Islip
Resource
Recovery
Agency

Post Closure Groundwater Monitoring Program

Site ID No. 152002

First Quarter 2020

Blydenburgh Road Landfill Complex
Town of Islip, New York

MAY 2020

D&B Engineers and Architects, P.C.

D&B ENGINEERS AND ARCHITECTS, P.C.

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May 4, 2020

Anthony J. Varrichio, P.E.
Chief Engineer
Islip Resource Recovery Agency
401 Main Street
Islip, NY 11751

Re: Blydenburgh Road Landfill Complex
Post-Closure Groundwater Monitoring Program
First Quarter 2020 Baseline Sampling Event
D&B No. 3763-25

Dear Mr. Varrichio:

Enclosed please find six copies of the First Quarter 2020 Post-Closure Groundwater Monitoring Program Report for the Blydenburgh Road Landfill Complex. In addition, this report is provided in electronic format on the enclosed compact disc.

If you have any questions or require additional information, please call me at (516) 364-9890, Ext. 3058.

Very truly yours,

Keith Robins

Keith Robins, P.G.
Associate

KSRt/kb
Enclosures
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POST CLOSURE GROUNDWATER MONITORING PROGRAM
QUARTERLY SAMPLING RESULTS
FIRST QUARTER 2020

BLYDENBURGH ROAD LANDFILL COMPLEX
TOWN OF ISLIP, NEW YORK
SITE ID NO. 152002

Prepared for:

ISLIP RESOURCE RECOVERY AGENCY
TOWN OF ISLIP, NEW YORK

Prepared by:

D&B ENGINEERS AND ARCHITECTS, P.C.
WOODBURY, NEW YORK

MAY 2020

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
QUARTERLY SAMPLING RESULTS
FIRST QUARTER 2020

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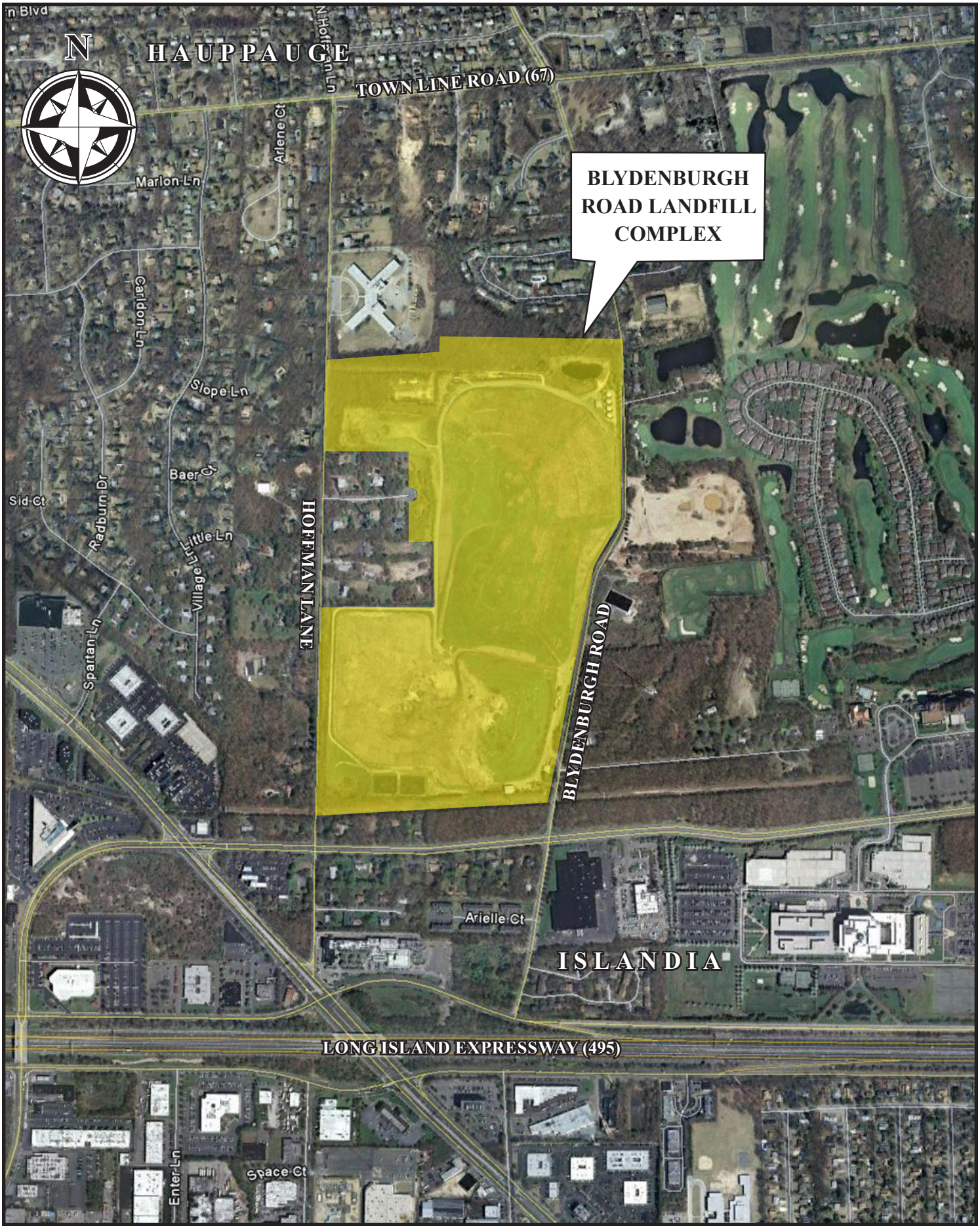
1.0 INTRODUCTION

This report presents the analytical results obtained in support of the Post Closure Groundwater Monitoring Program conducted during the First Quarter of 2020 for the Blydenburgh Road Landfill Complex (Site ID No. 152002), on behalf of the Islip Resource Recovery Agency (IRRA). The landfill complex is located in Hauppauge, Town of Islip, New York (see **Figure 1-1**). The wells were sampled in conformance with the Sampling and Analysis Plan (SAP) approved by the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Environmental Protection Agency (USEPA) - Region 2.

The purpose of the Post Closure Groundwater Monitoring Program is to monitor groundwater flow direction and quality subsequent to the capping and closure of the Municipal Solid Waste (MSW) Landfill and Ash Monofill, and operation of the groundwater remediation system.

This Post Closure Groundwater Monitoring Program Report includes a discussion of the sample locations, sampling procedures, laboratory analyses, field and analytical results, data validation, groundwater level measurements and flow direction. In addition, the report includes a comparison of the analytical results of this February 2020 sampling event to applicable New York State groundwater quality standards and guidelines, the results obtained during the previous sampling events (August 2019, where applicable), as well as the remediation criterion for total volatile organic compounds prescribed in the Record of Decision (ROD) issued by the USEPA – Region 2. Consistent with the ROD, the remediation program was designed to reduce total VOCs in groundwater to 50 micrograms per liter (ug/l).



D&B Engineers and Architects, P.C.

ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

LOCATION MAP

Source: Googlearth.com
Scale: Not to Scale

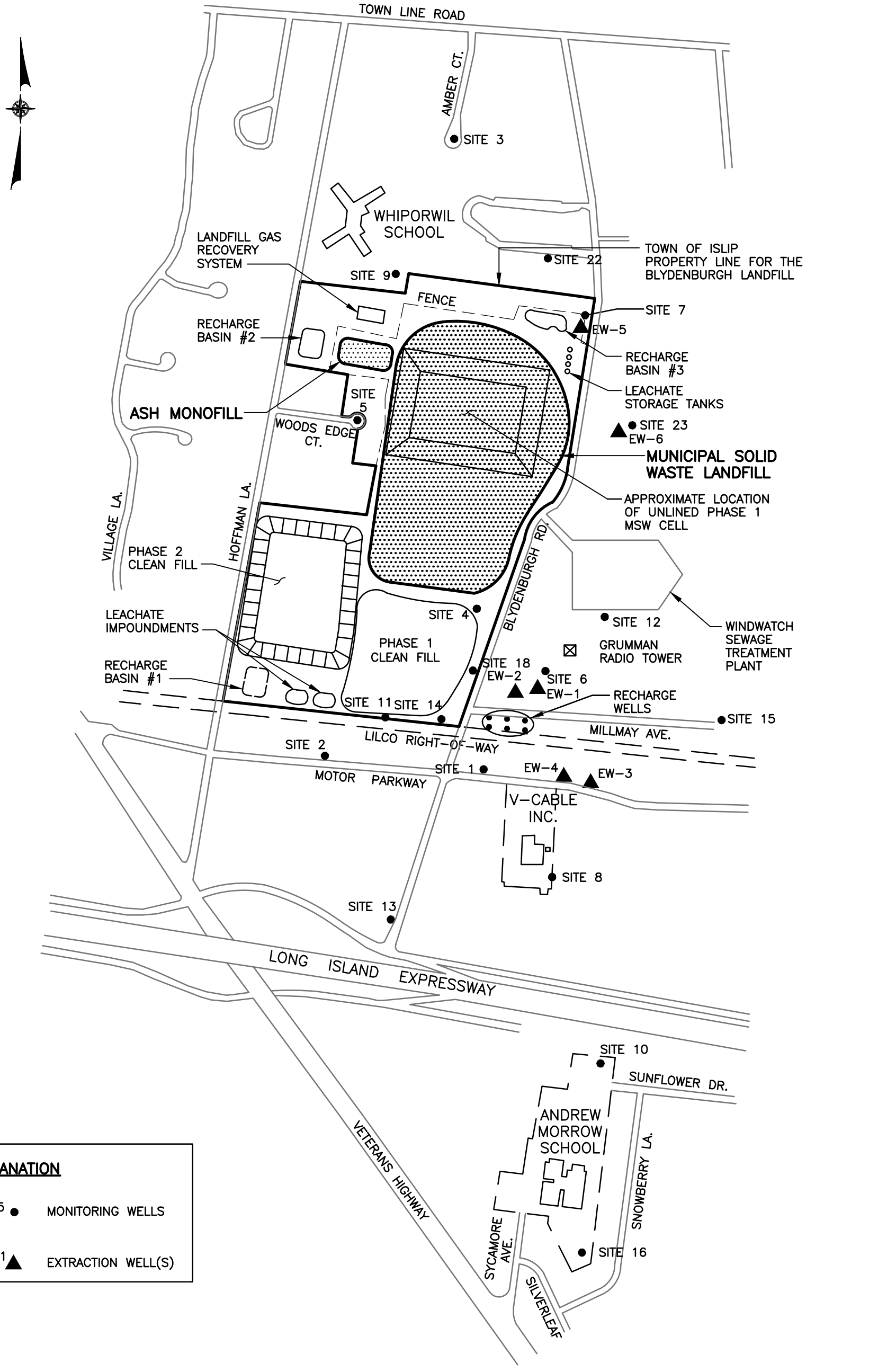
FIGURE 1-1

3763 - Location Map.indd (04/07/17 - 3:28 PM)

2.0 SAMPLING LOCATIONS

Twenty-five groundwater monitoring wells, temporary extraction well (GM-1D) and five groundwater extraction wells (EW-1, EW-2, EW-3, EW-4 and EW-6) were sampled as part of the First Quarter 2020 Post Closure Groundwater Monitoring Program. It should be noted, at the request of the NYSDEC, groundwater monitoring well GM-1D was converted to a temporary extraction well in October 2013. In addition, at the time of the First Quarter 2020 sampling event, extraction well EW-5 was not in service and therefore, a groundwater sample was not obtained.

Figure 2-1 illustrates the groundwater monitoring well and extraction well locations. Each monitoring well site shown on **Figure 2-1** includes one to four individual wells with screened intervals at varying depths. Well construction information for the wells sampled as part of this program, as well as the extraction wells, is summarized on **Tables 2-1** and **2-2**. In addition, well construction information for the six recharge wells used as part of the water level monitoring network is summarized on **Table 2-3**. The locations of the recharge wells are also illustrated in **Figure 2-1**.



SOURCES: GERAGHTY & MILLER (1993), MALCOLM PIRNIE (1992)

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ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

MONITORING WELL AND EXTRACTION WELL LOCATIONS

FIGURE 2-1

F:\3763-7B\dwg\3763-7B-C-FIG 2-1-EXTRACTION WELL LOCATIONS.dwg, 11/15/2019 8:26:47 AM, DWG to PDF-OVER.pc3

Table 2-1

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below land surface)	Screen Setting (feet below land surface)	Screen Setting (elevation relative to mean sea level)	Gravel Pack (feet below land surface)	Fine-Grained Sand Seal (feet below land surface)	Bentonite Slurry or Grout Seal (feet below land surface)	Height of Measuring Point (feet relative to land surface)	Elevation of Measuring Point (feet above mean sea level)
GM-1I	8/14/86	4	SS	285[1]	280-290	(-128)-(-138)	270-298	268-270(a)	0-268	-1.11	151.19
GM-1D [2]	8/14/86	4	SS	399	389-399	(-237)-(-247)	387-402	385-387(a)	300-385	-1.01	151.19
4G-2	1/23/89	4	PVC	211	201-211	(-35) – (-45)	194-216	188-194 (a)	0-188	-0.31	170.03
4M-1	5/9/89	4	PVC	325	315-325	(-149)-(-159)	305-336(b)	None Used	0-290	1.25	168.95
4M-2	8/9/89	4	SS	486	476-486	(-310)-(320)	470-517	463-470	0-463	2.23	169.53
6G-1	6/5/89	4	SS	147	135-145	45-32	128-145	123-128	0-123	2.57	180.17
6G-2	5/16/89	4	PVC	230	220-230	(-43)-(-53)	212-241	205-212	0-205	2.35	178.65
6G-3	3/28/90	4	SS	315	305-315	(-128)-(-138)	303-318	302-303(c)	0-300	2.43	179.83
7M-1	6/26/89	4	SS	214	204-214	(-142)-(-152)	195-230	190-195	0-190	-0.34	67.56
8G-1	8/11/89	4	SS	114	104-114	30-20	99-115	92-99	0-92	-0.23	133.97
8M-1	8/25/89	4	SS	270	260-270	(-124)-(-134)	260-288	245-250	0-245	-0.59	135.21
8M-2	7/5/89	4	PVC	383.5	373.5-383.5	(-238)-(-248)	366.5-383.5	363.5-366.5	0-363.5	-0.19	135.11
10M-1	9/6/89	4	SS	256	246-256	(-157)-(-167)	241-256	236-241	0-236	-0.16	88.84
11G-1	10/5/89	4	SS	145	135-145	32-22	130-160	125-130	0-125	0.90	168.90
11G-2	--	4	SS	220.5	--	(-31)-(-51)	--	--	--	2.51	169.31
12M-1	10/30/89	4	SS	338	328-338	(-153)-(-163)	323-362	318-323	0-318	2.86	177.66
13G-1	12/1/89	4	SS	93	83-93	27-17	72-135	59-62	0-50	-0.47	110.49[3]
13M-1	12/13/89	4	SS	265	255-265	(-145)-(-155)	245-289	240-245	0-240	-0.50	109.92[3]
14G-1A	--	4	SS	220	--	(-38)-(-58)	--	--	--	-0.17	161.73
14G-2	2/2/90	4	SS	264	244-264	(-83)-(-103)	239-272	234-239	0-234	-0.14	162.36
14M-1	1/18/90	4	SS	355	335-355	(-174)-(-194)	330-395	325-330	0-325	-0.12	161.98
16M-1	3/24/90	4	SS	240	230-240	(-153)-(-163)	225-250	222-225	0-222	-0.30	76.90

Table 2-1 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS

Well Designation	Date Completed	Well Diameter (inches)	Screen Type	Total Depth (feet below land surface)	Screen Setting (feet below land surface)	Screen Setting (elevation relative to mean sea level)	Gravel Pack (feet below land surface)	Fine-Grained Sand Seal (feet below land surface)	Bentonite Slurry or Grout Seal (feet below land surface)	Height of Measuring Point (feet relative to land surface)	Elevation of Measuring Point (feet above mean sea level)
18G-1	--	4	SS	157.5	--	31-11	--	--	--	2.32	168.62
18G-2	--	4	SS	197.5	--	(-9)-(-29)	--	--	--	2.18	168.78
22M-1	6/5/92	4	SS	222.5	215-225	(-154)-(-164)	211-225	209-211	0-209	-0.26	61.04
23M-1	6/1/92	4	SS	240.5	230.5-240.5	(-154)-(-164)	225.5-240.5	223.5-225.5	0-223.5	-0.19	76.81

PVC Polyvinyl chloride
SS Stainless steel
-- Data not available

(a) Bentonite pellets used
(b) Estimated
(c) Bentonite pellets used from 300 ft to 302 ft

(1) Well construction log GM-1I indicated a total depth of 290 feet. Total depth was measured in the field at 285 feet.
(2) In October 2013, GM-1D was converted to a temporary extraction well.
(3) Wells 13G-1 and 13M-1 reference elevation adjusted to reflect well pipe extension due to new sidewalk. (October 2008)

(Source: G&M Draft Environmental Monitoring Plan, March 1993; ERM Sampling and Analysis Plan Phase 1 and 2 Clean Fill Landfills, November 1995)

Table 2-2

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF EXTRACTION WELL CONSTRUCTION DETAILS

Well Designation	Date Completed	Aquifer (contact)	Well Diameter (inches)	Well Capacity (gallons per minute)	Screen Setting			Screen Length (feet)	Screen Setting (feet below land surface)	Elevation of Bottom of Screen (relative to mean sea level)	Ground Surface Elevation (feet above mean sea level)
					Screen Type	Screen Diameter (inches)	Total Depth (feet below land surface)				
EW-1	July 1996	M-UG	6	55	SS	6	225	60	165-225	-57	167.91
EW-2	July 1996	M-UG	6	45	SS	6	223	60	163-223	-53	170.42
EW-3	July 1996	D-UG/SM	8	90	SS	8	312	40	272-312	-129	182.47
EW-4	July 1996	D-UG/SM	6	55	SS	6	305	45	260-305	-138	167.48
EW-5	July 1996	D-UG/SM	6	65	SS	6	213	50	163-213	-141	72.40
EW-6	July 1996	D-UG/SM	6	40	SS	6	215	40	175-215	-137	77.70

SS - Stainless steel
M-UG - Mid-Upper Glacial
D-UG/SM - Deep-Upper Glacial/Shallow Magothy

(Source: D&B IRRA Groundwater Treatment Facility Operation and Maintenance Manual, 1996)

Table 2-3

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
SUMMARY OF RECHARGE WELL CONSTRUCTION DETAILS

Well Designation	Date Completed	Aquifer (contact)	Well Diameter (inches)	Screen Setting			Screen Length (feet)	Screen Setting (feet below land surface)	Elevation of Bottom of Screen (relative to mean sea level)	Ground Surface Elevation (feet above mean sea level)
				Screen Type	Screen Diameter (inches)	Total Depth (feet below land surface)				
RW-1	August 1996	M-UG	8	SS	8	220	70	133-203	-45	157.17
RW-2	August 1996	M-UG	8	SS	8	216	65	135-200	-46	153.45
RW-3	August 1996	M-UG	8	SS	8	215	60	139-199	-39	160.63
RW-4	August 1996	M-UG	8	SS	8	225	75	133-208	-53	155.54
RW-5	July 1996	M-UG	8	SS	8	227	70	141-211	-48	163.47
RW-6	August 1996	M-UG	8	SS	8	215	65	133-198	-38	159.95

SS - Stainless steel
M-UG - Mid-Upper Glacial

(Source: D&B IRRA Groundwater Treatment Facility Operation and Maintenance Manual, 1996)

3.0 SAMPLING PROCEDURES AND ANALYSES

Sampling procedures for collection of the groundwater samples were implemented in accordance with the protocol described in the Sampling and Analysis Plan (SAP). Dedicated and disposable sampling equipment was used whenever possible in accordance with the SAP. Field decontamination was performed between sampling locations for non-disposable equipment. The following sections provide a brief discussion of the procedures used during groundwater level measurements, organic vapor and combustible gas monitoring, groundwater sampling and sample analysis.

3.1 Groundwater Level Measurement Procedures

Prior to collecting groundwater samples, synoptic water level measurements were obtained from the monitoring wells to determine the volume of standing water in the well for purposes of purging, as well as for the determination of groundwater elevations and flow direction. Groundwater level measurements were obtained from a surveyed measuring point on each well using an electronic water level indicator to an accuracy of 0.01 foot. A discussion regarding groundwater level measurement results and groundwater flow direction is provided in Section 6.0.

In addition to the monitoring wells, water level measurements were also obtained in the six recharge wells by means of the existing bubbler systems to determine the operating water levels in each of the recharge wells. Water levels were measured while the effluent lift station pump inside the treatment facility was in operation. During operation of the pump, treated groundwater is discharged from the treatment facility into the six recharge wells. The operation of the pump was determined by listening for water flowing into each recharge well.

Measurement of the operating water level in the recharge well casing was obtained using a low flow of compressed air to minimize errors associated with friction (back pressure) resulting from turbulent air flow in the bubbler components. After a steady state reading was observed on the bubbler pressure gauge, the air flow rate was temporarily increased to ensure that the bubbler

tube was fully evacuated. The air flow was then throttled down to a slower rate to confirm the initial reading.

The gauge reading represents the back pressure on the bubbler tube or depth of submergence of the bubbler tube tip. The depth of submergence, measured in feet, is added to the bubbler tube tip elevation (reference elevation) to calculate the operating water level elevation within the well.

The difference between the operating water elevation within the well casing and the water table elevation of the aquifer surrounding the well represents the driving head or resistance of the well components and the aquifer to the recharge of water from the well casing to the aquifer. The magnitude of the driving head (or resistance) provides an indication of the hydraulic condition of each well. As an example, a partially clogged well (well screen, gravel pack, surrounding soil) would require a larger driving force at a given flow rate to realize the transfer of water from the well casing to the aquifer as compared to an unclogged well.

3.2 Sampling Procedures

Prior to collecting groundwater samples, the monitoring wells were purged to remove the standing water in the well. Well purging was accomplished by first measuring the static water level in the well and calculating the standing water volume. A decontaminated submersible pump was used to purge the water from the well.

During the purging process, groundwater was monitored and recorded for the following field parameters: pH, temperature, specific conductance, oxidation reduction potential (ORP), dissolved oxygen, and turbidity. When the values of the field parameters stabilized within 10% based on the last two readings, the turbidity of the groundwater was less than 50 Nephelometric Turbidity Units (NTUs) and at least three well volumes had been removed, well purging was considered complete.

Decontamination of the submersible pump used for well purging was performed in accordance with the procedures described in the SAP.

In accordance with the SAP, groundwater samples were collected using new, dedicated, disposable polyethylene bailers and polypropylene rope. Samples for VOC analysis were collected first, followed by inorganic parameters and leachate indicators. Each sample was stored in an ice-filled cooler with the chain of custody forms and delivered to the analytical laboratory.

Groundwater samples were also collected from extraction wells (EW-1, EW-2, EW-3, EW-4 and EW-6) and temporary extraction well GM-1D. These samples were collected from the sample port on each well. It should be noted, extraction wells EW-2 and EW-6 were shut down on May 15, 2006, at the request of the USEPA - Region 2. Prior to sampling, EW-2 and EW-6 were each purged using the pump installed in the well. After sampling was completed, wells EW-2 and EW-6 were again shut down.

Appropriate quality assurance/quality control (QA/QC) samples, which included field blanks, matrix spike and matrix spike duplicate (MS/MSD) sets, blind duplicates and trip blanks, were collected in accordance with the SAP. Trip blank samples accompanied all laboratory sample coolers.

Analytical results are provided in **Appendix A** and discussed in **Section 4.0**. Field observation logs for the First Quarter 2020 sampling event are contained in **Appendices B**. The chain of custody forms are provided in **Appendix C** and the daily calibration logs are provided in **Appendix D**.

3.3 Organic Vapor and Combustible Gas Monitoring

Total organic vapor and combustible gas headspace measurements were collected in the 25 monitoring wells that were sampled during this event. Organic vapors were measured using a photoionization detector (PID) and combustible gas was measured using a portable multi-gas meter. The organic vapor and combustible gas monitoring results represent headspace

measurements collected during the synoptic groundwater level measurements and are provided in **Section 4.0**.

3.4 Sample Analyses

Groundwater samples collected during the First Quarter (February 2020) sampling event from 25 monitoring wells, one temporary extraction well and five extraction wells were analyzed for New York Codes, Rules and Regulations (NYCRR) Part 360 Baseline Parameters. At the request of the NYSDEC, commencing with the First Quarter 2015 sampling event, both Freon 21 and Freon 22 were added for analysis to the Part 360 VOC list. Other parameters, such as pH, temperature, specific conductance, ORP, turbidity and dissolved oxygen, were measured in the field for groundwater samples collected from each of the monitoring wells, temporary extraction well and extraction wells.

4.0 ANALYTICAL RESULTS

4.1 Field Parameters

Table 4-1 provides a summary of the final field parameter values and field data measured for the First Quarter 2020 sampling event.

4.2 Monitoring Well Groundwater Results

The analytical results for the groundwater samples collected from the monitoring wells, as well as temporary extraction well (GM-1D), compared to NYSDEC Class GA groundwater standards and guidelines and to previous results are provided in **Appendices A-1** through **A-3**. The analytical results for GM-1D are discussed in **Section 4.3**.

4.2.1 Volatile Organic Compounds

The following discussion regarding groundwater quality is relative to total VOCs, which represents the remedial cleanup objective as stated in the Record of Decision (ROD). The analytical results for the VOC analyses are presented in **Appendix A-1**. Out of the 25 monitoring wells sampled, 11G-2 contained a concentration of total VOCs greater than 50 ug/l. Total VOCs were reported at 58.2 ug/l for well 11G-2. In addition, TVOCs were reported just below 50 ug/l in well 14M-1 at 46.7 ug/l. Fourteen monitoring wells (GM-1I, 4G-2, 6G-1, 6G-2, 7M-1, 8G-1, 8M-2, 13G-1, 14G-1A, 14G-2, 18G-1, 18G-2, 22M-1 and 22M-1) had no detectable concentrations of VOCs. Five wells (6G-3, 8M-1, 10M-1, 11G-1 and 16M-1) detected total VOCs of 10 ug/l or less. Total VOC concentrations in the remaining wells were reported at 32.9 ug/l in 4M-1, 14.8 ug/l in 4M-2, 17.5 ug/l in 12M-1 and 29.6 ug/l in 13M-1.

All 25 wells sampled during the First Quarter 2020 event that were also sampled during the previous event (Third Quarter 2019), exhibited consistent total VOC concentrations (variation of 10 ug/l or less).

As previously mentioned in Section 3.4 at the request of the NYSDEC both chlorodifluoromethane (Freon 22) and dichlorofluoromethane (Freon 21) were added to the Part 360 Baseline VOC list. Freon 22 and/or Freon 21 were detected in monitoring wells (4M-1, 4M-2, 8M-1, 10M-1, 11G-2, 13M-1 and 14M-1). Wells (4M-2, 11G-2 and 14M-1) slightly exceeded the groundwater standard (5 ug/l) for Freon 21. The maximum concentration for Freon 21 was reported in monitoring well 11G-2 (8.1 ug/l). It should be noted, there is no groundwater standard for Freon 22.

4.2.2 Inorganic Parameters

Tabulated analytical results for inorganic parameters for the monitoring wells, as well as temporary extraction well (GM-1D), are provided in **Appendix A-2**. Discussion of the individual inorganic parameters that were detected in monitoring wells at concentrations exceeding NYSDEC Class GA groundwater standards and guidance values are discussed below:

- Boron was detected above the groundwater standard (1,000 ug/l) in wells 4M-1 (1,530 ug/l), 11G-2 (1,240 ug/l) and 14M-1 (1,070 ug/l).
- Iron was detected above the groundwater standard (300 ug/l) in 7 wells (4M-1, 4M-2, 11G-1, 11G-2, 12M-1, 14M-1 and 18G-1). Iron concentrations in these wells ranged from 558 ug/l in well 11G-1 to 1,720 ug/l in well 4M-2.
- Manganese was detected above the groundwater standard (300 ug/l) in 9 monitoring wells (4G-2, 4M-1, 6G-1, 11G-1, 11G-2, 12M-1, 14M-1, 18G-1 and 18G-2). Manganese concentrations in these wells ranged from 1,300 ug/l in well 12M-1 to 9,430 ug/l in well 18G-2.
- Magnesium was detected above the groundwater guidance value (35,000 ug/l) in 8 monitoring wells (4M-1, 4M-2, 8G-1, 8M-1, 10M-1, 12M-1, 13M-1 and 14M-1). Concentrations of magnesium in these wells ranged from 37,000 ug/l in well 4M-2 to 73,300 ug/l in well 13M-1.
- Nickel was detected above the groundwater standard (100 ug/l) in wells 4M-1 (144 ug/l) and 11G-2 (142 ug/l).

Table 4-1

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - FIRST QUARTER 2020
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Results of Total Organic Vapor Screening and Combustible Gas Reading		Purging Method	Groundwater Elevation (feet above msl)
							PID (ppm)	% LEL		
GM-1I	7.87	14.09	0.437	0	152	1.12	0	0	Submersible pump	40.94
4G-2	6.90	22.96	0.473	0	-26	0.32	0	0	Submersible pump	41.31
4M-1	7.26	20.23	4.14	0	-12	1.31	0	0	Submersible pump	41.07
4M-2	6.39	15.32	1.19	0	-53	0.27	0	0	Submersible pump	39.20
6G-1	6.91	17.59	0.152	0	249	6.05	0	0	Submersible pump	40.99
6G-2	6.62	19.36	0.420	0	173	0.0	0	0	Submersible pump	41.77
6G-3	6.94	17.48	0.420	0	-7	0.0	0	0	Submersible pump	41.28
7M-1	5.77	12.90	0.156	0	199	0.49	0	0	Submersible pump	41.84
8G-1	5.99	14.60	2.67	0	196	5.71	0	0	Submersible pump	40.47
8M-1	7.42	13.70	0.623	0	38	0.75	0	0	Submersible pump	40.53
8M-2	6.87	12.06	0.117	0	72	0.29	0	0	Submersible pump	40.40
10M-1	7.95	12.24	0.598	0	98	0.39	0	0	Submersible pump	39.84
11G-1	6.93	25.06	2.65	0	-71	0.0	0	0	Submersible pump	41.10
11G-2	6.53	21.83	3.05	0	-41	0.0	0	0	Submersible pump	41.13
12M-1	6.93	16.25	0.653	0	2	0.0	0	0	Submersible pump	41.17
13G-1	5.02	12.34	0.153	0	251	9.53	0	0	Submersible pump	40.34
13M-1	6.88	11.23	0.874	0	-20	0.0	0	0	Submersible pump	40.29
14G-1A	7.52	16.64	0.504	0	193	2.61	0	0	Submersible pump	41.12
14G-2	7.69	16.62	0.442	0	101	2.84	0	0	Submersible pump	41.15
14M-1	7.37	15.89	2.38	0	-49	0.0	0	0	Submersible pump	40.84
16M-1	7.66	12.60	0.447	0	158	0.0	0	0	Submersible pump	39.01
18G-1	6.43	21.06	0.757	0	86	0.0	0	0	Submersible pump	41.17
18G-2	6.20	21.78	0.593	0	186	0.31	0	0	Submersible pump	41.20
22M-1	5.40	12.99	0.202	0	224	0.0	0	0	Submersible pump	41.76
23M-1	6.87	11.93	0.298	0	215	0.0	0	0	Submersible pump	41.56

Table 4-1(Continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - FIRST QUARTER 2020
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Monitoring Well	Initial Depth to Water (in feet)	Depth of Well (in feet)	Well Diameter (inches)	Volume of Water Purged (gallons)	Date of Sampling	Time of Sampling	Initials of Samplers	Weather Condition
GM-1I	110.25	285	4	500	2/14/20	4:15 p.m.	KR	Cold
4G-2	128.72	211	4	275	2/12/20	10:00 a.m.	KR	Partly Cloudy
4M-1	127.88	325	4	550	2/12/20	11:15 a.m.	KR	Partly Cloudy
4M-2	130.33	486	4	875	2/12/20	10:45 a.m.	KR	Partly Cloudy
6G-1	129.18	147	4	60	2/20/20	11:30 a.m.	KR	Partly Cloudy
6G-2	137.48	230	4	360	2/20/20	10:45 a.m.	KR	Partly Cloudy
6G-3	138.55	315	4	540	2/20/20	9:00 a.m.	KR	Partly Cloudy
7M-1	25.72	214	4	500	2/12/20	4:15 p.m.	KR	Partly Cloudy
8G-1	93.50	114	4	75	2/14/20	1:45 p.m.	KR	Cold
8M-1	94.68	269	4	475	2/14/20	10:00 a.m.	KR	Cold
8M-2	94.71	384	4	700	2/14/20	12:55 p.m.	KR	Cold
10M-1	49.00	256	4	550	2/13/20	3:45 p.m.	KR	Rain
11G-1	127.80	145	4	60	2/11/20	1:45 p.m.	KR	Rain
11G-2	128.18	221	4	250	2/11/20	1:00 p.m.	KR	Rain
12M-1	136.49	338	4	600	2/20/20	2:00 p.m.	KR	Partly Cloudy
13G-1	70.15	93	4	75	2/11/20	5:15 p.m.	KR	Drizzle
13M-1	69.63	265	4	500	2/11/20	4:30 p.m.	KR	Drizzle
14G-1A	121.61	220	4	325	2/19/20	12:15 p.m.	KR	Sunny
14G-2	121.21	264	4	400	2/13/20	12:45 p.m.	KR	Sunny
14M-1	121.14	355	4	675	2/13/20	10:30 a.m.	KR	Sunny
16M-1	37.89	240	4	600	2/18/20	12:00 p.m.	KR	Overcast
18G-1	127.45	157.5	4	100	2/11/20	10:30 a.m.	KR	Drizzle
18G-2	127.58	197.5	4	200	2/11/20	9:15 a.m.	KR	Drizzle
22M-1	19.28	222.5	4	550	2/12/20	6:00 p.m.	KR	Partly Cloudy
23M-1	35.25	240	4	550	2/18/20	9:15 a.m.	KR	Overcast

Note: Final field parameter readings were measured upon completion of sample collection.

Table 4-1(Continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - FIRST QUARTER 2020
SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA

Extraction Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/l)	Date of Sampling	Time of Sampling
EW-1	6.65	17.83	0.124	0	66	3.27	2/19/20	3:15 p.m.
EW-2	6.71	14.63	0.413	30	63	3.49	2/20/20	3:00 p.m.
EW-3	7.51	14.01	0.507	0	299	5.00	2/19/20	1:30 p.m.
EW-4	7.49	14.91	0.482	0	340	4.30	2/19/20	2:30 p.m.
EW-5	NS	NS	NS	NS	NS	NS	NS	NS
EW-6	7.57	12.10	0.192	0	107	4.97	2/12/20	2:00 p.m.
GM-1D*	6.96	11.75	1.37	0	97	1.46	2/14/20	3:45 p.m.

