shows the general locations of all the seep/wet areas and culverts discussed in this report. Specific details of Seeps 5 and 6 are shown on Figure B.2, and details of Seeps 7 and 8 are outlined on Figure B.3.

### B.2 Seep Sampling

Due to the number of non-detect samples at all seeps, it has been decided to suspend sampling at this time. Further sampling will be evaluated at a later date.

## **Appendix B**

### **B.3 Recommendations**

Based upon the results of the 2015 Biennial Gorge Face Seep Survey, no remedial actions are recommended at this time. The next inspection will be scheduled for summer 2017.



#### LEGEND

- SEEP-02 SEEP LOCATION
- CULVERT 8 CULVERT LOCATION

#### SOURCE:

2006 AERIAL IMAGE FOR NIAGARA COUNTY, NEW YORK; STATE PLANE NEW YORK WEST, NAD83. IMAGE PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) AS PART OF THE NORTH AMERICAN IMAGE PROGRAM (NAIP).

figure B.1

SEEP LOCATIONS - OVERVIEW  
HYDE PARK LANDFILL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*

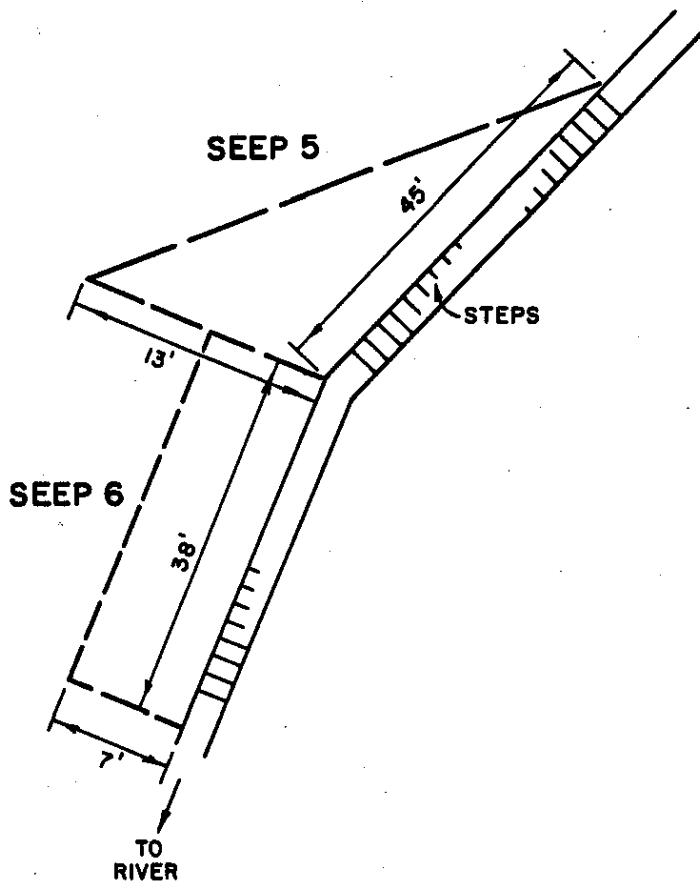
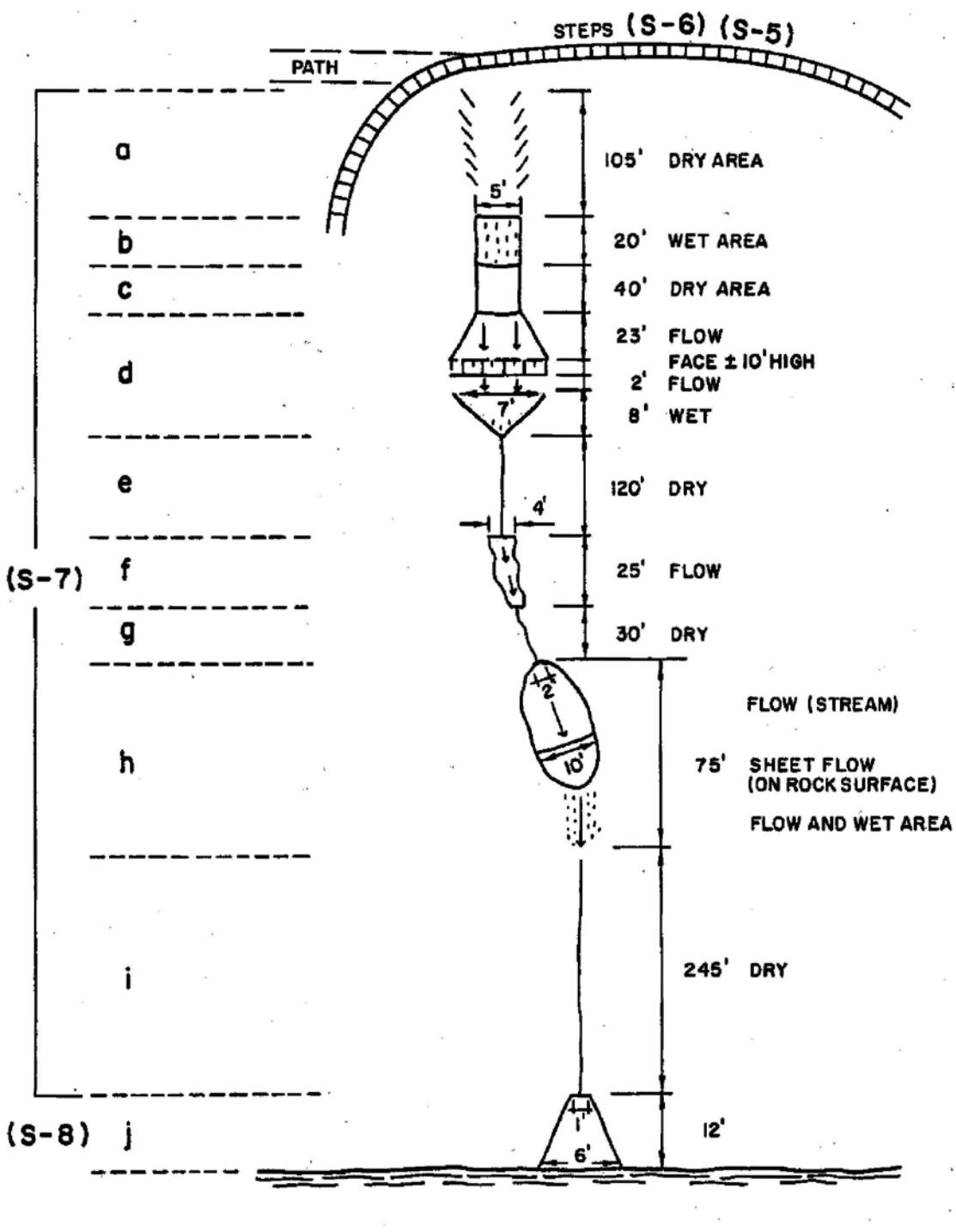


figure B.2

SEEP LOCATIONS - UPPER DEVIL'S HOLE  
HYDE PARK LANDFILL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*





NOT TO SCALE

figure B.3

SEEP LOCATIONS - LOWER DEVIL'S HOLE  
HYDE PARK LANDFILL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*