Notes:

Final field parameter readings were measured upon completion of sample collection.

ppm:	Parts Per Million	°C:	Degrees Celsius
% LEL:	Lower Explosive Limit	mS/cm:	Millisiemens Per Centimeter
PID:	Photoionization Detector	NTU:	Nephelometric Turbidity Unit
mV:	Millivolt	DO:	Dissolved Oxygen
mg/l:	Milligrams Per Liter	msl:	Mean Sea Level
ORP	Oxidation Reduction Potential	*	GM-1D was converted into a temporary extraction well in October 2013.
NS:	Not Sampled		

- Sodium was detected above the groundwater standard (20,000 ug/l) in most monitoring wells (22 out of 25 samples). Sodium concentrations which exceeded the groundwater standard ranged from 20,500 ug/l in well 13G-1 to 400,000 ug/l in well 8G-1.

- Thallium was detected above the guidance value (0.5 ug/l) in monitoring wells 4G-2 (3.8 ug/l), 6G-3 (6.5 ug/l), 14M-1 (5.3 ug/l), 18G-1 (4.7 ug/l) and 18G-2 (6.4 ug/l).

4.2.3 Leachate Indicators

Tabulated analytical results for leachate indicators for the monitoring wells, as well as temporary extraction well (GM-1D), are provided in **Appendix A-3**. Discussion of the individual leachate indicators that were detected in monitoring wells at concentrations exceeding NYSDEC Class GA groundwater standards and guidance values are discussed below:

- Ammonia was detected above the groundwater standard (2 mg/l) in 10 monitoring wells (4M-1, 4M-2, 6G-3, 8M-1, 11G-1, 11G-2, 12M-1, 14M-1, 18G-1 and 18G-2). Ammonia concentrations in these wells ranged from 2.2 mg/l in well 12M-1 to 99.2 mg/l in well 4M-1.

- Bromide was detected above the groundwater guidance value (2 mg/l) in wells 4M-1, 4M-2, 11G-2 and 14M-1 at concentrations of 4.9 mg/l, 2.7 mg/l, 3.6 mg/l and 3.3 mg/l, respectively.

- Chloride was detected above the groundwater standard (250 mg/l) in wells 4M-1, 4M-2, 8G-1, 11G-2 and 14M-1 at concentrations of 426 mg/l, 276 mg/l, 870 mg/l, 304 mg/l and 373 ug/l, respectively.

- Total phenols were detected above the groundwater standard (0.001 mg/l) in 5 monitoring wells (4M-1, 4M-2, 6G-3, 11G-1 and 14M-1). Total phenol concentrations in these wells ranged from 0.003 mg/l in well 4M-2 to 0.009 mg/l in well 14M-1.

4.3 Extraction Well Groundwater Results

The analytical results for the groundwater samples collected from the extraction wells compared to NYSDEC Class GA standards and guidelines and to previous results, are provided in **Appendix A-4** through **A-6**. The analytical results for the extraction wells and temporary extraction well (GM-1D) are discussed below.

4.3.1 Volatile Organic Compounds

The results of the VOC analyses for the extraction wells are presented in **Appendix A-4**.

VOCs were non- detect in the groundwater samples collected from extraction wells (EW-1, EW-2, EW-3 and EW-6). For EW-4, TVOCs were detected in groundwater at 1.3 ug/l. For these extraction wells, VOC results remained consistent with the results from the previous sampling event.

During the First Quarter of 2020, total VOC concentrations in temporary extraction well GM-1D were reported at 48.3 ug/l. Total VOCs in GM-1D remained consistent in comparison with the December 2019 sampling result (53.4 ug/l). For GM-1D, VOCs which exceeded their individual Class GA groundwater standards included: cis-1,2-DCE, 1,4-dichlorobenzene, Freon 21 and vinyl chloride.

4.3.2 Inorganic Parameters

The results of the inorganic parameters for the extraction wells are provided in **Appendix A-5**. Inorganic parameters which exceeded the NYSDEC Class GA groundwater standards/guidance values in one or more of the extraction wells, as well as temporary extraction well GM-1D are discussed below:

- Iron was detected above the groundwater standard (300 ug/l) in extraction well EW-2 at a concentration of 9,230 ug/l.
- Manganese was detected above the groundwater standard (300 ug/l) in extraction wells EW-1 and EW-3 at concentrations of 842 ug/l and 379 ug/l, respectively.
- Magnesium was detected above the groundwater standard (35,000 ug/l) in temporary extraction well GM-1D at a concentration of 64,200 ug/l.
- Sodium was detected above the groundwater standard (20,000 ug/l) in extraction wells EW-1, EW-2, EW-3 and EW-4 at concentrations of 82,500 ug/l, 94,200 ug/l, 64,500 ug/l and 55,400 ug/l, respectively, as well as in GM-1D at a concentration of 173,000 ug/l.

4.3.3 Leachate Indicators

The results of the leachate indicators for the extraction wells are presented in **Appendix A-6**. Leachate indicators which exceeded the NYSDEC Class GA groundwater standards/guidance values in one or more of the extraction wells, as well as temporary extraction well GM-1D are discussed below:

- Ammonia concentrations exceeded the groundwater standard (2 mg/l) in EW-3 (2.6 mg/l), EW-4 (5 mg/l) and in temporary extraction well GM-1D (4.8 mg/l).
- Total phenol concentration exceeded the groundwater standard (0.001 mg/l) in temporary extraction well GM-1D (0.003 mg/l)

No other leachate indicators were detected in the extraction wells or temporary extraction well (GM-1D) above the Class GA groundwater standards or guidance values.

4.4 Organic Vapor and Combustible Gas Monitoring

The results of the organic vapor and combustible gas monitoring in the headspace of the monitoring wells are presented in **Table 4-1 (refer to Section 4.2)**. The results show that organic vapors were not detected in the headspace of the 25 groundwater monitoring wells sampled. Combustible gas readings for the 25 groundwater monitoring wells sampled were 0% of the Lower Exposure Limit (LEL).

5.0 DATA VALIDATION

Thirty-one (31) groundwater samples (25 monitoring wells, 5 extraction wells and one temporary extraction well), two blind duplicates, two matrix spike/matrix spike duplicate (MS/MSD) sets, two field blanks and seven trip blanks were collected as part of the First Quarter 2020 Post Closure Groundwater Monitoring Program sampling event at the Blydenburgh Road Landfill Complex. All samples were analyzed for Baseline NYCRR Part 360 VOCs, Freon 21 and Freon 22, inorganic parameters and leachate indicators. Sample analysis was performed in accordance with SW-846 methods, as specified in the Part 360 regulations. The laboratory is approved under the New York State Department of Health Environment Laboratory Approval Program (ELAP) for the analysis performed.

The two data packages (70121560 and 70122351) submitted by the analytical laboratory, Pace Analytical, Inc., Melville, NY, was validated in accordance with NYSDEC quality assurance/quality control (QA/QC) requirements. In accordance with the contract requirements and the approved Sampling and Analysis Plan, 20 percent of the environmental samples and all QA/QC samples (calibrations, blanks, spikes, etc.) were reviewed, yielding a "20% validation". While all of the samples were reviewed for transcription errors, calculations were verified for seven environmental samples (18G-1, 4G-2, 22M-1, GM-1D, 6G-3, EW-3 and 12M-1).

Two duplicates were collected. Blind Duplicate-1 was a duplicate of sample 7M-1 and Blind Duplicate-2 was a duplicate of sample 16M-1. Matrix spike and matrix spike duplicate sets were collected at wells 10M-1 and EW-3.

The following requirements were outside limits:

- The percent recoveries (%Rs) were below the QC limit in the laboratory control sample (LCS), matrix spike (MS) and/or MS duplicate (MSD) for 1,1,1,2-tetrachloroethane, bromoform, bromomethane and trans-1,4-dichloro-2-butene associated samples TRIP BLANK, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1; iodomethane, 1,2-dibromo-3-chloropropane and 1,1,1,2-tetrachloroethane associated samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, TRIP BLANK, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2 and 10M-1; and 1,2-dibromo-3-chloropropane, 1,2-

dibromoethane (EDB), cis-1,3-dichloropropene and trans-1,3-dichloropropene associated with all samples. The %Rs were below the QC limits in the MS for 1,1,1,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane and bromodichloromethane associated with samples TRIP BLANK, EW-1, EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2. The above compounds were qualified as an estimated (UJ) in the associated samples.

- The following metals were detected in the initial blank, preparation blank and/or field blank and were qualified as non-detect (UB): iron in samples EW-6, BLIND DUPLICATE-2, 22M-1, 8M-1 and 8M-2; mercury in all samples; barium and cobalt in all samples; and nickel in samples EW-1, EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2.

- The following metals percent recoveries (%Rs) were above the QC limits in the MS and detected above the reporting limit, therefore they were qualified as estimated (J): potassium in samples EW-4, 6G-3, and EW-2.

- The %Rs were below the QC limit in the MS and qualified as estimated (J/UJ) in the following metals: silver associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 23M-1, 16M_1 and BLIND DUPLICATE-2; mercury associated with samples 23M-1, 16M-1, BLIND DUPLICATE-2, EW-1, EW-4, 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1;

- The percent difference was above the QC limit in the serial dilution for lead and manganese associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1 and calcium associated with samples 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1. The above metals were qualified as estimated (J/UJ) in the associated samples.

- The following were analyzed outside of holding times: hexavalent chromium associated with 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 6G-1, 6G-2, 6G-3, 14G-1A, 16M-1, 23M-1, BLIND DUPLICATE-2, EW-1, EW-3 and EW-4; and nitrate associated with samples 10M-1, 14G-2 and 14M-1. They were qualified as estimated (J/UJ) in associated samples.

- The following general chemistry parameters were detected in the FIELD BLANK and/or method blank and qualified as non-detect (UB): nitrite in sample 16M-1; nitrate in samples 10M-1, 14G-2 and 14M-1; BOD in all samples; ammonia in sample EW-6; and TKN in sample 8M-2.

- The following general chemistry parameters percent recoveries (%Rs) were above the QC limits in the MS and detected above the reporting limit, therefore they were qualified as estimated (J): chloride in samples EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1, EW-2, 18G-2, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1 and BLIND DUPLICATE; sulfate in samples 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1 and BLIND DUPLICATE and TKN in sample GM-1D.

- The %Rs were below the QC limit in the matrix spike (MS) and qualified as estimated (J/UJ) for TKN associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2 and 8G-1 and all samples in sdg 70122351.

- The RPDs were above the QC limits in the duplicate for phenolics associated with samples 23M-1, 16M_1, BLIND DUPLICATE-2, EW-1, EW-4, EW-3, 14G-1A, 6G-3 and 6G-2; TDS associated with samples 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE and 22M-1; TKN associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2 and 8G-1; and nitrate associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1 and were qualified as estimated (J/UJ) in associated samples.

- Sample 16M-1 was field duplicated and labeled BLIND DUPLICATE-2. TKN was qualified as estimated (J/UJ) in samples 16M-1 and BLIND DUPLICATE-2 based on field duplicate results.

No other issues were found with the sample results and all results are deemed valid and usable for environmental assessment purposes as qualified above. Complete Data Validation Forms for the First Quarter 2020 sampling event are provided in **Appendix E.**

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

Groundwater level measurements were obtained by D&B on February 11, 2020, from 54 groundwater monitoring wells. The groundwater level measurements from the monitoring wells are presented in **Table 6-1**. In addition, seventeen water level measurements were collected by Cashin Associates, P.C. on February 11, 2020, as part of the Cleanfill Landfill Groundwater Monitoring Program; these measurements are also included in **Table 6-1**. It should be noted, water level measurements collected on this date for the groundwater monitoring wells were completed while the groundwater treatment system for the Site was in operation.

6.1 Water Table Contours

The water table elevation contour map prepared from measurements obtained on February 11, 2020, is presented in **Figure 6-1**. The water table contour map was generated from wells screened at or near the water table in the Upper Glacial aquifer.

Based on a review of the water level elevation data collected from the shallow wells, the direction of the horizontal component of groundwater flow in the Upper Glacial aquifer is predominantly south. A localized mounding of the water table in the area of well 7G-1 is likely caused by recharge from the northeast storm water recharge basin. Mounding of the water table is also occurring in the area of the 6 recharge wells. The extent of the mounding and its effects on monitoring wells in the vicinity of the recharge wells are not well defined (water level readings in the active recharge wells are not representative of the water table elevation) and, therefore, is not depicted on **Figure 6-1**.

Lower groundwater elevations were noted downgradient of the Phase 2 Cleanfill Landfill in wells MW-D12, 19GR-1, 26G-1 and 27G-1, as well as downgradient of the Windwatch Sewage Treatment Plant in well 12G-1. Water levels from the above wells were not used in preparation of the water table contour map. The low groundwater elevations noted downgradient of the Phase 2 Cleanfill Landfill may be attributed to the low rate of recharge to the water table, upgradient of

Table 6-1

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
FEBRUARY 11, 2020

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
GM-1S	151.17	110.18	40.99
GM-1I	151.19	110.25	40.94
GM-1D	151.19	Pump installed in well	---
GM-2S	160.08	119.05	41.03
GM-2I	160.65	119.58	41.07
GM-2D	160.71	119.96	40.75
GM-3S	60.51	18.11	42.40
GM-3I	60.39	18.16	42.23
GM-3D	60.03	18.56	41.47
4G-1	168.47	127.04	41.43
4G-2	170.03 (1)	128.72	41.31
4M-1	168.95	127.88	41.07
4M-2	169.53	130.33	39.20
5G-1	173.58	131.85	41.73
6G-1	180.17	139.18	40.99
6G-2	178.65	137.48	41.17
6G-3	179.83	138.55	41.28
6M-1	178.40	137.78	40.62
7G-1	69.33	25.89	43.44
7M-1	67.56	25.72	41.84
8G-1	133.97	93.50	40.47
8M-1	135.21	94.68	40.53
8M-2	135.11	94.71	40.40
9G-1	90.83	48.72	42.11
9M-1	90.59	48.60	41.87
10G-1	88.52	48.70	39.82
10M-1	88.84	49.00	39.84
11G-1	168.90	127.80	41.10
11G-2	169.31	128.18	41.13
11M-1	168.32	127.14	41.18

Table 6-1 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
FEBRUARY 11, 2020

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
12G-1	173.61	134.49	39.12
12M-1	177.66	136.49	41.17
13G-1	110.49 (1)	70.15	40.34
13M-1	109.92 (1)	69.63	40.29
14G-1A	161.73	120.61	41.12
14G-1	162.82	121.69	41.13
14G-2	162.36	121.21	41.15
14M-1	161.98	121.14	40.84
15G-1	183.05	141.98	41.07
15M-1	183.47	142.44	41.03
16G-1	76.92	37.94	38.98
16M-1	76.90	37.89	39.01
18G-1	168.62	127.45	41.17
18G-2	168.78	127.58	41.20
22M-1	61.04	19.28	41.76
23M-1	76.81	35.25	41.56
MW-56	97.84	54.92	42.92
MW-57	84.05	41.06	42.99
MW-58	76.68	33.50	43.18
MW-59	87.58	44.61	42.97
MW-60	95.44	53.80	41.64
MW-61	107.01	65.44	41.57
MW-62	114.23	73.34	40.89
MW-63	126.26	84.64	41.62
MW-D12	162.39	121.81	40.58
19GR-1*	165.42	125.42	40.00
20G-1*	165.31	124.11	41.20
21G-1*	172.83	131.65	41.18
24G-1*	176.91	135.23	41.68
24G-2*	176.44	134.84	41.60
24G-3*	176.13	134.52	41.61

Table 6-1 (continued)

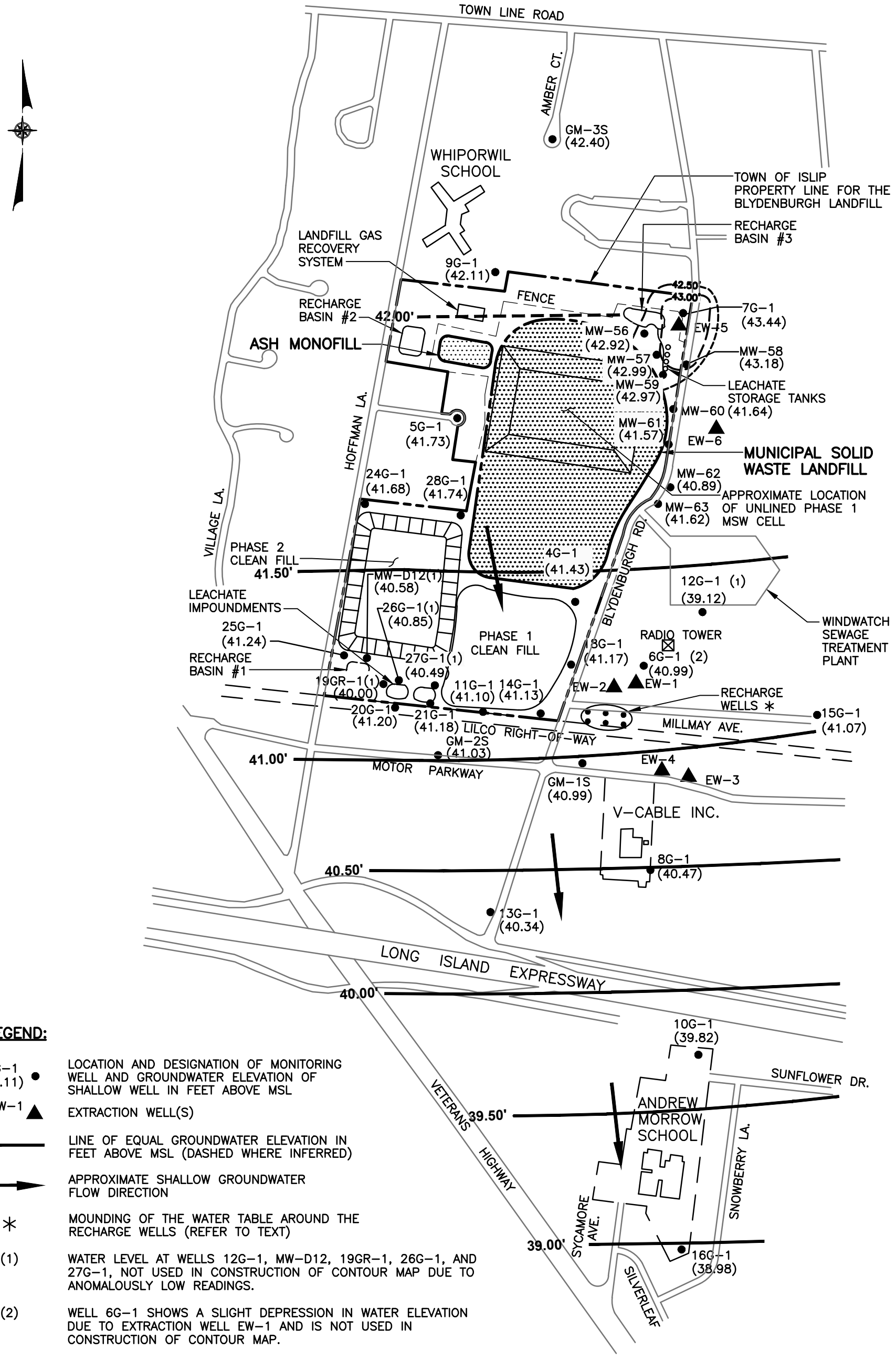
BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
FEBRUARY 11, 2020

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
25G-1*	159.91[(2)]	118.67	41.24
25G-2*	158.71	117.39	41.32
26G-1*	165.10	124.25	40.85
26G-2*	165.57	124.46	41.11
26G-3*	165.43	124.14	41.29
27G-1*	166.58	126.09	40.49
27G-2*	166.52	125.32	41.20
27G-3*	166.64	125.41	41.23
28G-1*	201.99	160.25	41.74
28G-2*	201.31	159.59	41.72
28G-3*	200.16	158.46	41.70

Notes:
---: Groundwater elevation not calculated.
* Additional water level measurements collected by Cashin Associates, P.C. as part of the Cleanfill Landfill Groundwater Monitoring Program

[(1)] New Survey (Wells 4G-2, 13G-1 and 13M-1) obtained by Municipal Land Survey.

[(2)] New survey (Well 25G-1) obtained by Roux Associates.



LEGEND:

9G-1 (42.11) ●	LOCATION AND DESIGNATION OF MONITORING WELL AND GROUNDWATER ELEVATION OF SHALLOW WELL IN FEET ABOVE MSL
EW-1 ▲	EXTRACTION WELL(S)
41.00'	LINE OF EQUAL GROUNDWATER ELEVATION IN FEET ABOVE MSL (DASHED WHERE INFERRED)
→	APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
*	MOUNDING OF THE WATER TABLE AROUND THE RECHARGE WELLS (REFER TO TEXT)
(1)	WATER LEVEL AT WELLS 12G-1, MW-D12, 19GR-1, 26G-1, AND 27G-1, NOT USED IN CONSTRUCTION OF CONTOUR MAP DUE TO ANOMALOUSLY LOW READINGS.
(2)	WELL 6G-1 SHOWS A SLIGHT DEPRESSION IN WATER ELEVATION DUE TO EXTRACTION WELL EW-1 AND IS NOT USED IN CONSTRUCTION OF CONTOUR MAP.

NOTE: CONTOUR INTERVAL EQUALS 0.50 FT.

SOURCES: GERAGHTY & MILLER (1993), MALCOLM PIRNIE 1992)

0 — 1000 FEET
SCALE

D&B ENGINEERS AND ARCHITECTS, P.C.

ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

WATER TABLE CONTOUR MAP
FEBRUARY 11, 2020

FIGURE 6-1

F:\3763-25\dwg\3763-25-C-SPL02- 2-11-20.dwg, FEB-11 2020, 4/7/2020 1:35:47 PM, rferrell

these locations. The reduction in groundwater recharge is primarily due to the landfill liners (primary and secondary liners) and the leachate collection and storage (impoundment) systems associated with the Cleanfill Landfill Phase 1 and 2. In addition, a slightly lower groundwater elevation was noted at well 6G-1, which most likely is the result of the water table drawn down in the vicinity of extraction well EW-1. The direction of groundwater flow determined for this monitoring event for the Upper Glacial aquifer is consistent with flow conditions previously mapped.

6.2 Potentiometric Surface Contours

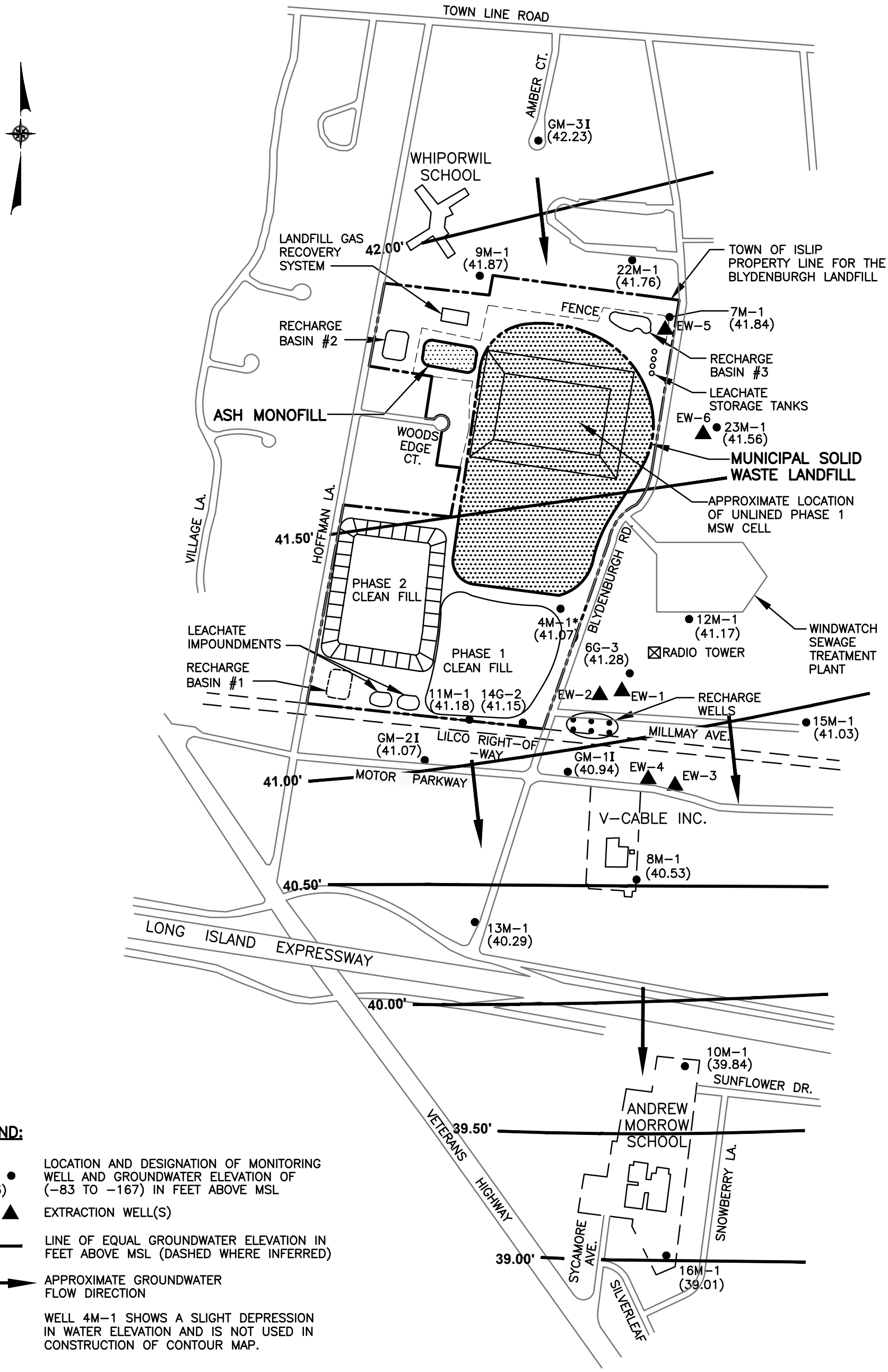
The potentiometric surface elevation contour map prepared from measurements obtained on February 11, 2020, is presented in **Figure 6-2**. The potentiometric surface contour map for the zone from 83 to 167 feet below mean sea level (msl) represents head conditions in wells screened near the deep Upper Glacial/shallow Magothy contact.

The water level elevation data collected from wells screened near the deep Upper Glacial/shallow Magothy aquifer contact indicate that the direction of horizontal component of groundwater flow north of Motor Parkway is toward the southeast and south of Motor Parkway, groundwater flow is toward the south. The direction of groundwater flow determined for this monitoring event near the deep Upper Glacial/shallow Magothy aquifer contact is fairly consistent with flow conditions previously mapped.

6.3 Recharge Well Water Levels

The groundwater elevation measurements obtained on February 19, 2020 are presented in **Table 6-2**. Historical water level elevation measurements from the recharge wells are presented in **Table 6-3**.

Water level elevation data collected from the 6 recharge wells ranged from 48.08 feet above mean sea level at well RW-5 to 169.16 feet above mean sea level at well RW-6. The water level readings in the recharge wells, less the water table elevation, represents the driving head required



LEGEND:

8M–1 (40.53)	LOCATION AND DESIGNATION OF MONITORING WELL AND GROUNDWATER ELEVATION OF (–83 TO –167) IN FEET ABOVE MSL
EW–1 ▲	EXTRACTION WELL(S)
40.50'	LINE OF EQUAL GROUNDWATER ELEVATION IN FEET ABOVE MSL (DASHED WHERE INFERRED)
→	APPROXIMATE GROUNDWATER FLOW DIRECTION
*	WELL 4M–1 SHOWS A SLIGHT DEPRESSION IN WATER ELEVATION AND IS NOT USED IN CONSTRUCTION OF CONTOUR MAP.

NOTE: CONTOUR INTERVAL EQUALS 0.50 FT.

SOURCES: GERAGHTY & MILLER (1993), MALCOLM PIRNIE (1992).

D&B ENGINEERS AND ARCHITECTS, P.C.

ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

POTENTIOMETRIC SURFACE CONTOUR MAP (-83 TO -167 FEET MSL) FEBRUARY 11, 2020

FIGURE 6-2

F:\3763-25\dwg\3763-25-C-SPL01-2-11-20.dwg, 6-2, 3/31/2020 8:15:13 AM, kalesius

Table 6-2

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS
FEBRUARY 19, 2020

Well Designation	Air Line Reference Elevation (feet above mean sea level)	Air Gauge Reading (feet)	Water Level Elevation (feet above mean sea level)
Recharge Well 1	26.42	40	66.42
Recharge Well 2	22.88	110	132.88
Recharge Well 3	30.39	30	60.39
Recharge Well 4	24.86	45	69.86
Recharge Well 5	33.08	15	48.08
Recharge Well 6	29.16	140	169.16

Table 6-3

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS

Well Designation	Water Level Elevation (feet above mean sea level)					
	Third Quarter August 1999	Fourth Quarter November 1999	First Quarter February 2000[1]	Second Quarter May 2000[1]	Third Quarter August 2000[1]	Fourth Quarter November 2000[1]
Recharge Well 1	86.42	49.42	72.42	56.42	46.42	42.42
Recharge Well 2	87.88	94.88	68.88	94.88	97.88	74.88
Recharge Well 3	70.39	44.39	68.39	75.39	46.39	42.39
Recharge Well 4	74.86	75.86	60.86	62.86	54.86	38.86
Recharge Well 5	55.08	49.08	57.08	43.08	51.08	45.08
Recharge Well 6	67.16	49.16	57.16	43.16	45.16	47.16

Well Designation	Water Level Elevation (feet above mean sea level)					
	First Quarter February 2001[1]	Second Quarter May 2001[1]	Third Quarter August 2001[1]	Fourth Quarter November 2001[1]	First Quarter February 2002[1]	Second Quarter May 2002[1]
Recharge Well 1	40.42	54.42	54.42	56.42	68.42	70.42
Recharge Well 2	94.88	106.88	98.88	88.88	94.88	94.88
Recharge Well 3	48.39	92.39	95.39	88.39	54.39	89.39
Recharge Well 4	68.86	74.86	72.86	56.86	52.86	68.86
Recharge Well 5	54.08	53.08	53.08	57.08	53.08	45.08
Recharge Well 6	64.16	63.16	63.16	65.16	53.16	64.16

Well Designation	Water Level Elevation (feet above mean sea level)					
	Third Quarter August 2002[1]	Fourth Quarter November 2002[1]	First Quarter February 2003[1]	Second Quarter May 2003[1]	Third Quarter August 2003[1]	Fourth Quarter November 2003[1]
Recharge Well 1	80.42	75.42	76.42	80.42	76.42	81.42
Recharge Well 2	87.88	107.88	98.88	106.88	100.88	106.88
Recharge Well 3	72.39	92.39	100.39	98.39	112.39	70.39
Recharge Well 4	66.86	73.86	56.86	64.86	79.86	77.86
Recharge Well 5	55.08	55.08	53.08	55.08	58.08	48.08
Recharge Well 6	61.16	59.16	63.16	51.16	75.16	54.16

[1] A revised protocol was implemented for measuring water level elevations in the six recharge wells (refer to Section 3). This protocol records water levels when the effluent pump station is operating.

Table 6-3 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS

	Water Level Elevation (feet above mean sea level)						
Well Designation	**First Quarter February 2004[(1)]**	**Second Quarter May 2004[(1)]**	**Third Quarter August 2004[(1)]**	**First Quarter February 2005[(1)]**	**Second Quarter May 2005[(1)]**	**Third Quarter August 2005[(1)]**	**Fourth Quarter November 2005[(1)]**
Recharge Well 1	84.42	82.42	71.42	76.42	88.42	68.42	70.42
Recharge Well 2	101.88	102.88	103.88	104.88	114.88	122.48	57.88
Recharge Well 3	112.39	122.39	70.39	98.39	95.39	74.39	94.39
Recharge Well 4	74.86	81.86	76.86	75.86	65.86	75.86	78.86
Recharge Well 5	48.08	57.08	46.08	61.08	53.08	48.08	49.08
Recharge Well 6	77.16	82.16	71.16	77.16	64.16	69.16	67.16

	Water Level Elevation (feet above mean sea level)						
Well Designation	**First Quarter February 2006[(1)]**	**Third Quarter July 2006[(1)]**	**First Quarter February 2007[(1)]**	**Third Quarter July 2007[(1)]**	**First Quarter February 2008[(1)]**	**Third Quarter August 2008[(1)]**	**First Quarter February 2009[(1)]**
Recharge Well 1	74.42	68.42	84.42	84.42	96.42	116.42	84.42
Recharge Well 2	125.88	112.88	120.88	122.88	137.88	77.88	102.88
Recharge Well 3	54.39	74.39	80.39	90.39	98.39	60.39	50.39
Recharge Well 4	74.86	64.86	58.86	54.86	74.86	94.86	82.86
Recharge Well 5	48.08	53.08	51.08	53.08	51.08	50.08	49.08
Recharge Well 6	50.16	79.16	95.16	104.16	97.16	169.16	119.16

	Water Level Elevation (feet above mean sea level)						
Well Designation	**Third Quarter August 2009[(1)]**	**First Quarter February 2010[(1)]**	**Third Quarter August 2010[(1)]**	**First Quarter February 2011[(1)]**	**Third Quarter August 2011[(1)]**	**First Quarter February 2012[(1)]**	**Third Quarter August 2012[(1)]**
Recharge Well 1	75.42	84.42	86.42	96.42	78.42	82.42	91.42
Recharge Well 2	132.88	94.88	108.88	114.88	74.88	90.88	99.88
Recharge Well 3	49.39	60.39	60.39	53.39	65.39	60.39	65.39
Recharge Well 4	109.86	76.86	60.86	82.86	64.86	70.86	66.86
Recharge Well 5	51.08	53.08	71.08	51.08	61.08	56.08	60.08
Recharge Well 6	139.16	151.16	129.16	129.16	109.16	135.16	151.16

[(1)] A revised protocol was implemented for measuring water level elevations in the six recharge wells (refer to Section 3). This protocol records water levels when the effluent pump station is operating.

Table 6-3 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
HISTORICAL RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS

	Water Level Elevation (feet above mean sea level)						
Well Designation	**First Quarter February 2013[(1)]**	**Third Quarter August 2013[(1)]**	**First Quarter February 2014[(1)]**	**Third Quarter August/September 2014[(1)]**	**First Quarter March 2015[(1)]**	**Third Quarter August 2015[(1)]**	**First Quarter February 2016[(1)]**
Recharge Well 1	86.42	80.42	96.42	81.42	96.42	91.42	96.42
Recharge Well 2	102.88	96.88	114.88	137.88	122.88	127.88	130.88
Recharge Well 3	78.39	62.39	70.39	60.39	50.39	60.39	102.39
Recharge Well 4	72.86	78.86	52.86	91.86	44.86	74.86	46.86
Recharge Well 5	57.08	47.08	61.08	55.08	58.08	55.08	53.08
Recharge Well 6	123.16	95.16	81.16	141.16	103.16	167.16	147.16

	Water Level Elevation (feet above mean sea level)						
Well Designation	**Third Quarter August 2016[(1)]**	**First Quarter February 2017[(1)]**	**Third Quarter August 2017[(1)]**	**First Quarter February 2018[(1)]**	**Third Quarter August 2018[(1)]**	**First Quarter February 2019[(1)]**	**Third Quarter August 2019[(1)]**
Recharge Well 1	71.42	78.42	74.42	74.42	96.42	81.42	86.42
Recharge Well 2	102.88	102.88	142.86	107.88	92.88	97.88	147.88
Recharge Well 3	65.39	43.39	62.39	50.39	75.39	75.39	48.39
Recharge Well 4	76.86	46.86	52.86	44.86	56.86	49.86	59.86
Recharge Well 5	65.08	53.08	51.08	48.08	53.08	58.08	53.08
Recharge Well 6	129.16	169.16	129.16	149.16	134.16	139.16	119.16

	Water Level Elevation (feet above mean sea level)						
Well Designation	**First Quarter February 2020[(1)]**						
Recharge Well 1	66.42						
Recharge Well 2	132.88						
Recharge Well 3	60.39						
Recharge Well 4	69.86						
Recharge Well 5	48.08						
Recharge Well 6	169.16						

[(1)] A revised protocol was implemented for measuring water level elevations in the six recharge wells (refer to Section 3). This protocol records water levels when the effluent pump station is operating.

for the flow rate to that recharge well to pass from the well casing, through the well screen and gravel pack, and into the aquifer. The recharge wells are not pressurized and operate by gravity under atmospheric conditions. It should be noted that the water level elevation readings are, for all practical purposes, instantaneous readings which must be viewed in terms of the status of the pumping cycle at the time of the reading, as well as the manual throttling of wellhead valves and the actual distribution of flow to each of the 6 recharge wells.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Groundwater Flow

Based on groundwater elevation measurements obtained during the First Quarter 2020 sampling event and the water table and potentiometric surface elevation contour maps prepared for the site, groundwater flow is predominantly in a south to southeast direction. This flow direction is fairly consistent with previous elevation measurements obtained and maps prepared for the site.

Groundwater Treatment Facility Recharge Well Water Levels

The water level measurements for recharge wells, RW-1, RW-3, RW-4 and RW-5 suggest that these wells continue to be effective and are not in need of rehabilitation or redevelopment. However, the water level measurement in recharge wells RW-2 and RW-6 appear to indicate some loss of efficiency. Redevelopment of these recharge wells are not necessary at this time but may be required in the future.

Monitoring Wells

Based on a comparison of the First Quarter 2020 results to the previous results in the Third Quarter of 2019, groundwater quality downgradient and in the vicinity of the Blydenburgh Road Landfill Complex remained consistent (variation in total VOCs of 10 ug/l or less) in all 25 wells sampled. TVOCs for well 11G-2 were reported at 58.2 ug/l, which exceeded the groundwater remediation criterion of 50 ug/l TVOCs established by the ROD. TVOCs were reported just below 50 ug/l in well 14M-1 at 46.7 ug/l. TVOC concentrations in wells (4M-1, 4M-2, 12M-1 and 13M-1) ranged between 14.8 ug/l at well 4M-2 to 32.9 ug/l at well 4M-1. The remaining 19 wells showed total VOC concentrations of 10 ug/l or less.

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Most of the monitoring wells (22 out of 25) downgradient of the MSW Landfill, exhibited one or more of the following inorganic parameters: boron, iron, manganese, magnesium, nickel, sodium and thallium at concentrations exceeding their respective groundwater standards or guidance values.

Some of the monitoring wells (11 out of 25) downgradient of the MSW Landfill, exhibited one or more of the following leachate parameters: ammonia, bromide, chloride and total phenol at concentrations exceeding their respective groundwater standards or guidance values.

Extraction Wells

VOCs were non-detect for extraction wells (EW-1, EW-2, EW-3 and EW-6). For EW-4, TVOCs were reported at 1.3 ug/l. All of these extraction wells have remained consistent in comparison to the previous sample results. TVOCs in temporary extraction well GM-1D (48.3 ug/l) remained consistent in comparison to the previous December 2019 TVOC result (53.4 ug/l).

Extraction wells EW-1, EW-2, EW-3 and EW-4 exhibited one or more of the following inorganic parameters: iron, manganese and sodium at concentrations exceeding their respective groundwater standards.

Temporary extraction well GM-1D, exhibited a concentration of magnesium above the groundwater guidance value, as well as a concentration of sodium above the groundwater standard.

Ammonia exceeded the groundwater standard in extraction wells EW-3 and EW-4, as well as in temporary extraction well GM-1D.

Total phenol exceeded the groundwater standard in temporary extraction well GM-1D.

7.2 Recommendations

Based on the findings of the First Quarter 2020 Post Closure Groundwater Monitoring event, the following recommendations are presented:

- The monitoring frequency for the Post Closure Groundwater Monitoring Program should remain on a semi-annual basis.
- The selected set of monitoring wells and extraction wells should be sampled in accordance with the revised Sampling and Analysis Plan (SAP).

APPENDIX A-1

MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	08/04/17	10/27/17	12/18/17	02/21/18	04/27/18
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
COMPOUNDS								
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		***6.1***	***7.4***	***5.6***	***6***	***5.9***
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***1.1***	***1.3***	***1***	U	***1.1***
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	1		U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***7***	***8.5***	***7.1***	***6.2***	***6.9***
2-Hexanone	591-78-6	50 GV		U	U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U	U
Chlorobenzene	108-90-7	5 ST		1.6	1.8	1.5	1.3	1.5
Chlorodifluoromethane (Freon 22)	75-45-6	---		7.9	U	8 J	8.8	NR
Chloroethane	75-00-3	5 ST		U	U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		***10.4***	***13.5***	***9.5***	***9.4***	***10.1***
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		***11.9***	U	***11.9 J***	***11.1***	***9.6 J***
Ethylbenzene	100-41-4	5 ST		U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	2.6	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		3.2	4.4	3.3	2.8	3.3
Toluene	108-88-3	5 ST		U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		2.9	3.1	2.9	2.5	3.1
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST		***2.4***	***2.7***	***2.3***	***2.5***	***2.8***
Xylenes, Total	XYLENES	5 ST+		U	U	U	U	U
Total Volatile Organic Compounds		---		54.5	46.3	53.1	50.6	44.3

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***		*	Collected under pumping conditions, however, samples collected on 10/16 and 4/17 at GM-1D deemed unusable due to pumping issues
++	Applies to sum of isomer	ug/l	Micrograms per liter		
NR	Not reported	BGS	Below Ground Surface		
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve		
J	Estimated detection limit or value	MSW	Municipal Solid Waste		
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value		
		ST	Standard		

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	07/03/18	09/07/18	10/25/18	12/24/18	02/14/19
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
COMPOUNDS								
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		4.3	4.3	***5.1***	3.7	***6.7***
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***0.68*** ***J***	U	1	***0.65*** ***J***	***1.1***
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		0.74 J	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***4.6***	***6.2***	***6.4***	***3.9***	***7***
2-Hexanone	591-78-6	50 GV		U	U	U	U	U
Acetone	67-64-1	50 GV		U	2 J	J	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U	U
Benzene	71-43-2	1 ST		U	U	0.56 J	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	1.3	1.6	0.95 J	1.5
Chlorodifluoromethane (Freon 22)	75-45-6	---		9.8	7	9.9	5.8	9.4
Chloroethane	75-00-3	5 ST		U	U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		***7.1***	***6.8***	***7.7***	***5.6***	***10.3*** ***J***
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		4.2	***9.1***	***10.3***	***8.3***	***14.6***
Ethylbenzene	100-41-4	5 ST		U	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		1.7	3.1	3.8	1.7	3
Toluene	108-88-3	5 ST		U	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		2.3	2.7	2.6	1.9	2.7
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U	U
Vinyl Chloride	75-01-4	2 ST		1.8	1.8	***2.4***	1.5	***2.7***
Xylenes, Total	XYLENES	5 ST+		U	U	U	U	U
Total Volatile Organic Compounds		---		37.22	44.3	51.36	34	59

+ Applies to each isomer individually
++ Applies to sum of isomer
NR Not reported
U Compound was analyzed for but not detecte
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank result

Exceeds Class GA Standard/Guidance value

ug/l Micrograms per liter
BGS Below Ground Surface
MSL Mean Sea Leve
MSW Municipal Solid Waste
GV Guidance Value
ST Standard

* Collected under pumping conditions, however, samples collected on 10/16 and 4/17 at GM-1D deemed unsuable due to pumping issues

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	08/19/19	10/30/19	12/20/19	02/14/20
			Depth of Well BGS	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		***5.1***	4.8	***5.8***	3.5
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		UJ	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***5.3***	***5.6***	***5.7***	***6.4***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		0.54 J	0.52 J	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	UJ
Bromomethane	74-83-9	5 ST		U	U	U	UJ
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		1.2	1.3	1.3	1.4
Chlorodifluoromethane (Freon 22)	75-45-6	---		8.1	7.3	9.1	10.9
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		***7.9***	***8***	***9***	***7.8***
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		***13***	***12.8***	***14.7***	***11.6***
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		2.2	2.7	2.4	2.3
Toluene	108-88-3	5 ST		U	U	u	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	UJ
Trichloroethylene (TCE)	79-01-6	5 ST		2.1	2	2.2	2.1
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		***2.4***	***2.6***	***3.2***	***2.3***
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		47.8	47.6	53.4	48.3

\+ Applies to each isomer individually
++ Applies to sum of isomer
NR Not reported
U Compound was analyzed for but not detecte
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank result

Exceeds Class GA Standard/Guidance value

ug/l Micrograms per liter
BGS Below Ground Surface
MSL Mean Sea Leve
MSW Municipal Solid Waste
GV Guidance Value
ST Standard

* Collected under pumping conditions, however, samples collected on 10/16 and 4/17 at GM-1D deemed unsuable due to pumping issues

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: GM-1I	GM-1I	GM-1I	GM-1I
			Sample_date: 02/21/18	02/14/19	08/19/19	02/14/20
			Depth of Well BGS: 285'	285'	285'	285'
			Depth to bottom screen, relative to MSL: -138'	-138'	-138'	-138'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	UJ
Bromomethane	74-83-9	5 ST	U	U	U	UJ
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	UJ
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: GM-1S	GM-1S	GM-1S	GM-1S
			Sample_date: 09/03/15	08/03/16	08/14/17	08/19/19
			Depth of Well BGS: 135'	135'	135'	135'
			Depth to bottom screen, relative to MSL: 19'	19'	19'	19'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: GM-2D	GM-2D	GM-2D	GM-2D
			Sample_date: 09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS: 398'	398'	398'	398'
			Depth to bottom screen, relative to MSL: -248'	-248'	-248'	-248'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	GM-2I	GM-2I	GM-2I	GM-2I
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	298'	298'	298'	298'
			Depth to bottom screen, relative to MSL	-136'	-136'	-136'	-136'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		***7***	U	2.3	4.2
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		***9***	***8***	4	***5.2***
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		***6***	***6***	*1.5*	3.7
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		22	14	7.8	13.1

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: GM-2S	GM-2S	GM-2S	GM-2S
			Sample_date: 09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS: 149'	149'	149'	149'
			Depth to bottom screen, relative to MSL: 12'	12'	12'	12'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	UB	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	4 J	2.5	2.6
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	1 J	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	5	2.5	2.6

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	4G-1	4G-1	4G-1	4G-1
			Sample_date	08/11/17	05/25/18	09/04/18	08/16/19
			Depth of Well BGS	164'	164'	164'	164'
			Depth to bottom screen, relative to MSL	2'	2'	2'	2'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	UJ	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		1.1	2.6	2.1	2.5
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	UB	UB	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	0.44 J
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	1.3	1.2	1.3
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	NR	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	NR	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		1.1	3.9	3.3	4.24

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	4G-2	4G-2	4G-2	4G-2
			Sample_date	02/16/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	211'	211'	211'	211'
			Depth to bottom screen, relative to MSL	-45'	-45'	-45'	-45'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+ Applies to each isomer individually
++ Applies to sum of isomer
NR Not reported
U Compound was analyzed for but not detecte
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank result

Exceeds Class GA Standard/Guidance value

ug/l Micrograms per liter
BGS Below Ground Surface
MSL Mean Sea Leve
MSW Municipal Solid Waste
GV Guidance Value
ST Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	4M-1	4M-1	4M-1	4M-1
			Sample_date	09/04/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	325'	325'	325'	325'
			Depth to bottom screen, relative to MSL	-159'	-159'	-159'	-159'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		1.2	1.3	1.4	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***1.4***	***2.5***	***2.4***	***2.4***
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***4.6***	***12.1***	***11.7***	***11.1***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	1.6 J	4.5 J	4.4 J
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		***2.9***	***3.1***	***2.9***	***2.8***
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		3	3.9	3.6	3.8
Chlorodifluoromethane (Freon 22)	75-45-6	---		5.3	6.4	6.2	6.9
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		1.2	1.8	2	1.5
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		19.6	32.7	34.7	32.9

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	4M-2	4M-2	4M-2	4M-2
			Sample_date	02/26/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	486'	486'	486'	486'
			Depth to bottom screen, relative to MSL	-320'	-320'	-320'	-320'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		1.1	1.2	1.8	1.4
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		4.1	5	6.9	7.1
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		4.6	***6.4***	***7.2***	***6.3***
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	1.2	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		9.8	12.6	17.1	14.8

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: 6G-1	6G-1	6G-1	6G-1
			Sample_date: 02/22/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS: 147'	147'	147'	147'
			Depth to bottom screen, relative to MSL: 32'	32'	32'	32'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	UJ
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	6G-2	6G-2	6G-2	6G-2
			Sample_date	02/23/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	230'	230'	230'	230'
			Depth to bottom screen, relative to MSL	-53'	-53'	-53'	-53'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	UJ
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	6G-3	6G-3	6G-3	6G-3
			Sample_date	02/23/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	315'	315'	315'	315'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***3.9***	***3.7***	***3.6***	***3.2***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	UJ
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		2	1.8	1.5	1.4
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		5.9	5.5	5.1	4.6

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	6M-1	6M-1	6M-1	6M-1
		Sample_date	09/02/15	08/11/16	08/09/17	08/15/19
		Depth of Well BGS	545'	545'	545'	545'
		Depth to bottom screen, relative to MSL	-368'	-368'	-368'	-368'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	UB	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	UJ	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	7M-1	7M-1	7M-1	7M-1
			Sample_date	02/23/18	02/12/19	08/20/19	02/12/20
			Depth of Well BGS	214'	214'	214'	214'
			Depth to bottom screen, relative to MSL	-152'	-152'	-152'	-152'
			Gradient relative to MSW	CROSS	CROSS	CROSS	CROSS
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		1.3	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		0.43 J	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		1.73	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	8G-1	8G-1	8G-1	8G-1
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	114'	114'	114'	114'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	UJ
Bromomethane	74-83-9	5 ST		U	U	U	UJ
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	UJ
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: 8M-1	8M-1	8M-1	8M-1
			Sample_date: 02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS: 270'	270'	270'	270'
			Depth to bottom screen, relative to MSL: -134'	-134'	-134'	-134'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	1.5
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	UJ
Bromomethane	74-83-9	5 ST	U	U	U	UJ
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	1.6
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	UJ
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	3.1

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	8M-2	8M-2	8M-2	8M-2
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	383'	383'	383'	383'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	UJ
Bromomethane	74-83-9	5 ST		U	U	U	UJ
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	UJ
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: 9G-1	9G-1	9G-1	9G-1
			Sample_date: 08/09/16	08/08/17	09/07/18	08/20/19
			Depth of Well BGS: 68'	68'	68'	68'
			Depth to bottom screen, relative to MSL: 23'	23'	23'	23'
			Gradient relative to MSW: UP	UP	UP	UP
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: 10G-1	10G-1	10G-1	10G-1
			Sample_date: 08/14/15	08/10/16	08/10/17	08/21/19
			Depth of Well BGS: 69'	69'	69'	69'
			Depth to bottom screen, relative to MSL: 20'	20'	20'	20'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	UJ	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	10M-1	10M-1	10M-1	10M-1
			Sample_date	02/15/18	02/12/19	08/21/19	02/13/20
			Depth of Well BGS	256	256	256	256
			Depth to bottom screen, relative to MSL	-167	-167	-167	-167
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		1.4	1.6	1.3	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		1.5	1.8	1.7	1.8
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		1.3	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		1.5	2	1.8	1.4
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		1.9	1.1	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		7.6	6.5	4.8	3.2

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	11G-1	11G-1	11G-1	11G-1
			Sample_date	08/31/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	145'	145'	145'	145'
			Depth to bottom screen, relative to MSL	22'	22'	22'	22'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***1.1***	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***4.9***	***3.9***	***3.8***	***4.1***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		3.8 J	2 J	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	0.97 J	U	0.98 J
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		1.3	1.2	1.1	1.3
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		11.1	8.07	4.9	6.38

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	11G-2	11G-2	11G-2	11G-2
			Sample_date	08/31/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-51	-51	-51	-51
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		2.2	2.8	2.7	2.9
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***3.5***	***5***	***4.1***	***4.3***
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***15.1***	***26.7***	***20.2***	***22.2***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		4.8 J	2.2 J	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		***2.3***	***2.5***	***1.6***	***1.8***
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		***5.1***	***5.7***	4.2	4.4
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	8.2	7.2	8.9
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	1.8	2	1.2
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	***8.1***	***10.3***	***8.1***
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	1.3	2.6	2.5
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		***2.1***	1.7	1.9	1.9
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		35.1	66	56.8	58.2

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	11M-1	11M-1	11M-1	11M-1
			Sample_date	08/19/15	08/09/16	08/03/17	08/14/19
			Depth of Well BGS	320'	320'	320'	320'
			Depth to bottom screen, relative to MSL	-154'	-154'	-154'	-154'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		1 J	2 J	U	1.6
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	2 J	U	1.8
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		2 J	3 J	U	2.9
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		3 J	4 J	1.9	4.1
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		4 J	5	1.7	***5.7***
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		2 J	3 J	1.3	2.6
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		1 J	2 J	U	1.6
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		1 J	1 J	U	1.2
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		14	22	4.9	21.5

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	12M-1	12M-1	12M-1	12M-1
			Sample_date	02/22/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	338'	338'	338'	338'
			Depth to bottom screen, relative to MSL	-163'	-163'	-163'	-163'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		***2.4***	***2.3***	***2.4***	***2.3***
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***9.9***	***10.3***	***10.4***	***9.7***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	UJ
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		***5.3***	***5.5***	***5.1***	***5.5***
Chlorodifluoromethane (Freon 22)	75-45-6	---		1.8	1.6	1.4	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		2	1.3 J	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		21.4	21	19.3	17.5

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	13G-1	13G-1	13G-1	13G-1
			Sample_date	02/15/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	93'	93'	93'	93'
			Depth to bottom screen, relative to MSL	17'	17'	17'	17'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	13M-1	13M-1	13M-1	13M-1
			Sample_date	02/15/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	265'	265'	265'	265'
			Depth to bottom screen, relative to MSL	-155	-155	-155	-155
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		3.3	3.3	2.7	2.4
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***5.8***	***6***	***4.7***	***4.8***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		1.4	1.2	1	1
Chlorodifluoromethane (Freon 22)	75-45-6	---		3.5	3.6	3.2	3.8
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		***5.7***	***5.7***	4.8	4.4
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		***5.9***	***6.9***	***6***	4.1
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		***7.8***	***7.9***	***7.8***	***7.5***
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		2.6	1.8	1.7	1.6
Trichlorofluoromethane	75-69-4	5 ST		1	1.3	1.3	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		37	37.7	33.2	29.6

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

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Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	14G-1A	14G-1A	14G-1A	14G-1A
		Sample_date	02/14/18	02/11/19	08/13/19	02/19/20
		Depth of Well BGS	220'	220'	220'	220'
		Depth to bottom screen, relative to MSL	-58	-58	-58	-58
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	UJ	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	UJ
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	UJ	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	UJ	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID	14G-2	14G-2	14G-2	14G-2
			Sample_date	02/14/18	02/11/19	08/13/19	02/13/20
			Depth of Well BGS	264'	264'	264'	264'
			Depth to bottom screen, relative to MSL	-103	-103	-103	-103
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS							
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	14M-1	14M-1	14M-1	14M-1
			Sample_date	09/05/18	02/11/19	08/13/19	02/13/20
			Depth of Well BGS	355'	355'	355'	355'
			Depth to bottom screen, relative to MSL	-194'	-194'	-194'	-194'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		***5***	***6.8***	***5.9***	***5.3***
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***1.6***	***2.9***	***2.6***	***2.5***
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***6.2***	***14.3***	***12.3***	***13.7***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		5.6	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	0.85 J
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		2.3	3	2.8	2.8
Chlorodifluoromethane (Freon 22)	75-45-6	---		8.4	10.7	9.6	11.9
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		2.7	3.3	3	2.7
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		***5.9***	***9***	***7.7***	***7***
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	1	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		37.7	50	44.9	46.75

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	15G-1	15G-1	15G-1	15G-1
			Sample_date	08/19/15	08/09/16	08/14/17	08/15/19
			Depth of Well BGS	160'	160'	160'	160'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	UB	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: 16G-1	16G-1	16G-1	16G-1
			Sample_date: 08/14/15	08/10/16	08/10/17	08/21/19
			Depth of Well BGS: 57'	57'	57'	57'
			Depth to bottom screen, relative to MSL: 20'	20'	20'	20'
			Gradient relative to MSW: DOWN	DOWN	DOWN	DOWN
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	UJ	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	16M-1	16M-1	16M-1	16M-1
			Sample_date	02/15/18	02/12/19	08/21/19	02/18/20
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-163	-163	-163	-163
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		3.4	2.6	2	2
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		3.4	2.6	2	2

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	18G-1	18G-1	18G-1	18G-1
			Sample_date	02/16/18	02/13/19	08/13/19	02/11/20
			Depth of Well BGS	157'	157'	157'	157'
			Depth to bottom screen, relative to MSL	11'	11'	11'	11'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		2	1.4	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		2	1.4	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	09/06/18	02/13/19	08/13/19	02/11/20
			Depth of Well BGS	197'	197'	197'	197'
			Depth to bottom screen, relative to MSL	-29	-29	-29	-29
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	1.1	1	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	1.1	1	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV	Sample ID: 22M-1	22M-1	22M-1	22M-1
			Sample_date: 09/05/18	02/12/19	08/16/19	02/12/20
			Depth of Well BGS: 222'	222'	222'	222'
			Depth to bottom screen, relative to MSL: -164'	-164'	-164'	-164'
			Gradient relative to MSW: UP	UP	UP	UP
COMPOUNDS						
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	1.4 J	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	1.4	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-1
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	23M-1	23M-1	23M-1	23M-1
			Sample_date	02/15/18	02/12/19	08/14/19	02/18/20
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		1	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		1	0	0	0

+	Applies to each isomer individually	***Exceeds Class GA Standard/Guidance value***	
++	Applies to sum of isomer	ug/l	Micrograms per liter
NR	Not reported	BGS	Below Ground Surface
U	Compound was analyzed for but not detecte	MSL	Mean Sea Leve
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) due to blank result	GV	Guidance Value
		ST	Standard

APPENDIX A-2

MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	06/09/17	08/04/17	10/27/17	12/18/17	02/21/18
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Aluminum	7429-90-5	--		U	UB	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U	U
Barium	7440-39-3	1000 ST		11.9 J	6.3 J	3.8 J	3.1 J	2.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U	U
Boron	7440-42-8	1000 ST		315	331	318	341	330
Cadmium	7440-43-9	5 ST		0.074 J	U	U	U	U
Calcium	7440-70-2	--		88400	95500	92900	95800	93700
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	U	U
Chromium, Total	7440-47-3	50 ST		U	U	U	U	U
Cobalt	7440-48-4	--		1.6 J	0.96 J	U	U	2 J
Copper	7440-50-8	200 ST		145	U	U	2.9 J	1.5 J
Cyanide	57-12-5	200 ST		U	U	U	U	U
Iron	7439-89-6	300 ST#		*65.2 J*	*UB*	*145*	*232*	178
Lead	7439-92-1	25 ST		U	5.2	U	U	U
Magnesium	7439-95-4	35000 GV		***56200***	***60400***	***60100***	***63200***	***62200***
Manganese	7439-96-5	300 ST#		*98*	*39.4*	*20.5*	*18*	16.2
Mercury	7439-97-6	0.7 ST		U	UB	U	U	UB
Nickel	7440-02-0	100 ST		11.4 J	9.6 J	9.2 J	9.7 J	34.5 J
Potassium	7440-09-7	--		6460	6100	5360	6340	5350
Selenium	7782-49-2	10 ST		U	U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U	U
Sodium	7440-23-5	20000 ST		***142000***	***154000***	***147000***	***157000***	***151000***
Thallium	7440-28-0	0.5 GV		U	U	U	U	UB
Vanadium	7440-62-2	--		0.82 J	U	U	U	U
Zinc	7440-66-6	2000 GV		255	UB	6.2 J	4.2 J	4.4 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	04/27/18	07/03/18	09/07/18	10/25/18	12/24/18
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Aluminum	7429-90-5	--		25.5 J	U	U	U	24.8 J
Antimony	7440-36-0	3 ST		U	U	U	U	U
Arsenic	7440-38-2	25 ST		7.2 J	U	U	U	U
Barium	7440-39-3	1000 ST		2.6 J	2.5 J	2.5 J	2.4 J	2.4 J
Beryllium	7440-41-7	3 GV		U	U	U	U	U
Boron	7440-42-8	1000 ST		330	335	318	354	343
Cadmium	7440-43-9	5 ST		0.10 J	U	U	U	U
Calcium	7440-70-2	--		94800	95400	98500	99200	97200
Chromium, Hexavalent	18540-29-9	50 ST		5.6 J	U	U	U	U
Chromium, Total	7440-47-3	50 ST		4.3 J	U	U	U	1.9 J
Cobalt	7440-48-4	--		U	U	U	U	U
Copper	7440-50-8	200 ST		41.1	U	U	11. J	U
Cyanide	57-12-5	200 ST		U	U	U	U	U
Iron	7439-89-6	300 ST#		171	***533***	***368***	***474***	***388***
Lead	7439-92-1	25 ST		U	U	U	U	U
Magnesium	7439-95-4	35000 GV		***62500***	***62500***	***63800***	***64500***	***64000***
Manganese	7439-96-5	300 ST#		16.3	17.1	18.8	19.2	17.4
Mercury	7439-97-6	0.7 ST		U	U	UB	U	U
Nickel	7440-02-0	100 ST		30.6 J	9.5 J	8.9 J	11.2 J	11.4 J
Potassium	7440-09-7	--		6260	5380	5030	5950	5680
Selenium	7782-49-2	10 ST		U	U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U	U
Sodium	7440-23-5	20000 ST		***159000***	***159000***	***168000***	***174000***	***180000***
Thallium	7440-28-0	0.5 GV		***8.1 J***	U	U	U	U
Vanadium	7440-62-2	--		0.86 J	U	UB	U	U
Zinc	7440-66-6	2000 GV		69.1	9.6 J	UB	7.5 J	5 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	02/14/19	08/19/19	10/30/19	12/20/19	02/14/20
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Aluminum	7429-90-5	--		U	U	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U	U
Barium	7440-39-3	1000 ST		2.5 J	U	3.4 J	2.5 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U	U
Boron	7440-42-8	1000 ST		358	UB	316	307	337
Cadmium	7440-43-9	5 ST		UB	U	U	U	U
Calcium	7440-70-2	--		101000	86200	90300	89300	99200 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	U	U
Chromium, Total	7440-47-3	50 ST		U	U	U	2.1 J	U
Cobalt	7440-48-4	--		0.66 J	U	U	U	U
Copper	7440-50-8	200 ST		4.3 J	U	5.6 J	U	U
Cyanide	57-12-5	200 ST		5.6 J	U	U	2.9 J	U
Iron	7439-89-6	300 ST#		***375***	47.9	***370***	75	*64.2*
Lead	7439-92-1	25 ST		U	4.8 J	U	U	U
Magnesium	7439-95-4	35000 GV		***66200***	***55400 J***	***59000***	***58700***	***64200***
Manganese	7439-96-5	300 ST#		19.3	13.8	17.3	15.1	16.9
Mercury	7439-97-6	0.7 ST		U	U	U	U	UBJ
Nickel	7440-02-0	100 ST		11.8 J	9.8 J	30.2 J	21 J	12.7 J
Potassium	7440-09-7	--		6280	6010	5870	4940	6140
Selenium	7782-49-2	10 ST		U	U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U	U
Sodium	7440-23-5	20000 ST		***180000***	***150000***	***156000***	***149000***	***173000***
Thallium	7440-28-0	0.5 GV		U	U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U	U
Zinc	7440-66-6	2000 GV		6 J	178	316	199	49.7

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	GM-1I	GM-1I	GM-1I	GM-1I
			Sample_date	02/21/18	02/14/19	08/19/19	02/14/20
			Depth of Well BGS	285'	285'	285'	285'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		24.7 J	24.3 J	23.6 J	25 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		136	138	UB	134
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		45300	39700	42200	43400 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	U
Chromium, Total	7440-47-3	50 ST		U	2.2 J	U	U
Cobalt	7440-48-4	--		5.3 J	3.9 J	U	U
Copper	7440-50-8	200 ST		0.75 J	U	U	U
Cyanide	57-12-5	200 ST		U	3.7 J	U	U
Iron	7439-89-6	300 ST#		43.7	13.6 J	11 J	U
Lead	7439-92-1	25 ST		U	U	5	U
Magnesium	7439-95-4	35000 GV		27900	23800	24800 J	25900
Manganese	7439-96-5	300 ST#		U	U	U	U
Mercury	7439-97-6	0.7 ST		U	U	U	UBJ
Nickel	7440-02-0	100 ST		29.8 J	8.6 J	8.5 J	6.9 J
Potassium	7440-09-7	--		2980 J	3340 J	4180 J	3440 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***52600***	***61000***	***57100***	***57500***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	0.99 J	U	U
Zinc	7440-66-6	2000 GV		3.9 J	1.5 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	GM-1S	GM-1S	GM-1S	GM-1S
			Sample_date	09/03/15	08/03/16	08/14/17	08/19/19
			Depth of Well BGS	135'	135'	135'	135'
			Depth to bottom screen, relative to MSL	19'	19'	19'	19'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	816	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		19.3 B	17.9 J	22.7 J	22.6 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		138	126	134	UB
Cadmium	7440-43-9	5 ST		UB	U	2.8	U
Calcium	7440-70-2	--		43100	39600	38200	47000
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		U	U	21.9	U
Cobalt	7440-48-4	--		4.5 B	4.1 J	8.5 J	U
Copper	7440-50-8	200 ST		UB	0.8 J	6.9 J	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		U	U	***1090 J***	20.5
Lead	7439-92-1	25 ST		6.1	8.3	7.7	4.9 J
Magnesium	7439-95-4	35000 GV		25400	23000	22200	26400 J
Manganese	7439-96-5	300 ST#		0.7 B	U	***58.8***	U
Mercury	7439-97-6	0.7 ST		UB	U	0.032 J	U
Nickel	7440-02-0	100 ST		10.9 B	15.4 J	47.8	21.8 J
Potassium	7440-09-7	--		4970 B	3130 J	4810 J	5770
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		UBJ	U	U	U
Sodium	7440-23-5	20000 ST		***51300***	***57400 J***	***48400***	***66200***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	2.3 J	U
Zinc	7440-66-6	2000 GV		7.7 B	UB	30.7	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	GM-2D	GM-2D	GM-2D	GM-2D
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	398'	398'	398'	398'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	151 J	U
Antimony	7440-36-0	3 ST		UB	UB	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		1.8 B	U	4 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	7.6 J	UB	UB
Cadmium	7440-43-9	5 ST		U	U	0.32 J	U
Calcium	7440-70-2	--		5180 J	4960	4980	4980
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	UJ
Chromium, Total	7440-47-3	50 ST		UB	U	18.4	U
Cobalt	7440-48-4	--		0.3 B	0.5 J	0.79 J	U
Copper	7440-50-8	200 ST		3.9 B	U	4.8 J	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		135	112	***461 J***	114
Lead	7439-92-1	25 ST		2.6 BJ	1.7 J	1.6 J	3.7 J
Magnesium	7439-95-4	35000 GV		1950 BJ	1900	1830	1870 J
Manganese	7439-96-5	300 ST#		9.8 BJ	8.8 J	36.4	8.8 J
Mercury	7439-97-6	0.7 ST		UJ	UB	0.025 J	U
Nickel	7440-02-0	100 ST		U	U	15.5 J	U
Potassium	7440-09-7	--		UBJ	U	1240 J	U
Selenium	7782-49-2	10 ST		UJ	UJ	U	U
Silver	7440-22-4	50 ST		UJ	U	U	U
Sodium	7440-23-5	20000 ST		3450 BJ	849 J	2890 J	4340 J
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		UB	U	18.2 J	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

		Sample ID	GM-2I	GM-2I	GM-2I	GM-2I
		Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
		Depth of Well BGS	298'	298'	298'	298'
		Depth to bottom screen, relative to MSL	-136'	-136'	-136'	-136'
Units in ug/l		**Gradient relative to MSW**	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	152 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	3.4 B	U	6.5 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UB	9 J	UB	UB
Cadmium	7440-43-9	5 ST	U	U	0.15 J	U
Calcium	7440-70-2	--	32500 J	30100	31900	35700
Chromium, Hexavalent	18540-29-9	50 ST	U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST	UB	U	4.3 J	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	U	14.1 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	U	***352 J***	U
Lead	7439-92-1	25 ST	2.5 BJ	2.6 J	2.9 J	2.8 J
Magnesium	7439-95-4	35000 GV	16700 J	15900	16700	18300 J
Manganese	7439-96-5	300 ST#	UBJ	U	22.9	U
Mercury	7439-97-6	0.7 ST	UJ	UB	0.031 J	U
Nickel	7440-02-0	100 ST	U	U	3.8 J	U
Potassium	7440-09-7	--	1940 BJ	668 J	2190 J	2970 J
Selenium	7782-49-2	10 ST	UJ	UJ	U	5 J
Silver	7440-22-4	50 ST	UJ	U	U	U
Sodium	7440-23-5	20000 ST	10100 J	11800 J	10800	14400
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	6.3 B	4.3 J	5.7 J	U
Zinc	7440-66-6	2000 GV	UB	U	18.3 J	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l		Sample ID	GM-2S		GM-2S		GM-2S		GM-2S	
		Sample_date	09/01/15		08/08/16		08/14/17		08/20/19	
		Depth of Well BGS	149'		149'		149'		149'	
		Depth to bottom screen, relative to MSL	12'		12'		12'		12'	
		Gradient relative to MSW	DOWN		DOWN		DOWN		DOWN	
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV								
Aluminum	7429-90-5	--	242			U	314			U
Antimony	7440-36-0	3 ST		UB		U		U		U
Arsenic	7440-38-2	25 ST		U		U		U		U
Barium	7440-39-3	1000 ST	13.4	B	16	J	18.8	J	20.8	J
Beryllium	7440-41-7	3 GV		U		U		U		U
Boron	7440-42-8	1000 ST		UB	16.1	J		UB		UB
Cadmium	7440-43-9	5 ST	0.4	B		U		UB		U
Calcium	7440-70-2	--	12900	J	14000		13800		16700	
Chromium, Hexavalent	18540-29-9	50 ST		U		U		U		UJ
Chromium, Total	7440-47-3	50 ST		U		U	6.4	J		U
Cobalt	7440-48-4	--	0.5	B		U		U		U
Copper	7440-50-8	200 ST		UB		U	4.6	J		U
Cyanide	57-12-5	200 ST		U		U		U		U
Iron	7439-89-6	300 ST#	130			U	***861***			U
Lead	7439-92-1	25 ST	3.5	J	3.2	J	4.8	J	3.6	J
Magnesium	7439-95-4	35000 GV	5480	J	5960		5840		6960	J
Manganese	7439-96-5	300 ST#	11.3	BJ		U	***48.5***		4.6	J
Mercury	7439-97-6	0.7 ST		UJ		UB		U		U
Nickel	7440-02-0	100 ST		UB	3.2	J	8.5	J	6.1	J
Potassium	7440-09-7	--	1790	BJ	860	J	1920	J		U
Selenium	7782-49-2	10 ST		UJ		UJ		U		U
Silver	7440-22-4	50 ST	1.1	BJ-		U		U		U
Sodium	7440-23-5	20000 ST	6740	J	7700	J	7320		11400	
Thallium	7440-28-0	0.5 GV		U		U		U		U
Vanadium	7440-62-2	--		U		U	1.2	J		U
Zinc	7440-66-6	2000 GV		UB		U	21.6			U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	4G-1	4G-1	4G-1	4G-1
			Sample_date	08/11/17	02/21/18	09/04/18	08/16/19
			Depth of Well BGS	164'	164'	164'	164'
			Depth to bottom screen, relative to MSL	2'	2'	2'	2'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		78.4 J	NR	26.3 J	U
Antimony	7440-36-0	3 ST		U	NR	U	U
Arsenic	7440-38-2	25 ST		U	NR	U	U
Barium	7440-39-3	1000 ST		128 J	NR	184 J	190 J
Beryllium	7440-41-7	3 GV		U	NR	U	U
Boron	7440-42-8	1000 ST		179	NR	386	UB
Cadmium	7440-43-9	5 ST		UB	U	U	U
Calcium	7440-70-2	--		11500	20800	19700	17500
Chromium, Hexavalent	18540-29-9	50 ST		U	NR	UJ	U
Chromium, Total	7440-47-3	50 ST		U	NR	2.6 J	U
Cobalt	7440-48-4	--		11.2 J	NR	10.8 J	10.2 J
Copper	7440-50-8	200 ST		5 J	NR	U	6.5 J
Cyanide	57-12-5	200 ST		U	NR	U	2.1 J
Iron	7439-89-6	300 ST#		***5780***	***11400***	***9450***	***7170***
Lead	7439-92-1	25 ST		3.1 J	UB	U	U
Magnesium	7439-95-4	35000 GV		5400	9280	9550	8120
Manganese	7439-96-5	300 ST#		***6430***	***8020***	***5940***	***5280***
Mercury	7439-97-6	0.7 ST		UJ	NR	U	U
Nickel	7440-02-0	100 ST		21 J	NR	35.7 J	45.8
Potassium	7440-09-7	--		13700	16200	25800	27200
Selenium	7782-49-2	10 ST		U	NR	U	U
Silver	7440-22-4	50 ST		U	NR	U	U
Sodium	7440-23-5	20000 ST		***84500***	***123000***	***142000***	***121000***
Thallium	7440-28-0	0.5 GV		***8.4 J***	NR	U	U
Vanadium	7440-62-2	--		U	NR	1.5 J	U
Zinc	7440-66-6	2000 GV		20.7	NR	UB	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

		Sample ID	4G-2	4G-2	4G-2	4G-2
		Sample_date	02/16/18	02/11/19	08/16/19	02/12/20
		Depth of Well BGS	211'	211'	211'	211'
		Depth to bottom screen, relative to MSL	-45'	-45'	-45'	-45'
Units in ug/l		**Gradient relative to MSW**	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	6.5 J	U	U	U
Barium	7440-39-3	1000 ST	85.4 J	77.1 J	94.5 J	98.3 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	128	116	UB	117
Cadmium	7440-43-9	5 ST	U	U	U	U
Calcium	7440-70-2	--	32500	28500	34400	33900 J
Chromium, Hexavalent	18540-29-9	50 ST	U	UJ	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	3.1 J	3.6 J	3.8 J	3.6 J
Copper	7440-50-8	200 ST	4.2 J	3.5 J	8.9 J	U
Cyanide	57-12-5	200 ST	U	9.2 J	U	U
Iron	7439-89-6	300 ST#	***182***	***210***	***126***	***204***
Lead	7439-92-1	25 ST	U	1.9 J	U	U
Magnesium	7439-95-4	35000 GV	8050	7100	7960	8180
Manganese	7439-96-5	300 ST#	***4870***	***4110***	***4420***	***4930***
Mercury	7439-97-6	0.7 ST	UB	U	U	UJ
Nickel	7440-02-0	100 ST	28.8 J	10.4 J	25.2 J	12.5 J
Potassium	7440-09-7	--	9850	8810	11600	11800
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	***81900***	***94400***	***98600***	***114000***
Thallium	7440-28-0	0.5 GV	U	***6 J***	U	***3.8 J***
Vanadium	7440-62-2	--	U	UB	U	U
Zinc	7440-66-6	2000 GV	5.4 J	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	4M-1	4M-1	4M-1	4M-1
			Sample_date	09/04/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	325'	325'	325'	325'
			Depth to bottom screen, relative to MSL	-159'	-159'	-159'	-159'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		46.5 J	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		16.8	20.2	UB	22.8
Barium	7440-39-3	1000 ST		8.5 J	16.9 J	17.1 J	17.1 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		***1580***	***1620***	***1650***	***1530***
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		37600	48000	47500	44000 J
Chromium, Hexavalent	18540-29-9	50 ST		UJ	UJ	U	UJ
Chromium, Total	7440-47-3	50 ST		5.7 J	3.9 J	U	6.1 J
Cobalt	7440-48-4	--		19.4 J	23.9 J	24.1 J	21.4 J
Copper	7440-50-8	200 ST		UB	4.6 J	8.4 J	U
Cyanide	57-12-5	200 ST		U	3.5 J	4 J	U
Iron	7439-89-6	300 ST#		***1760***	***1060***	***949***	***943***
Lead	7439-92-1	25 ST		U	1.8 J	U	U
Magnesium	7439-95-4	35000 GV		***37100***	***46000***	***44900***	***41300***
Manganese	7439-96-5	300 ST#		***1300***	***1670***	***1640***	***1500***
Mercury	7439-97-6	0.7 ST		U	U	U	UJ
Nickel	7440-02-0	100 ST		***128***	***153***	***177***	***144***
Potassium	7440-09-7	--		96400	92800	103000	92600
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***391000***	***406000***	***372000***	***379000***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		5.2 J	UB	U	U
Zinc	7440-66-6	2000 GV		UB	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	4M-2	4M-2	4M-2	4M-2
			Sample_date	02/26/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	486'	486'	486'	486'
			Depth to bottom screen, relative to MSL	-320'	-320'	-320'	-320'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		3.6 J	3.6 J	4 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	50.6	UB	62.4
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		59500	61700	65400	66600 J
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		2.9 J	3 J	3.4 J	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	2.8 J	2.1 J	U
Iron	7439-89-6	300 ST#		***1530 J***	***1560***	***1580***	***1720***
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		33400	34400	***36900***	***37000***
Manganese	7439-96-5	300 ST#		***18.2***	UB	***21.5***	***20.3***
Mercury	7439-97-6	0.7 ST		UB	U	U	UJ
Nickel	7440-02-0	100 ST		25.1 J	9.2 J	25.4 J	11.9 J
Potassium	7440-09-7	--		3870 J	3490 J	5520	4360 J
Selenium	7782-49-2	10 ST		7.2 J	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***166000***	***188000***	***189000***	***205000***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	6G-1	6G-1	6G-1	6G-1
			Sample_date	02/22/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	147'	147'	147'	147'
			Depth to bottom screen, relative to MSL	32'	32'	32'	32'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		15.7 J	11.7 J	U	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		81.4	UB	31.4 J	29.8 J
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		14700	14300	13700	15100
Chromium, Hexavalent	18540-29-9	50 ST		4.1 J	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		UB	5.2 J	U	U
Cobalt	7440-48-4	--		0.84 J	U	U	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		UJ	3.7 J	2.1 J	U
Iron	7439-89-6	300 ST#		47.6	78.8	U	12.6 J
Lead	7439-92-1	25 ST		U	U	U	8.7
Magnesium	7439-95-4	35000 GV		4820	4550	4690	5600
Manganese	7439-96-5	300 ST#		UB	3 J	U	U
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		16.9 J	4.9 J	UB	UB
Potassium	7440-09-7	--		4330 J	3450 J	U	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***54200***	***24000***	***27500***	***23400***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	3.6 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	6G-2	6G-2	6G-2	6G-2
			Sample_date	02/23/18	02/14/19	08/15/19	02/20/22
			Depth of Well BGS	230'	230'	230'	230'
			Depth to bottom screen, relative to MSL	-53'	-53'	-53'	-53'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		39.8 J	42.3 J	46.8 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		120	120	111	122
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		22100	23500	27200	28400
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		6.8 J	8 J	5.4 J	UB
Copper	7440-50-8	200 ST		1.1 J	U	U	U
Cyanide	57-12-5	200 ST		U	UJ	2.8 J	U
Iron	7439-89-6	300 ST#		U	U	12.6 J	U
Lead	7439-92-1	25 ST		U	U	U	4 J
Magnesium	7439-95-4	35000 GV		8510	9220	10300	10700
Manganese	7439-96-5	300 ST#		96.5	77	81.7	89.1
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		5 J	5.9 J	UB	UB
Potassium	7440-09-7	--		1840 J	1970 J	U	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***84800***	***93300***	***91200***	***92800***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	2.1 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	6G-3	6G-3	6G-3	6G-3
			Sample_date	02/23/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	315'	315'	315'	315'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		49.9 J	46.3 J	48.7 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		246	214	198	200
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		38800	37200	39400	35800
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		6 J	5.5 J	5.3 J	UB
Copper	7440-50-8	200 ST		5 J	U	U	U
Cyanide	57-12-5	200 ST		U	UJ	U	U
Iron	7439-89-6	300 ST#		***170***	***141***	***130***	***128***
Lead	7439-92-1	25 ST		2.6 J	2.7 J	U	10.8
Magnesium	7439-95-4	35000 GV		22300	21300	22000	20300
Manganese	7439-96-5	300 ST#		***4710***	***3550***	***3760***	***3290***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		15.7 J	12.5 J	13.2 J	UB
Potassium	7440-09-7	--		8760	8460	8220	7680 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***43800***	***42600***	***46400***	***46200***
Thallium	7440-28-0	0.5 GV		UB	***4.6 J***	***6.4 J***	***6.5 J***
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	2.3 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	6M-1	6M-1	6M-1	6M-1
			Sample_date	09/02/15	08/11/16	08/09/17	08/15/19
			Depth of Well BGS	545'	545'	545'	545'
			Depth to bottom screen, relative to MSL	-368'	-368'	-368'	-368'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	26.7 J	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		2.5 B	U	U	U
Barium	7440-39-3	1000 ST		9 B	U	12.4 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		44 B	41.5 J	46 J	33.4 J
Cadmium	7440-43-9	5 ST		U	U	UB	U
Calcium	7440-70-2	--		13000	13200	13000	16100
Chromium, Hexavalent	18540-29-9	50 ST		U	U	14 J	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		1.6 B	1.1 J	1.8 J	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	UJ	U	2.1 J
Iron	7439-89-6	300 ST#		94.4 B	155	183	102
Lead	7439-92-1	25 ST		5.8	3.1 J	U	U
Magnesium	7439-95-4	35000 GV		9190	9240	9100	10400
Manganese	7439-96-5	300 ST#		84.6	75.4	248	73
Mercury	7439-97-6	0.7 ST		U	UJ	UJ	U
Nickel	7440-02-0	100 ST		3 B	2.9 J	4.2 J	UB
Potassium	7440-09-7	--		1880 B	1030 J	2110 J	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		UBJ	UJ	U	U
Sodium	7440-23-5	20000 ST		18100	19500	18600	19500
Thallium	7440-28-0	0.5 GV		***2.8 B***	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	U	9.8 J	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	7M-1	7M-1	7M-1	7M-1
			Sample_date	02/23/18	02/12/19	08/20/19	02/12/20
			Depth of Well BGS	214'	214'	214'	214'
			Depth to bottom screen, relative to MSL	-152'	-152'	-152'	-152'
			Gradient relative to MSW	CROSS	CROSS	CROSS	CROSS
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	17.3 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		12.2 J	12.5 J	U	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	34.9 J	UB	32 J
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		17200	16200	16800	17100 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		U	U	U	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		U	U	U	U
Lead	7439-92-1	25 ST		U	U	3.7 J	U
Magnesium	7439-95-4	35000 GV		6980	6350	6370 J	6520
Manganese	7439-96-5	300 ST#		UB	UB	23.1	17
Mercury	7439-97-6	0.7 ST		UB	U	U	UJ
Nickel	7440-02-0	100 ST		U	U	U	U
Potassium	7440-09-7	--		2140 J	2020 J	3310 J	U
Selenium	7782-49-2	10 ST		U	U	4.8 J	U
Silver	7440-22-4	50 ST		U	U	UB	U
Sodium	7440-23-5	20000 ST		16800	16800	15800	15200
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	8G-1	8G-1	8G-1	8G-1
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	114'	114'	114'	114'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		163 J	257	382	411
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	UB	UB	35.2 J
Cadmium	7440-43-9	5 ST		0.38 J	UB	0.46 J	U
Calcium	7440-70-2	--		56600	68400	98800	107000 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		UB	3.7 J	5.3 J	16.4
Cobalt	7440-48-4	--		1.5 J	U	U	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	3.8 J	U	U
Iron	7439-89-6	300 ST#		26.4 J	21.8	27.2	86.6
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		22400	**38000**	***48600 J***	***41200***
Manganese	7439-96-5	300 ST#		22.8	23.2	41.1	10.1
Mercury	7439-97-6	0.7 ST		UB	U	U	UBJ
Nickel	7440-02-0	100 ST		23.6 J	24.2 J	8.7 J	10.6 J
Potassium	7440-09-7	--		4480 J	5450	6770	6170
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***194000***	***256000***	***342000***	***400000***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	0.94 J	U	U
Zinc	7440-66-6	2000 GV		17.8 J	23.8	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	8M-1	8M-1	8M-1	8M-1
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	270'	270'	270'	270'
			Depth to bottom screen, relative to MSL	-134'	-134'	-134'	-134'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		31.9 J	29.7 J	32.2 J	41.1 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		244	187	UB	239
Cadmium	7440-43-9	5 ST		0.18 J	UB	U	U
Calcium	7440-70-2	--		39400	40600	44000	58600 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		7.1 J	5.2 J	5.2 J	7.2 J
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	3.8 J	U	U
Iron	7439-89-6	300 ST#		15.2 J	U	U	UB
Lead	7439-92-1	25 ST		U	U	4.3 J	U
Magnesium	7439-95-4	35000 GV		25500	26200	28500 J	***38700***
Manganese	7439-96-5	300 ST#		37.5	37.8	43.5	63.1
Mercury	7439-97-6	0.7 ST		UB	U	U	UBJ
Nickel	7440-02-0	100 ST		35.2 J	32.5 J	12.4 J	20.6 J
Potassium	7440-09-7	--		8350	7320	7890	7640
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	UB	U
Sodium	7440-23-5	20000 ST		***69900***	***56900***	***63700***	***91700***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	0.98 J	U	U
Zinc	7440-66-6	2000 GV		14.8 J	8.5 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	8M-2	8M-2	8M-2	8M-2
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	383'	383'	383'	383'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	U	U	U
Antimony	7440-36-0	3 ST		U	3.1 J	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		4.2 J	4.5 J	113 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	UB	459 J	U
Cadmium	7440-43-9	5 ST		U	2.9 J	U	U
Calcium	7440-70-2	--		10500	11000	30600 J	12600 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		1.2 J	U	3.6 J	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	5 J	U	U
Iron	7439-89-6	300 ST#		UJ	U	***31.4 J***	UB
Lead	7439-92-1	25 ST		U	U	3.6 J	U
Magnesium	7439-95-4	35000 GV		5840	6040	11100 J	6790
Manganese	7439-96-5	300 ST#		UB	11.6	***1900 J***	14.3
Mercury	7439-97-6	0.7 ST		UB	U	U	UBJ
Nickel	7440-02-0	100 ST		15.3 J	16 J	8.6 J	U
Potassium	7440-09-7	--		1130 J	1120 J	44000 J	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		9950	11800	***85100 J***	10200
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	3 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l		Sample ID	9G-1	9G-1	9G-1	9G-1
		Sample_date	08/09/16	08/08/17	09/07/18	08/20/19
		Depth of Well BGS	68'	68'	68'	68'
		Depth to bottom screen, relative to MSL	23'	23'	23'	23'
		Gradient relative to MSW	UP	UP	UP	UP
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	2880	1030	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	U	14.5 J	8.3 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	6.4 J	UB	UB	UB
Cadmium	7440-43-9	5 ST	U	0.36 J	UB	U
Calcium	7440-70-2	--	4530	1720	1350	1870
Chromium, Hexavalent	18540-29-9	50 ST	U	U	23	UJ
Chromium, Total	7440-47-3	50 ST	2.4 J	21.4	53	6.1 J
Cobalt	7440-48-4	--	U	1.1 J	0.74 J	U
Copper	7440-50-8	200 ST	U	5.1 J	UB	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	***2680***	***1480***	27.2
Lead	7439-92-1	25 ST	U	8	3.7 J	U
Magnesium	7439-95-4	35000 GV	1400	611	519	607 J
Manganese	7439-96-5	300 ST#	4.1 J	***83***	***74.4***	U
Mercury	7439-97-6	0.7 ST	UB	UB	UB	U
Nickel	7440-02-0	100 ST	7.4 J	7 J	16 J	3.3 J
Potassium	7440-09-7	--	U	3530 J	1480 J	U
Selenium	7782-49-2	10 ST	UJ	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	7040 J	5970	7480	5100
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	5.4 J	3.5 J	U
Zinc	7440-66-6	2000 GV	U	70.7	UB	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	10G-1	10G-1	10G-1	10G-1
			Sample_date	08/14/15	08/10/16	08/10/17	08/21/19
			Depth of Well BGS	69'	69'	69'	69'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	323	99.3 J
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		101 B	104 J	43.4 J	68.1 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UJ	14.4 J	UB	UB
Cadmium	7440-43-9	5 ST		0.4 B	0.3 J	***14.7***	U
Calcium	7440-70-2	--		14700 J	12700	6580	8850
Chromium, Hexavalent	18540-29-9	50 ST		U	U	15 J	U
Chromium, Total	7440-47-3	50 ST		30	7.4 J	**348**	6.8 J
Cobalt	7440-48-4	--		0.8 B	U	U	U
Copper	7440-50-8	200 ST		UB	UB	8.9 J	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		170	59.1 J	**5160**	33.6
Lead	7439-92-1	25 ST		8.8	2.3 J	1.9 J	U
Magnesium	7439-95-4	35000 GV		4670 BJ	5130	2210	3930
Manganese	7439-96-5	300 ST#		258 J	224	**248**	121
Mercury	7439-97-6	0.7 ST		UJ	UB	UBJ	U
Nickel	7440-02-0	100 ST		7 B	4 J	9.3 J	14.4 J
Potassium	7440-09-7	--		2330 B	1180 J	11300	UB
Selenium	7782-49-2	10 ST		U	UJ	U	U
Silver	7440-22-4	50 ST		UB	U	U	U
Sodium	7440-23-5	20000 ST		***64100***	***73500*** J	***38600***	***76700***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	1.2 J	U
Zinc	7440-66-6	2000 GV		UB	U	68.3	14.1 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l		Sample ID	10M-1	10M-1	10M-1	10M-1
		Sample_date	02/15/18	02/12/19	08/21/19	02/13/20
		Depth of Well BGS	256	256	256	256
		Depth to bottom screen, relative to MSL	-167	-167	-167	-167
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	5 J	U	U	U
Barium	7440-39-3	1000 ST	3 J	3.7 J	3.6 J	U
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	68.9	70.7	UB	73.2
Cadmium	7440-43-9	5 ST	U	U	U	U
Calcium	7440-70-2	--	68700	71300	73500	70700 J
Chromium, Hexavalent	18540-29-9	50 ST	UJ	UJ	U	U
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	1.3 J	0.98 J	U	U
Copper	7440-50-8	200 ST	U	U	U	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	U	9.6 J	U
Lead	7439-92-1	25 ST	U	U	U	U
Magnesium	7439-95-4	35000 GV	***43200***	***45600***	***47500***	***45400***
Manganese	7439-96-5	300 ST#	3.4 J	UB	5.6 J	U
Mercury	7439-97-6	0.7 ST	UB	U	0.11 J	UJ
Nickel	7440-02-0	100 ST	27.4 J	6.8 J	26.6 J	7.8 J
Potassium	7440-09-7	--	3470 J	3550 J	3100 J	3690 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	***46100***	***63300***	***65500***	***70800***
Thallium	7440-28-0	0.5 GV	UB	U	U	U
Vanadium	7440-62-2	--	U	UB	U	U
Zinc	7440-66-6	2000 GV	U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	11G-1	11G-1	11G-1	11G-1
			Sample_date	08/31/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	145'	145'	145'	145'
			Depth to bottom screen, relative to MSL	22'	22'	22'	22'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		115 J	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		58.8 J	55.3 J	58.5 J	58 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		955	922	959	935
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		1600	1960	1960	2200
Chromium, Hexavalent	18540-29-9	50 ST		11 J	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		7.8 J	3.6 J	U	U
Cobalt	7440-48-4	--		23.5 J	23 J	23.7 J	23.2 J
Copper	7440-50-8	200 ST		39.2	22.6 J	21 J	21.9 J
Cyanide	57-12-5	200 ST		U	U	2.8 J	U
Iron	7439-89-6	300 ST#		***636***	***451***	***462***	***558***
Lead	7439-92-1	25 ST		1.3 J	U	U	UJ
Magnesium	7439-95-4	35000 GV		6440	6800	7170	8240
Manganese	7439-96-5	300 ST#		***964***	***1520***	***1500***	***1490 J***
Mercury	7439-97-6	0.7 ST		UB	U	0.11 J	U
Nickel	7440-02-0	100 ST		***104***	98.6	***102***	99.1
Potassium	7440-09-7	--		71500	68400	72900	73700
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UJ
Sodium	7440-23-5	20000 ST		***255000***	***249000***	***248000***	***256000***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		1.8 J	UB	U	U
Zinc	7440-66-6	2000 GV		UB	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	11G-2	11G-2	11G-2	11G-2
			Sample_date	08/31/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-51	-51	-51	-51
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		182 J	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		221	177 J	145 J	175 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		***1600***	***1490***	***1240***	***1240***
Cadmium	7440-43-9	5 ST		UB	U	U	U
Calcium	7440-70-2	--		17100	17000	25600	35700
Chromium, Hexavalent	18540-29-9	50 ST		20 J	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		7.9 J	2.8 J	U	U
Cobalt	7440-48-4	--		33.7 J	33.4 J	25.9 J	27.6 J
Copper	7440-50-8	200 ST		85	22.9 J	11.3 J	12.7 J
Cyanide	57-12-5	200 ST		U	U	2.1 J	U
Iron	7439-89-6	300 ST#		***951***	***627***	***1290***	***1390***
Lead	7439-92-1	25 ST		4.1 J	U	U	UJ
Magnesium	7439-95-4	35000 GV		16200	17000	17100	21900
Manganese	7439-96-5	300 ST#		***2940***	***2490***	***3640***	***4290 J***
Mercury	7439-97-6	0.7 ST		UB	U	0.1 J	U
Nickel	7440-02-0	100 ST		***194***	***175***	***136***	***142***
Potassium	7440-09-7	--		95500	84600	67900	68100
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UJ
Sodium	7440-23-5	20000 ST		***394000***	***375000***	***302000***	***314000***
Thallium	7440-28-0	0.5 GV		U	U	***6 J***	U
Vanadium	7440-62-2	--		1.8 J	UB	U	U
Zinc	7440-66-6	2000 GV		UB	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	11M-1	11M-1	11M-1	11M-1
			Sample_date	08/19/15	08/09/16	08/03/17	08/14/19
			Depth of Well BGS	320'	320'	320'	320'
			Depth to bottom screen, relative to MSL	-154'	-154'	-154'	-154'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	UB	U
Antimony	7440-36-0	3 ST		UB	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		5 B	U	7.2 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	26.2 J	UB	U
Cadmium	7440-43-9	5 ST		U	U	0.093 J	U
Calcium	7440-70-2	--		41400 J	40000	36800	40000
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	4.7 J	U
Cobalt	7440-48-4	--		0.9 B	1.1 J	0.93 J	U
Copper	7440-50-8	200 ST		UB	UB	U	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		U	129	248	75.2
Lead	7439-92-1	25 ST		1.6 BJ	3.5 J	3.8 J	4.4 J
Magnesium	7439-95-4	35000 GV		22900 J	22500	18900	21500
Manganese	7439-96-5	300 ST#		144 J	158	121	126
Mercury	7439-97-6	0.7 ST		UJ	UB	UB	U
Nickel	7440-02-0	100 ST		7.2 B	6.9 J	9.2 J	UB
Potassium	7440-09-7	--		2660 BJ	1970 J	2770 J	U
Selenium	7782-49-2	10 ST		UJ	UJ	U	U
Silver	7440-22-4	50 ST		UJ	U	U	U
Sodium	7440-23-5	20000 ST		***39600 J***	***39300*** J	***32600***	***41800***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		UB	U	UB	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	12M-1	12M-1	12M-1	12M-1
			Sample_date	02/22/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	338'	338'	338'	338'
			Depth to bottom screen, relative to MSL	-163'	-163'	-163'	-163'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		***25.2***	21.2	UB	19
Barium	7440-39-3	1000 ST		20.4 J	18.5 J	19.8 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		281	257	UB	328
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		72000	70100	74900	72700
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		2.4 J	2.2 J	3.1 J	U
Copper	7440-50-8	200 ST		UB	U	5.3 J	U
Cyanide	57-12-5	200 ST		U	8.1 J	U	U
Iron	7439-89-6	300 ST#		***1860***	***1430***	***1370***	***1340***
Lead	7439-92-1	25 ST		UB	U	U	13
Magnesium	7439-95-4	35000 GV		***39000***	***38500***	***41300***	***40100***
Manganese	7439-96-5	300 ST#		***1590***	***1350***	***1390***	***1300***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		13 J	11.6 J	38.1 J	UB
Potassium	7440-09-7	--		4840 J	4140 J	UB	4490 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***70400***	***69900***	***71400***	***77100***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		U	3 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

		Sample ID	13G-1	13G-1	13G-1	13G-1
		Sample_date	02/15/18	02/13/19	08/14/19	02/11/20
		Depth of Well BGS	93'	93'	93'	93'
		Depth to bottom screen, relative to MSL	17'	17'	17'	17'
Units in ug/l		**Gradient relative to MSW**	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	U	U
Antimony	7440-36-0	3 ST	UB	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	22.6 J	24.3 J	17.9 J	14.8 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	20.1 J	17.2 J	U	U
Cadmium	7440-43-9	5 ST	U	UB	U	U
Calcium	7440-70-2	--	18800	17500	11800	9140
Chromium, Hexavalent	18540-29-9	50 ST	U	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST	3.5 J	4.5 J	U	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	U	7.8 J	U
Cyanide	57-12-5	200 ST	U	UJ	2.8 J	U
Iron	7439-89-6	300 ST#	13.8 J	34.6	U	U
Lead	7439-92-1	25 ST	U	U	U	UJ
Magnesium	7439-95-4	35000 GV	7030	6590	4380	3460
Manganese	7439-96-5	300 ST#	5.3 J	UB	U	UJ
Mercury	7439-97-6	0.7 ST	UB	U	U	U
Nickel	7440-02-0	100 ST	21.2 J	5.5 J	UB	2.6 J
Potassium	7440-09-7	--	1530 J	1470 J	U	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	UJ
Sodium	7440-23-5	20000 ST	14600	***20400***	18400	***20500***
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	20.2	UB	19.2 J	14 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	13M-1	13M-1	13M-1	13M-1
			Sample_date	02/15/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	265'	265'	265'	265'
			Depth to bottom screen, relative to MSL	-155	-155	-155	-155
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	30.2 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		20.6 J	18.5 J	17.8 J	18 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		138	149	141	142
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		94900	83900	89400	96600
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	1.7 J	U	U
Cobalt	7440-48-4	--		1.8 J	1.1 J	U	U
Copper	7440-50-8	200 ST		2.7 J	U	U	U
Cyanide	57-12-5	200 ST		U	U	2.1 J	U
Iron	7439-89-6	300 ST#		200	50.7	37.6	103
Lead	7439-92-1	25 ST		U	1.3 J	U	UJ
Magnesium	7439-95-4	35000 GV		***70400***	***61300***	***65600***	***73300***
Manganese	7439-96-5	300 ST#		27.2	26.4	24.3	26.5 J
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		43.8	9.1 J	UB	8.7 J
Potassium	7440-09-7	--		4580 J	4280 J	3750 J	4260 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UJ
Sodium	7440-23-5	20000 ST		***63000***	***61700***	***52000***	***52800***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	UB	U	U
Zinc	7440-66-6	2000 GV		U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	14G-1A	14G-1A	14G-1A	14G-1A
			Sample_date	02/14/18	02/11/19	08/13/19	02/19/20
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-58	-58	-58	-58
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	29.5 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		28.4 J	36.1 J	39 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		122	151	168	160
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		38800	48000	49100	48400
Chromium, Hexavalent	18540-29-9	50 ST		UJ	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		3.6 J	4.2 J	4.6 J	UB
Copper	7440-50-8	200 ST		0.52 J	U	U	U
Cyanide	57-12-5	200 ST		U	2.8 J	2.4 J	U
Iron	7439-89-6	300 ST#		U	39.3	14.8 J	U
Lead	7439-92-1	25 ST		U	1.4 J	U	9
Magnesium	7439-95-4	35000 GV		20100	27100	28200	27700
Manganese	7439-96-5	300 ST#		U	UB	U	U
Mercury	7439-97-6	0.7 ST		UB	U	U	0.17 J
Nickel	7440-02-0	100 ST		23.3 J	6.4 J	27.4 J	UB
Potassium	7440-09-7	--		4540 J	4310 J	4130 J	3770 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***50300***	***66500***	***71600***	***70000***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	UB	U	U
Zinc	7440-66-6	2000 GV		U	UB	5.4 J	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

		Sample ID	14G-2	14G-2	14G-2	14G-2
		Sample_date	02/14/18	02/11/19	08/13/19	02/13/20
		Depth of Well BGS	264'	264'	264'	264'
		Depth to bottom screen, relative to MSL	-103	-103	-103	-103
Units in ug/l		**Gradient relative to MSW**	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	U	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	48.6 J	56 J	53.5 J	56.9 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	116	137	131	135
Cadmium	7440-43-9	5 ST	U	UB	U	U
Calcium	7440-70-2	--	40000	46900	43200	45700 J
Chromium, Hexavalent	18540-29-9	50 ST	UJ	UJ	UJ	U
Chromium, Total	7440-47-3	50 ST	3.4 J	7 J	6 J	7.9 J
Cobalt	7440-48-4	--	3.5 J	3.8 J	3.2 J	U
Copper	7440-50-8	200 ST	U	U	7.3 J	U
Cyanide	57-12-5	200 ST	U	2.8 J	U	U
Iron	7439-89-6	300 ST#	16.2 J	48.5	72.6	56.7
Lead	7439-92-1	25 ST	U	U	U	U
Magnesium	7439-95-4	35000 GV	24200	28700	26800	28700
Manganese	7439-96-5	300 ST#	U	UB	U	U
Mercury	7439-97-6	0.7 ST	UB	U	U	UBJ
Nickel	7440-02-0	100 ST	37 J	28.2 J	45.8	42.1
Potassium	7440-09-7	--	2430 J	2430 J	2250 J	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	***45500***	***53800***	***49100***	***54800***
Thallium	7440-28-0	0.5 GV	UB	U	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	14M-1	14M-1	14M-1	14M-1
			Sample_date	09/05/18	02/11/19	08/13/19	02/13/20
			Depth of Well BGS	355'	355'	355'	355'
			Depth to bottom screen, relative to MSL	-194'	-194'	-194'	-194'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		157 J	19.7 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		50.6 J	37.1 J	36.4 J	36.6 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		***1120***	***1160***	***1130***	***1070***
Cadmium	7440-43-9	5 ST		UB	UB	U	U
Calcium	7440-70-2	--		91800	97100	88100	87800 J
Chromium, Hexavalent	18540-29-9	50 ST		UJ	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		2.5 J	U	U	U
Cobalt	7440-48-4	--		12.4 J	13.7 J	13.4 J	12 J
Copper	7440-50-8	200 ST		65.9	6 J	8.7 J	U
Cyanide	57-12-5	200 ST		U	2.2 J	U	U
Iron	7439-89-6	300 ST#		***518***	***689***	***551***	***604***
Lead	7439-92-1	25 ST		2.6 J	3.7 J	U	U
Magnesium	7439-95-4	35000 GV		***56200***	***59600***	***54500***	***52900***
Manganese	7439-96-5	300 ST#		***3920***	***5380***	***5130***	***4970***
Mercury	7439-97-6	0.7 ST		U	U	U	UBJ
Nickel	7440-02-0	100 ST		100	***105***	***124***	98.9
Potassium	7440-09-7	--		40300	38500	40300	39200
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***286000***	***307000***	***267000***	***282000***
Thallium	7440-28-0	0.5 GV		U	U	U	***5.3 J***
Vanadium	7440-62-2	--		UB	UB	U	U
Zinc	7440-66-6	2000 GV		UB	UB	5.6 J	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l		Sample ID	15G-1	15G-1	15G-1	15G-1
		Sample_date	08/19/15	08/09/16	08/14/17	08/15/19
		Depth of Well BGS	160'	160'	160'	160'
		Depth to bottom screen, relative to MSL	23'	23'	23'	23'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	33.4 J	289	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	16.7 B	17.6 J	57.6 J	17.1 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UJ	12.9 J	UB	UB
Cadmium	7440-43-9	5 ST	U	U	1.7 J	U
Calcium	7440-70-2	--	18900 J	19900	23600	20900
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	UJ
Chromium, Total	7440-47-3	50 ST	UB	2.4 J	7.6 J	4.6 J
Cobalt	7440-48-4	--	U	0.4 J	U	U
Copper	7440-50-8	200 ST	U	UB	6.6 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	U	98.9 J	***415***	14.3 J
Lead	7439-92-1	25 ST	9	2 J	6.1	U
Magnesium	7439-95-4	35000 GV	7300 J	7850	7520	9530
Manganese	7439-96-5	300 ST#	UJ	12.2 J	50	5.3 J
Mercury	7439-97-6	0.7 ST	UJ	UB	U	U
Nickel	7440-02-0	100 ST	UB	3 J	9.2 J	16.9 J
Potassium	7440-09-7	--	1760 B	1260 J	2800 J	UB
Selenium	7782-49-2	10 ST	U	UJ	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	5830	7630 J	7630	8570
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	U	U	1.4 J	U
Zinc	7440-66-6	2000 GV	UB	U	132	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l		Sample ID	16G-1	16G-1	16G-1	16G-1
		Sample_date	08/14/15	08/10/16	08/10/17	08/21/19
		Depth of Well BGS	57'	57'	57'	57'
		Depth to bottom screen, relative to MSL	20'	20'	20'	20'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	UB	U	99.2 J	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	13.7 B	18.9 J	23.1 J	20.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	UJ	7.7 J	UB	U
Cadmium	7440-43-9	5 ST	U	U	***5.7***	U
Calcium	7440-70-2	--	7160 J	9110	8620	7480
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	U
Chromium, Total	7440-47-3	50 ST	UB	U	3.5 J	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	U	U	14.3 J	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	33.8 B	U	***1420***	22.9
Lead	7439-92-1	25 ST	3.1	U	U	U
Magnesium	7439-95-4	35000 GV	1540 BJ	2110	1950	1580
Manganese	7439-96-5	300 ST#	UJ	U	***132***	U
Mercury	7439-97-6	0.7 ST	UJ	UB	UJ	U
Nickel	7440-02-0	100 ST	U	U	4.2 J	U
Potassium	7440-09-7	--	1240 B	U	1940 J	UB
Selenium	7782-49-2	10 ST	U	UJ	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	3150 B	1490 J	UB	10200
Thallium	7440-28-0	0.5 GV	***2.4 B***	UB	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	UB	U	27.2	5.9 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	16M-1	16M-1	16M-1	16M-1
			Sample_date	02/15/18	02/12/19	08/21/19	02/16/20
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-163	-163	-163	-163
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	19.4 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		5.4 J	5.4 J	5.3 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		66.5	80.4	UB	93.7
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		52500	49600	50300	51100
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		2.9 J	2.8 J	2.6 J	U
Copper	7440-50-8	200 ST		U	U	U	U
Cyanide	57-12-5	200 ST		U	4.8 J	U	U
Iron	7439-89-6	300 ST#		U	U	U	U
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		32500	31300	31800	32200
Manganese	7439-96-5	300 ST#		8.2 J	UB	6.4 J	U
Mercury	7439-97-6	0.7 ST		UB	U	U	0.11 J
Nickel	7440-02-0	100 ST		28.2 J	9 J	24.9 J	8 J
Potassium	7440-09-7	--		2610 J	2320 J	UB	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UJ
Sodium	7440-23-5	20000 ST		***41000***	***47100***	***46200***	***46900***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	UB	U	U
Zinc	7440-66-6	2000 GV		U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	18G-1	18G-1	18G-1	18G-1
			Sample_date	02/16/18	02/13/19	08/13/19	02/11/20
			Depth of Well BGS	157'	157'	157'	157'
			Depth to bottom screen, relative to MSL	11'	11'	11'	11'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	43.4 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		42.5 J	29.8 J	40.8 J	80.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		329	236	193	314
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		5770	5080	10600	15800
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	5.1 J
Cobalt	7440-48-4	--		11 J	11.8 J	13.6 J	16.7 J
Copper	7440-50-8	200 ST		12.8 J	12.9 J	10.5 J	29.9
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		***67.8***	***53.1***	***20.9***	***1560***
Lead	7439-92-1	25 ST		U	2.2 J	U	UJ
Magnesium	7439-95-4	35000 GV		4550	3850	6810	8310
Manganese	7439-96-5	300 ST#		***12700***	***9940***	***12000***	***6840 J***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		49	25.6 J	28.8 J	35.3 J
Potassium	7440-09-7	--		26600	19400	16800	22600
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	2.4 J	UJ
Sodium	7440-23-5	20000 ST		***106000***	***97100***	***111000***	***124000***
Thallium	7440-28-0	0.5 GV		U	***7.5 J***	***12.7***	***4.7 J***
Vanadium	7440-62-2	--		U	UB	U	U
Zinc	7440-66-6	2000 GV		U	UB	U	14.9 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	09/06/18	02/13/19	08/13/19	02/11/20
			Depth of Well BGS	197'	197'	197'	197'
			Depth to bottom screen, relative to MSL	-29	-29	-29	-29
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		45.2 J	19.4 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		57.7 J	52.2 J	55.6 J	79.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		177	158	160	208
Cadmium	7440-43-9	5 ST		UB	UB	U	U
Calcium	7440-70-2	--		22000	23100	23600	27200
Chromium, Hexavalent	18540-29-9	50 ST		UJ	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		56.6	5.4 J	U	U
Cobalt	7440-48-4	--		16 J	11.8 J	11 J	17.9 J
Copper	7440-50-8	200 ST		UB	3 J	9.3 J	U
Cyanide	57-12-5	200 ST		U	U	U	3 J
Iron	7439-89-6	300 ST#		***356***	***27.5***	U	***63.8***
Lead	7439-92-1	25 ST		U	U	U	UJ
Magnesium	7439-95-4	35000 GV		8860	8340	8330	9470
Manganese	7439-96-5	300 ST#		***7000***	***4790***	***7030***	***9430 J***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		11.6 J	9.3 J	10.6 J	14.5 J
Potassium	7440-09-7	--		12300	12000	14000	16300
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UJ
Sodium	7440-23-5	20000 ST		***87400***	***95600***	***95100***	***104000***
Thallium	7440-28-0	0.5 GV		U	***6 J***	***5.9 J***	***6.4 J***
Vanadium	7440-62-2	--		UB	UB	U	U
Zinc	7440-66-6	2000 GV		UB	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l		Sample ID	22M-1	22M-1	22M-1	22M-1
		Sample_date	09/05/18	02/12/19	08/16/19	02/12/20
		Depth of Well BGS	222'	222'	222'	222'
		Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
		Gradient relative to MSW	UP	UP	UP	UP
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	307 J	281	U	U
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	33 J	34.4 J	32.9 J	34.5 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	40.4 J	39.6 J	UB	37.5 J
Cadmium	7440-43-9	5 ST	UB	UB	U	U
Calcium	7440-70-2	--	18100	17400	17600	18200 J
Chromium, Hexavalent	18540-29-9	50 ST	UJ	U	U	UJ
Chromium, Total	7440-47-3	50 ST	U	U	U	U
Cobalt	7440-48-4	--	U	0.97 J	U	U
Copper	7440-50-8	200 ST	U	U	U	U
Cyanide	57-12-5	200 ST	U	2.9 J	2.1 J	U
Iron	7439-89-6	300 ST#	***469***	248	21.1	UB
Lead	7439-92-1	25 ST	U	2.3 J	U	U
Magnesium	7439-95-4	35000 GV	5340	5160	5140	5370
Manganese	7439-96-5	300 ST#	UB	UB	5.3 J	U
Mercury	7439-97-6	0.7 ST	UB	U	U	UBJ
Nickel	7440-02-0	100 ST	U	U	9.8 J	U
Potassium	7440-09-7	--	2130 J	2360 J	UB	U
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	17800	18300	17800	19400
Thallium	7440-28-0	0.5 GV	U	U	U	U
Vanadium	7440-62-2	--	UB	UB	U	U
Zinc	7440-66-6	2000 GV	UB	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

Appendix A-2
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	23M-1	23M-1	23M-1	23M-1
			Sample_date	02/15/18	02/12/19	08/14/19	02/18/20
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	16.9 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		5 J	5 J	U	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		75.3	78.1	75.2	83.2
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		37800	37100	37600	38200
Chromium, Hexavalent	18540-29-9	50 ST		UJ	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		0.97 J	1.6 J	U	U
Copper	7440-50-8	200 ST		U	2.8 J	12.9 J	U
Cyanide	57-12-5	200 ST		U	3.5 J	2.1 J	U
Iron	7439-89-6	300 ST#		U	U	U	U
Lead	7439-92-1	25 ST		U	2.2 J	U	U
Magnesium	7439-95-4	35000 GV		18300	18100	18100	18600
Manganese	7439-96-5	300 ST#		49.2	50.7	53.4	51.4
Mercury	7439-97-6	0.7 ST		UB	U	U	0.1 J
Nickel	7440-02-0	100 ST		20.9 J	0.99 J	U	U
Potassium	7440-09-7	--		2030 J	1860 J	U	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UJ
Sodium	7440-23-5	20000 ST		***27400***	***29400***	***26900***	***27800***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	UB	U	U
Zinc	7440-66-6	2000 GV		U	UB	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated bias low
J-	Estimated bias high
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
D	Dectected at secondary dilution
UB	Qualified as non detect (U) based on blank results
--	No ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions
NR	Not reported

APPENDIX A-3

MONITORING WELL SAMPLE RESULTS
LEACHATE INDICATORS

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	06/09/17	08/04/17	10/27/17	12/18/17	02/21/18
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Alkalinity, Total (as CaCO3)	ALK	---		560	579	446	401	415
Biochemical Oxygen Demand (BOD)	BOD5	---		1 J	UB	1.0 J	1 J	U
Bromide	24959-67-9	2 GV		1.2	1.5	1.4	1.5	1.7
Chloride (as Cl)	16887-00-6	250 ST		171	227	225	240	218
Cod - Chemical Oxygen Demand	COD	---		29.6	42.1	45.7	36.8	43.1
Color	COLOR	---		U	U	10.0	5	5
Hardness (as CaCO3)	HARD	---		470	450	480	400	280
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***4.3***	***4.9 J***	***5.0***	***4.9***	***5.5 J***
Nitrogen, Kjeldahl, Total	KN	---		26.6	7.8 J	6.0	6.2	6.2 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.68	U	U	0.015 J	UJ
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.003 J***	UB	***0.003 J***	***0.004 J***	UB
Sulfate (as SO4)	14808-79-8	250 ST		31.5	36.1	34.7	24.9	37.6
Total Dissolved Solids	E-10173	---		748	842	912	780	846
Total Organic Carbon	TOC	---		9.2	9.6	10.4	10.4	8.6

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	04/27/18	07/03/18	09/07/18	1025/18	12/24/18
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Alkalinity, Total (as CaCO3)	ALK	---		466	476	530 J	485	541
Biochemical Oxygen Demand (BOD)	BOD5	---		U	2.0	U	U	U
Bromide	24959-67-9	2 GV		1.6	1.8	1.7	1.6	1.6
Chloride (as Cl)	16887-00-6	250 ST		212	251	195	203	230
Cod - Chemical Oxygen Demand	COD	---		48.2	56.3	64.5	47.2	45.1
Color	COLOR	---		U	5.0	5	10	5
Hardness (as CaCO3)	HARD	---		460	700	360	400	500
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***4.7***	***4.0***	***5.2***	***4.6***	***4.6***
Nitrogen, Kjeldahl, Total	KN	---		6	24.6	6.2 J	6.4	4.5
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		3	U	U	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.0051***	0.004 J	UB	***0.0110***	***0.0084***
Sulfate (as SO4)	14808-79-8	250 ST		37.7	43.3	35	37.7	37.2
Total Dissolved Solids	E-10173	---		863	876	810	872	824
Total Organic Carbon	TOC	---		8.2	10.8	8.8	10	10.4

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-1D*	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	02/14/19	08/19/19	10/30/19	12/20/19	02/14/20
			Depth of Well BGS	399'	399'	399'	399'	399'
			Depth to bottom screen, relative to MSL	-247'	-247'	-247'	-247'	-247'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Alkalinity, Total (as CaCO3)	ALK	---		551	494	515	518	510
Biochemical Oxygen Demand (BOD)	BOD5	---		U	UB	2.3	1 J	UB
Bromide	24959-67-9	2 GV		1.8	2	1.6	1.7	1.7
Chloride (as Cl)	16887-00-6	250 ST		U	231	236	229	237
Cod - Chemical Oxygen Demand	COD	---		38.9 J	34.5	36.7	43.3	52.6
Color	COLOR	---		10.0	U	5	5	U
Hardness (as CaCO3)	HARD	---		500	420	440	500	500
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***4.9***	***4.7***	***4.7***	***4.2***	***4.8***
Nitrogen, Kjeldahl, Total	KN	---		7.2 J	5.3 J	5.9	5.4	6.9 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	U	0.046 J	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UJ	U	U	***0.003 J***
Sulfate (as SO4)	14808-79-8	250 ST		41.1	45.8	37	39	37.6
Total Dissolved Solids	E-10173	---		824	770	824	866	798
Total Organic Carbon	TOC	---		10.4	9.8	9.9	9.5	9.7

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-1I	GM-1I	GM-1I	GM-1I
			Sample_date	02/21/18	02/14/19	08/19/19	02/14/20
			Depth of Well BGS	285'	285'	285'	285'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		153	211	201	231
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.22 J	0.43 J	0.28 J	0.23 J
Chloride (as Cl)	16887-00-6	250 ST		64.2	39.5 J	68.7	62.8
Cod - Chemical Oxygen Demand	COD	---		13.5	10 J	10.2	12.5
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		180	180	200	240
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.021 J	U	UB	U
Nitrogen, Kjeldahl, Total	KN	---		UJ	UJ	UBJ	U
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		6.3 J	0.96 J	7	6.6
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		26.9	46.0	31.7	25.6
Total Dissolved Solids	E-10173	---		383	351	348	402
Total Organic Carbon	TOC	---		UB	1.0	1.8	0.99 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-1S	GM-1S	GM-1S	GM-1S
			Sample_date	09/03/15	08/03/16	08/14/17	08/19/19
			Depth of Well BGS	135'	135'	135'	135'
			Depth to bottom screen, relative to MSL	19'	19'	19'	19'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		187 D	192 D	226	228
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	1 J	UB
Bromide	24959-67-9	2 GV		U	U	0.19 J	0.43 J
Chloride (as Cl)	16887-00-6	250 ST		84.9 D	58.6 D	62.5	91.2
Cod - Chemical Oxygen Demand	COD	---		U	13.9	25.5	10.2
Color	COLOR	---		U	10	5	U
Hardness (as CaCO3)	HARD	---		60 D	190 D	153	140
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		U	UB	0.055 J	UB
Nitrogen, Kjeldahl, Total	KN	---		1.7 DJ	U	0.69 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		6.54 D	5.55 D	5.5 J	6.9
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	UB	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	***0.003 J***	UJ
Sulfate (as SO4)	14808-79-8	250 ST		30.5	23.1	29.5	32.9
Total Dissolved Solids	E-10173	---		356	367	324	372
Total Organic Carbon	TOC	---		2.6	2.1	1.7	1.4

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-2D	GM-2D	GM-2D	GM-2D
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	398'	398'	398'	398'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		18.4	20.4	23.2	20.6
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	1 J	UBJ
Bromide	24959-67-9	2 GV		U	U	U	0.083 J
Chloride (as Cl)	16887-00-6	250 ST		5.11	3.96 J	4.9	4.2
Cod - Chemical Oxygen Demand	COD	---		U	35.9 J	13	U
Color	COLOR	---		U	5	15	U
Hardness (as CaCO3)	HARD	---		22	19	20	12
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.1	0.3 J	0.092 J	UB
Nitrogen, Kjeldahl, Total	KN	---		1.72 D	U	0.64 J	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	U	0.11	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	UB	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	***0.008***	***0.003 J***	UJ
Sulfate (as SO4)	14808-79-8	250 ST		U	U	3.6 J	3.6 J
Total Dissolved Solids	E-10173	---		21	43	31	54
Total Organic Carbon	TOC	---		U	U	1.5	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-2I	GM-2I	GM-2I	GM-2I
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	298'	298'	298'	298'
			Depth to bottom screen, relative to MSL	-136'	-136'	-136'	-136'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		111	112	122	117
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	1 J	UBJ
Bromide	24959-67-9	2 GV		U	U	U	UB
Chloride (as Cl)	16887-00-6	250 ST		20.3	15	17.1	46.5
Cod - Chemical Oxygen Demand	COD	---		U	U	21.3	U
Color	COLOR	---		U	5	20	U
Hardness (as CaCO3)	HARD	---		180 D	150 D	124	130
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		U	0.11	0.099 J	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	0.77 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		4.75 DJ	5.65 D	4.8	5.7 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	UB	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	***0.005***	UJ
Sulfate (as SO4)	14808-79-8	250 ST		11.4	10.2	11.4	17.5
Total Dissolved Solids	E-10173	---		169	198	175	233
Total Organic Carbon	TOC	---		U	U	1.7	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	GM-2S	GM-2S	GM-2S	GM-2S
			Sample_date	09/01/15	08/08/16	08/14/17	08/20/19
			Depth of Well BGS	149'	149'	149'	149'
			Depth to bottom screen, relative to MSL	12'	12'	12'	12'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		28.4	27.8	26.2 J	25.8
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UBJ
Bromide	24959-67-9	2 GV		U	U	0.15 J	U
Chloride (as Cl)	16887-00-6	250 ST		15.4	19.3	25.5	34.2
Cod - Chemical Oxygen Demand	COD	---		U	U	17.2	U
Color	COLOR	---		U	5	5	U
Hardness (as CaCO3)	HARD	---		48 D	54 D	56	53.3
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.17	0.12	UB	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	UB	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		3.29 DJ	3.9 D	3.7	6 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	UB	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	***0.008***	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		10.7	12.3	14.9	18.4
Total Dissolved Solids	E-10173	---		107	158	123	170
Total Organic Carbon	TOC	---		1.6	U	UBJ	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	4G-1	4G-1	4G-1	4G-1
			Sample_date	08/11/17	02/21/18	09/04/18	08/16/19
			Depth of Well BGS	164'	164'	164'	164'
			Depth to bottom screen, relative to MSL	2'	2'	2'	2'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		154 J	216	300	302
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.34 J	0.72	0.61	0.7
Chloride (as Cl)	16887-00-6	250 ST		86.6	132	149	150
Cod - Chemical Oxygen Demand	COD	---		31.7	53.7	70.6 J	34.5
Color	COLOR	---		20	NA	150	75
Hardness (as CaCO3)	HARD	---		60 J	92.0	104	80
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***3.5***	***3.8***	***22.1***	***28.5***
Nitrogen, Kjeldahl, Total	KN	---		5	4.7 J	22.8 J	26 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.98 J	U	UJ	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	UJ	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	***0.024 J***	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		18.7	14.7	14.6	19.6
Total Dissolved Solids	E-10173	---		374	460	504	446
Total Organic Carbon	TOC	---		4.4 J	6.9	11.6 J	10.1

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	4G-2	4G-2	4G-2	4G-2
			Sample_date	02/16/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	211'	211'	211'	211'
			Depth to bottom screen, relative to MSL	-45'	-45'	-45'	-45'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		158	178 J	198	210
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	0.14 J	0.13 J	0.11 J
Chloride (as Cl)	16887-00-6	250 ST		73.6	90	104	88 J
Cod - Chemical Oxygen Demand	COD	---		30.4 J	U	10.2	12.5
Color	COLOR	---		U	5	U	U
Hardness (as CaCO3)	HARD	---		120	88	110	125
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.33	0.3	UB	1.5
Nitrogen, Kjeldahl, Total	KN	---		1.8 J	0.7 J	UBJ	0.53 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	0.88	U	1.1
Nitrogen, Nitrite	14797-65-0	1 ST		0.14 J	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	UB	UBJ	0.014
Sulfate (as SO4)	14808-79-8	250 ST		27.6	25.2 J	44.5	31.7 J
Total Dissolved Solids	E-10173	---		354	364	398	404 J
Total Organic Carbon	TOC	---		UJB	1.2	1.2	1.2

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	4M-1	4M-1	4M-1	4M-1
			Sample_date	09/04/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	325'	325'	325'	325'
			Depth to bottom screen, relative to MSL	-159'	-159'	-159'	-159'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		1200	1200	1240	1240
Biochemical Oxygen Demand (BOD)	BOD5	---		2.6	U	UB	UB
Bromide	24959-67-9	2 GV		***4.4***	***4.9***	***4.8***	***4.9***
Chloride (as Cl)	16887-00-6	250 ST		***492***	***687***	***479***	***426 J***
Cod - Chemical Oxygen Demand	COD	---		283 J	260	288	289
Color	COLOR	---		150	200	125	150
Hardness (as CaCO3)	HARD	---		267	300	260	300
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***171***	***173***	***179***	***99.2***
Nitrogen, Kjeldahl, Total	KN	---		192 J	178 J	191 J	181 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	U	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.047***	UB	UBJ	***0.007***
Sulfate (as SO4)	14808-79-8	250 ST		UB	9.9 J	10.6	13.7 J
Total Dissolved Solids	E-10173	---		1350	1600	1530	1470 J
Total Organic Carbon	TOC	---		72.5 J	79.9	76.4	71.8

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
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Exceeds Class GA Standard/Guidance value	
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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	4M-2	4M-2	4M-2	4M-2
			Sample_date	02/26/18	02/11/19	08/16/19	02/12/20
			Depth of Well BGS	486'	486'	486'	486'
			Depth to bottom screen, relative to MSL	-320'	-320'	-320'	-320'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		232	276 J	336	304
Biochemical Oxygen Demand (BOD)	BOD5	---		2.3	U	UB	UB
Bromide	24959-67-9	2 GV		***2.1***	***2.5***	***2.8***	***2.7***
Chloride (as Cl)	16887-00-6	250 ST		***261***	***397***	***311***	***276 J***
Cod - Chemical Oxygen Demand	COD	---		43.1	30.6	41.1	31.5
Color	COLOR	---		U	5	U	U
Hardness (as CaCO3)	HARD	---		240	280	240	320
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***3.6***	***4.2***	***5.5***	***3.7***
Nitrogen, Kjeldahl, Total	KN	---		4.1 J	5.3 J	8.8 J	3.8 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.13 J	U	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UBJ	***0.003 J***
Sulfate (as SO4)	14808-79-8	250 ST		53.6	56.5 J	56.9	45.5 J
Total Dissolved Solids	E-10173	---		736	700	746	742 J
Total Organic Carbon	TOC	---		7.3	7.7	9.3	7.7

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
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GV	Guidance Value
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Exceeds Class GA Standard/Guidance value	
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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	6G-1	6G-1	6G-1	6G-1
			Sample_date	02/22/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	147'	147'	147'	147'
			Depth to bottom screen, relative to MSL	32'	32'	32'	32'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		314	57.4	62.6	56.8
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1.1 J
Bromide	24959-67-9	2 GV		0.038 J	UB	UB	0.041 J
Chloride (as Cl)	16887-00-6	250 ST		34.9	29.5 J	26.1 J	24.8 J
Cod - Chemical Oxygen Demand	COD	---		15.7	UJ	10.2 J	10.4
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		50	30	43.3	60
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	U	UB	0.051 J
Nitrogen, Kjeldahl, Total	KN	---		U	UJ	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	2.8 J	2 J	1.4
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	U	UBJ	U
Sulfate (as SO4)	14808-79-8	250 ST		15.3	27.7	17	17.9
Total Dissolved Solids	E-10173	---		553	127	151	152
Total Organic Carbon	TOC	---		0.38 J	0.27 J	UJ	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Blydenburgh Road Landfill Complex
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Leachate Indicators

Units in mg/l			Sample ID	6G-2	6G-2	6G-2	6G-2
			Sample_date	02/23/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	230'	230'	230'	230'
			Depth to bottom screen, relative to MSL	-53'	-53'	-53'	-53'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		133	158	170	167
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		0.057 J	UB	UB	0.095 J
Chloride (as Cl)	16887-00-6	250 ST		57.9	41 J	76.3	75.4 J
Cod - Chemical Oxygen Demand	COD	---		U	UJ	UJ	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		84	80	100	105
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.098 J	U	UB	0.097 J
Nitrogen, Kjeldahl, Total	KN	---		UJ	UBJ	UJ	0.2 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UB	2.8 J	3 J	2.5
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	U	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		21.6	29.6	52.6	47.6
Total Dissolved Solids	E-10173	---		297	312	364	342
Total Organic Carbon	TOC	---		0.72 J	0.76 J	0.72 J	0.55 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
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Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	6G-3	6G-3	6G-3	6G-3
			Sample_date	02/23/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	315'	315'	315'	315'
			Depth to bottom screen, relative to MSL	-138'	-138'	-138'	-138'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		204	220	214	204
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1.1 J
Bromide	24959-67-9	2 GV		0.32 J	0.58	0.38 J	0.31 J
Chloride (as Cl)	16887-00-6	250 ST		42.1	88.3 J	86.7	74.6 J
Cod - Chemical Oxygen Demand	COD	---		24.1	20.3 J	25.6 J	23
Color	COLOR	---		5	10	5	U
Hardness (as CaCO3)	HARD	---		172	160	160	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***7.5***	***6.9***	***7.7***	***6.2***
Nitrogen, Kjeldahl, Total	KN	---		7.3 J	8.4 J	7.1 J	6.7 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	UJ	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	***0.007 J***
Sulfate (as SO4)	14808-79-8	250 ST		22.6	41.9	22.7	22.7
Total Dissolved Solids	E-10173	---		311	338	370 J	307
Total Organic Carbon	TOC	---		4.9	4.3	3.9 J	3.4

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
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Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	6M-1	6M-1	6M-1	6M-1
			Sample_date	09/02/15	08/11/16	08/09/17	08/15/19
			Depth of Well BGS	545'	545'	545'	545'
			Depth to bottom screen, relative to MSL	-368'	-368'	-368'	-368'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		76.1	72.7	89.2 J	84.9
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	U	0.11 J	UB
Chloride (as Cl)	16887-00-6	250 ST		32.7	22.7	28.1	37.8
Cod - Chemical Oxygen Demand	COD	---		U	U	6.8 J	10.2 J
Color	COLOR	---		U	U	10	U
Hardness (as CaCO3)	HARD	---		64 D	64 D	66 J	66.7
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		1.46	1.44	0.96	1.1
Nitrogen, Kjeldahl, Total	KN	---		1.43 J	1.21	1.2 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	U	0.29 J	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	U	UB
Sulfate (as SO4)	14808-79-8	250 ST		6.27	5.86	9.7	7
Total Dissolved Solids	E-10173	---		109	124	130	191 J
Total Organic Carbon	TOC	---		1.7	1.4 J	1.4	0.86 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
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Exceeds Class GA Standard/Guidance value	
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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	7M-1	7M-1	7M-1	7M-1
			Sample_date	02/23/18	02/12/19	08/20/19	02/12/20
			Depth of Well BGS	214'	214'	214'	214'
			Depth to bottom screen, relative to MSL	-152'	-152'	-152'	-152'
			Gradient relative to MSW	CROSS	CROSS	CROSS	CROSS
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		29	26.5	25.5	27.3
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.035 J	0.059 J	UB	0.06 J
Chloride (as Cl)	16887-00-6	250 ST		30.1	37.7	38	39.1 J
Cod - Chemical Oxygen Demand	COD	---		U	U	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		60	54	26.7	75
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.36	0.49	0.64	0.68
Nitrogen, Kjeldahl, Total	KN	---		U	UB	UB	0.13 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.3	1.6 J	2.5 J	2.3
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		28.9	34.3 J	34.9	36.5 J
Total Dissolved Solids	E-10173	---		157	116 J	152	133 J
Total Organic Carbon	TOC	---		0.77 J	0.59 J	0.57 J	0.57 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
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Blydenburgh Road Landfill Complex
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Leachate Indicators

Units in mg/l			Sample ID	8G-1	8G-1	8G-1	8G-1
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	114'	114'	114'	114'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		23.2	17.4	16.8	32.8
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.17 J	0.21 J	0.28 J	0.37 J
Chloride (as Cl)	16887-00-6	250 ST		***425***	U	***1120***	***870***
Cod - Chemical Oxygen Demand	COD	---		28.3	36.8 J	43.3	80.1
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		180	260	400	420
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	U	UB	U
Nitrogen, Kjeldahl, Total	KN	---		U	U	UBJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.7 J	3.4 J	3.3	2.1
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		24.6	17.6	20.7	14.9
Total Dissolved Solids	E-10173	---		882	996	1440	1310
Total Organic Carbon	TOC	---		0.59 J	0.28 J	U	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	8M-1	8M-1	8M-1	8M-1
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	270'	270'	270'	270'
			Depth to bottom screen, relative to MSL	-134'	-134'	-134'	-134'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		210	209	264	306
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.31 J	0.32 J	0.53	0.68
Chloride (as Cl)	16887-00-6	250 ST		81.7	U	99.8	109
Cod - Chemical Oxygen Demand	COD	---		15.7	12.1 J	12.4	27.3
Color	COLOR	---		U	U	U	5
Hardness (as CaCO3)	HARD	---		173	170	200	300
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***8.8***	***4.8***	***4.9***	***4.3***
Nitrogen, Kjeldahl, Total	KN	---		9 J	4.1 J	4.2 J	4.5 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		5.2 J	8.9 J	6.2	5
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		25.8	30	31.9	25
Total Dissolved Solids	E-10173	---		378	326	394	492
Total Organic Carbon	TOC	---		2.9	1.8	2.9	4.8

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
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Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	8M-2	8M-2	8M-2	8M-2
			Sample_date	02/27/18	02/15/19	08/19/19	02/14/20
			Depth of Well BGS	383'	383'	383'	383'
			Depth to bottom screen, relative to MSL	-248'	-248'	-248'	-248'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		36	42.2	43.4	44.7
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.066 J	U	0.14 J	0.11 J
Chloride (as Cl)	16887-00-6	250 ST		19.6	UBJ	28.7	25.3
Cod - Chemical Oxygen Demand	COD	---		U	10 J	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		44	52	46.7	65
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.35	0.29	UB	0.27
Nitrogen, Kjeldahl, Total	KN	---		0.21 J	UBJ	UBJ	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.52 J	1.2 J	0.82	0.53
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		4.2 J	U	5.4	4 J
Total Dissolved Solids	E-10173	---		100	87	106	106
Total Organic Carbon	TOC	---		0.4 J	0.32 J	U	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	9G-1	9G-1	9G-1	9G-1
			Sample_date	08/09/16	08/08/17	09/07/18	08/20/19
			Depth of Well BGS	68'	68'	68'	68'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
			Gradient relative to MSW	UP	UP	UP	UP
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		3.4	21.8 J	6.8 J	4.6
Biochemical Oxygen Demand (BOD)	BOD5	---		U	UB	U	UBJ
Bromide	24959-67-9	2 GV		U	U	U	U
Chloride (as Cl)	16887-00-6	250 ST		26.1	5.6	6.1	6.1
Cod - Chemical Oxygen Demand	COD	---		U	40	21.6	U
Color	COLOR	---		5	U	30	U
Hardness (as CaCO3)	HARD	---		16	22.7	4 J	4 J
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		U	UBJ	UB	UB
Nitrogen, Kjeldahl, Total	KN	---		0.11	UBJ	0.71 J	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.11	0.19	0.24	0.096 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		U	3.8 J	UB	5.8
Total Dissolved Solids	E-10173	---		63	45	34	52
Total Organic Carbon	TOC	---		U	1.1	UB	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Units in mg/l			Sample ID	10G-1	10G-1	10G-1	10G-1
			Sample_date	08/14/15	08/10/16	08/10/17	08/21/19
			Depth of Well BGS	69'	69'	69'	69'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		9.15	11 D	28.8 J	10.7
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	U	0.037 J	UB
Chloride (as Cl)	16887-00-6	250 ST		148 D	136 D	77	76.1
Cod - Chemical Oxygen Demand	COD	---		U	U	10.9	32.2
Color	COLOR	---		U	5	5	U
Hardness (as CaCO3)	HARD	---		48 D	54 D	32 J	25
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		U	0.15	UB	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	UBJ	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.11 D	2.53 D	1.1 J	1.4 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		13.1	14.8	6.8	24.5
Total Dissolved Solids	E-10173	---		288	273	166	256
Total Organic Carbon	TOC	---		1.8 J	1.1 J	1.6	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
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GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
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Units in mg/l			Sample ID	10M-1	10M-1	10M-1	10M-1
			Sample_date	02/15/18	02/12/19	08/21/19	02/13/20
			Depth of Well BGS	256	256	256	256
			Depth to bottom screen, relative to MSL	-167	-167	-167	-167
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		270	317	334	318
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.13 J	0.69	0.7	0.57
Chloride (as Cl)	16887-00-6	250 ST		75.1	115	120	102
Cod - Chemical Oxygen Demand	COD	---		17.8 J	12.1	10.2	31.5
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		350	300	320	340
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.51	0.43	0.61	0.69
Nitrogen, Kjeldahl, Total	KN	---		0.76 J	0.96 J	UB	0.52 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	3.3 J	4.2 J	4.4 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		25	32.2 J	32.7	26.7
Total Dissolved Solids	E-10173	---		480	460 J	478	540
Total Organic Carbon	TOC	---		2	2.5	2.4	2.5

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Leachate Indicators

Units in mg/l			Sample ID	11G-1	11G-1	11G-1	11G-1
			Sample_date	08/31/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	145'	145'	145'	145'
			Depth to bottom screen, relative to MSL	22'	22'	22'	22'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		1170	733	741	696
Biochemical Oxygen Demand (BOD)	BOD5	---		3.8	3.1	UB	UB
Bromide	24959-67-9	2 GV		U	1.8	2	2.2
Chloride (as Cl)	16887-00-6	250 ST		***498***	U	***277***	241 J
Cod - Chemical Oxygen Demand	COD	---		156	150	151	167
Color	COLOR	---		100	150	125	150
Hardness (as CaCO3)	HARD	---		34	34	30	40
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***119***	***127***	***125***	***82.7***
Nitrogen, Kjeldahl, Total	KN	---		104 J	132 J	135 J	126 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	UB	U	UJ
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.05***	UB	UB	***0.006***
Sulfate (as SO4)	14808-79-8	250 ST		UB	U	U	U
Total Dissolved Solids	E-10173	---		1150	804 J	864	804
Total Organic Carbon	TOC	---		45 J	43.9	46.2	42.9

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	11G-2	11G-2	11G-2	11G-2
			Sample_date	08/31/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-51	-51	-51	-51
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		1120	992	871	849
Biochemical Oxygen Demand (BOD)	BOD5	---		3.4	4.9	UB	UB
Bromide	24959-67-9	2 GV		U	***4***	***3.5***	***3.6***
Chloride (as Cl)	16887-00-6	250 ST		***479***	42.6	***385***	***304 J***
Cod - Chemical Oxygen Demand	COD	---		244	221	149	158
Color	COLOR	---		100	150	125	125
Hardness (as CaCO3)	HARD	---		100	108	100	180
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***176***	***153***	***119***	***77.5***
Nitrogen, Kjeldahl, Total	KN	---		204 J	178 J	132 J	115 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	UB	U	UJ
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.025 J***	UB	UB	U
Sulfate (as SO4)	14808-79-8	250 ST		UB	4.1 J	5.5	5.8
Total Dissolved Solids	E-10173	---		762	552 J	1030	956
Total Organic Carbon	TOC	---		61.8 J	56.6	42	39

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	11M-1	11M-1	11M-1	11M-1
			Sample_date	08/19/15	08/09/16	08/03/17	08/14/19
			Depth of Well BGS	320'	320'	320'	320'
			Depth to bottom screen, relative to MSL	-154'	-154'	-154'	-154'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		135 D	160 D	120	157
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	0.59 J	0.51	0.73
Chloride (as Cl)	16887-00-6	250 ST		99.7 D	85.4 D	71.7	96.7
Cod - Chemical Oxygen Demand	COD	---		U	U	13	U
Color	COLOR	---		U	5	15	U
Hardness (as CaCO3)	HARD	---		160 D	184 D	156	220
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.68	0.66	UBJ	UB
Nitrogen, Kjeldahl, Total	KN	---		0.5	2.74	UBJ	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.19 J	0.11	0.13	0.021 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		26.1	24.7	21.7	25.2
Total Dissolved Solids	E-10173	---		286	333	275	348
Total Organic Carbon	TOC	---		4.7	3.7	2.5	2.6

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Leachate Indicators

Units in mg/l			Sample ID	12M-1	12M-1	12M-1	12M-1
			Sample_date	02/22/18	02/14/19	08/15/19	02/20/20
			Depth of Well BGS	338'	338'	338'	338'
			Depth to bottom screen, relative to MSL	-163'	-163'	-163'	-163'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		105	372	375	376
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		0.037 J	1.4	0.89	0.86
Chloride (as Cl)	16887-00-6	250 ST		34.8	60.4 J	108	114 J
Cod - Chemical Oxygen Demand	COD	---		24.1	22.4 J	25.6	27.3
Color	COLOR	---		U	15	5	10
Hardness (as CaCO3)	HARD	---		280	380	320	360
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		**2.1**	1.2	1.4	***2.2***
Nitrogen, Kjeldahl, Total	KN	---		2 J	2.1 J	1.9 J	4.8 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.1	3.3 J	0.45 J	0.76
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UBJ	U
Sulfate (as SO4)	14808-79-8	250 ST		15.3	28.7	38.3	35.4
Total Dissolved Solids	E-10173	---		205	516	506	496
Total Organic Carbon	TOC	---		35.2	5.2	5.6 J	5.2

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Leachate Indicators

Units in mg/l			Sample ID	13G-1	13G-1	13G-1	13G-1
			Sample_date	02/15/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	93'	93'	93'	93'
			Depth to bottom screen, relative to MSL	17'	17'	17'	17'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		20	22.8	24.1	23.1
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	0.078 J	UB	0.06 J
Chloride (as Cl)	16887-00-6	250 ST		43.3	49.1	42.2	34.3 J
Cod - Chemical Oxygen Demand	COD	---		11.4 J	U	UJ	10.4
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		76	65	40	45
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.78	U	UB	0.32
Nitrogen, Kjeldahl, Total	KN	---		UJ	UJ	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	2.8	1.7 J	1.8 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	***0.044 J***	U
Sulfate (as SO4)	14808-79-8	250 ST		29	26 J	19	15.8 J
Total Dissolved Solids	E-10173	---		168	143 J	135	115
Total Organic Carbon	TOC	---		UB	0.33 J	UJ	0.35 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

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Leachate Indicators

Units in mg/l			Sample ID	13M-1	13M-1	13M-1	13M-1
			Sample_date	02/15/18	02/13/19	08/14/19	02/11/20
			Depth of Well BGS	265'	265'	265'	265'
			Depth to bottom screen, relative to MSL	-155	-155	-155	-155
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		473	484	483	512
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.29 J	0.9	0.88	0.86
Chloride (as Cl)	16887-00-6	250 ST		97	U	108	84.4 J
Cod - Chemical Oxygen Demand	COD	---		30.4 J	22.4	23.4 J	12.5
Color	COLOR	---		U	15	U	U
Hardness (as CaCO3)	HARD	---		500	500	460	540
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		1.7	0.82	1.4	1.5
Nitrogen, Kjeldahl, Total	KN	---		1.7 J	2.1 J	UBJ	1.5 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	UB	U	UJ
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	U
Sulfate (as SO4)	14808-79-8	250 ST		11.3	16.1 J	17	17.2 J
Total Dissolved Solids	E-10173	---		651	612 J	572	550
Total Organic Carbon	TOC	---		5.5	5.5	4.6 J	4.3

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	14G-1A	14G-1A	14G-1A	14G-1A
			Sample_date	02/14/18	02/11/19	08/13/19	02/19/20
			Depth of Well BGS	220'	220'	220'	220'
			Depth to bottom screen, relative to MSL	-58	-58	-58	-58
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		169	222	242	233
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		U	0.36 J	0.43 J	0.37 J
Chloride (as Cl)	16887-00-6	250 ST		55.1	85.8	96.7	99.6 J
Cod - Chemical Oxygen Demand	COD	---		13.5 J	U	U	14.6
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		190	200	210	240
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.028 J	U	UB	0.055 J
Nitrogen, Kjeldahl, Total	KN	---		0.13 J	UB	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		5.5 J	7 J	6.8	7.4
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	U	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		31.5	30.9 J	31.6	31.6
Total Dissolved Solids	E-10173	---		357	378	404	344
Total Organic Carbon	TOC	---		1.7	1.5	1.4	1.2

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	14G-2	14G-2	14G-2	14G-2
			Sample_date	02/14/18	02/11/19	08/13/19	02/13/20
			Depth of Well BGS	264'	264'	264'	264'
			Depth to bottom screen, relative to MSL	-103	-103	-103	-103
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		172	200	207	214
Biochemical Oxygen Demand (BOD)	BOD5	---		7.4 J	U	UB	UB
Bromide	24959-67-9	2 GV		U	0.3 J	0.33 J	0.24 J
Chloride (as Cl)	16887-00-6	250 ST		50.6	70.2	76.7	62.5
Cod - Chemical Oxygen Demand	COD	---		UJ	U	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		200	190	200	280
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.072 J	U	UB	U
Nitrogen, Kjeldahl, Total	KN	---		UJ	UB	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		6.9 J	6 J	5.9	6.4 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	U	UB	U
Sulfate (as SO4)	14808-79-8	250 ST		24	29.7 J	31.9	26.6
Total Dissolved Solids	E-10173	---		353	372	326	380
Total Organic Carbon	TOC	---		UB	1.2	0.94 J	1.1

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	14M-1	14M-1	14M-1	14M-1
			Sample_date	09/05/18	02/11/19	08/13/19	02/13/20
			Depth of Well BGS	355'	355'	355'	355'
			Depth to bottom screen, relative to MSL	-194'	-194'	-194'	-194'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		810 J	857	841	824
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	21.8	UB
Bromide	24959-67-9	2 GV		***3.5***	***4***	***4***	***3.3***
Chloride (as Cl)	16887-00-6	250 ST		***432***	24.7	***441***	***373***
Cod - Chemical Oxygen Demand	COD	---		134 J	132	114	120
Color	COLOR	---		40	75	50	40
Hardness (as CaCO3)	HARD	---		320	440	300	460
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***62.7***	***64.6***	***63.9***	***68.6***
Nitrogen, Kjeldahl, Total	KN	---		65.4 J	69.7 J	69.3 J	70.7 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	U	U	UJ
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.035***	UB	UB	***0.009***
Sulfate (as SO4)	14808-79-8	250 ST		17.2	18.9 J	19.2	15.2
Total Dissolved Solids	E-10173	---		1120	1300	1200	1310
Total Organic Carbon	TOC	---		32.2 J	33.5	2.6	29.9

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	15G-1	15G-1	15G-1	15G-1
			Sample_date	08/19/15	08/09/16	08/14/17	08/15/19
			Depth of Well BGS	160'	160'	160'	160'
			Depth to bottom screen, relative to MSL	23'	23'	23'	23'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		42.9	48.8	76.2 J	55.3
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	U	0.067 J	0.11 J
Chloride (as Cl)	16887-00-6	250 ST		11.2	11.8	10.4	12.9
Cod - Chemical Oxygen Demand	COD	---		U	U	38	U
Color	COLOR	---		U	5	10	U
Hardness (as CaCO3)	HARD	---		68 D	76 D	80 J	80
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		U	U	UB	UB
Nitrogen, Kjeldahl, Total	KN	---		0.28	0.16	0.91	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.6 D	1.05	1.3	3.4 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	UB	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		24.3	29.1	29.3	34.4
Total Dissolved Solids	E-10173	---		113 J	160	129	134
Total Organic Carbon	TOC	---		5.3	1.9	1.7 J	0.79 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	16G-1	16G-1	16G-1	16G-1
			Sample_date	08/14/15	08/10/16	08/10/17	08/21/19
			Depth of Well BGS	57'	57'	57'	57'
			Depth to bottom screen, relative to MSL	20'	20'	20'	20'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		11.2	14.4 D	13.4 J	14.3
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	U	0.033 J	UB
Chloride (as Cl)	16887-00-6	250 ST		6.91	9.57	10.3	14.4
Cod - Chemical Oxygen Demand	COD	---		U	U	U	U
Color	COLOR	---		U	U	10 J	U
Hardness (as CaCO3)	HARD	---		21	30 D	30 J	16
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.22	U	UB	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	UBJ	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.73 D	1.96 D	1.3 J	1.5 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		5.79	5.8	7.5	11.6
Total Dissolved Solids	E-10173	---		54	60	53	58
Total Organic Carbon	TOC	---		UJ	UJ	1.2	U

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	16M-1	16M-1	16M-1	16M-1
			Sample_date	02/15/18	02/12/19	08/21/19	218/20
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-163	-163	-163	-163
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		240	219	223	238
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		0.27 J	0.34 J	UB	0.27 J
Chloride (as Cl)	16887-00-6	250 ST		57.4	104	160	76.9
Cod - Chemical Oxygen Demand	COD	---		13.5 J	U	U	10.4
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		260	240	220	240
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.029 J	U	UB	0.069 J
Nitrogen, Kjeldahl, Total	KN	---		UJ	UB	U	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	4.4 J	5.9 J	5.5
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	UB
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	UJ
Sulfate (as SO4)	14808-79-8	250 ST		25.2	32 J	31.5	27.4
Total Dissolved Solids	E-10173	---		378	356 J	360	392
Total Organic Carbon	TOC	---		UB	1.1	0.92 J	0.87 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	18G-1	18G-1	18G-1	18G-1
			Sample_date	02/16/18	02/13/19	08/13/19	02/11/20
			Depth of Well BGS	157'	157'	157'	157'
			Depth to bottom screen, relative to MSL	11'	11'	11'	11'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		277	194	158	189
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		U	0.22 J	0.39 J	0.52
Chloride (as Cl)	16887-00-6	250 ST		99.1	U	181	136 J
Cod - Chemical Oxygen Demand	COD	---		57.9 J	38.9	21.2	44.1
Color	COLOR	---		15	20	10	20
Hardness (as CaCO3)	HARD	---		64	42	85	110
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***41.9***	***26.1***	***20.1***	***22.8***
Nitrogen, Kjeldahl, Total	KN	---		40.2 J	23.9 J	19.5 J	27.9 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	1.6	3.5	3.1 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	0.063
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	U
Sulfate (as SO4)	14808-79-8	250 ST		17	28.5 J	34.7	34.6
Total Dissolved Solids	E-10173	---		421	270 J	396	458
Total Organic Carbon	TOC	---		7.2	4.4	4.4	6.5

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	09/06/18	02/13/19	08/13/19	02/11/20
			Depth of Well BGS	197'	197'	197'	197'
			Depth to bottom screen, relative to MSL	-29	-29	-29	-29
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		188 J	176	183	169
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.11 J	0.28 J	0.29 J	0.26 J
Chloride (as Cl)	16887-00-6	250 ST		80.7	91.2	98.1	91.3 J
Cod - Chemical Oxygen Demand	COD	---		25.7	22.4	U	20.9
Color	COLOR	---		5	U	U	10
Hardness (as CaCO3)	HARD	---		92	96	95	95
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		1.8	***2.5***	***3.1***	***3.6***
Nitrogen, Kjeldahl, Total	KN	---		2 J	3 J	3.8 J	1.6 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		3.2	6.1	8.6	9 J
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	U
Sulfate (as SO4)	14808-79-8	250 ST		26	25.5 J	21.2	24.2
Total Dissolved Solids	E-10173	---		341	342 J	456	414
Total Organic Carbon	TOC	---		1.7	2.3	2	2.4

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	22M-1	22M-1	22M-1	22M-1
			Sample_date	09/05/18	02/12/19	08/16/19	02/12/20
			Depth of Well BGS	222'	222'	222'	222'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	UP	UP	UP	UP
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		31.4 J	32.8	31.6	29.8
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	UB
Bromide	24959-67-9	2 GV		0.038 J	0.055 J	0.099 J	0.048 J
Chloride (as Cl)	16887-00-6	250 ST		44.4	43.9	46.8	39.9
Cod - Chemical Oxygen Demand	COD	---		15.5 J	U	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		62	56	53.3	70
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		1.2	0.69	0.74	0.72
Nitrogen, Kjeldahl, Total	KN	---		2.1 J	0.67 J	UBJ	0.12 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2	1.4 J	2 J	2
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		21.5	23.1 J	23	19.6
Total Dissolved Solids	E-10173	---		134	110 J	160	131 J
Total Organic Carbon	TOC	---		UB	0.76 J	0.76 J	0.75 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

Appendix A-3
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	23M-1	23M-1	23M-1	23M-1
			Sample_date	02/15/18	02/12/19	08/14/19	02/18/20
			Depth of Well BGS	240'	240'	240'	240'
			Depth to bottom screen, relative to MSL	-164'	-164'	-164'	-164'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		112	128	125	134
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		U	0.17 J	UB	0.12 J
Chloride (as Cl)	16887-00-6	250 ST		39.3	47.8	42.9	32.2
Cod - Chemical Oxygen Demand	COD	---		32.5 J	U	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		180	150	140	150
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.083 J	U	UB	0.13
Nitrogen, Kjeldahl, Total	KN	---		UJ	UB	UBJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	3.1 J	U	5.9
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		41	82 J	45.3	44.4
Total Dissolved Solids	E-10173	---		282	262 J	298	270
Total Organic Carbon	TOC	---		2.9	2.8	3.3	2.5

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Qualified as non detect (U) based on blank results
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
NR	Not reported
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
*	Collected under pumping conditions

APPENDIX A-4

EXTRACTION WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-1	EW-1	EW-1	EW-1
		Sample_date	2/23/18	02/15/19	08/14/19	2/19/20
		Depth of Well BGS	225'	225'	225'	225'
		Depth to bottom screen, relative to MSL	-57	-57	-57	-57
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	UJ	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	UJ
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	UJ	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	UJ	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	2/09/18(A)	2/26/18(B)	3/12/18(A)	4/10/18(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-54	-53	-54	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	1.6	1.2	1.1
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	1.6	1.2	1.1

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	5/07/18(A)	6/05/18(A)	7/02/18(A)	8/13/18(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-54	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.1	1.1	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	1.1	1.1	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	9/10/18(A)	10/3/18(A)	11/7/18(A)	12/5/18(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-54	-53	-53	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	1/7/19(A)	2/11/19(A)	2/15/19(B)	3/8/19(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-53	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	4/8/19(A)	5/13/19(A)	6/12/19(A)	7/15/19(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-53	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported	***Exceeds Class GA Standard/Guidance value***	

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	8/8/19(A)	8/16/19(B)	9/11/19(A)	10/7/19(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-53	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-2	EW-2	EW-2	EW-2
		Sample_date	11/2/19(A)	12/16/19(A)	1/7/19 (A)	2/20/20(B)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-53	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	UJ
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-3	EW-3	EW-3	EW-3
		Sample_date	2/15/18	02/13/19	08/13/19	2/19/20
		Depth of Well BGS	312'	312'	312'	312'
		Depth to bottom screen, relative to MSL	-129	-129	-129	-129
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	UJ	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.2	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	UJ
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	UJ	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	UJ	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	1.2	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	EW-4	EW-4	EW-4	EW-4
			Sample_date	2/15/18	02/15/19	08/13/19	2/19/20
			Depth of Well BGS	305'	305'	305'	305'
			Depth to bottom screen, relative to MSL	-138	-138	-138	-138
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	UJ
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	UJ
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	UJ	UJ
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	1.3
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		1.5 J	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	UJ
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	UJ
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	UJ	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	UJ	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		1.5	0	0	1.3

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	EW-5	EW-5	EW-5	EW-5
			Sample_date	3/7/16	8/3/16	2/23/17	8/4/17
			Depth of Well BGS	213'	213'	213'	213'
			Depth to bottom screen, relative to MSL	-141	-141	-141	-141
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		5	3 J	3.4	3.3
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		1 J	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	0.59 J	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		6	3	3.99	3.3

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-6	EW-6	EW-6	EW-6
		Sample_date	11/15/17(A)	12/12/17(A)	1/12/18(A)	2/12/18(A)
		Depth of Well BGS	215'	215'	215'	215'
		Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-137'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-6	EW-6	EW-6	EW-6
		Sample_date	2/16/18 (B)	3/12/18(A)	4/10/18(A)	5/07/18(A)
		Depth of Well BGS	215'	215'	215'	215'
		Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-137'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-6	EW-6	EW-6	EW-6
		Sample_date	6/05/18(A)	7/02/18(A)	8/13/18(A)	9/10/18(A)
		Depth of Well BGS	215'	215'	215'	215'
		Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-137'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-6	EW-6	EW-6	EW-6
		Sample_date	10/3/18(A)	11/7/18 (A)	12/5/18 (A)	1/7/19(A)
		Depth of Well BGS	215'	215'	215'	223'
		Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-53
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	1	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-6	EW-6	EW-6	EW-6
		Sample_date	4/8/19(A)	5/13/19(A)	6/12/19(A)	7/17/19(A)
		Depth of Well BGS	215'	215'	215'	215'
		Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-137'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported		

Exceeds Class GA Standard/Guidance value

D&B Engineers and Architects, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l			Sample ID	EW-6	EW-6	EW-6	EW-6
			Sample_date	8/8/19(A)	8/14/19(B)	9/11/19(A)	10/07/19(A)
			Depth of Well BGS	215'	215'	223'	223'
			Depth to bottom screen, relative to MSL	-137'	-137'	-53	-137'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
1,1,1,2-Tetrachloroethane	630-20-6	5 ST		U	U	U	U
1,1,1-Trichloroethane	71-55-6	5 ST		U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST		U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST		U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST		U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST		U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST		U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST		U	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	UJ	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++		U	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	U	U
Bromochloromethane	74-97-5	5 ST		U	U	U	U
Bromodichloromethane	75-27-4	50 GV		U	U	U	U
Bromoform	75-25-2	50 GV		U	U	U	U
Bromomethane	74-83-9	5 ST		U	U	U	U
Carbon Disulfide	75-15-0	60 GV		U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST		U	U	U	U
Chlorobenzene	108-90-7	5 ST		U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	U	U	U
Chloroethane	75-00-3	5 ST		U	U	U	U
Chloroform	67-66-3	7 ST		U	U	U	U
Chloromethane	74-87-3	5 ST		U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST		U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST		U	U	U	U
Dibromochloromethane	124-48-1	50 GV		U	U	U	U
Dibromomethane	74-95-3	5 ST		U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST		U	U	U	U
Ethylbenzene	100-41-4	5 ST		U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST		U	UJ	U	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV		U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---		U	U	U	U
Methylene Chloride	75-09-2	5 ST		U	U	U	U
Styrene	100-42-5	5 ST		U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST		U	U	U	U
Toluene	108-88-3	5 ST		U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST		U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST		U	UJ	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST		U	U	U	U
Vinyl Acetate	108-05-4	---		U	U	U	U
Vinyl Chloride	75-01-4	2 ST		U	U	U	U
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported	***Exceeds Class GA Standard/Guidance value***	

D&B ENGINEERS AND ARCHITECTS, P.C.

Appendix A-4
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Volatile Organic Compounds

Units in ug/l		Sample ID	EW-6	EW-6	EW-6	EW-6
		Sample_date	11/12/19(A)	12/16/19(A)	1/7/19 (A)	2/12/20(B)
		Depth of Well BGS	223'	223'	223'	215'
		Depth to bottom screen, relative to MSL	-137'	-137'	-53	-137'
		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
COMPOUNDS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
1,1,1,2-Tetrachloroethane	630-20-6	5 ST	U	U	U	UJ
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U	UJ
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U	U
Acetone	67-64-1	50 GV	U	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U	U
Benzene	71-43-2	1 ST	U	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U	U
Bromoform	75-25-2	50 GV	U	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U	U
Chloroform	67-66-3	7 ST	U	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	U	U	UJ
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U	U
Toluene	108-88-3	5 ST	U	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	U	U	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	0	0	0	0

+	Applies to each isomer individually	ug/l	Micrograms per liter
++	Applies to sum of isomer	BGS	Below Ground Surface
U	Compound was analyzed for but not detected	MSL	Mean Sea Level
J	Estimated detection limit or value	MSW	Municipal Solid Waste
UB	Qualified as non detect (U) based on blank results	GV	Guidance Value
(A)	Collected by IRRA during well shutdown	ST	Standard
(B)	Collected by D&B during well shutdown	B	Detected in blank
NR	Not reported	***Exceeds Class GA Standard/Guidance value***	

D&B ENGINEERS AND ARCHITECTS, P.C.

APPENDIX A-5

EXTRACTION WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Appendix A-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	EW-1	EW-1	EW-1	EW-1
			Sample_date	2/23/18	02/15/19	08/14/19	2/19/20
			Depth of Well BGS	225'	225'	225'	225'
			Depth to bottom screen, relative to MSL	-57	-57	-57	-57
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST	36.8	J	36.6 J	37.8 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST	125		122	112	115
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--	28200		30500	31500	31000
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--	4.4	J	4 J	U	U
Copper	7440-50-8	200 ST		UB	3.7 J	U	U
Cyanide	57-12-5	200 ST		U	102	2.8 J	U
Iron	7439-89-6	300 ST#	***11.2***	J	U	U	***15.8 J***
Lead	7439-92-1	25 ST		U	U	U	6.2
Magnesium	7439-95-4	35000 GV	11100		11200	11200	10800
Manganese	7439-96-5	300 ST#	***558***		***700***	***842***	***842***
Mercury	7439-97-6	0.7 ST		UB	U	U	0.12 J
Nickel	7440-02-0	100 ST	5	J	19.9 J	UB	UB
Potassium	7440-09-7	--	3570	J	3580 J	3460 J	3340 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST	***84000***		***76700***	***80700***	***82500***
Thallium	7440-28-0	0.5 GV		UB	U	***4.1 J***	U
Vanadium	7440-62-2	--		U	0.82 J	U	U
Zinc	7440-66-6	2000 GV	10.9	J	5.3 J	29	16.3 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated high based on blank results
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
UB	Qualified as non detect (U) based on blank results
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	EW-2	EW-2	EW-2	EW-2
			Sample_date	2/26/18 (B)	2/15/19 (B)	8/16/19 (B)	2/20/20 (B)
			Depth of Well BGS	223'	223'	223'	223'
			Depth to bottom screen, relative to MSL	-53	-53	-53	-53
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	UB	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		16.4 J	24.8 J	13.5 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		165	127	UB	120
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		33200	26200	24500	24600
Chromium, Hexavalent	18540-29-9	50 ST		UJ	U	U	U
Chromium, Total	7440-47-3	50 ST		U	3 J	U	4.7 J
Cobalt	7440-48-4	--		3.6 J	7 J	3.9 J	U
Copper	7440-50-8	200 ST		UB	16.1 J	8.6 J	U
Cyanide	57-12-5	200 ST		UJ	4.5 J	2.1 J	U
Iron	7439-89-6	300 ST#		***10200*** J	***11000***	***5860***	***9230***
Lead	7439-92-1	25 ST		U	1.6 J	U	6.9
Magnesium	7439-95-4	35000 GV		12000	8740	8060	8130
Manganese	7439-96-5	300 ST#		***419***	***273***	***227***	***212***
Mercury	7439-97-6	0.7 ST		U	U	U	U
Nickel	7440-02-0	100 ST		21 J	24.2 J	18.4 J	UB
Potassium	7440-09-7	--		7060	5760	5570	5120 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***79900***	***88400***	***89200***	***94200***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		12.2 J	45.3	16.5 J	12.5 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated high based on blank results
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
UB	Qualified as non detect (U) based on blank results
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

			Sample ID	EW-3	EW-3	EW-3	EW-3
			Sample_date	2/15/18	02/13/19	08/13/19	2/19/20
			Depth of Well BGS	312'	312'	312'	312'
			Depth to bottom screen, relative to MSL	-129	-129	-129	-129
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	128 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		47 J	45.9 J	47.4 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		146	139	148	146
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		49400	48400	48700	49200
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		10.7 J	12.1 J	13.7 J	UB
Copper	7440-50-8	200 ST		2.8 J	6 J	U	8.7 J
Cyanide	57-12-5	200 ST		U	98.5 J	U	U
Iron	7439-89-6	300 ST#		U	24.1	U	13.8 J
Lead	7439-92-1	25 ST		U	2.2 J	2.5 J	14.4
Magnesium	7439-95-4	35000 GV		30800	30300	29500	30500
Manganese	7439-96-5	300 ST#		***417***	***413***	***475***	***379***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		36.1 J	9.1 J	UB	UB
Potassium	7440-09-7	--		5090	4570 J	4730 J	4420 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***62500***	***65800***	***63400***	***64500***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	UB	U	U
Zinc	7440-66-6	2000 GV		6.6 J	UB	U	41.5

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated high based on blank results
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
UB	Qualified as non detect (U) based on blank results
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

			Sample ID	EW-4	EW-4	EW-4	EW-4
			Sample_date	2/15/18	02/15/19	08/13/19	2/19/20
			Depth of Well BGS	213'	213'	305'	305'
			Depth to bottom screen, relative to MSL	-141	-141	-138	-138
Units in ug/l			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	U	U	U
Antimony	7440-36-0	3 ST		U	***3.7 J***	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		53.1 J	55 J	53.3 J	UB
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		210	247	239	198
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		46400	47100	46600	44700
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	4.2 J
Cobalt	7440-48-4	--		10 J	10.2 J	9.2 J	UB
Copper	7440-50-8	200 ST		3.4 J	6 J	U	11.4 J
Cyanide	57-12-5	200 ST		U	18.6	2.3 J	U
Iron	7439-89-6	300 ST#		18.8 J	37.9	20.6	36.7
Lead	7439-92-1	25 ST		U	U	U	10.4
Magnesium	7439-95-4	35000 GV		26900	27200	26400	25500
Manganese	7439-96-5	300 ST#		298	***336***	***331***	200
Mercury	7439-97-6	0.7 ST		UB	U	U	0.11 J
Nickel	7440-02-0	100 ST		34.4 J	34.8 J	16.4 J	UB
Potassium	7440-09-7	--		8700	9460	9200	6140 J
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***61200***	***65600***	***64200***	***55400***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	0.98 J	U	U
Zinc	7440-66-6	2000 GV		18.8 J	23.5	U	57.7

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated high based on blank results
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
UB	Qualified as non detect (U) based on blank results
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

		Sample ID	EW-5	EW-5	EW-5	EW-5
		Sample_date	3/7/16	8/3/16	2/23/17	8/4/17
		Depth of Well BGS	213'	213'	213'	215'
		Depth to bottom screen, relative to MSL	-141	-141	-141	-137'
Units in ug/l		Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV				
Aluminum	7429-90-5	--	U	24.9 J	UB	UB
Antimony	7440-36-0	3 ST	U	U	U	U
Arsenic	7440-38-2	25 ST	U	U	U	U
Barium	7440-39-3	1000 ST	34.1 J	30.2 J	30.7 B	30.9 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	39.2 J	38.7 J	43.4 B	UB
Cadmium	7440-43-9	5 ST	U	U	U	U
Calcium	7440-70-2	--	21900	25000	26200	23900
Chromium, Hexavalent	18540-29-9	50 ST	U	U	U	U
Chromium, Total	7440-47-3	50 ST	U	U	1.3 B	U
Cobalt	7440-48-4	--	U	U	U	U
Copper	7440-50-8	200 ST	5.0 J	1.1 J	35.3	U
Cyanide	57-12-5	200 ST	U	U	U	U
Iron	7439-89-6	300 ST#	UJ	U	U	UB
Lead	7439-92-1	25 ST	5.7	6.6	5.2	U
Magnesium	7439-95-4	35000 GV	10500	11900	12200	10900
Manganese	7439-96-5	300 ST#	45.9	44.5	38.4	48.3
Mercury	7439-97-6	0.7 ST	UB	U	U	UB
Nickel	7440-02-0	100 ST	U	U	U	U
Potassium	7440-09-7	--	1580 J	771 J	1800 B	2200 J
Selenium	7782-49-2	10 ST	U	U	U	U
Silver	7440-22-4	50 ST	U	U	U	U
Sodium	7440-23-5	20000 ST	10500 J	13400 J	11600	9560
Thallium	7440-28-0	0.5 GV	U	***1.9 J***	U	U
Vanadium	7440-62-2	--	U	U	U	U
Zinc	7440-66-6	2000 GV	77.4	22.1	48.3	19.4 J

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated high based on blank results
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
UB	Qualified as non detect (U) based on blank results
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

Units in ug/l			Sample ID	EW-6	EW-6	EW-6	EW-6
			Sample_date	8/11/17(B)	2/16/18(B)	8/14/19(B)	2/12/20
			Depth of Well BGS	215'	215'	215'	215'
			Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-137'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		25 J	24.9 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		8.8 J	U	U	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	30.1 J	37.6 J	43.9 J
Cadmium	7440-43-9	5 ST		U	0.30 J	U	U
Calcium	7440-70-2	--		22100	20000	25500	26800 J
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		U	U	U	U
Copper	7440-50-8	200 ST		13.6 J	1.3 J	U	U
Cyanide	57-12-5	200 ST		U	U	2.8 J	U
Iron	7439-89-6	300 ST#		87.7	UJ	44.6	UB
Lead	7439-92-1	25 ST		U	4.5 J	U	U
Magnesium	7439-95-4	35000 GV		11800	10600	13800	14600
Manganese	7439-96-5	300 ST#		6.7 J	6.6 J	10.7	U
Mercury	7439-97-6	0.7 ST		U	UB	U	UJ
Nickel	7440-02-0	100 ST		U	U	U	U
Potassium	7440-09-7	--		1750 J	1000 J	U	U
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		7890	9010 J	10900	10900
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		16.3 J	8.1 J	U	U

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
J+	Estimated high based on blank results
B	Detected between the IDL and CRDL
IDL	Instrument Detection Limit
CRDL	Contract Required Detection Limit
UB	Qualified as non detect (U) based on blank results
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
#	Standard for total iron and manganese is 500 ug/l
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

APPENDIX A-6

EXTRACTION WELL SAMPLE RESULTS
LEACHATE INDICATORS

Appendix A-6
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	EW-1	EW-1	EW-1	EW-1
			Sample_date	2/23/18	02/15/19	08/14/19	2/19/20
			Depth of Well BGS	225'	225'	225'	225'
			Depth to bottom screen, relative to MSL	-57	-57	-57	-57
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		151	173	184	208
Biochemical Oxygen Demand (BOD)	BOD	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		0.081 J	UB	UB	0.093 J
Chloride (as Cl)	16887-00-6	250 ST		61.7	67.7 J	80.5	79.7
Cod - Chemical Oxygen Demand	COD	---		17.8	20.3 J	U	18.8
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		104	112	107	140
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	U	UB	U
Nitrogen, Kjeldahl, Total	KN	---		U	U	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.9	2.8 J	1.6 J	1.6
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		19.4	25.3	29.2	24.8
Total Dissolved Solids	E-10173	---		324	312	344	327
Total Organic Carbon	TOC	---		1.2	0.66 J	0.81 J	0.73 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-6
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	EW-2	EW-2	EW-2	EW-2
			Sample_date	2/26/18 (B)	2/15/19 (B)	8/16/19 (B)	2/20/20 (B)
			Depth of Well BGS	223'	223'	223'	223'
			Depth to bottom screen, relative to MSL	-53	-53	-53	-53
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		168	169	184	178
Biochemical Oxygen Demand (BOD)	BOD	---		U	U	UB	1 J
Bromide	24959-67-9	2 GV		0.2 J	UB	0.12 J	0.095 J
Chloride (as Cl)	16887-00-6	250 ST		81.5	U	80.2	88.8 J
Cod - Chemical Oxygen Demand	COD	---		22	16.2 J	U	12.5
Color	COLOR	---		100	150	75	150
Hardness (as CaCO3)	HARD	---		120	96	70	100
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.5	0.24	UB	0.22
Nitrogen, Kjeldahl, Total	KN	---		1.3 J	UB	UBJ	0.18 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.4 J	3.4 J	1.1 J	1.6
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	0.062
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UJ	U
Sulfate (as SO4)	14808-79-8	250 ST		22.5	27.8	19.7	22.2
Total Dissolved Solids	E-10173	---		371	334	316	317
Total Organic Carbon	TOC	---		2	0.92 J	0.97 J	0.64 J

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-6
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	EW-3	EW-3	EW-3	EW-3
			Sample_date	2/15/18	02/13/19	08/13/19	2/19/20
			Depth of Well BGS	312'	312'	312'	312'
			Depth to bottom screen, relative to MSL	-129	-129	-129	-129
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		225	269	279	271
Biochemical Oxygen Demand (BOD)	BOD	---		U	U	UB	3.4
Bromide	24959-67-9	2 GV		U	0.22 J	UB	0.2 J
Chloride (as Cl)	16887-00-6	250 ST		57.9	74.2	76	79.4 J
Cod - Chemical Oxygen Demand	COD	---		19.9 J	14.1	U	23
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		230	200	220	260
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***3.2***	***2.1***	***2.9***	***2.6***
Nitrogen, Kjeldahl, Total	KN	---		2.9 J	3.3 J	3.4 J	2.6 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	4	2.5	2.7
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		23.2	30.2 J	31.3	29.5
Total Dissolved Solids	E-10173	---		391	422 J	408	390
Total Organic Carbon	TOC	---		2.5	2.2	2.4	2.4

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-6
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	EW-4	EW-4	EW-4	EW-4
			Sample_date	2/15/18	02/15/19	08/13/19	2/19/20
			Depth of Well BGS	213'	213'	305'	305'
			Depth to bottom screen, relative to MSL	-141	-141	-138	-138
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		238	39.7	251	243
Biochemical Oxygen Demand (BOD)	BOD	---		14.3	21.2	26	8.9
Bromide	24959-67-9	2 GV		0.16 J	0.47 J	0.49 J	0.34 J
Chloride (as Cl)	16887-00-6	250 ST		69.4	U	83.6	72.6 J
Cod - Chemical Oxygen Demand	COD	---		26.2 J	28.6 J	U	U
Color	COLOR	---		5	15	10	5
Hardness (as CaCO3)	HARD	---		130	200	200	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***9.9***	***11.1***	***10.3***	***5***
Nitrogen, Kjeldahl, Total	KN	---		12.2 J	11.7 J	11.2 J	5.1 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		7.8 J	6.6 J	4	5.3
Nitrogen, Nitrite	14797-65-0	1 ST		0.63 J	0.3 J	0.66 J	0.34
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		28.5	33.7	36.6	35.9
Total Dissolved Solids	E-10173	---		419	452	394	348
Total Organic Carbon	TOC	---		4.2	5.1 J	4.8	2.4

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-6
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	EW-5		EW-5		EW-5		EW-5	
			Sample_date	3/7/16		8/3/16		2/23/17		8/4/17	
			Depth of Well BGS	213'		213'		213'		215'	
			Depth to bottom screen, relative to MSL	-141		-141		-141		-137'	
			Gradient relative to MSW	DOWN		DOWN		DOWN		DOWN	
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV									
Alkalinity, Total (as CaCO3)	ALK	---		56.0		71.4	D	71.6		79.8	
Biochemical Oxygen Demand (BOD)	BOD	---			U		U		UB		UB
Bromide	24959-67-9	2 GV			U		U	0.094	J	0.037	J
Chloride (as Cl)	16887-00-6	250 ST		24.6		20.4		30.5		22.6	
Cod - Chemical Oxygen Demand	COD	---			UJ		U		UB	6.8	J
Color	COLOR	---			U	10		5		5	
Hardness (as CaCO3)	HARD	---		90	D	112	D	120		120	
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.42			UB	0.36			UBJ
Nitrogen, Kjeldahl, Total	KN	---			U		U		U		U
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		3.40	D	4.38	D	4.5		4	
Nitrogen, Nitrite	14797-65-0	1 ST			U		U		U		U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST			U		U	***0.0068***			UB
Sulfate (as SO4)	14808-79-8	250 ST		27.4		21.9		23.4		23.3	
Total Dissolved Solids	E-10173	---		154		182		177		182	
Total Organic Carbon	TOC	---			U	1.4			U	1.2	

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

Appendix A-6
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	EW-6	EW-6	EW-6	EW-6
			Sample_date	8/11/17 (B)	2/16/18 (B)	8/16/19 (B)	2/12/20
			Depth of Well BGS	215'	215'	215'	215'
			Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-137'
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		80.2 J	65.3	91	95.6
Biochemical Oxygen Demand (BOD)	BOD	---		UB	U	UB	UB
Bromide	24959-67-9	2 GV		0.04 J	U	UB	0.058 J
Chloride (as Cl)	16887-00-6	250 ST		13.3	14.0	20.4	19.7 J
Cod - Chemical Oxygen Demand	COD	---		8.8 J	UJ	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		116 J	88 D	107	80
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.11	UB	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		4.2	3.71 D	4.4 J	4.8
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	U	UB	U
Sulfate (as SO4)	14808-79-8	250 ST		20.1	20.0	22.8	23.1 J
Total Dissolved Solids	E-10173	---		156	132	181	175 J
Total Organic Carbon	TOC	---		UBJ	U	0.97 J	1.3

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
D	Result was reported from a secondary dilution
--	Not analyzed or no ST or GV
BGS	Below Ground Surface
MSL	Mean Sea Level
MSW	Municipal Solid Waste
GV	Guidance Value
ST	Standard
Exceeds Class GA Standard/Guidance value	
(B)	Collected by D&B during well shutdown

APPENDIX B

FIELD OBSERVATION LOGS

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-14-2020

SAMPLE ID: GM-1I
WELL ID: GM-1I-2/14/20
SAMPLERS: Kevin Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 285'
Initial static water level (from top of casing) ..... 110.25'
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 174.75 ft. of water x 0.65 = 113 gallons

volume of water removed: 500 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.86	13.96	0.442	0.0	1.04	166
100	7.80	13.80	0.431	0.0	0.38	169
200	7.56	13.96	0.433	0.0	0.89	174
300	7.73	14.08	0.434	0.0	1.20	176
400	7.75	14.18	0.434	0.0	1.06	154
500	7.75	14.14	0.434	0.0	0.90	156
Sample	7.87	14.09	0.437	0.0	1.12	152

Sampling
Time of Sample Collection: 415 p.m.

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PAA 360 Baseline, plus Freon 11/22

602 ____ 503 ____ Other ____

Observations
Weather/Temperature: Cold, breezy, 30-35, NW winds 10-15 mphs
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
gpm: 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-12-2020

SAMPLE ID: 46-2.2/12/2020
WELL ID: 46-2
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... 21.1' Time: _____
Initial static water level (from top of casing) ..... 12.72 Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 82.28 ft. of water x 0.65 = 53.4 gallons

volume of water removed: 275 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.58	23.94	0.495	17.5	2.08	89
50	7.05	23.00	0.520	0.0	0.42	-38
100	6.96	22.91	0.487	0.0	0.35	-35
150	6.90	22.95	0.476	0.0	0.47	-24
200	6.88	22.98	0.475	0.0	0.31	-24
250	6.87	22.95	0.475	0.0	0.29	-25
275	6.86	22.95	0.475	0.0	0.33	-25
Sample	6.90	22.96	0.473	0.0	0.32	-26

Sampling
Time of Sample Collection: 1000 am

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other _____

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Partly cloudy, mid 40-45°F, NW winds 10mphs
Sample description: Clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
gpm = 4

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-12-2020

SAMPLE ID: 4M-1-2-12-2020
WELL ID: 4M-1
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 325'
Initial static water level (from top of casing) 127.88

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 197.12 ft. of water x 0.65 = 128 gallons

volume of water removed: 550 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.08	23.03	4.50	63.5	1.51	-105
100	7.11	20.27	4.15	7.5	1.60	-55
200	7.11	20.20	4.11	3.4	1.74	-33
300	7.08	20.23	4.18	4.9	1.84	-23
400	7.08	20.24	4.08	5.1	2.85	-22
500	7.08	20.23	4.11	5.8	2.06	-19
550	7.08	20.24	4.12	5.2	2.07	-19
Sample	7.26	20.23	4.14	0.7	1.31	-12

Sampling

Time of Sample Collection: 1115 am

Method:

____	Stainless steel bailer
____	Teflon bailer
____	Pos. Disp. Pump
X	Disposable bailer
____	Dedicated pump
____	Other: ____

Analyses:

X	VOCs
____	SVOCs
____	Metals
____	PCB/Pest.
____	Physical
X	Other PAH 360 Baseline, plus Freon 12/22

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Partly Cloudy, mild 40-45°F, NW winds 10 mph
Sample description: Yellowish Tint
Free Product? yes ____ no ____ describe ____
Sheen? yes ____ no ____ describe ____
Odor? yes X no ____ describe Slight leachate odor

Comments:

gpm = 4

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-12-2020

SAMPLE ID: 4M-2-2/12/2020
WELL ID: 4M-2
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) 486
Initial static water level (from top of casing) 130.33

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 355.67 ft. of water x 0.65 = 231 gallons

volume of water removed: 875 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.29	22.89	0.806	33	0.99	-49
100	6.11	18.61	1.23	0	0.68	-81
200	6.47	16.55	1.31	0	0.51	-80
300	6.50	15.80	1.35	0	0.76	-77
400	6.38	15.63	1.25	0	0.36	-64
500	6.37	15.44	1.19	0	0.31	-58
600	6.35	15.34	1.21	0	0.26	-56
700	6.35	15.38	1.19	0	0.38	-54
800	6.36	15.37	1.19	0	0.29	-54
875 sample	6.39	15.31	1.19	0	0.30	-52
		15.32	1.19		0.27	-53

Sampling Time of Sample Collection: 1045 am

Method:

____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:

X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline Parameters plus Freon 21/22

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Partly Cloudy, mid 40-45°F, NW winds 10 mph
Sample description: clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe Slight sulfur odor

Comments:

gpm = 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/20/2020

SAMPLE ID: GG-1
WELL ID: GG-1-2120
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 147'
Initial static water level (from top of casing) ..... 129.18'
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 7.82' ft. of water x 0.65 = 5 gallons

volume of water removed: 60 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	~~pH~~ Temp (C°)	~~Temp~~ PH	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	16.30	7.34	0.147	0.0	9.15	305
15	17.53	6.53	0.140	0.0	9.11	243
30	17.65	6.45	0.146	0.0	9.27	242
45	17.70	6.52	0.148	0.0	9.58	246
60	17.73	6.52	0.148	0.0	9.59	246
Sample	17.54	6.91	0.152	0.0	10.01	249

Sampling
Time of Sample Collection: 1130 am

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs 602 ____ 503 ____ Other ____
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline, plus Freon 21/22

Observations
Weather/Temperature: Partly cloudy, cool 28°-34°F, west winds 5 mphs
Sample description: clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
gpm 3

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE: Blydenburgh Road Landfill Complex DATE: 2/20/2020

SAMPLE ID: GG-2
WELL ID: GG-2-2/20/2020
SAMPLERS: Keith Robins

Time On-site: ______ Time Off-site: ______

Depth of well (from top of casing) .... 230' Time: ______
Initial static water level (from top of casing) .... 137.48' Time: ______

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ______ ft. of water x 0.16 = ______ gallons
3 in. casing: ______ ft. of water x 0.36 = ______ gallons
4 in. casing: 92.52 ft. of water x 0.65 = 60 gallons

volume of water removed: 360 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.04	17.96	0.418	4.7	3.35	240
60	6.45	19.25	0.417	1.9	0.48	213
120	6.35	19.31	0.421	0.1	0.18	182
180	6.44	19.38	0.421	0.0	0.0	176
240	6.37	19.34	0.420	0.0	0.0	179
300	6.42	19.34	0.420	0.0	0.0	181
360	6.41	19.36	0.420	0.0	0.0	181
Sample	6.62	19.36	0.420	0.0	0.0	173

Sampling
Time of Sample Collection: 10:45 am

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ______

Analyses:
X VOCs 602 ____ 503 ____ Other ____
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other P.A. 360 Baseline, plus Freon 21/22

Observations
Weather/Temperature: Partly Cloudy, cool 28° - 34°F, west winds 5 mph
Sample description: Clear
Free Product? yes ____ no X describe ______
Sheen? yes ____ no X describe ______
Odor? yes ____ no X describe ______

Comments:
gpm = 6

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/20/2020

SAMPLE ID: 66-3
WELL ID: 66-3 2/20/2020
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 315'
Initial static water level (from top of casing) ..... 138.55'
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	✓	Ded. Pump	____

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 176.45 ft. of water x 0.65 = 115 gallons

volume of water removed: 540 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.45	18.72	0.408	21	0.64	87
120	6.72	17.97	0.411	0.0	0.0	-35
240	6.77	17.46	0.409	0.0	0.0	-32
360	7.36	17.45	0.420	0.0	0.0	-51
480	7.19	17.50	0.418	0.0	0.0	-29
540	7.19	17.51	0.418	0.0	0.0	-29
Sample	6.44	17.48	0.420	0.0	0.0	-7

Sampling

Time of Sample Collection: 0900

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Baseline PeA360, plus Freon 21/22

602 _____ 503 _____ Other _____

Observations

Weather/Temperature: Partly cloudy, cool 28°-34° F, west winds, 5 mph
Sample description: clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
gpm: 6

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-12-2020

SAMPLE ID: IM-1-2/12/20
WELL ID: IM-1
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... 214.0' Time: _____
Initial static water level (from top of casing) ..... 25.72' Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 188.28' ft. of water x 0.65 = 1223 gallons

volume of water removed: 500 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.41	12.57	0.153	0.0	5.36	130
100	5.72	12.86	0.154	0.7	0.98	180
200	5.72	12.88	0.155	0.0	0.58	173
300	5.71	12.88	0.155	0.0	0.59	200
400	5.72	12.88	0.155	0.0	0.31	203
500	5.71	12.88	0.153	0.0	0.29	205
Sample	5.77	12.90	0.156	0.0	0.99	199

Sampling

Time of Sample Collection: 4:15pm

Method:		Analyses:							
____	Stainless steel bailer	X	VOCs	602	____	503	____	Other	____
____	Teflon bailer	____	SVOCs						
____	Pos. Disp. Pump	____	Metals						
X	Disposable bailer	____	PCB/Pest.						
____	Dedicated pump	____	Physical						
____	Other: ____	X	Other	Part 360 Baseline plus Freon 21/22					

Observations

Weather/Temperature: Partly cloudy, mild 40-45°F, NW winds 10mphs
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:

gpm: 6.5
(Collected Blind Duplicate-1)

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-14-2020

SAMPLE ID: 86-1
WELL ID: 86-1-2/14/2020
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 114'
Initial static water level (from top of casing) ..... 93.50'

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 18.50 ft. of water x 0.65 = 12 gallons

volume of water removed: 75 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.47	13.69	2.35	186	7.67	138
15	6.24	14.23	2.53	18.2	7.35	164
30	6.05	14.84	2.60	8	7.43	186
45	6.04	14.85	2.61	0	7.45	188
60	6.00	14.88	2.63	0	7.37	191
75	5.99	14.90	2.64	0	7.28	192
Sample	5.99	14.60	2.67	0	5.71	196

Sampling
Time of Sample Collection: 1:45 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PeA 360 Baseline, plus freon 21/22

602 ____ 503 ____ Other ____

Observations
Weather/Temperature: Cold, breezy 30-35°F, NW winds 10-15 mph
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
gpm: 5

/

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE: Blydenburgh Road Landfill Complex DATE: 2/14/2020

SAMPLE ID: 8M-1
WELL ID: 8M-1 -2/14/2020
SAMPLERS: Keith Robins

Time On-site: ______ Time Off-site: ______

Depth of well (from top of casing) .... 270 Time: ______
Initial static water level (from top of casing) .... 94.68 Time: ______

Purging Method

Airlift ____ Centrifugal ____
Bailer ____ Pos. Displ. ____
Submersible X Ded. Pump ____

Well Volume Calculation:

2 in. casing: ______ ft. of water x 0.16 = ______ gallons
3 in. casing: ______ ft. of water x 0.36 = ______ gallons
4 in. casing: 175.32 ft. of water x 0.65 = 114 gallons

volume of water removed: 475 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.73	14.52	0.330	12.2	1.92	-13
100	7.36	13.98	0.616	0	2.40	2
200	7.36	14.02	0.623	0	0.50	6
300	7.37	14.04	0.625	0	0.69	25
400	7.37	14.04	0.625	0	0.44	20
475	7.37	14.05	0.625	0	0.41	31
Sample	7.42	13.70	0.623	0	0.75	38

Sampling

Time of Sample Collection: 10:00am

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- X Disposable bailer
- ____ Dedicated pump
- ____ Other: ______

Analyses:
- X VOCs 602 ______ 503 ______ Other ______
- ____ SVOCs
- ____ Metals
- ____ PCB/Pest.
- ____ Physical
- X Other PAA 360 Baseline, plus Freon 21/22

Observations

Weather/Temperature: Cold, breezy, NW 10-15 mph, 30-35°F
Sample description: Clear
Free Product? yes ____ no X describe ______
Sheen? yes ____ no X describe ______
Odor? yes ____ no X describe ______

Comments:

gpm: 6

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FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blyderburgh Road Landfill Complex DATE 2-14-2020

SAMPLE ID: 8M-2
WELL ID: 8M-2-2142020
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... 383.5 Time: _____
Initial static water level (from top of casing) ..... 99.71 Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 283.79 ft. of water x 0.65 = 184.7 gallons

volume of water removed: 700 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.38	14.13	0.399	0	1.98	187
100	6.88	12.91	0.154	0	0.42	113
200	6.88	12.19	0.135	0	0.38	59
300	6.80	12.13	0.136	0	0.56	63
400	6.83	12.10	0.125	0	0.59	70
500	6.85	12.10	0.125	0	0.49	70
600	6.85	12.07	0.121	0	0.32	70
700	6.84	12.05	0.121	0	0.20	72
Sampling Sample	6.87	12.06	0.117	0	0.29	72

Time of Sample Collection: 1255pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
X VOCs 602 _____ 503 _____ Other _____
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PerA360 Baseline plus Freon 21/22

Observations
Weather/Temperature: Cold, Breezy, 10-15 mph NW, 30-35°F
Sample description: Clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
gpm .5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-13-2020

SAMPLE ID: 10M-1
WELL ID: 10M-1 - 2/13/2020
SAMPLERS: Kevin Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) 256
Initial static water level (from top of casing) 49.00

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 207 ft. of water x 0.65 = 135 gallons

volume of water removed: 550 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv)
Initial	7.88	13.92	0.540	0	1.69	148
100	7.86	12.34	0.588	0	0.50	126
200	7.91	12.29	0.600	0	0.40	117
300	7.93	12.29	0.603	0	0.30	113
400	7.92	12.27	0.601	0	0.30	104
500	7.92	12.25	0.601	0	0.28	101
550	7.92	12.25	0.600	0	0.28	100
Sample	7.95	12.24	0.598	0	0.39	98

Sampling

Time of Sample Collection: 345 pm

Method:		Analyses:						
____	Stainless steel bailer	X	VOCs	602 ____	503 ____	Other ____		
____	Teflon bailer	____	SVOCs					
____	Pos. Disp. Pump	____	Metals					
X	Disposable bailer	____	PCB/Pest.					
____	Dedicated pump	____	Physical					
____	Other: ____	X	Other	PsA 360 Baseline, plus Freon 11/12				

Observations

Weather/Temperature: Drizzle, Rain 40-50°F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:

gpm 6.5. Collected MS/MSD

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-11-2020

SAMPLE ID: 11G-1-2/11/2020
WELL ID: 11G-1
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 145'
Initial static water level (from top of casing) ..... 127.80'

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 17.20 ft. of water x 0.65 = 11 gallons

volume of water removed: 60 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) (ORP)
Initial	7.04	2023	2.56	5.2	0.51	8
10	6.95	23.76	2.67	2.6	0.15	-36
20	6.43	24.32	2.66	1.4	0.10	-45
30	6.88	25.12	2.66	0	0.0	-64
40	6.86	25.18	2.66	0	0.0	-65
50	6.87	25.21	2.66	0	0.0	-67
60	6.88	25.06	2.665	0	0.0	-69
Sample	6.93	25.06	2.65	0	0.0	-7

Sampling

Time of Sample Collection: 1 45 pm

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- X Disposable bailer
- ____ Dedicated pump
- ____ Other: ____

Analyses:
- X VOCs
- ____ SVOCs
- ____ Metals
- ____ PCB/Pest.
- ____ Physical
- X Other Freon 21/22, plus PA360 Baseline

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Drizzle - 40-50° F
Sample description: Clear - slight yellow tint
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:

gpm = 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-11-2020

SAMPLE ID: 116-2-2/11/2020
WELL ID: 116-2
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 221.05'
Initial static water level (from top of casing) ..... 128.18'

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 92.82 ft. of water x 0.65 = 60 gallons

volume of water removed: 250 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) (ORP)
Initial	6.71	22.31	2.91	19.1	0.62	-48
50	6.34	22.21	2.94	15.7	0.16	-35
100	6.25	21.98	3.03	0.4	0.02	-44
150	6.38	22.10	3.04	0.1	0.0	-41
200	6.43	22.12	3.04	0.0	0.0	-45
250	6.48	22.16	3.06	0.0	0.0	-48
Sample	6.53	21.85	3.05	0.0	0.0	-41

Sampling

Time of Sample Collection: 1100 pm

Method:

____	Stainless steel bailer
____	Teflon bailer
____	Pos. Disp. Pump
X	Disposable bailer
____	Dedicated pump
____	Other: ____

Analyses:

X	VOCs	602	____	503	____	Other	____
____	SVOCs						
____	Metals						
____	PCB/Pest.						
____	Physical						
X	Other	Part 360 Baseline, plus Freon 4/22					

Observations

Weather/Temperature: Drizzle - 40-50°F
Sample description: Yellowish Tint
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe Sulfer/ Landfill gas odor

Comments:

gpm - 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/20/2020

SAMPLE ID: 12M-1
WELL ID: 12M-1-2/20/2020
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 338'
Initial static water level (from top of casing) ..... 136.49'
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	✓	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 201.51 ft. of water x 0.65 = 131 gallons

volume of water removed: 600 gal. >3 volumes: yes ✓ no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.44	17.88	0.648	0.0	0.42	330
100	6.71	16.63	0.652	0.0	0.00	49
200	6.81	16.33	0.654	0.0	0.00	14
300	6.82	16.29	0.654	0.0	0.00	9
400	6.85	16.25	0.653	0.0	0.00	6
500	6.83	16.25	0.653	0.0	0.00	5
600	6.84	16.24	0.653	0.0	0.00	2
Sample	6.93	16.25	0.653	0.0	0.00	2

Sampling

Time of Sample Collection: 2:00pm

Method:

____	Stainless steel bailer
____	Teflon bailer
____	Pos. Disp. Pump
X	Disposable bailer
____	Dedicated pump
____	Other: ____

Analyses:

X	VOCs
____	SVOCs
____	Metals
____	PCB/Pest.
____	Physical
X	Other Part 360 Baseline, plus Freon 21/22

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Partly cloudy, cool 28°-34°F, west winds 5 mph
Sample description: clear / no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:

gpm: 5.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/11/2020

SAMPLE ID: 136-1-2/11/2020
WELL ID: 136-1
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... 93.00 Time: _____
Initial static water level (from top of casing) ..... 70.15 Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 22.85 ft. of water x 0.65 = 14.8 gallons

volume of water removed: 75 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	5.40	11.99	0.128	2.7	10.06	202
15	4.52	12.28	0.151	0.6	9.99	224
30	4.65	12.42	0.153	0	9.73	252
45	4.66	12.41	0.152	0	9.69	256
60	4.67	12.41	0.153	0	9.64	259
75	4.67	12.41	0.153	0	9.60	262
Sample	5.02	12.34	0.155	0	9.53	251

Sampling
Time of Sample Collection: 515 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline, plus Freon 21/22

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Drizzle - Rain 40-50°F
Sample description: clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
ppm: 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Land-fill Complex DATE 2-11-2020

SAMPLE ID: 13M-1-2/11/2020
WELL ID: 13M-1
SAMPLERS: Kevin Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 265.
Initial static water level (from top of casing) 69.63

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 195.37 ft. of water x 0.65 = 127 gallons

volume of water removed: 500 gal.

>3 volumes: yes X no ____

purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) (ORP)
Initial	7.03	12.25	0.334	1.4	1.25	152
100	6.55	11.35	0.815	0.6	0.46	-27
200	6.73	11.22	0.864	0	0.0	-36
300	6.73	11.21	0.872	0	0.0	-25
400	6.83	11.20	0.874	0	0.0	-23
500	6.85	11.20	0.874	0	0.0	-24
Sample	6.88	11.23	0.874	0	0.0	-20

Sampling

Time of Sample Collection: 4:30 pm

Method:

____	Stainless steel bailer
____	Teflon bailer
____	Pos. Disp. Pump
X	Disposable bailer
____	Dedicated pump
____	Other: ____

Analyses:

X	VOCs	602 ____	503 ____	Other ____
____	SVOCs			
____	Metals			
____	PCB/Pest.			
____	Physical			
X	Other	PAH 360 Baseline, plus Freon 21/22		

Observations

Weather/Temperature: Drizzle - Rain 40-50°F
Sample description: Clear

Free Product? yes ____	no X	describe	____
Sheen? yes ____	no X	describe	____
Odor? yes ____	no X	describe	____

Comments:

gpm: 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-19-2020

SAMPLE ID: 14G-1A
WELL ID: 14G-1A -2 2/19/2020
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 220'
Initial static water level (from top of casing) ..... 121.61'

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 98.39 ft. of water x 0.65 = 64 gallons

volume of water removed: 325 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.55	17.81	0.522	113	2.90	216
50	7.41	16.52	0.505	0	5.73	185
100	7.42	16.49	0.505	0	7.71	182
150	7.51	16.57	0.518	0	9.57	184
200	7.44	16.49	0.503	0	3.20	193
250	7.50	16.47	0.521	0	4.45	188
300	7.51	16.57	0.503	0	4.44	193
325	7.51	16.57	0.505	0	4.40	193
Sampling Sample	7.52	16.64	0.501	0	2.61	193

Time of Sample Collection: 1215 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline, plus Freon 21/22

602 ____ 503 ____ Other ____

Observations
Weather/Temperature: Sunny, cool 30-35°F
Sample description: clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
gpm: 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/13/2020

SAMPLE ID: 146-2-2/13/2020
WELL ID: 146-2
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 264 Time:
Initial static water level (from top of casing) ..... 121.21 Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 142.79 ft. of water x 0.65 = 93 gallons

volume of water removed: 400 gal. >3 volumes: yes X no ____ purged dry? yes ____ no ____

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.65	19.24	0.440	15.2	9.43	126
50	7.66	16.56	0.443	3.4	4.23	102
100	7.67	16.60	0.443	0	4.32	100
150	7.68	16.32	0.444	0	4.34	92
200	7.66	16.65	0.444	0	4.35	81
300	7.68	16.67	0.444	0	4.36	78
400	7.68	16.67	0.443	8	4.03	83
sample	7.69	16.62	0.442		2.84	101

Sampling
Time of Sample Collection: 1245pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PaA 360 Baseline plus Freon 12/22

602 ____ 503 ____ Other ____

Observations
Weather/Temperature: Drizzle/Rain 40-50°F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:
gpm-5.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill DATE 2/13/2020

SAMPLE ID: 14M-1_2/13/2020
WELL ID: 14M-1
SAMPLERS: Keith Rubins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 355 Time:
Initial static water level (from top of casing) ..... 121.14 Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 233.86 ft. of water x 0.65 = 152 gallons

volume of water removed: 675 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	6.87	17.36	2.49	10.1	0.0	-10
100	7.15	16.79	2.40	0	0.0	-30
200	7.21	15.97	2.40	0	0.0	-42
300	7.34	15.99	2.40	0	0.0	-53
400	7.29	15.96	2.40	0	0.0	-49
500	7.30	15.92	2.40	0	0.0	-51
600	7.30	15.91	2.39	0	0.0	-50
675	7.30	15.91	2.39	0	0.0	-50
Sampling Sample	7.37	15.89	2.38	0	0.0	-49

Time of Sample Collection: 1030 am

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs 602 ____ 503 ____ Other ____
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline, plus Freon 21/22

Observations
Weather/Temperature: Drizzle Rain 40-50 °F
Sample description: Yellowish Tint
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe slight leachate odor

Comments:
gpm 5.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-18-2020

SAMPLE ID: 16M-1
WELL ID: 16M-1 2/18/2020
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 240'
Initial static water level (from top of casing) ..... 37.89'
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 202.11 ft. of water x 0.65 = 131 gallons

volume of water removed: 600 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	7.54	13.01	0.451	0	3.42	258
100	7.42	12.84	0.448	0	0.0	249
200	7.35	12.59	0.447	0	0.0	235
300	7.54	12.58	0.448	0	0.0	210
400	7.57	12.57	0.447	0	0.0	187
500	7.61	12.56	0.447	0	0.0	169
600	7.60	12.58	0.447	0	0.0	161
Sample	7.66	12.60	0.447	0	0.0	158

Sampling
Time of Sample Collection: 1200 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
X Physical
____ Other PCA 360 Bwelle, plus Freon 12/22

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Overcast, cool 40-45, light breeze (0-5 mph)
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

Comments:
Collected Blind Duplicate - 2
Gpm 6

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-11-2020

SAMPLE ID: 186-1-2/11/2020
WELL ID: 186-1
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 157.50'
Initial static water level (from top of casing) ..... 127.45'

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 30.05 ft. of water x 0.65 = 19.5 gallons

volume of water removed: 100 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) (ORP)
Initial	6.61	19.44	0.766	53.3	2.83	256
20	6.49	20.81	0.761	18.7	0.64	170
40	6.46	21.16	0.758	0.0	0.75	141
60	6.46	21.16	0.755	0.0	0.75	113
80	6.45	21.23	0.757	0.0	0.71	109
100	6.45	21.27	0.756	0.0	0.64	109
Sample	6.43	21.06	0.757	0.0	0.38	86

Sampling

Time of Sample Collection: 10:30 am

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- X Disposable bailer
- ____ Dedicated pump
- ____ Other: ____

Analyses:
- X VOCs
- ____ SVOCs
- ____ Metals
- ____ PCB/Pest.
- ____ Physical
- X Other Part 360 baseline, plus Freon 21/22

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Drizzle, 40-50°F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:

gpm = 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-11-2020

SAMPLE ID: 186-2-2/11/2020
WELL ID: 186-2
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) 197.50
Initial static water level (from top of casing) 127.58

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 69.92 ft. of water x 0.65 = 45.4 gallons

volume of water removed: 200 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) (ORP)
Initial	5.90	21.17	0.603	16.9	3.57	223
25	5.96	21.48	0.603	0	2.82	211
50	5.95	21.55	0.601	0	0.71	213
75	6.22	21.76	0.594	0	035	143
100	6.23	21.73	0.595	0	036	142
125	6.22	21.88	0.592	0	029	188
150	6.22	21.85	0.593	0	0.28	188
175	6.18	21.85	0.592	0	027	188
200	6.18	21.91	0.592	0	026	188
Sampling Sample	6.20	21.78	0.593	0	0.31	186

Time of Sample Collection: 0915 am

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: ____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline Plus Freon 21/Freon 22

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Drizzle, 40-50°F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Comments:

gpm: 5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill DATE 2-12-2020

SAMPLE ID: 22M-1-2/12/2020
WELL ID: 22M-1
SAMPLERS: Keith Rubins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 222.5' Time:
Initial static water level (from top of casing) ..... 19.28' Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 203.22 ft. of water x 0.65 = 132 gallons

volume of water removed: 550 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	8.13	12.41	0.183	11.3	0.23	-29
100	4.87	12.91	0.188	14.4	0.0	96
200	4.93	12.95	0.205	3.7	0.0	159
300	5.07	12.96	0.206	2.4	0.0	203
400	5.13	12.97	0.202	1.2	0.0	225
500	5.08	12.98	0.202	0.9	0.0	240
550	5.08	12.98	0.202	0.7	0.0	240
Sample	5.40	12.99	0.202	0.7	0.0	224

Sampling

Time of Sample Collection: 6:00 pm

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- X Disposable bailer
- ____ Dedicated pump
- ____ Other: ____

Analyses:
- X VOCs
- ____ SVOCs
- ____ Metals
- ____ PCB/Pest.
- ____ Physical
- X Other Part 360 Baseline, plus Freon 21/22

602 ____ 503 ____ Other ____

Observations

Weather/Temperature: Partly cloudy, mild 40-45°F, NW winds 10 mphs
Sample description: clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe slight sulfer odor

Comments:

gpm: 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-18-2020

SAMPLE ID: 23M-1
WELL ID: 23M-1 -2/18/2020
SAMPLERS: Kenth Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) 240.50
Initial static water level (from top of casing) 35.25

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: 204.75 ft. of water x 0.65 = 133 gallons

volume of water removed: 550 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Initial	5.51	11.07	0.201	7.6	0.59	303
100	6.45	11.93	0.301	0	0.0	234
200	6.43	11.94	0.301	0	0.0	237
300	6.66	11.94	0.248	0	0.0	227
400	6.83	11.95	0.293	0	0.0	224
500	6.82	11.95	0296	0	0.0	218
600	6.82	11.93	0.295	0	0.0	222
Sample	6.87	11.93	0298	0	0.0	215

Sampling
Time of Sample Collection: 0915

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
X Disposable bailer
____ Dedicated pump
____ Other: _____

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PAH 360 Baseline, Plus Freon 22

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Overcast, cool 40-45°F, light breeze
Sample description: clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:
gpm: 6

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blyberburgh Road Landfill Complex DATE 2-14-2020

SAMPLE ID: GW-1D
WELL ID: GW-1D- 2/14/2020
SAMPLERS: Keith Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 39.9'
Initial static water level (from top of casing) ..... NA

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: NA gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Sample	6.46	11.75	1.37	0.0	1.46	97

Sampling
Time of Sample Collection: 345 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
X Dedicated pump
X Other: Sample spigot

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PCA 360 Baseline Parameter, Plus Freon 21/22

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Cold, breezy, 30-35, NW winds 10-15 mph
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-19-2020

SAMPLE ID: EW-1
WELL ID: EW-1-2/19/20
SAMPLERS: Kenth Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... ≈ 225'
Initial static water level (from top of casing) ..... NA

Time: _____
Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: _____ gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Sample	6.65	17.83	0.124	0.0	3.27	66

Sampling

Time of Sample Collection: 3:15 pm

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump
- X Other: sample spigot

Analyses:
- X VOCs
- ____ SVOCs
- ____ Metals
- ____ PCB/Pest.
- ____ Physical
- X Other: Freon 21/22, plus PCA 360 Baseline

602 _____ 503 _____ Other _____

Observations

Weather/Temperature: Sunny Cool 30-35°F
Sample description: Clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/20/2020

SAMPLE ID: EW-2
WELL ID: EW-2-2/20/20
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... ≈223 FT Time: _____
Initial static water level (from top of casing) ..... NA Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	✓	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: — gal. >3 volumes: yes ____ no X purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Sample	6.71	14.63	0.413	30	3.49	63

Sampling
Time of Sample Collection: 3:00 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
X Dedicated pump
X Other: Sample spigot

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other PwA 360 Baseline, plus Freon 21/22

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Partly Cloudy, cool 28°-34°F, west winds 5 mph
Sample description: Slightly Cloudy, light Brown color
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2/19/2020

SAMPLE ID: EW-3
WELL ID: EW-3 - 2/19/20
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... ≈ 312' Time: _____
Initial static water level (from top of casing) ..... NA Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: _____ gal. >3 volumes: yes ✓ no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Sample	7.51	14.01	0.507	0.0	5.00	294

Sampling

Time of Sample Collection: 1:30pm

Method:

____	Stainless steel bailer
____	Teflon bailer
____	Pos. Disp. Pump
____	Disposable bailer
X	Dedicated pump
X	Other: Sample spigot

Analyses:

X	VOCs	602	____	503	____	Other	____
____	SVOCs						
____	Metals						
____	PCB/Pest.						
____	Physical						
X	Other	PSA 360 Baseline, plus Freon 21/22					

Observations

Weather/Temperature: Sunny cool 30-35°F
Sample description: clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments: Collected (MS/MSD)

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-19-2020

SAMPLE ID: EW-4
WELL ID: EW-4 -2/19/2020
SAMPLERS: Keith Robins

Time On-site: _____ Time Off-site: _____

Depth of well (from top of casing) ..... 305' Time: _____
Initial static water level (from top of casing) ..... NA Time: _____

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	✓	Ded. Pump	____

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: _____ gal. >3 volumes: yes ✓ no ____ purged dry? yes ____ no ✓

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) ORP
Sample	7.49	14.91	0.482	0.0	4.30	342

Sampling

Time of Sample Collection: 2:30 p.m

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- X Dedicated pump
- X Other: Sample spigot

Analyses:
- X VOCs
- ____ SVOCs
- ____ Metals
- ____ PCB/Pest.
- ____ Physical
- X Other PeRA360 Baseline plus Freon 12/22

602 _____ 503 _____ Other _____

Observations

Weather/Temperature: Sunny, cool 30-35°F
Sample description: clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

Comments:

♦1222\G0722801.DOC

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 2-12-2020

SAMPLE ID: EW-6-2/12/2020
WELL ID: EW-6
SAMPLERS: K. Robins

Time On-site: Time Off-site:

Depth of well (from top of casing) ..... 215'
Initial static water level (from top of casing) ..... NA

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible	X	Ded. Pump	____

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: ~ gal. >3 volumes: yes ✓ no ____ purged dry? yes ____ no ✓

Field Tests

Volume of Purge Water (in gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	Eh (mv) (ORP)
Sample	7.57	12.10	0.192	0.0	4.47	107

Sampling
Time of Sample Collection: 2:00 pm

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
X Dedicated pump
X Other: Sample spigot

Analyses:
X VOCs
____ SVOCs
____ Metals
____ PCB/Pest.
____ Physical
X Other Part 360 Baseline, plus Freon 21/22

602 _____ 503 _____ Other _____

Observations
Weather/Temperature: Partly Cloudy, mild 40-45°F, NW winds 10 mph
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

Comments:

APPENDIX C

CHAIN OF CUSTODY FORMS

PaceAnalytical
WWW.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Islip Resource Recovery	Report To:	Anthony Varrichio	Attention:	Anthony Varrichio
Address:	401 Main Street	Copy To:	Keith Robins	Company Name:	IRRA
Islip, NY 11751				Address:	401 Main Street, Islip NY
Email:	avarrichio@islipny.gov	Purchase Order #:		Pace Quote:	
Phone:	(631)595-3749 Fax	Project Name:	Blydenburgh LF-Post Closure - Baseline	Pace Project Manager:	jennifer.aracri@pacelabs.com
Requested Due Date:	21 Business Days	Project #:	3763 First Qtr 2020	Pace Profile #:	5516

Regulatory Agency	State / Location
	NY

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons	Residual Chlorine (Y/N)	NYCRR Part 360 Baseline plus Freon 21 and Freon 22
1	18G-2-2/11/2020	WT	G	2/11/2020	0915	2/11/2020			9	2	3	1	2	1	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	N	
2	18G-1-2/11/2020	WT	G	2/11/2020	0930	2/11/2020			9	2	3	1	2	1	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	N	
3	11G-2-2/11/2020	WT	G	2/11/2020	1000	2/11/2020			9	2	3	1	2	1	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	N	
4	11G-1-2/11/2020	WT	G	2/11/2020	1045	2/11/2020			9	2	3	1	2	1	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	N	
5	13M-1-2/11/2020	WT	G	2/11/2020	1130	2/11/2020			9	2	3	1	2	1	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	N	
6	13G-1-2/11/2020	WT	G	2/11/2020	1515	2/11/2020			9	2	3	1	2	1	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	N	
7	Trip Blank-2/11/2020	WT	-	2/11/2020		2/11/2020			2	-	-	-	2	-	-	-	-	X	-	-	-	-	✓	-	✓		N	
8																												
9																												
10																												
11																												
12																												

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Provide EQuIS and Catagory "B" Deliverables	Keith Robins/IRRA	2/12/2020	0700				

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Keith Robins				
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed:	2-12-2020	TEMP in C	
				Received on Ice (Y/N)	
				Custody Sealed Cooler (Y/N)	
				Samples Intact (Y/N)	

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Islip Resource Recovery	Report To:	Anthony Varrichio	Attention:	Anthony Varrichio
Address:	401 Main Street	Copy To:	Keith Robins (D+S)	Company Name:	ISRRA
	Islip, NY 11751			Address:	40 Main Street Islip NY
Email:	avarrichio@islipny.gov	Purchase Order #:		Pace Quote:	
Phone:	(631)595-3749 Fax	Project Name:	Blydenburgh LF-Post Closure - Baseline	Pace Project Manager:	jennifer.aracri@pacelabs.com,
Requested Due Date:	Standard	Project #:	3763- Fourth Qtr 2020	Pace Profile #:	5516

Regulatory Agency	
State / Location	NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons	Residual Chlorine (Y/N)	NYCRR Part 360 Baseline, plus From 21 and From 22
1	Trip Blank - 2/12/20	WT	-	2/12/20	-	2/12/20	-		2	-	-	-	2	-	-	-	-	N	-	-	-	-	-	✓	-	✓	N	
2	GM-2 - 2/12/2020	WT	G	2/12/20	1045	2/12/20	-		3	1	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
3	GM-1 - 2/12/2020	WT	G	2/12/20	1130	2/12/20	-		3	1	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
4	GG-2 - 2/12/2020	WT	G	2/12/20	1215	2/12/20	-		3	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
5	EW-6 - 2/12/2020	WT	G	2/12/20	1245	2/12/20	-		3	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
6	DM-1 - 2/12/2020	WT	G	2/12/20	1315	2/12/20	-		3	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
7	Field Duplicate - 2/12/2020	WT	G	2/12/20	0000	2/12/20	-		3	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
8	EB-2 - 2/12/2020	WT	G	2/12/20	1400	2/12/20	-		3	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	✓	N	
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Category "B" and EQUIS Deliverable	Keith Robins D+S	2-13-20	0730				

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Keith Robins		
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed:	2-13-2020

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

Section A
Required Client Information:

Company:	Islip Resource Recovery
Address:	401 Main Street
	Islip, NY 11751
Email:	avarrichio@islipny.gov
Phone:	(631)595-3749 Fax
Requested Due Date:	STANDARD

Section B
Required Project Information:

Report To:	Anthony Varrichio
Copy To:	Keith Robins (D+B)
Purchase Order #:	
Project Name:	Blydenburgh LF-Post Closure - Baseline
Project #:	3763 - First Qtr 2020

Section C
Invoice Information:

Attention:	Anthony Varrichio, PE
Company Name:	IRRA
Address:	401 Main Street, Islip NY
Pace Quote:	
Pace Project Manager:	jennifer.aracri@pacelabs.com,
Pace Profile #:	5516

Regulatory Agency	
State / Location	NY

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

Requested Analysis Filtered (Y/N): N N N N N N N N

Preservatives / Analyses Test

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons	Residual Chlorine (Y/N)	NYCRR Part 360 Baseline Parameters Plus Freon 21/Freon 22
1	Trip Blank - 2/13/2020	WT	–	2/13/20	—	2/13/20	—		2	–	–	–	2	–	–	–	–	–	–	–	–	–	✓	–	✓	N	
2	14M-1 - 2/13/2020	WT	G	2/13/20	10:20	2/13/20	—		9	2	3	1	2	1	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	N	
3	14G-2 - 2/13/2020	WT	G	2/13/20	12:45	2/13/20	—		9	2	3	1	2	1	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	N	
4	10M-1 - 2/13/2020	WT	G	2/13/20	3:45	2/13/20	—		9	2	3	1	2	1	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	N	
5	10M-1 - 2/13/2020 (MS)	WT	G	2/13/20	3:47	2/13/20	—		9	2	3	1	2	1	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	N	
6	10M-1 - 2/13/2020 (MSD)	WT	G	2/13/20	3:47	2/13/20	—		9	2	3	1	2	1	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	N	
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Category "B" Deliverables	Keith Robins (D+B)	2/14/20	0730							
also provide in EQuIS										
Send data also to										
Lab data @ d6-[illegible]										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:	Keith Robins		
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed:	2-14-2020

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Islip Resource Recovery	Report To:	Anthony Varrichio	Attention:	Anthony Varrichio
Address:	401 Main Street	Copy To:	KEITH ROBINS / DTB	Company Name:	IRRA
Islip, NY 11751				Address:	401 Main St 2nd Fl Islip
Email:	avarrichio@islipny.gov	Purchase Order #:		Pace Quote:	
Phone:	(631)595-3749 Fax	Project Name:	Blydenburgh LF-Post Closure - Baseline	Pace Project Manager:	jennifer.aracri@pacelabs.com,
Requested Due Date:	STANDARD	Project #:	3263 - Fall 2020	Pace Profile #:	5516

Regulatory Agency

State / Location: NY

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Melals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons	Residual Chlorine (Y/N)	NYCRR Part 360 Baseline Plus Freon 21 and Freon 22
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	N	N	N	N	N	N	N	N		
1	Trip Blank - 2/14/2020	WT	-	2/14/20	-	2/14/20	-		2	-	-	-	2	-	-	-	-		-	-	-	-	✓	-	✓	N	
2	8M-1 - 2/14/2020	WT	G	2/14/20	1000	2/14/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	
3	8M-2 - 2/14/2020	WT	G	2/14/20	1255 pm	2/14/20			9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	
4	8G-1 - 2/14/2020	WT	G	2/14/20	1445 pm	2/14/20			9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	
5	GM-1I - 2/14/2020	WT	G	2/14/20	415	2/14/20			9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	
6	GM-1D - 2/14/20	WT	G	2/14/20	2:45 pm	2/14/20			9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	
7	Field Blank - 2 - 2/14/2020	WT	G	2/14/20	330 pm	2/14/20			9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Provide EQuIS 6.0	Keith Robins / DTB	2-14-2020	17:21	[signature] Pace LI	2/14/20	17:21	6.0	(C)	N	4
Category "B" deliverables										
Send data 9/30 TO										
Lab Data@dtb-eng.com										

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	KEITH RUBINS					
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 2-14-2020				

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Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Islip Resource Recovery	Report To:	Anthony Varrichio	Attention:	Anthony Varrichio [illegible]
Address:	401 Main Street	Copy To:	Keith Robinson (D&B)	Company Name:	[illegible]
Islip, NY 11751				Address:	401 Main Street, Islip, NY
Email:	avarrichio@islipny.gov	Purchase Order #:		Pace Quote:	
Phone:	(631)595-3749 Fax	Project Name:	Blydenburgh LF-Post Closure - Baseline	Pace Project Manager:	jennifer.aracri@pacelabs.com,
Requested Due Date:	Standard	Project #:	[illegible]	Pace Profile #:	5516

Regulatory Agency	State / Location
	NY

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Requested Analysis Filtered (Y/N): N N N N N N N N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons					Residual Chlorine (Y/N)	NYCRR Part 360 Baseline plus Freon 21/Freon 22
1	Trip Blank - 2/18/2020	[illegible]	-	2/18/20	-	2/18/20	-		2	-	-	-	2	-	-	-	-		-	-	-	-	-	✓	-	✓					N	
2	2BM-1 - 2/18/2020	W	G	2/18/20	[illegible]	2/18/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓					N	
3	16M-1 - 2/18/2020	W	G	2/18/20	[illegible]	2/18/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓					N	
4	Blind Duplicate -2- 2/18/20	W	G	2/18/20	[illegible]	2/18/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓					N	
5																																
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Category "B" Deliverables	Keith Robinson / D&B	2/18/20	[illegible]							
plus EQuIS										
Provide data to										
Lab.data@[illegible].com										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Robinson

SIGNATURE of SAMPLER: Keith Robinson DATE Signed: [illegible]

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

Section A
Required Client Information:

Company:	Islip Resource Recovery
Address:	401 Main Street
	Islip, NY 11751
Email:	avarrichio@islipny.gov
Phone:	(631)595-3749 Fax
Requested Due Date:	STAndard

Section B
Required Project Information:

Report To:	Anthony Varrichio
Copy To:	KeitH RoBiNS (D+B)
Purchase Order #:	
Project Name:	Blydenburgh LF-Post Closure - Baseline
Project #:	First QRT 2020 (#3763)

Section C
Invoice Information:

Attention:	Anthony Varrichio P.E
Company Name:	DERA
Address:	401 Main Street, Islip NY
Pace Quote:	
Pace Project Manager:	jennifer.aracri@pacelabs.com,
Pace Profile #:	5516

Regulatory Agency	
State / Location	NY

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE (see valid codes to left); SAMPLE TYPE (G=GRAB C=COMP)

Requested Analysis Filtered (Y/N): N N N N N N N N

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons	Residual Chlorine (Y/N)
1	Trip Blank-2/19/20	WT	-	2/19/20	-	2/19/20	-		2	-	-	-	2	-	-	-	-		-	-	-	-	-	✓	-	✓	N
2	EW-1-2/19/20	WT	G	2/19/20	3¹⁵ pm	2/19/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
3	EW-4 -2/19/20	WT	G	2/19/20	2³⁰ pm	2/19/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
4	EW-3 -2/19/20	WT	G	2/19/20	1³⁰ pm	2/19/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
5	14G-1A -2/19/20	WT	G	2/19/20	12¹⁵ pm	2/19/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
6	EW-3 -2/19/20 (MS)	WT	G	2/19/20	1³⁰ pm	2/19/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
7	EW-3 - 2/19/20 (MSD)	WT	G	2/19/20	1³⁰ pm	2/19/20	-		9	2	3	1	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
8																											
9																											
10																											
11																											
12																											

NYCRR Part 360 Baseline Parameters plus Freon 11, and Freon 22

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Category "B" Deliverable also data provided in EQuIS send data to: labdata@db-eng.com	Keith Robins (D+B)	2/20/20	0700				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEITH ROBINS

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 2-20-20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 Of 1

Section A — Required Client Information:

Company:	Islip Resource Recovery
Address:	401 Main Street
	Islip, NY 11751
Email:	avarrichio@islipny.gov
Phone:	(631)595-3749 Fax
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	Anthony Varrichio
Copy To:	Keith Robins (D+B)
Purchase Order #:	
Project Name:	Blydenburgh LF-Post Closure - Baseline
Project #:	3763 (First QRT 2020)

Section C — Invoice Information:

Attention:	Anthony Varrichio, P.E.
Company Name:	IRR/A
Address:	401 Main street
Pace Quote:	
Pace Project Manager:	jennifer.aracri@pacelabs.com,
Pace Profile #:	5516

Regulatory Agency:

State / Location: NY

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Requested Analysis Filtered (Y/N): N N N N N N N N

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Volatiles +Freons	Residual Chlorine (Y/N)	NYCRR Part 360 Baseline Parameters plus Freon 21, and Freon 22
1	Trip Blank - 2/20/20	WT	—	2/20/20	—	2/20/20	—		2	—	—	—	2	—	—	—	—	—	—	—	—	—	✓	—	✓	N	
2	GG-3 - 2/20/20	WT	G	2/20/20	0900	2/20/20	—		9	2	3	1	2	1	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	N	
3	GG-2 - 2/20/20	WT	G	2/20/20	1045 am	2/20/20	—		9	2	3	1	2	1	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	N	
4	GG-1 - 2/20/20	WT	G	2/20/20	1130 am	2/20/20	—		9	2	3	1	2	1	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	N	
5	12M-1 - 2/20/20	WT	G	2/20/20	200 pm	2/20/20	—		9	2	3	1	2	1	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	N	
6	Field Blank - 2/20/20	WT	G	2/20/20	215	2/20/20	—		9	2	3	1	2	1	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	N	
7	EW-2 - 2/20/20	WT	G	2/20/20	300 pm	2/20/20	—		9	2	3	1	2	1	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓	N	
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Provide CATAGORY "B" and EQuis Deliverables, also send data to: Labdata@db-eng.com	Keith Robins / D+B	2/21/20	8:50	Jennifer Platt / Pace LI	2/20/20	8:50	1.7	Y	N	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Robins

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 2-21-20

APPENDIX D

DAILY CALIBRATION LOGS

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/11/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25

Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Mini RAE 3000- PID Meter	100 ppm Isobutylene gas	7:15 a.m.	Calibrated to 100 ppm, Background concentrations used for zero air
Four Gas Meter-QRAE3 – Model 2500- Serial number 042098	Carbon Monoxide 50 ppm Hydrogen Sulfide 10 ppm Methane 2.5 % Oxygen 18% Nitrogen balance	NA	Factory calibrated by Pine Environmental Rental. Meter readings calibrated within meter specifications.
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	7:25 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meter specifications

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/12/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25 Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	7:20 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meters specifications

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/13/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25 Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	8:00 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meters specifications

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/14/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25 Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	7:30 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meters specifications

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/18/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25 Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	7:20 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meters specifications

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/19/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25 Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	10:45 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meters specifications

D&B ENGINEERS AND ARCHITECTS, P.C.

Date: 2/20/2020

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Blydenburgh Road Landfill Complex

Project Number: 3763-25 Calibrated by: Keith Robins

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Horbia U52 Water Quality Meters- serial number kxa090yu and 791g80f7	Auto Calibration Solution Lot number:20100071 Exp:3/32/2021	7:15 a.m.	Calibrated pH, specific conductivity and turbidity. Field parameters calibrated within range of meters specifications

APPENDIX E

DATA VALIDATION FORMS

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill
Project Number:	3763-25
Sample Date(s):	February 11- 14, 2020
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 20 Soil/ 0 Field Duplicates/ 1 Trip Blanks / 4 Field Blanks/ 1
Analyzing Laboratory:	Pace Analytical., Melville, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: TAL by SW846 Method 6010C, mercury by Method 7470A and Cyanide by USEPA 9014 General Chemistry: Alkalinity (SM2320B); Ammonia (SM 4500); Chloride, Sulfate and Bromide (USEPA 300.0); Nitrate and Nitrite (USEPA 353.2); Biochemical Oxygen Demand (BOD) (SM5210B); Chemical Oxygen Demand (COD) (410.4); Phenolics (USEPA 420.1); Color (SM2120B); Total Dissolved Solids (SM 2540C); Hexavalent Chromium (SM3500-CR B); Total Kjeldahl Nitrogen (USEPA 351.2), Hardness (SM 2340C) and Total Organic Carbon (USEPA 9060A)
Laboratory Report No:	70121560 Date:3/13/2020

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/ Quality Control (QA/QC) requirements. The monitoring program requires a 20% validation specified

in Part 360. A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS, P.C.

SDG: 70121560
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
18G-2	70121560001	2/11/2020		X		X	X
18G-1	70121560002	2/11/2020		X		X	X
11G-2	70121560003	2/11/2020		X		X	X
11G-1	70121560004	2/11/2020		X		X	X
13M-1	70121560005	2/11/2020		X		X	X
13G-1	70121560006	2/11/2020		X		X	X
TRIP BLANK	70121560007	2/11/2020		X			
TRIP BLANK	70121560009	2/12/2020		X			
4M-2	70121560010	2/12/2020		X		X	X
4M-1	70121560011	2/12/2020		X		X	X
4G-2	70121560012	2/12/2020		X		X	X
EW-6	70121560013	2/12/2020		X		X	X
7M-1	70121560014	2/12/2020		X		X	X
BLIND DUPLICATE	70121560015	2/12/2020	7M-1	X		X	X
22M-1	70121560016	2/12/2020		X		X	X
TRIP BLANK	70121560017	2/13/2020		X			
14M-1	70121560018	2/13/2020		X		X	X
14G-2	70121560019	2/13/2020		X		X	X
10M-1	70121560020	2/13/2020		X		X	X
TRIP BLANK	70121560021	2/14/2020		X			
8M-1	70121560022	2/14/2020		X		X	X
8M-2	70121560023	2/14/2020		X		X	X
8G-1	70121560024	2/14/2020		X		X	X
GM-1I	70121560025	2/14/2020		X		X	X
GM-1D	70121560026	2/14/2020		X		X	X
FIELD BLANK-1	70121560027	2/14/2020		X		X	X

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample (LCS) spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)		X		X	

VOCs - volatile organic compounds %D - percent difference RRF - relative response factor
%R - percent recovery %RSD - percent relative standard deviation RPD - relative percent difference

Comments:
Performance was acceptable, with the following exceptions:

3-6. The %Rs were above the QC limits in the MS and/or MSD for 1,2-dichloropropane, ethylbenzene, toluene and xylene (total) associated with samples TRIP BLANK, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1. They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were below the QC limits in the LCS, MS and/or MSD for 1,1,1,2-tetrachloroethane, bromoform, bromomethane and trans-1,4-dichloro-2-butene associated samples TRIP BLANK, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1. The RPD was above the QC limit in the MS/ MSD for trans-1,4-dichloro-2-butene. The above compounds were qualified as an estimated (UJ) in the associated samples.

The %Rs were below the QC limits in the LCS, MS and/or MSD for iodomethane, 1,2-dibromo-3-chloropropane and 1,1,1,2-tetrachloroethane associated samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, TRIP BLANK, TRIP BLANK, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, TRIP BLANK, 14M-1, 14G-2 and 10M-1. The above compounds were qualified as an estimated (UJ) in the associated samples.

The RPD was above the QC limit in the MS/ MSD for 1,2-dibromo-3-chloropropane associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, TRIP BLANK, TRIP BLANK, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, TRIP BLANK, 14M-1, 14G-2 and 10M-1. It was not detected in the samples; therefore, qualification of the data was not necessary.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method and calibration blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X	X		
9. Post digestive spike sample %R		X	X		
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X	X		
12. Field duplicates RPD		X		X	

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, with the following exceptions:

2A&B. Iron and mercury were detected in the field blank, initial blank and/or preparation blank. Iron was qualified as non-detect (UB) in samples EW-6, BLIND DUPLICATE-2, 22M-1, 8M-1 and 8M-2. Mercury was qualified as non-detect (UB) in all samples.

8&9. The %R for silver was below the QC limit in the spike and post spike samples associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1. Silver was qualified as an estimated (UJ) in associated samples.

The %R for mercury was below the QC limit in the spike associated with samples 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1. Mercury was qualified as estimated (J/UJ) in associated samples.

11. The %Ds were above the QC limits in the serial dilution for lead and manganese associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1 and calcium associated with samples 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1. They were qualified as estimated (J/UJ) in the associated samples.

INORGANIC ANALYSES
GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X	X		
2. Blanks					
A. Laboratory blanks		X	X		
B. Field blanks		X	X		
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Laboratory control sample %R		X		X	
7. Spike sample %R		X	X		
8. Duplicate RPD		X	X		
9. Field duplicates RPD		X		X	

%R percent recovery RPD - relative percent difference %D – percent difference
RSD - relative standard deviation

Comments:
Performance was acceptable, with the following exception:

1. Hexavalent chromium was analyzed outside of holding times in samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1 and 14M-1. It was qualified as an estimated detection limit (UJ) in associated samples.

   Nitrate was analyzed outside of holding times in samples 10M-1, 14G-2 and 14M-1. It was qualified as an estimated (J/UJ) in associated samples.

2A&B. BOD, chloride, nitrate, ammonia and TKN were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): BOD in all samples; ammonia in sample EW-6; and TKN in sample 8M-2.

7. The %R was below the QC limit in the MS for TKN associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2 and 8G-1 and was qualified as estimated (J/UJ) in associated samples.

   The %R was above the QC limit in the MS and detected above the reporting limit for chloride in samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1 and BLIND DUPLICATE; sulfate in samples 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1 and BLIND DUPLICATE and TKN in sample GM-1D and were qualified as estimated (J).

8. The RPDs were above the QC limits in the duplicate for TDS associated with samples 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE and 22M-1; TKN associated with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2 and 8G-1; and nitrate associated

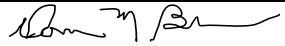
with samples 18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1. These were qualified as estimated (J/UJ) in associated samples.

DATA VALIDATION AND QUALIFICATION SUMMARY **Laboratory Numbers:70121560**

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
TRIP BLANK, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1	1,1,1,2-Tetrachloroethane, bromoform, bromomethane and trans-1,4-dichloro-2-butene	UJ	The %Rs were below the QC limits in the LCS, MS and/or MSD
18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, TRIP BLANK, TRIP BLANK, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, TRIP BLANK, 14M-1, 14G-2 and 10M-1	Iodomethane, 1,2-dibromo-3-chloropropane and 1,1,1,2-tetrachloroethane		
Metals			
EW-6, BLIND DUPLICATE-2, 22M-1, 8M-1 and 8M-2	Iron	UB	Detected in the field blank, initial blank, preparation blank and/or field blank
All samples	Mercury		
18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1	Silver	UJ	The %R was below the QC limit in the spike and post spike samples
4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1	Mercury	J/UJ	The %R was below the QC limit in the spike
18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1	Lead and manganese	J/UJ	The %D was above the QC limit in the serial dilution
4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2, 8G-1, GM-1I, GM-1D and FIELD BLANK-1	Calcium		
General Chemistry			
18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1 and 14M-1	Hexavalent chromium	J/UJ	Analyzed outside of holding times
10M-1, 14G-2 and 14M-1	Nitrate		
All samples	BOD	UB	Detected in the FIELD BLANK and/or method blank
EW-6	Ammonia		

8M-2	TKN		

Sample ID	Analyte(s)	Qualifier	Reason(s)
18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2 and 8G-1	TKN	J/UJ	The %Rs were below the QC limit in the MS
18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1 and BLIND DUPLICATE	Chloride	J	The %R was above the QC limit in the MS
13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1 and BLIND DUPLICATE	Sulfate		
GM-1D	TKN		
4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE and 22M-1	TDS	J/UJ	The RPDs were above the QC limits in the duplicate
18G-2, 18G-1, 11G-2, 11G-1, 13M-1, 13G-1, 4M-2, 4M-1, 4G-2, EW-6, 7M-1, BLIND DUPLICATE, 22M-1, 14M-1, 14G-2, 10M-1, 8M-1, 8M-2 and 8G-1	TKN		
18G-2, 18G-1, 11G-2, 11G-1, 13M-1 and 13G-1	Nitrate		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/7/2020
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill
Project Number:	3763-25
Sample Date(s):	February 18-20, 2020
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 11 Soil/ 0 Field Duplicates/ 1 Trip Blanks / 3 Field Blanks/ 1
Analyzing Laboratory:	Pace Analytical., Melville, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: TAL by SW846 Method 6010C, mercury by Method 7470A and Cyanide by USEPA 9014 General Chemistry: Alkalinity (SM2320B); Ammonia (SM 4500); Chloride, Sulfate and Bromide (USEPA 300.0); Nitrate and Nitrite (USEPA 353.2); Biochemical Oxygen Demand (BOD) (SM5210B); Chemical Oxygen Demand (COD) (410.4); Phenolics (USEPA 420.1); Color (SM2120B); Total Dissolved Solids (SM 2540C); Hexavalent Chromium (SM3500-CR B); Total Kjeldahl Nitrogen (USEPA 351.2), Hardness (SM 2340C) and Total Organic Carbon (USEPA 9060A)
Laboratory Report No:	70122351 Date: 3/16/2020

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/ Quality Control (QA/QC) requirements. The monitoring program requires a 20% validation specified

in Part 360. A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, or USEPA National Functional Guidelines of Inorganic Data Review, January 2017, method performance criteria, and performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS, P.C.

SDG: 70122351
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	70122351001	02/18/2020		X			
23M-1	70122351002	02/18/2020		X		X	X
16M_1	70122351003	02/18/2020		X		X	X
BLIND DUPLICATE-2	70122351004	02/18/2020	16M_1	X		X	X
TRIP BLANK	70122351006	02/19/2020		X			
EW-1	70122351007	02/19/2020		X		X	X
EW-4	70122351008	02/19/2020		X		X	X
EW-3	70122351009	02/19/2020		X		X	X
14G-1A	70122351010	02/19/2020		X		X	X
TRIP BLANK	70122351011	02/20/2020		X			
6G-3	70122351012	02/20/2020		X		X	X
6G-2	70122351013	02/20/2020		X		X	X
6G-1	70122351014	02/20/2020		X		X	X
12M-1	70122351015	02/20/2020		X		X	X
FIELD BLANK	70122351016	02/20/2020		X		X	X
EW-2	70122351017	02/20/2020		X		X	X

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X	X		
5. MS/MSD precision (RPD)		X	X		
6. Laboratory Control Sample (LCS) spike %R		X	X		
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X		X	
12. Transcriptions – quant report vs. Form I		X		X	
13. Field duplicates RPD		X		X	
14. Tentatively Identified Compounds (TICs)		X		X	

VOCs - volatile organic compounds %D - percent difference RRF - relative response factor
%R - percent recovery %RSD - percent relative standard deviation RPD - relative percent difference

Comments:

Performance was acceptable, with the following exceptions:

3-6. The %Rs were below the QC limits in the MS for 1,2-dibromo-3-chloropropane, 1,2-dibromoethane (EDB), cis-1,3-dichloropropene and trans-1,3-dichloropropene associated with all samples. The %Rs were below the QC limits in the MS for 1,1,1,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane and bromodichloromethane associated with samples TRIP BLANK, EW-1, EW-4, EW-3, 14G-1A, TRIP BLANK, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2. The above compounds were qualified as an estimated (UJ) in the associated samples.

The RPD was above the QC limit in the MS/MSD for chloromethane and iodomethane associated with samples It was not detected in the samples TRIP BLANK, EW-1, EW-4, EW-3, 14G-1A, TRIP BLANK, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2; therefore, qualification of the data was not necessary.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method and calibration blanks		X	X		
B. Field blanks		X		X	
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Interference check sample %R		X		X	
7. Laboratory control sample %R		X		X	
8. Spike sample %R		X	X		
9. Post digestive spike sample %R		X	X		
10. Duplicate %RPD		X		X	
11. Serial dilution check %D		X		X	
12. Field duplicates RPD		X		X	

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, with the following exceptions:

2A&B. Barium, beryllium, cobalt, manganese, nickel and selenium were detected in the initial blank and/or preparation blank. The following metals were qualified as non-detect (UB): barium and cobalt in all samples; and nickel in samples EW-1, EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2.

8. The %Rs for barium and potassium were above the QC limits in the spike associated with samples EW-1, EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2. Potassium was detected above the reporting limit and qualified as estimated (J) in samples EW-4, 6G-3 and EW-2.

The %R for silver was below the QC limit in the spike and post spike samples associated with samples 23M-1, 16M_1 and BLIND DUPLICATE-2. Silver was qualified as an estimated detection limit (UJ) in associated samples.

The %R for mercury was below the QC limit in the spike associated with samples 23M-1, 16M_1, BLIND DUPLICATE-2, EW-1 and EW-4. Mercury was qualified as an estimated (J) in associated samples.

INORGANIC ANALYSES
GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X	X		
2. Blanks					
A. Laboratory blanks		X	X		
B. Field blanks		X		X	
3. Initial calibration verification %R		X		X	
4. Continuing calibration verification %R		X		X	
5. CRDL standard %R		X		X	
6. Laboratory control sample %R		X		X	
7. Spike sample %R		X	X		
8. Duplicate RPD		X	X		
9. Field duplicates RPD		X	X		

%R percent recovery RPD - relative percent difference %D – percent difference
RSD - relative standard deviation

Comments:
Performance was acceptable, with the following exception:

1. Hexavalent chromium was analyzed outside of holding times in samples 6G-1, 6G-2, 6G-3, 14G-1A, 16M-1, 23M-1, BLIND DUPLICATE-2, EW-1, EW-3 and EW-4. It was qualified as an estimated detection limit (UJ) in associated samples.

2A. Chloride and nitrite were detected in the method blank. Nitrite was qualified as non-detect (UB) in sample 16M-1.

7. The %R was below the QC limit in the MS for TKN associated with all samples. TKN was qualified as estimated (J/UJ) in all samples.

   The %R was above the QC limit in the MS for chloride associated with samples EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1 and EW-2. Chloride was detected above the reporting limit and was qualified as estimated (J) in associated samples.

8. The RPD was above the QC limit in the duplicate for phenolics associated with samples 23M-1, 16M_1, BLIND DUPLICATE-2, EW-1, EW-4, EW-3, 14G-1A, 6G-3 and 6G-2 and were qualified as estimated (J/UJ) in associated samples.

9. Sample 16M-1 was field duplicated and labeled BLIND DUPLICATE_2. TKN was qualified as estimated (J/UJ) in samples 16M-1 and BLIND DUPLICATE_2 based on field duplicate results.

DATA VALIDATION AND QUALIFICATION SUMMARY **Laboratory Numbers:70122351**

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples	1,2-Dibromo-3-chloropropane, 1,2-dibromoethane (EDB), cis-1,3-dichloropropene and trans-1,3-dichloropropene	UJ	The %Rs were below the QC limits in the MS
TRIP BLANK, EW-1, EW-4, EW-3, 14G-1A, TRIP BLANK, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2	1,1,1,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane and bromodichloromethane		
Metals			
All samples	Barium and cobalt	UB	Detected in the initial blank, preparation blank and/or field blank
EW-1, EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1, FIELD BLANK and EW-2	Nickel		
EW-4, 6G-3 and EW-2	Potassium	J	The %Rs were above the QC limits in the spike
23M-1, 16M_1 and BLIND DUPLICATE-2	Silver	UJ	The %R was below the QC limit in the spike and post spike samples
23M-1, 16M_1, BLIND DUPLICATE-2, EW-1 and EW-4	Mercury	J	The %R was below the QC limit in the spike
General Chemistry			
6G-1, 6G-2, 6G-3, 14G-1A, 16M-1, 23M-1, BLIND DUPLICATE-2, EW-1, EW-3 and EW-4	Hexavalent chromium	UJ	Analyzed outside of holding times
16M-1	Nitrite	UB	Detected in the FIELD BLANK and/or method blank
All samples	TKN	J/UJ	The %R was below the QC limit in the MS

Sample ID	Analyte(s)	Qualifier	Reason(s)
EW-4, EW-3, 14G-1A, 6G-3, 6G-2, 6G-1, 12M-1 and EW-2	Chloride	J	The %R was above the QC limit in the MS
23M-1, 16M_1, BLIND DUPLICATE-2, EW-1, EW-4, EW-3, 14G-1A, 6G-3 and 6G-2	Phenolics	J/UJ	The RPDs were above the QC limits in the duplicate
16M-1 and BLIND DUPLICATE_2	TKN	J/UJ	Based on field duplicate results

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/7/2020
VALIDATION PERFORMED BY SIGNATURE: