Islip
Resource
Recovery
Agency

Post Closure Groundwater Monitoring Program

Third Quarter 2019

Blydenburgh Road Landfill Complex
Town of Islip, New York

NOVEMBER 2019

D&B Engineers and Architects, P.C.

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November 14, 2019

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
Third Quarter 2019 Baseline Sampling Event
D&B No. 3763-20

Dear Mr. Varrichio:

Enclosed please find six copies of the Third Quarter 2019 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. 3068.

Very truly yours,

Thomas P. Fox, P.G.
Vice President

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POST CLOSURE GROUNDWATER MONITORING PROGRAM
QUARTERLY SAMPLING RESULTS
THIRD QUARTER 2019

BLYDENBURGH ROAD LANDFILL COMPLEX
TOWN OF ISLIP, NEW YORK

Prepared for:

ISLIP RESOURCE RECOVERY AGENCY
TOWN OF ISLIP, NEW YORK

Prepared by:

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

NOVEMBER 2019

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
QUARTERLY SAMPLING RESULTS
THIRD QUARTER 2019

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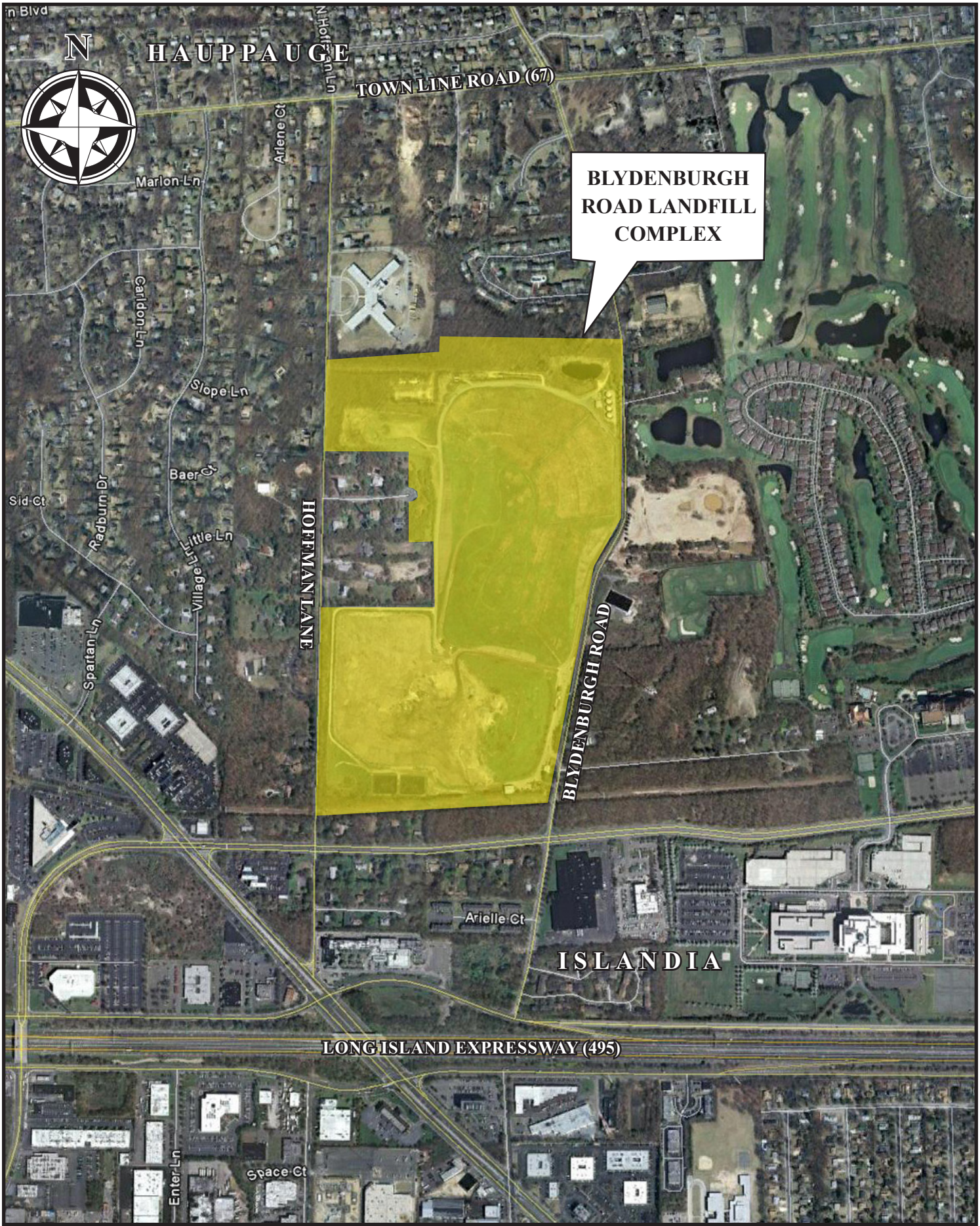
1.0 INTRODUCTION

This report presents the analytical results obtained in support of the Post Closure Groundwater Monitoring Program conducted during the Third Quarter of 2019 for the Blydenburgh Road Landfill Complex, 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 August 2019 sampling event to applicable New York State groundwater quality standards and guidelines, the results obtained during the previous sampling events (February 2019 and August 2018, 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).



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ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

LOCATION MAP

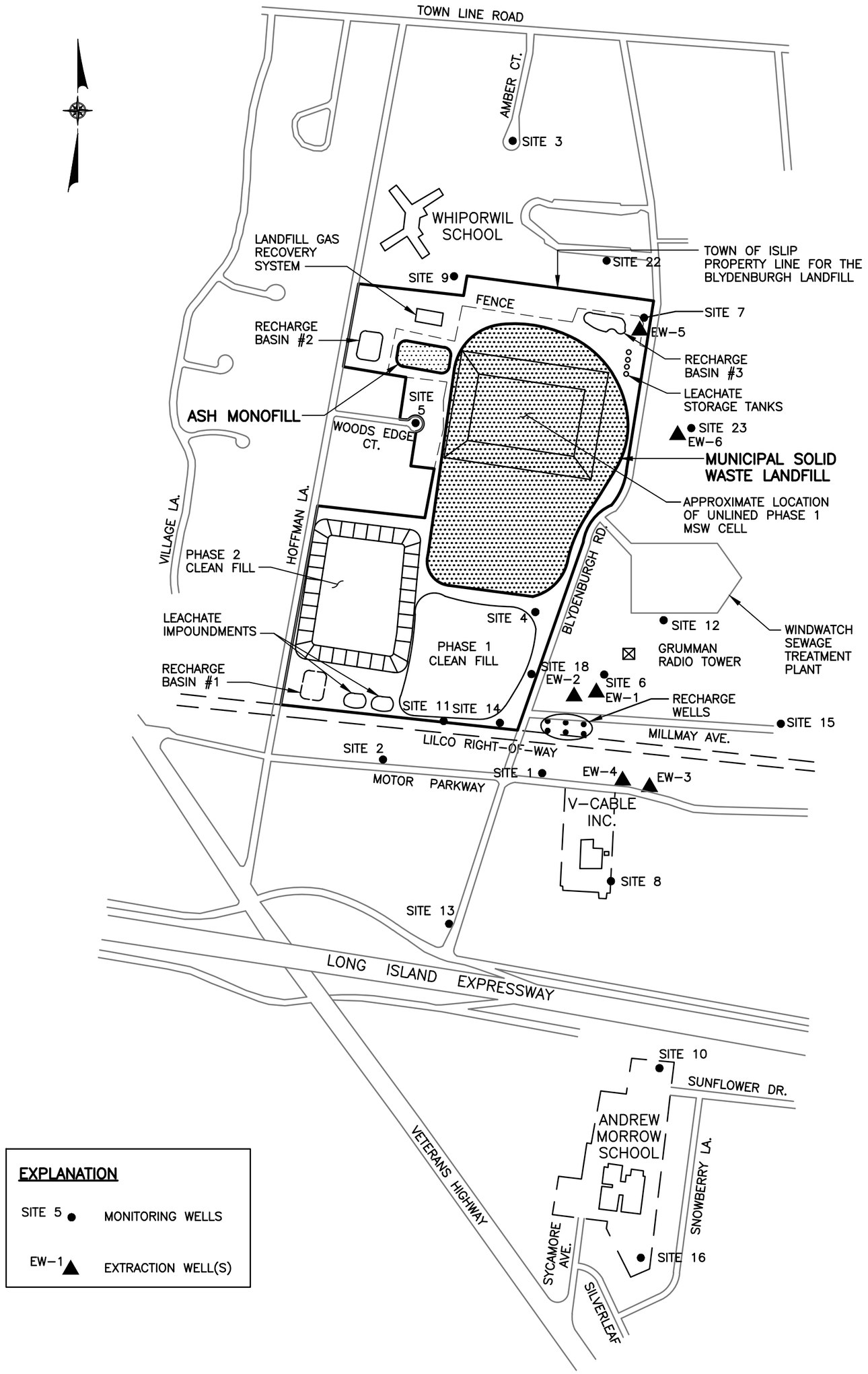
Source: Googlearth.com
Scale: Not to Scale

FIGURE 1-1

2.0 SAMPLING LOCATIONS

Thirty-six groundwater monitoring wells, one temporary extraction well and five groundwater extraction wells were sampled as part of the Third Quarter 2019 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 Third Quarter 2019 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-1S	8/21/86	4	SS	135	125-135	29-19	123-138	121-123(a)	110-121	-1.33	151.17
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[4]	8/14/86	4	SS	399	389-399	(-237)-(-247)	387-402	385-387(a)	300-385	-1.01	151.19
GM-2S	9/25/86	4	SS	149	139-149	22-12	136-152	134-136(a)	74-134	-1.32	160.08
GM-2I	9/17/86	4	SS	298	290-298	(-129)-(-136)	285-300	283-285(a)	100-283	-0.65	160.65
GM-2D	917/86	4	SS	398[2]	400-409	(-239)-(-248)	395-409	393-395(a)	302-393	-0.59	160.71
4G-1	4/21/89	4	PVC	164	154-164	12-2	140-170	135-140	0-135	1.27	168.47
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
6M-1	4/27/89	4	PVC	545	535-545	(-358)-(-368)	525-548	523-525	0-523	1.40	178.40
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
9G-1	8/2/89	4	SS	68	58-68	33-23	52.6-68	47-52.5	0-47	-0.47	90.83
10G-1	9/6/89	4	SS	69	59-69	30-20	54-69	51-54	0-51	-0.08	88.52
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
11M-1	9/26/89	4	SS	320	310-320	(-144)-(-154)	305-327	300-305	0-300	1.02	168.32

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)
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
15G-1	3/1/90	4	SS	160	150-160	33-23	145-180	140-145	0-140	-0.15	183.05
16G-1	2/14/90	4	SS	57	47-57	30-20	42-57	37-42	0-37	-0.48	76.92
16M-1	3/24/90	4	SS	240	230-240	(-153)-(-163)	225-250	222-225	0-222	-0.30	76.90
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 feet to 302 feet.

[1] Well construction log GM-1I indicated a total depth of 290 feet. Total depth was measured in the field at 285 feet.
[2] Well construction log GM-2D indicated a total depth of 409 feet. Total depth was measured in the field at 398 feet.
[3] Wells 13G-1 and 13M-1 reference elevation adjusted to reflect well pipe extension due to new sidewalk. (October 2008).
[4] In October 2013, GM-1D was converted to a temporary extraction well.

(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). The extraction wells sampled 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 Third Quarter 2019 sampling event are contained in **Appendices B** and the chain of custody forms are provided in **Appendix C**.

3.3 Organic Vapor and Combustible Gas Monitoring

Total organic vapor and combustible gas headspace measurements were collected in the 36 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 Third Quarter (August 2019) sampling event from 36 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 Third Quarter 2019 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 36 monitoring wells sampled, only one well (11G-2) contained a concentration of total VOCs greater than 50 ug/l. Total VOCs were reported at 56.8 ug/l for well 11G-2. Twenty one monitoring wells (GM-1S, GM-1I, GM-2D, 4G-2, 6G-1, 6G-2, 6M-1, 7M-1, 8G-1, 8M-1, 8M-2, 9G-1, 10G-1, 13G-1, 14G-1A, 14G-2, 15G-1, 16G-1, 18G-1, 22M-1 and 22M-1) had no detectable concentrations of VOCs. Seven wells (GM-2S, 4G-1, 6G-3, 10M-1, 11G-1, 16M-1 and 18G-2) detected total VOCs of 10 ug/l or less. Total VOC concentrations in the remaining wells were reported at 13.1 ug/l in GM-2I to 44.9 ug/l in 14M-1.

Table 4-1

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - THIRD QUARTER 2019
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 8/13/19 (feet above msl)
							PID (ppm)	% LEL		
GM-1S	7.46	16.75	0.730	0	93	4.73	0	0	Submersible pump	41.27
GM-1I	7.87	14.56	0.656	0	70	4.19	0	0	Submersible pump	41.49
GM-2S	4.93	14.72	0.173	0	250	3.14	0	0	Submersible pump	41.67
GM-2I	7.80	12.08	0.285	0	135	7.00	0	0	Submersible pump	41.64
GM-2D	4.99	11.46	0.046	0	97	0.56	0	0	Submersible pump	41.15
4G-1	6.30	24.42	1.05	0	-135	0.38	0	0	Submersible pump	42.10
4G-2	6.39	22.78	0.739	0	-43	0.33	0	0	Submersible pump	41.94
4M-1	7.21	20.32	3.93	0	-108	1.04	0	0	Submersible pump	41.65
4M-2	6.15	15.45	1.51	0	-81	0.24	0	0	Submersible pump	39.48
6G-1	6.36	18.53	0.202	0	236	10.53	0	0	Submersible pump	41.57
6G-2	6.42	19.51	0.648	0	85	1.14	0	0	Submersible pump	41.70
6G-3	6.90	17.84	0.670	0	-97	0.53	0	0	Submersible pump	41.80
6M-1	6.73	13.70	0.237	0	-10	0.67	0	0	Submersible pump	40.97
7M-1	4.91	13.00	0.179	0	258	0.57	0	0	Submersible pump	42.17
8G-1	5.83	12.36	2.73	0	182	12.34	0	0	Submersible pump	40.62
8M-1	7.27	13.93	0.804	0	30	0.40	0	0	Submersible pump	41.02
8M-2	6.32	11.99	0.177	0	82	1.04	0	0	Submersible pump	40.69
9G-1	5.09	13.00	0.034	0	269	11.34	0	0	Submersible pump	42.73
10G-1	4.89	14.01	0.380	0	280	7.68	0	0	Submersible pump	40.11
10M-1	7.40	12.47	0.574	0	91	0.61	0	0	Submersible pump	40.12
11G-1	7.25	25.60	2.56	0	-112	0.88	0	0	Submersible pump	41.81
11G-2	6.98	22.54	2.62	0	-138	0.77	0	0	Submersible pump	41.85
11M-1	6.17	14.70	0.448	0	58	0.64	0	0	Submersible pump	41.73
12M-1	6.90	16.66	0.887	0	-51	2.85	0	0	Submersible pump	40.89
13G-1	5.20	13.52	0.178	0	263	9.58	0	0	Submersible pump	40.74
13M-1	7.11	11.26	1.12	0	-66	0.46	0	0	Submersible pump	40.78
14G-1A	7.03	16.49	0.812	0	76	7.05	0	0	Submersible pump	41.71
14G-2	7.21	16.56	0.591	0	244	4.84	0	0	Submersible pump	41.71

Table 4-1(Continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - THIRD QUARTER 2019
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 8/13/19 (feet above msl)
14M-1	6.72	15.89	2.61	0	-86	1.10	0	0	Submersible pump	41.45
15G-1	5.52	13.04	0.232	0	203	7.99	0	0	Submersible pump	41.43
16G-1	5.51	14.52	0.089	0	266	9.81	0	0	Submersible pump	39.08
16M-1	6.92	12.96	0.480	0	154	0.61	0	0	Submersible pump	39.11
18G-1	6.37	21.37	0.908	0	38	3.98	0	0	Submersible pump	41.98
18G-2	6.26	21.74	0.739	0	104	1.39	0	0	Submersible pump	42.01
22M-1	5.26	13.09	0.251	0	124	0.220	0	0	Submersible pump	41.99
23M-1	6.61	12.61	0.461	0	117	1.08	0	0	Submersible pump	41.98

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 - THIRD QUARTER 2019
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 Sa.m.pling	Initials of Samplers	Weather Condition
GM-1S	109.59	135	4	85	8/19/19	3:45 p.m.	KR	Sunny
GM-1I	109.70	285	4	450	8/19/19	2:40 p.m.	KR	Sunny
GM-2S	119.41	149	4	375	8/20/19	1:00 p.m.	KR	Sunny
GM-2I	120.01	298	4	110	8/20/19	12:15 p.m.	KR	Sunny
GM-2D	120.56	398	4	550	8/20/19	10:15 a.m.	KR	Sunny
4G-1	126.37	164	4	100	8/16/19	1:15 p.m.	KR	Sunny
4G-2	128.09	211	4	180	8/16/19	12:10 p.m.	KR	Sunny
4M-1	127.35	325	4	450	8/16/19	1:00 p.m.	KR	Sunny
4M-2	130.05	486	4	700	8/16/19	10:10 a.m.	KR	Sunny
6G-1	138.60	147	4	60	8/15/19	12:00 p.m.	KR	Sunny
6G-2	136.95	230	4	225	8/15/19	11:10 a.m.	KR	Sunny
6G-3	138.03	315	4	350	8/15/19	9:40 a.m.	KR	Sunny
6M-1	137.43	545	4	800	8/15/19	10:30 a.m.	KR	Sunny
7M-1	25.39	214	4	500	8/20/19	4:30 p.m.	KR	Sunny
8G-1	93.35	114	4	75	8/19/19	12:00 p.m.	KR	Sunny
8M-1	94.19	270	4	450	8/19/19	10:30 a.m.	KR	Sunny
8M-2	94.12	384	4	600	8/19/19	9:35 a.m.	KR	Sunny
9G-1	48.10	68	4	105	8/20/19	2:20 p.m.	KR	Overcast
10G-1	48.41	69	4	120	8/21/19	10:40 a.m.	KR	Overcast
10M-1	48.12	256	4	565	8/21/19	9:35 a.m.	KR	Overcast
11G-1	127.09	145	4	60	8/14/19	10:30 a.m.	KR	Overcast
11G-2	126.47	221	4	250	8/14/19	9:10 a.m.	KR	Overcast
11M-1	127.46	320	4	400	8/14/19	8:35 a.m.	KR	Sunny
12M-1	136.93	338	4	450	8/15/19	3:35 p.m.	KR	Overcast
13G-1	69.60	93	4	80	8/14/19	4:15 p.m.	KR	Overcast
13M-1	69.18	265	4	500	8/14/19	3:40 p.m.	KR	Overcast
14G-1A	119.95	220	4	200	8/13/19	10:40 a.m.	KR	Overcast
14G-2	120.56	264	4	300	8/13/19	9:50 a.m.	KR	Overcast

Table 4-1(Continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
GROUNDWATER SAMPLING - THIRD QUARTER 2019
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 Sa.m.pling	Initials of Samplers	Weather Condition
14M-1	120.56	355	4	475	8/13/19	9:10 a.m.	KR	Overcast
15G-1	141.62	160	4	100	8/15/19	5:45 p.m.	KR	Sunny
16G-1	37.84	57	4	120	8/21/19	1:55 p.m.	KR	Overcast
16M-1	37.79	240	4	500	8/21/19	1:00 p.m.	KR	Overcast
18G-1	126.64	157.5	4	100	8/13/19	1:25 p.m.	KR	Overcast
18G-2	126.77	197.5	4	150	8/13/19	12:30 p.m.	KR	Overcast
22M-1	19.05	222.5	4	450	8/16/19	3:45 p.m.	KR	Sunny
23M-1	34.83	240	4	450	8/14/19	12:30 p.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 - THIRD QUARTER 2019
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	6.17	20.37	0.622	0	169	7.40	8/14/19	1:10 p.m.
EW-2	7.00	20.34	0.489	53.5	-66	7.74	8/16/19	9:30 a.m.
EW-3	7.46	17.28	0.136	0	180	8.58	8/13/19	2:05 p.m.
EW-4	7.35	17.65	0.673	0	177	6.37	8/13/19	4:00 p.m.
EW-5	NS	NS	NS	NS	NS	NS	NS	NS
EW-6	6.18	15.10	0.302	0	14	7.43	8/14/19	1:45 p.m.
GM-1D*	7.35	15.68	1.40	0	-51	2.85	8/19/19	1:45 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, due to extraction well not in service		

In comparison to the previous events, were applicable, 35 out of the 36 wells exhibited consistent total VOC concentrations (variation of 10 ug/l or less). Monitoring well (11M-1) exhibited an increase in total VOCs from 4.9 ug/l in the Third Quarter 2017 to 21.5 ug/l in the Third Quarter 2019.

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 (GM-2I, 4M-1, 4M-2, 10M-1, 11G-2, 11M-1, 12M-1, 13M-1 and 14M-1). Wells (4M-2, 11G-2, 11M-1, 13M-1 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 at a concentration of 10.3 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 (1,650 ug/l), 11G-2 (1,240 ug/l) and 14M-1 (1,130 ug/l).
- Iron was detected above the groundwater standard (300 ug/l) in 7 wells (4G-1, 4M-1, 4M-2, 11G-1, 11G-2, 12M-1 and 14M-1). Iron concentrations in these wells ranged from 551 ug/l in well 14M-1 to 7,170 ug/l in well 4G-1.
- Manganese was detected above the groundwater standard (300 ug/l) in 12 monitoring wells (4G-1, 4G-2, 4M-1, 4M-2, 6G-3, 8M-2, 11G-1, 11G-2, 12M-1, 14M-1, 18G-1 and 18G-2). Manganese concentrations in these wells ranged from 1,390 ug/l in well 12M-1 to 12,000 ug/l in well 18G-1.
- Magnesium was detected above the groundwater guidance value (35,000 ug/l) in 6 monitoring wells (4M-1, 8G-1, 10M-1, 12M-1, 13M-1 and 14M-1). Concentrations of

magnesium in these wells ranged from 41,300 ug/l in well 12M-1 to 65,600 ug/l in well 13M-1.

- Nickel was detected above the groundwater standard (100 ug/l) in wells 4M-1 (177 ug/l), 11G-1 (102 ug/l), 11G-2 (136 ug/l) and 14M-1 (124 ug/l).

- Sodium was detected above the groundwater standard (20,000 ug/l) in the majority of monitoring wells (26 out of 36 samples). Sodium concentrations which exceeded the groundwater standard ranged from 26,900 ug/l in well 23M-1 to 372,000 ug/l in well 4M-1.

- Thallium was detected above the guidance value (0.5 ug/l) in monitoring wells 6G-3 (6.4 ug/l), 11G-2 (6 ug/l) 18G-1 (12.7 ug/l) and 18G-2 (5.9 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 (4G-1, 4M-1, 4M-2, 6G-3, 8M-1, 11G-1, 11G-2, 14M-1, 18G-1 and 18G-2). Ammonia concentrations in these wells ranged from 3.1 mg/l in well 18G-2 to 179 mg/l in well 4M-1.

- Bromide was detected slightly above the groundwater guidance value (2 mg/l) in wells 4M-1, 4M-2, 11G-2 and 14M-1 at concentrations of 4.8 mg/l, 2.8 mg/l, 3.5 mg/l and 4 mg/l, respectively.

- Chloride was detected above the groundwater standard (250 mg/l) in 6 wells (4M-1, 4M-2, 8G-1, 11G-1, 11G-2 and 14M-1). Chloride concentrations in these wells ranged from 311 mg/l in wells 4M-2 to 1,120 mg/l in well 8G-1.

- Total phenol was detected above the groundwater standard (0.001 mg/l) in well 13G-1 at a concentration of 0.044 mg/l.

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, EW-4 and EW-6). For these extraction wells, VOC results remained consistent with the results from the previous sampling event.

During the Third Quarter of 2019, total VOC concentrations in temporary extraction well GM-1D were reported at 47.8 ug/l. Total VOCs in GM-1D exhibited a slight decrease in comparison with the February 2019 sampling result (59 ug/l). GM-1D contained VOCs (cis-1,2-DCE, 1,4-dichlorobenzene, 1,1-DCA, Freon 21 and vinyl chloride) which exceeded their individual Class GA groundwater standards.

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 5,860 ug/l.

- Manganese was detected above the groundwater standard (300 ug/l) in extraction wells EW-1, EW-3 and EW-4 at concentrations of 842 ug/l, 331 ug/l and 475 ug/l, respectively.

- Magnesium was detected above the groundwater standard (35,000 ug/l) in temporary extraction well GM-1D at a concentration of 55,400 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 80,700 ug/l, 89,200 ug/l, 63,400 ug/l and 64,200 ug/l, respectively, as well as in GM-1D at a concentration of 150,000 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 (2.9 mg/l), EW-4 (10.3 mg/l) and in temporary extraction well GM-1D (4.9 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 36 groundwater monitoring wells sampled. Combustible gas readings for the 36 groundwater monitoring wells sampled were 0% of the Lower Exposure Limit (LEL).

5.0 DATA VALIDATION

Forty two (42) groundwater samples (36 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 Third Quarter 2019 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 (70101295 and 70101745) 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 six environmental samples (18G-2, 23M-1, 4G-1, 6G-3, EW-2 and 10G-1).

Two duplicates were collected. Blind Duplicate -1 was a duplicate of sample EW-4 and Blind Duplicate-2 was a duplicate of sample 8M-2. Matrix spike and matrix spike duplicate sets were collected at wells GM-2D and EW-3.

The following requirements were outside limits:

- The percent recoveries (%Rs) were below the QC limit in the MS for 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE-1, FIELD BLANK-1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1; and 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/19/19, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I,

GM-1S and GM-1D. The above compounds were qualified as an estimated (UJ) in the associated samples.

- The %R was below the QC limit in the LCS for iodomethene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE -1, FIELD BLANK-1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1 and was qualified as an estimated detection limit (UJ).

- The following metals were detected in the initial blank, preparation blank and/or field blank and were qualified as non-detect (UB): nickel in samples 13G-1, 6M-1, 11M-1, EW-1, 6G-1, 6G-2, 13M-1and EW-3; arsenic in samples 12M-1 and 4M-1; boron all samples except 8M-2 and 4M-1; silver in samples 8M-1 and 7M-1; and potassium in samples 12M-1, 15G-1, 22M-1, 10G-1, 16M-1 and 16G-1.

- The percent difference was above the QC limit in the serial dilution for magnesium associated with sample 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1 and FIELD BLANK-2. Magnesium was qualified as estimated (J/UJ) in the associated samples.

- Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results boron, calcium, iron, magnesium, manganese, potassium and sodium were qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.

- The following were analyzed outside of holding times: hexavalent chromium associated with 12M-1, 15G-1, 7M-1, 8G-1, 8M-1, 9G-1, GM-2I, GM-2S, 8M-2, BLIND DUPLICATE-2 and GM-2D and all sample in data package 70101295. It was qualified as an estimated detection limit (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): ammonia in samples 14G-2, EW-1, EW-6, 23M-1, 6G-1, 13G-1, 14G-1A, 6G-2, 11M-1, GM-2D, 9G-1, 16M-1, 16G-1, GM-2S, GM-2I, 10G-1, GM-1I, GM-1S, 15G-1, 8G-1, EW-2, 4G-2, BLIND DUPLICATE-2 and 8M-2; BOD in samples 14G-2, 14G-1A, 18G-2, 18G-1, FIELD BLANK-1, 11M-1, 23M-1, EW-1, EW-6, 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, EW-3, 11G-2 and 11G-1 and all sample in data package 70101745; bromide in samples 6G-1, 13G-1, 6G-2, EW-1, EW-6, 23M-1, EW-3, 6M-1, GM-2I, 7M-1, 10G-1, 16M-1 and 16G-1; TKN in samples 11M-1, 6M-1, 13M-1, 23M-1, GM-2S, 9G-1, 10G-1, 16G-1, 15G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-2I, 8G-1, EW-2, 8M-2, 4G-2, 10M-1, 7M-1 and 22M-1; and phenolics in all samples except 13G-1.

- 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): nitrate in samples 12M-1, 15G-1, 22M-1, EW-2, GM-2I, GM-2S, 9G-1, 7M-1, 10M-1, 10G-1, 16M-1, 16G-1, EW-1, EW-6, 13G-1, 6G-2 and 6G-1; chloride in sample 6G-1; phenolics in sample 13G-1; and nitrite in samples EW-4 and BLIND DUPLICATE-1.

- The %Rs were below the QC limit in the matrix spike (MS) and qualified as estimated (J/UJ) in the following general chemistry parameters: TKN in all samples except 6G-2, 6G-1, 12M-1, 15G-1, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1, EW-2, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D and GM-2I: phenolics in all samples in data package 70101745 and sample 6G-1; and TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, 12M-1 and 15G-1.

- The RPDs were above the QC limits in the duplicate for TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, 12M-1 and 15G-1; TDS in samples 6M-1 and 6G-3; COD in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; TKN in samples 6G-2 and 6G-1; and BOD associated with samples GM-2D, GM-2I, GM-2S and 9G-1 and were qualified as estimated (J/UJ) in associated samples.

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 Third Quarter 2019 sampling event are provided in Appendix D.

6.0 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

Groundwater level measurements were obtained by D&B on August 13, 2019, from 51 groundwater monitoring wells. Due to access constraints, groundwater level measurements were recorded from Site 8 on August 19, 2019. 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 August 13, 2019, as part of the Cleanfill Landfill Groundwater Monitoring Program; these measurements are also included in **Table 6-1**.

6.1 Water Table Contours

The water table elevation contour map prepared from measurements obtained on August 13, 2019, 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 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

Table 6-1

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
AUGUST 13, 2019

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
GM-1S	151.17	109.59	41.58
GM-1I	151.19	109.70	41.49
GM-1D	151.19	Pump installed in well	---
GM-2S	160.08	118.41	41.67
GM-2I	160.65	119.01	41.64
GM-2D	160.71	119.56	41.15
GM-3S	60.51	17.32	43.19
GM-3I	60.39	17.70	42.69
GM-3D	60.03	18.39	41.64
4G-1	168.47	126.37	42.10
4G-2	170.03 (1)	128.09	41.94
4M-1	168.95	127.30	41.65
4M-2	169.53	130.05	39.48
5G-1	173.58	131.16	42.42
6G-1	180.17	138.60	41.57
6G-2	178.65	136.95	41.70
6G-3	179.83	138.03	41.80
6M-1	178.40	137.43	40.97
7G-1	69.33	25.90	43.43
7M-1	67.56	25.39	42.17
8G-1	133.97	93.35(3)	40.62
8M-1	135.21	94.19(3)	41.02
8M-2	135.11	94.42(3)	40.69
9G-1	90.83	48.10	42.73
9M-1	90.59	47.98	42.61
10G-1	88.52	48.41	40.11
10M-1	88.84	48.72	40.12
11G-1	168.90	127.09	41.81
11G-2	169.31	127.46	41.85
11M-1	168.32	126.47	41.85

Table 6-1 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
AUGUST 13, 2019

Well Designation	Measuring Point Elevation (feet above msl)	Depth to Water from Measuring Point (feet)	Groundwater Elevation (feet above msl)
12G-1	173.61	133.90	39.71
12M-1	177.66	135.93	41.73
13G-1	110.49 (1)	69.60	40.89
13M-1	109.92 (1)	69.18	40.74
14G-1A	161.73	119.95	41.78
14G-1	162.82	121.04	41.78
14G-2	162.36	120.65	41.71
14M-1	161.98	120.53	41.45
15G-1	183.05	141.62	41.43
15M-1	183.47	142.06	41.41
16G-1	76.92	37.84	39.08
16M-1	76.90	37.79	39.11
18G-1	168.62	126.64	41.98
18G-2	168.78	126.77	42.01
22M-1	61.04	19.05	41.99
23M-1	76.81	34.83	41.98
MW-56	97.84	54.81	43.03
MW-57	84.05	40.97	43.08
MW-58	76.68	33.41	43.27
MW-59	87.58	44.51	43.07
MW-60	95.44	53.31	42.13
MW-61	107.01	64.96	42.05
MW-62	114.23	72.89	41.34
MW-63	126.26	84.31	41.95
MW-D12	162.39	121.06	41.33
19GR-1*	165.42	124.62	40.80
20G-1*	165.31	123.40	41.91
21G-1*	172.83	130.94	41.89
24G-1*	176.91	134.37	42.54
24G-2*	176.44	134.02	42.42
24G-3*	176.13	133.74	42.39

Table 6-1 (continued)

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS
AUGUST 13, 2019

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)]	117.93	41.98
25G-2*	158.71	116.66	42.05
26G-1*	165.10	123.52	41.58
26G-2*	165.57	123.71	41.86
26G-3*	165.43	123.42	42.01
27G-1*	166.58	125.34	41.24
27G-2*	166.52	124.62	41.90
27G-3*	166.64	124.72	41.92
28G-1*	201.99	159.47	42.52
28G-2*	201.31	158.81	42.50
28G-3*	200.16	157.78	42.38

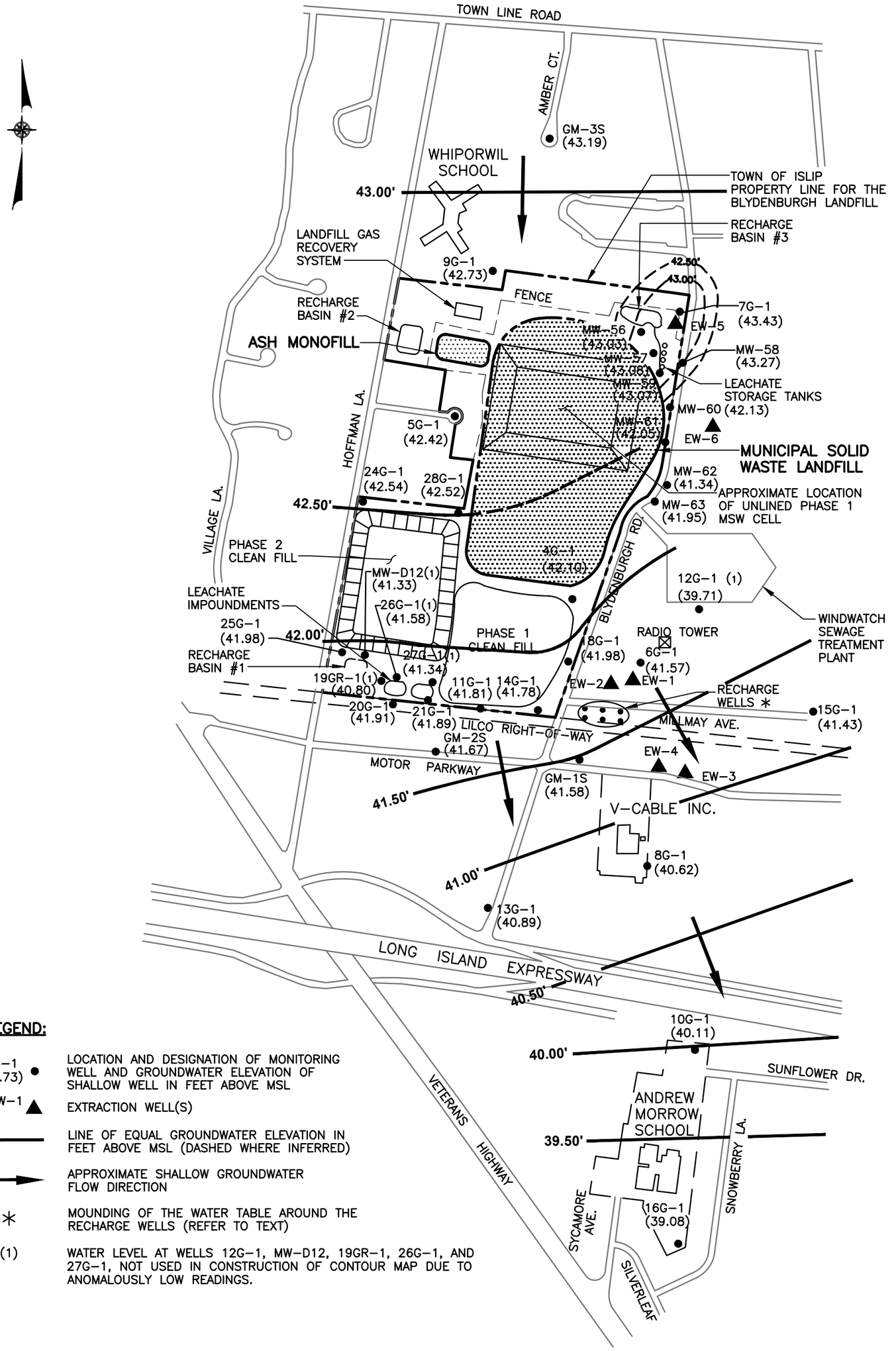
Notes:

---: 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.

[(3)] Due to access constraints, water level measurements for wells 8G-1, 8M-1 and 8M-2 were recorded on August 19, 2019.



LEGEND:

9G-1 (42.73) ●	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.

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
AUGUST 13, 2019

FIGURE 6-1

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associated with the Cleanfill Landfill Phase 1 and 2. The direction of groundwater flow determined for this monitoring event for the Upper Glacial aquifer is fairly consistent with flow conditions previously mapped.

6.2 Potentiometric Surface Contours

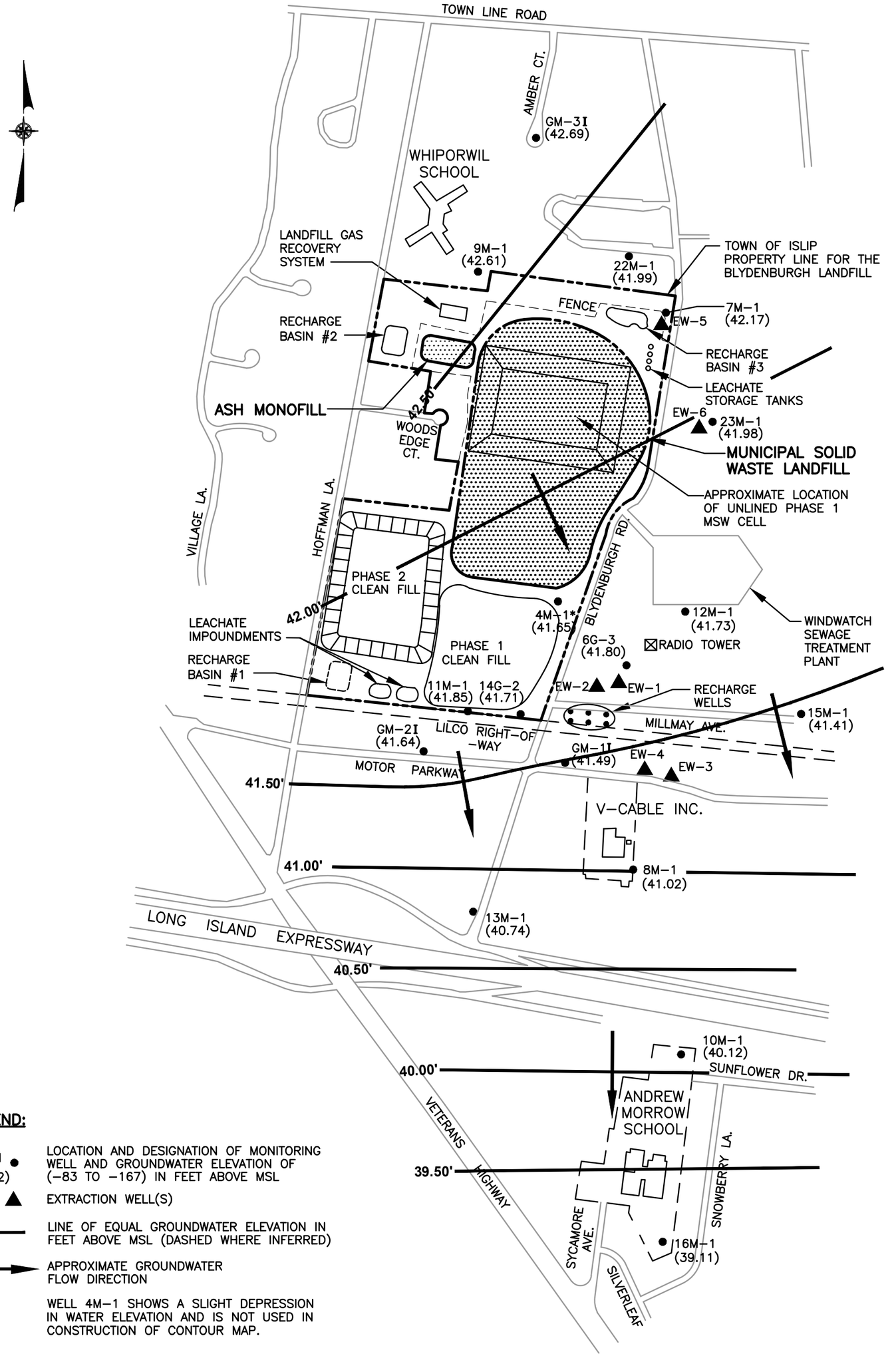
The potentiometric surface elevation contour map prepared from measurements obtained on August 13, 2019, is presented in **Figure 6-2**. The potentiometric surface contour map for the zone from 83 to 167 feet below mean sea level (msl) represents head conditions in wells screened near the deep Upper 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 August 13, 2019 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 48.39 feet above mean sea level at well RW-3 to 147.88 feet above mean sea level at well RW-2. The water level readings in the recharge wells, less the water table elevation, represents the driving head required 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



LEGEND:

- 8M-1 (41.02) — 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).

0 — 1000 FEET
SCALE

D&B ENGINEERS AND ARCHITECTS, P.C.

ISLIP RESOURCE RECOVERY AGENCY
BLYDENBURGH ROAD LANDFILL COMPLEX

POTENTIOMETRIC SURFACE CONTOUR MAP
(-83 TO -167 FEET MSL)
AUGUST 13, 2019

FIGURE 6-2

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Table 6-2

BLYDENBURGH ROAD LANDFILL COMPLEX
POST CLOSURE GROUNDWATER MONITORING PROGRAM
RECHARGE WELL WATER LEVEL ELEVATION MEASUREMENTS
AUGUST 13, 2019

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	60	86.42
Recharge Well 2	22.88	125	147.88
Recharge Well 3	30.39	18	48.39
Recharge Well 4	24.86	35	59.86
Recharge Well 5	33.08	20	53.08
Recharge Well 6	29.16	90	119.16

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

[(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.

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 Third Quarter 2019 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 Third Quarter 2019 results to the previous results (February 2019/August 2018) 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 35 out of 36 wells sampled. Well 11M-1 exhibited an increase of more than 10 ug/l in total VOCs. Of the 36 wells sampled, monitoring well 11G-2 (56.8 ug/l) slightly exceeded the groundwater remediation criterion of 50 ug/l established by the Record of Decision (ROD) for total VOCs. It should be noted, 21 out of the 36 monitoring wells sampled, showed no detectable concentrations of VOCs.

The majority of the monitoring wells (26 out of 36) 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 (10 out of 36) downgradient of the MSW Landfill, exhibited one or more of the following leachate parameters: ammonia, bromide, chloride and total phenols 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, EW-4 and EW-6) and have remained consistent in comparison to the previous sample results. TVOCs in temporary extraction well GM-1D (47.8 ug/l) showed a slight decrease in comparison to the February 2019 TVOC result (59 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.

7.2 Recommendations

Based on the findings of the Third Quarter 2019 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	GM-1D*	GM-1D*	GM-1D*	GM-1D*
Sample ID			GM-1D*	GM-1D*	GM-1D*	GM-1D*
Sample_date			06/09/17	08/04/17	10/27/17	12/18/17
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	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	2.7	***6.1***	***7.4***	***5.6***
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	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	***1.1***	***1.3***	***1***
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	1	
1,4-Dichlorobenzene	106-46-7	3 ST++	***5.7***	***7***	***8.5***	***7.1***
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	1.4	1.6	1.8	1.5
Chlorodifluoromethane (Freon 22)	75-45-6	---	3.1	7.9	U	8 J
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	***5.2***	***10.4***	***13.5***	***9.5***
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	***7.3***	***11.9***	U	***11.9 J***
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	2.6	U
Styrene	100-42-5	5 ST	U	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	3.9	3.2	4.4	3.3
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	U
Trichloroethylene (TCE)	79-01-6	5 ST	1.8	2.9	3.1	2.9
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	***2.4***	***2.7***	***2.3***
Xylenes, Total	XYLENES	5 ST+	U	U	U	U
Total Volatile Organic Compounds		---	31.1	54.5	46.3	53.1

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

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
++ Applies to sum of isomer

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

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	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	02/21/18	04/27/18	07/03/18	09/07/18
			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	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		***6***	***5.9***	4.3	4.3
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	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	***1.1***	***0.68 J***	U
1,2-Dichloroethane	107-06-2	0.6 ST		U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST		U	U	0.74 J	U
1,4-Dichlorobenzene	106-46-7	3 ST++		***6.2***	***6.9***	***4.6***	***6.2***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	U	U	2 J
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		1.3	1.5	U	1.3
Chlorodifluoromethane (Freon 22)	75-45-6	---		8.8	NR	9.8	7
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		***9.4***	***10.1***	***7.1***	***6.8***
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		***11.1***	***9.6 J***	4.2	***9.1***
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		2.8	3.3	1.7	3.1
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		2.5	3.1	2.3	2.7
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		***2.5***	***2.8***	1.8	1.8
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		50.6	44.3	37.22	44.3

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

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
++ Applies to sum of isomer

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

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	GM-1D*	GM-1D*	GM-1D*	GM-1D*
			Sample_date	10/25/18	12/24/18	02/14/19	08/19/19
			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	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		***5.1***	3.7	***6.7***	***5.1***
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++		1	***0.65 J***	***1.1***	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++		***6.4***	***3.9***	***7***	***5.3***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		J	U	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		0.56 J	U	U	0.54 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		1.6	0.95 J	1.5	1.2
Chlorodifluoromethane (Freon 22)	75-45-6	---		9.9	5.8	9.4	8.1
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		***7.7***	***5.6***	***10.3 J***	***7.9***
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		***10.3***	***8.3***	***14.6***	***13***
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		3.8	1.7	3	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	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	1.9	2.7	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***	1.5	***2.7***	***2.4***
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		51.36	34	59	47.84

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

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
++ Applies to sum of isomer

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

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	GM-1I	GM-1I	GM-1I	GM-1I
			Sample_date	08/14/17	02/21/18	02/14/19	08/19/19
			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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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	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		***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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	4G-2	4G-2	4G-2	4G-2
			Sample_date	05/26/18	02/16/18	02/11/19	08/16/19
			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	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	---		NR	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		NR	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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-1	4M-1	4M-1	4M-1
			Sample_date	02/16/18	09/04/18	02/11/19	08/16/19
			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	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		1.5	1.2	1.3	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	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST		U	U	U	U
1,2-Dichlorobenzene	95-50-1	3 ST++		***2.4***	***1.4***	***2.5***	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++		***11.4***	***4.6***	***12.1***	***11.7***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		3.5 J	UB	1.6 J	4.5 J
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		***3.2***	***2.9***	***3.1***	***2.9***
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		3.6	3	3.9	3.6
Chlorodifluoromethane (Freon 22)	75-45-6	---		6.6	5.3	6.4	6.2
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		1.5	1.2	1.8	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		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		---		33.7	19.6	32.7	34.7

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

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
++ Applies to sum of isomer

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	08/11/17	02/26/18	02/11/19	08/16/19
			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	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	1.1	1.2	1.8
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	---		1.5	4.1	5	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		1.6	4.6	***6.4***	***7.2***
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		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	1.2
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		3.1	9.8	12.6	17.1

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

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
++ Applies to sum of isomer

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	6G-1	6G-1	6G-1	6G-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	6G-2	6G-2	6G-2	6G-2
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			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	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		UB	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	6G-3	6G-3	6G-3	6G-3
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			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	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++		3	***3.9***	***3.7***	***3.6***
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	2	1.8	1.5
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		---		4.4	5.9	5.5	5.1

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

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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	7M-1	7M-1	7M-1	7M-1
			Sample_date	08/10/17	02/23/18	02/12/19	08/20/19
			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	U
1,1,1-Trichloroethane	71-55-6	5 ST		2.9	1.3	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	0.43 J	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		1.4	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		---		4.3	1.73	0	0

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

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
++ Applies to sum of isomer

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	8G-1	8G-1	8G-1	8G-1
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	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		UB	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
NR Not reported
U Compound was analyzed for but not detected
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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
++ Applies to sum of isomer

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	8M-1	8M-1	8M-1	8M-1
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	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	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		UB	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	8M-2	8M-2	8M-2	8M-2
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	10M-1	10M-1	10M-1	10M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			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	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	1.4	1.6	1.3
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	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		UB	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	1.5	1.8	1.7
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	1.3	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	1.5	2	1.8
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		1.6	1.9	1.1	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		UJ	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		---		1.6	7.6	6.5	4.8

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

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
++ Applies to sum of isomer

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	11G-1	11G-1	11G-1	11G-1
			Sample_date	05/24/18	08/31/18	02/13/19	08/14/19
			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	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++		***1.1***	***1.1***	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++		***4.3***	***4.9***	***3.9***	***3.8***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	3.8 J	2 J	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		U	U	0.97 J	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		1.2	1.3	1.2	1.1
Chlorodifluoromethane (Freon 22)	75-45-6	---		NR	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		NR	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	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		---		6.6	11.1	8.07	4.9

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

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
++ Applies to sum of isomer

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	11G-2	11G-2	11G-2	11G-2
			Sample_date	05/24/18	08/31/18	02/13/19	08/14/19
			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	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		2.3	2.2	2.8	2.7
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++		***5.3***	***3.5***	***5***	***4.1***
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++		***27.7***	***15.1***	***26.7***	***20.2***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	4.8 J	2.2 J	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		***2.4***	***2.3***	***2.5***	***1.6***
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		***6.5***	***5.1***	***5.7***	4.2
Chlorodifluoromethane (Freon 22)	75-45-6	---		NR	U	8.2	7.2
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	1.8	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		NR	U	***8.1***	***10.3***
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	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		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		1.3	***2.1***	1.7	1.9
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		46.8	35.1	66	56.8

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

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
++ Applies to sum of isomer

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

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	12M-1	12M-1	12M-1	12M-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			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	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++		1.4	***2.4***	***2.3***	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++		1.2	***9.9***	***10.3***	***10.4***
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		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	***5.3***	***5.5***	***5.1***
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	1.8	1.6	1.4
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	2	1.3 J	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		---		2.6	21.4	21	19.3

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

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
++ Applies to sum of isomer

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	13G-1	13G-1	13G-1	13G-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			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	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	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	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	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***	
NR	Not reported	ug/l	Micrograms per liter
U	Compound was analyzed for but not detected	BGS	Below Ground Surface
J	Estimated detection limit or value	MSL	Mean Sea Leve
UB	Qualified as non detect (U) due to blank results	MSW	Municipal Solid Waste
		GV	Guidance Value
		ST	Standard
		++	Applies to sum of isomer

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	13M-1	13M-1	13M-1	13M-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			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	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	3.3	3.3	2.7
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	***5.8***	***6***	***4.7***
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	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	1.4	1.2	1
Chlorodifluoromethane (Freon 22)	75-45-6	---		U	3.5	3.6	3.2
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	***5.7***	***5.7***	4.8
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		U	***5.9***	***6.9***	***6***
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	***7.8***	***7.9***	***7.8***
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	2.6	1.8	1.7
Trichlorofluoromethane	75-69-4	5 ST		U	1	1.3	1.3
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	37	37.7	33.2

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

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	14G-1A	14G-1A	14G-1A	14G-1A
			Sample_date	05/21/18	02/14/18	02/11/19	08/13/19
			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	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	---		NR	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		NR	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		UJ	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	14G-2	14G-2	14G-2	14G-2
			Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
			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	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		UJ	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	---		NR	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		NR	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	14M-1	14M-1	14M-1	14M-1
			Sample_date	05/21/18	09/05/18	02/11/19	08/13/19
			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							
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		***6.7***	***5***	***6.8***	***5.9***
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		UJ	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++		***2.7***	***1.6***	***2.9***	2.6
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++		***13.2***	***6.2***	***14.3***	***12.3***
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	5.6	U	U
Acrylonitrile	107-13-1	5 ST		U	U	U	U
Benzene	71-43-2	1 ST		0.99 J	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		3.2	2.3	3	2.8
Chlorodifluoromethane (Freon 22)	75-45-6	---		NR	8.4	10.7	9.6
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		3.2	2.7	3.3	3
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		NR	***5.9***	***9***	***7.7***
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		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	1
Xylenes, Total	XYLENES	5 ST+		U	U	U	U
Total Volatile Organic Compounds		---		29.99	37.7	50	44.9

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

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
++ Applies to sum of isomer

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

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	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	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	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
NR Not reported
U Compound was analyzed for but not detected
J Estimated detection limit or value
UB Qualified as non detect (U) due to blank results

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
++ Applies to sum of isomer

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	16M-1	16M-1	16M-1	16M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			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		0.68 J	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		UB	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		3.1	3.4	2.6	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		UJ	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		---		3.78	3.4	2.6	2

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

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-1	18G-1	18G-1	18G-1
			Sample_date	05/21/18	02/16/18	02/13/19	08/13/19
			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	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++		2.1	2	1.4	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		UB	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	---		NR	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		NR	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		UJ	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		---		2.1	2	1.4	0

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

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
++ Applies to sum of isomer

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: 18G-2	18G-2	18G-2	18G-2
			Sample_date: 05/21/18	09/06/18	02/13/19	08/13/19
			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						
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++	1.4	U	1.1	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	---	NR	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	NR	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	UJ	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		---	1.4	0	1.1	1

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

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
++ Applies to sum of isomer

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	22M-1 02/26/18	22M-1 09/05/18	22M-1 02/12/19	22M-1 08/16/19
Sample ID			22M-1	22M-1	22M-1	22M-1
Sample_date			02/26/18	09/05/18	02/12/19	08/16/19
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	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	1.4 J	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	1.4	0	0

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

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
++ Applies to sum of isomer

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	08/10/17	02/15/18	02/12/19	08/14/19
			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	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		UB	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	UJ
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST		UJ	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST		U	1	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	0	0

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

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
++ Applies to sum of isomer

D&B Engineers and Architects, P.C.

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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	GM-1D* 10/24/16 399' -247' DOWN	GM-1D* 04/05/17 399' -247' DOWN	GM-1D* 06/09/17 399' -247' DOWN	GM-1D* 08/04/17 399' -247' DOWN	GM-1D* 10/27/17 399' -247' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Aluminum	7429-90-5	--		U	36.2 J	U	UB	UB
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		U	38 J	11.9 J	6.3 J	3.8 J
Beryllium	7440-41-7	3 GV		U	U	U	U	U
Boron	7440-42-8	1000 ST		168	205	315	331	318
Cadmium	7440-43-9	5 ST		U	0.34 J	0.074 J	U	U
Calcium	7440-70-2	--		46200	48400	88400	95500	92900
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	--		U	4.6 J	1.6 J	0.96 J	U
Copper	7440-50-8	200 ST		U	U	145	U	U
Cyanide	57-12-5	200 ST		U	U	U	U	U
Iron	7439-89-6	300 ST#		U	*125*	*65.2 J*	*UB*	*145*
Lead	7439-92-1	25 ST		U	3.4 J	U	5.2	U
Magnesium	7439-95-4	35000 GV		***28100***	***33400***	***56200***	***60400***	***60100***
Manganese	7439-96-5	300 ST#		***416***	***327***	*98*	*39.4*	*20.5*
Mercury	7439-97-6	0.7 ST		U	U	U	UB	U
Nickel	7440-02-0	100 ST		U	11.2 J	11.4 J	9.6 J	9.2 J
Potassium	7440-09-7	--		6800	6960	6460	6100	5360
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		***60300***	***71600***	***142000***	***154000***	***147000***
Thallium	7440-28-0	0.5 GV		U	U	U	U	U
Vanadium	7440-62-2	--		U	U	0.82 J	U	U
Zinc	7440-66-6	2000 GV		U	9.6 J	255	UB	6.2 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	12/18/17	02/21/18	04/27/18	07/03/18	09/07/18
			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	U	25.5 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U	U
Arsenic	7440-38-2	25 ST		U	U	7.2 J	U	U
Barium	7440-39-3	1000 ST		3.1 J	2.5 J	2.6 J	2.5 J	2.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U	U
Boron	7440-42-8	1000 ST		341	330	330	335	318
Cadmium	7440-43-9	5 ST		U	U	0.10 J	U	U
Calcium	7440-70-2	--		95800	93700	94800	95400	98500
Chromium, Hexavalent	18540-29-9	50 ST		U	U	5.6 J	U	U
Chromium, Total	7440-47-3	50 ST		U	U	4.3 J	U	U
Cobalt	7440-48-4	--		U	2 J	U	U	U
Copper	7440-50-8	200 ST		2.9 J	1.5 J	41.1	U	U
Cyanide	57-12-5	200 ST		U	U	U	U	U
Iron	7439-89-6	300 ST#		*232*	178	171	***533***	***368***
Lead	7439-92-1	25 ST		U	U	U	U	U
Magnesium	7439-95-4	35000 GV		***63200***	***62200***	***62500***	***62500***	***63800***
Manganese	7439-96-5	300 ST#		*18*	16.2	16.3	17.1	18.8
Mercury	7439-97-6	0.7 ST		U	UB	U	U	UB
Nickel	7440-02-0	100 ST		9.7 J	34.5 J	30.6 J	9.5 J	8.9 J
Potassium	7440-09-7	--		6340	5350	6260	5380	5030
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		***157000***	***151000***	***159000***	***159000***	***168000***
Thallium	7440-28-0	0.5 GV		U	UB	***8.1 J***	U	U
Vanadium	7440-62-2	--		U	U	0.86 J	U	UB
Zinc	7440-66-6	2000 GV		4.2 J	4.4 J	69.1	9.6 J	UB

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*
			Sample_date	10/25/18	12/24/18	02/14/19	08/19/19
			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
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	24.8 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		2.4 J	2.4 J	2.5 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		354	343	358	UB
Cadmium	7440-43-9	5 ST		U	U	UB	U
Calcium	7440-70-2	--		99200	97200	101000	86200
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	U
Chromium, Total	7440-47-3	50 ST		U	1.9 J	U	U
Cobalt	7440-48-4	--		U	U	0.66 J	U
Copper	7440-50-8	200 ST		11. J	U	4.3 J	U
Cyanide	57-12-5	200 ST		U	U	5.6 J	U
Iron	7439-89-6	300 ST#		***474***	***388***	***375***	47.9
Lead	7439-92-1	25 ST		U	U	U	4.8 J
Magnesium	7439-95-4	35000 GV		***64500***	***64000***	***66200***	***55400 J***
Manganese	7439-96-5	300 ST#		19.2	17.4	19.3	13.8
Mercury	7439-97-6	0.7 ST		U	U	U	U
Nickel	7440-02-0	100 ST		11.2 J	11.4 J	11.8 J	9.8 J
Potassium	7440-09-7	--		5950	5680	6280	6010
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		***174000***	***180000***	***180000***	***150000***
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		7.5 J	5 J	6 J	178

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	08/14/17	02/21/18	02/14/19	08/19/19
			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	--		88.4 J	U	UB	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		28.5 J	24.7 J	24.3 J	23.6 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		130	136	138	UB
Cadmium	7440-43-9	5 ST		0.22 J	U	UB	U
Calcium	7440-70-2	--		46700	45300	39700	42200
Chromium, Hexavalent	18540-29-9	50 ST		UJ	U	U	U
Chromium, Total	7440-47-3	50 ST		5.2 J	U	2.2 J	U
Cobalt	7440-48-4	--		4.5 J	5.3 J	3.9 J	U
Copper	7440-50-8	200 ST		5.1 J	0.75 J	U	U
Cyanide	57-12-5	200 ST		U	U	3.7 J	U
Iron	7439-89-6	300 ST#		195 J	43.7	13.6 J	11 J
Lead	7439-92-1	25 ST		3.2 J	U	U	5
Magnesium	7439-95-4	35000 GV		29400	27900	23800	24800 J
Manganese	7439-96-5	300 ST#		8.9 J	U	U	U
Mercury	7439-97-6	0.7 ST		0.031 J	U	U	U
Nickel	7440-02-0	100 ST		13.2 J	29.8 J	8.6 J	8.5 J
Potassium	7440-09-7	--		3640 J	2980 J	3340 J	4180 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		***50500***	***52600***	***61000***	***57100***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		1.9 J	U	0.99 J	U
Zinc	7440-66-6	2000 GV		19.4 J	3.9 J	1.5 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	GM-1S 09/03/15 135' 19' DOWN	GM-1S 08/03/16 135' 19' DOWN	GM-1S 08/14/17 135' 19' DOWN	GM-1S 08/19/19 135' 19' 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	GM-2D 09/01/15 398' -248' DOWN	GM-2D 08/08/16 398' -248' DOWN	GM-2D 08/14/17 398' -248' DOWN	GM-2D 08/20/19 398' -248' 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

Units in ug/l			Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	GM-2I 09/01/15 298' -136' DOWN	GM-2I 08/08/16 298' -136' DOWN	GM-2I 08/14/17 298' -136' DOWN	GM-2I 08/20/19 298' -136' 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	GM-2S 09/01/15 149' 12' DOWN	GM-2S 08/08/16 149' 12' DOWN	GM-2S 08/14/17 149' 12' DOWN	GM-2S 08/20/19 149' 12' 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

Units in ug/l			Sample ID Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	4G-2 08/11/17 211' -45' DOWN	4G-2 02/16/18 211' -45' DOWN	4G-2 02/11/19 211' -45' DOWN	4G-2 08/16/19 211' -45' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		266	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	6.5 J	U	U
Barium	7440-39-3	1000 ST		132 J	85.4 J	77.1 J	94.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		142	128	116	UB
Cadmium	7440-43-9	5 ST		UB	U	U	U
Calcium	7440-70-2	--		37200	32500	28500	34400
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		3.6 J	U	U	U
Cobalt	7440-48-4	--		5.5 J	3.1 J	3.6 J	3.8 J
Copper	7440-50-8	200 ST		10.3 J	4.2 J	3.5 J	8.9 J
Cyanide	57-12-5	200 ST		U	U	9.2 J	U
Iron	7439-89-6	300 ST#		***2490***	***182***	***210***	***126***
Lead	7439-92-1	25 ST		3.9 J	U	1.9 J	U
Magnesium	7439-95-4	35000 GV		9240	8050	7100	7960
Manganese	7439-96-5	300 ST#		***7040***	***4870***	***4110***	***4420***
Mercury	7439-97-6	0.7 ST		UBJ	UB	U	U
Nickel	7440-02-0	100 ST		18.8 J	28.8 J	10.4 J	25.2 J
Potassium	7440-09-7	--		11500	9850	8810	11600
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		***85200***	***81900***	***94400***	***98600***
Thallium	7440-28-0	0.5 GV		***6 J***	U	***6 J***	U
Vanadium	7440-62-2	--		U	U	UB	U
Zinc	7440-66-6	2000 GV		40.3	5.4 J	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	4M-1	4M-1	4M-1	4M-1
			Sample_date	02/16/18	09/04/18	02/11/19	08/16/19
			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	--		U	46.5 J	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		20.3	16.8	20.2	UB
Barium	7440-39-3	1000 ST		18.4 J	8.5 J	16.9 J	17.1 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		***1620***	***1580***	***1620***	***1650***
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		50900	37600	48000	47500
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	UJ	U
Chromium, Total	7440-47-3	50 ST		2.8 J	5.7 J	3.9 J	U
Cobalt	7440-48-4	--		21 J	19.4 J	23.9 J	24.1 J
Copper	7440-50-8	200 ST		6 J	UB	4.6 J	8.4 J
Cyanide	57-12-5	200 ST		U	U	3.5 J	4 J
Iron	7439-89-6	300 ST#		***1100***	***1760***	***1060***	***949***
Lead	7439-92-1	25 ST		U	U	1.8 J	U
Magnesium	7439-95-4	35000 GV		***49000***	***37100***	***46000***	***44900***
Manganese	7439-96-5	300 ST#		***1750***	***1300***	***1670***	***1640***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		***185***	***128***	***153***	***177***
Potassium	7440-09-7	--		96800	96400	92800	103000
Selenium	7782-49-2	10 ST		5.2 J	U	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***373000***	***391000***	***406000***	***372000***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		3.8 J	5.2 J	UB	U
Zinc	7440-66-6	2000 GV		U	UB	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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	4M-2 08/11/17 486' -320' DOWN	4M-2 02/26/18 486' -320' DOWN	4M-2 02/11/19 486' -320' DOWN	4M-2 08/16/19 486' -320' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		101 J	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		6.9 J	3.6 J	3.6 J	4 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		62.4	UB	50.6	UB
Cadmium	7440-43-9	5 ST		UB	U	U	U
Calcium	7440-70-2	--		62800	59500	61700	65400
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		1.6 J	U	U	U
Cobalt	7440-48-4	--		3.4 J	2.9 J	3 J	3.4 J
Copper	7440-50-8	200 ST		5.1 J	UB	U	U
Cyanide	57-12-5	200 ST		U	U	2.8 J	2.1 J
Iron	7439-89-6	300 ST#		***1490***	***1530 J***	***1560***	***1580***
Lead	7439-92-1	25 ST		2.2 J	U	U	U
Magnesium	7439-95-4	35000 GV		***35600***	33400	34400	***36900***
Manganese	7439-96-5	300 ST#		***56.6***	***18.2***	UB	***21.5***
Mercury	7439-97-6	0.7 ST		UBJ	UB	U	U
Nickel	7440-02-0	100 ST		13.6 J	25.1 J	9.2 J	25.4 J
Potassium	7440-09-7	--		4540 J	3870 J	3490 J	5520
Selenium	7782-49-2	10 ST		U	7.2 J	U	U
Silver	7440-22-4	50 ST		U	U	U	U
Sodium	7440-23-5	20000 ST		***169000***	***166000***	***188000***	***189000***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		26.1	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	6G-1	6G-1	6G-1	6G-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			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	--		6160	UB	UB	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		61.3 J	15.7 J	11.7 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		63.5	81.4	UB	31.4 J
Cadmium	7440-43-9	5 ST		0.25 J	U	UB	U
Calcium	7440-70-2	--		17300	14700	14300	13700
Chromium, Hexavalent	18540-29-9	50 ST		UJ	4.1 J	U	UJ
Chromium, Total	7440-47-3	50 ST		***1930***	UB	5.2 J	U
Cobalt	7440-48-4	--		24.9 J	0.84 J	U	U
Copper	7440-50-8	200 ST		47.5	UB	U	U
Cyanide	57-12-5	200 ST		U	UJ	3.7 J	2.1 J
Iron	7439-89-6	300 ST#		***17400***	47.6	78.8	U
Lead	7439-92-1	25 ST		13.8	U	U	U
Magnesium	7439-95-4	35000 GV		6930	4820	4550	4690
Manganese	7439-96-5	300 ST#		***1130***	UB	3 J	U
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		***114***	16.9 J	4.9 J	UB
Potassium	7440-09-7	--		4950 J	4330 J	3450 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		***46400***	***54200***	***24000***	***27500***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		23.6 J	U	U	U
Zinc	7440-66-6	2000 GV		33.2	U	3.6 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	6G-2 08/09/17 230' -53' DOWN	6G-2 02/23/18 230' -53' DOWN	6G-2 02/14/19 230' -53' DOWN	6G-2 08/15/19 230' -53' 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		48.2 J	39.8 J	42.3 J	46.8 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		111	120	120	111
Cadmium	7440-43-9	5 ST		0.16 J	U	UB	U
Calcium	7440-70-2	--		22400	22100	23500	27200
Chromium, Hexavalent	18540-29-9	50 ST		UB	U	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		9.5 J	6.8 J	8 J	5.4 J
Copper	7440-50-8	200 ST		3.4 J	1.1 J	U	U
Cyanide	57-12-5	200 ST		4.7 J	U	UJ	2.8 J
Iron	7439-89-6	300 ST#		132	U	U	12.6 J
Lead	7439-92-1	25 ST		3.3 J	U	U	U
Magnesium	7439-95-4	35000 GV		8580	8510	9220	10300
Manganese	7439-96-5	300 ST#		***347***	96.5	77	81.7
Mercury	7439-97-6	0.7 ST		U	UB	U	U
Nickel	7440-02-0	100 ST		6.8 J	5 J	5.9 J	UB
Potassium	7440-09-7	--		2580 J	1840 J	1970 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		***85100***	***84800***	***93300***	***91200***
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	2.1 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	6G-3 08/09/17 315' -138' DOWN	6G-3 02/23/18 315' -138' DOWN	6G-3 02/14/19 315' -138' DOWN	6G-3 08/15/19 315' -138' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	UB	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		101 J	49.9 J	46.3 J	48.7 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		227	246	214	198
Cadmium	7440-43-9	5 ST		U	U	UB	U
Calcium	7440-70-2	--		40000	38800	37200	39400
Chromium, Hexavalent	18540-29-9	50 ST		UB	U	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		36.8 J	6 J	5.5 J	5.3 J
Copper	7440-50-8	200 ST		2.9 J	5 J	U	U
Cyanide	57-12-5	200 ST		U	U	UJ	U
Iron	7439-89-6	300 ST#		***1910***	***170***	***141***	***130***
Lead	7439-92-1	25 ST		5.3	2.6 J	2.7 J	U
Magnesium	7439-95-4	35000 GV		22700	22300	21300	22000
Manganese	7439-96-5	300 ST#		***5730***	***4710***	***3550***	***3760***
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		18.4 J	15.7 J	12.5 J	13.2 J
Potassium	7440-09-7	--		9600	8760	8460	8220
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		***41000***	***43800***	***42600***	***46400***
Thallium	7440-28-0	0.5 GV		UB	UB	***4.6 J***	***6.4 J***
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		42.3	U	2.3 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	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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	7M-1 08/10/17 214' -152' CROSS	7M-1 02/23/18 214' -152' CROSS	7M-1 02/12/19 214' -152' CROSS	7M-1 08/20/19 214' -152' CROSS
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		44.3 J	U	17.3 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		14.2 J	12.2 J	12.5 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	UB	34.9 J	UB
Cadmium	7440-43-9	5 ST		UB	U	UB	U
Calcium	7440-70-2	--		17700	17200	16200	16800
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	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		U	UB	U	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		60.1	U	U	U
Lead	7439-92-1	25 ST		1.6 J	U	U	3.7 J
Magnesium	7439-95-4	35000 GV		7470	6980	6350	6370 J
Manganese	7439-96-5	300 ST#		21.5	UB	UB	23.1
Mercury	7439-97-6	0.7 ST		UBJ	UB	U	U
Nickel	7440-02-0	100 ST		U	U	U	U
Potassium	7440-09-7	--		1870 J	2140 J	2020 J	3310 J
Selenium	7782-49-2	10 ST		U	U	U	4.8 J
Silver	7440-22-4	50 ST		U	U	U	UB
Sodium	7440-23-5	20000 ST		13800	16800	16800	15800
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		12.6 J	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	8G-1	8G-1	8G-1	8G-1
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	--		641	UB	UB	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		125 J	163 J	257	382
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	UB	UB	UB
Cadmium	7440-43-9	5 ST		***8.6***	0.38 J	UB	0.46 J
Calcium	7440-70-2	--		78100	56600	68400	98800
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	UJ
Chromium, Total	7440-47-3	50 ST		***70.2***	UB	3.7 J	5.3 J
Cobalt	7440-48-4	--		0.79 J	1.5 J	U	U
Copper	7440-50-8	200 ST		9.2 J	UB	U	U
Cyanide	57-12-5	200 ST		U	U	3.8 J	U
Iron	7439-89-6	300 ST#		***1100***	26.4 J	21.8	27.2
Lead	7439-92-1	25 ST		8.1	U	U	U
Magnesium	7439-95-4	35000 GV		20000	22400	**38000**	***48600 J***
Manganese	7439-96-5	300 ST#		***51.4***	22.8	23.2	41.1
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		16.9 J	23.6 J	24.2 J	8.7 J
Potassium	7440-09-7	--		5780	4480 J	5450	6770
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		***118000***	***194000***	***256000***	***342000***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		1.6 J	U	0.94 J	U
Zinc	7440-66-6	2000 GV		140	17.8 J	23.8	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	08/14/17	02/27/18	02/15/19	08/19/19
			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	--		6520	UB	UB	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		150 J	31.9 J	29.7 J	32.2 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		178	244	187	UB
Cadmium	7440-43-9	5 ST		2 J	0.18 J	UB	U
Calcium	7440-70-2	--		46000	39400	40600	44000
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	UJ
Chromium, Total	7440-47-3	50 ST		15.5	U	U	U
Cobalt	7440-48-4	--		7.8 J	7.1 J	5.2 J	5.2 J
Copper	7440-50-8	200 ST		41.6	UB	U	U
Cyanide	57-12-5	200 ST		14.2	U	3.8 J	U
Iron	7439-89-6	300 ST#		***5880***	15.2 J	U	U
Lead	7439-92-1	25 ST		20.6	U	U	4.3 J
Magnesium	7439-95-4	35000 GV		15000	25500	26200	28500 J
Manganese	7439-96-5	300 ST#		***122***	37.5	37.8	43.5
Mercury	7439-97-6	0.7 ST		***3.4***	UB	U	U
Nickel	7440-02-0	100 ST		29 J	35.2 J	32.5 J	12.4 J
Potassium	7440-09-7	--		6380	8350	7320	7890
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	UB
Sodium	7440-23-5	20000 ST		***94100***	***69900***	***56900***	***63700***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		11.3 J	U	0.98 J	U
Zinc	7440-66-6	2000 GV		745	14.8 J	8.5 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	8M-2	8M-2	8M-2	8M-2
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	--		766	U	U	U
Antimony	7440-36-0	3 ST		U	U	3.1 J	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		15.1 J	4.2 J	4.5 J	113 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	UB	UB	459 J
Cadmium	7440-43-9	5 ST		***10.2***	U	2.9 J	U
Calcium	7440-70-2	--		12500	10500	11000	30600 J
Chromium, Hexavalent	18540-29-9	50 ST		UJ	U	U	UJ
Chromium, Total	7440-47-3	50 ST		5.1 J	U	U	U
Cobalt	7440-48-4	--		1.8 J	1.2 J	U	3.6 J
Copper	7440-50-8	200 ST		20.6 J	UB	U	U
Cyanide	57-12-5	200 ST		U	U	5 J	U
Iron	7439-89-6	300 ST#		***2040 J***	UJ	U	***31.4 J***
Lead	7439-92-1	25 ST		***65.5***	U	U	3.6 J
Magnesium	7439-95-4	35000 GV		6460	5840	6040	11100 J
Manganese	7439-96-5	300 ST#		***144***	UB	11.6	***1900 J***
Mercury	7439-97-6	0.7 ST		0.029 J	UB	U	U
Nickel	7440-02-0	100 ST		10.1 J	15.3 J	16 J	8.6 J
Potassium	7440-09-7	--		1810 J	1130 J	1120 J	44000 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		***22100***	9950	11800	***85100 J***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		2.9 J	U	U	U
Zinc	7440-66-6	2000 GV		248	U	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

			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'
Units in ug/l			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	08/10/17	02/15/18	02/12/19	08/21/19
			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	--		582	U	U	U
Antimony	7440-36-0	3 ST		U	U	U	U
Arsenic	7440-38-2	25 ST		U	5 J	U	U
Barium	7440-39-3	1000 ST		6.6 J	3 J	3.7 J	3.6 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		38.5 J	68.9	70.7	UB
Cadmium	7440-43-9	5 ST		***5.5***	U	U	U
Calcium	7440-70-2	--		19700	68700	71300	73500
Chromium, Hexavalent	18540-29-9	50 ST		15 J	UJ	UJ	U
Chromium, Total	7440-47-3	50 ST		2.5 J	U	U	U
Cobalt	7440-48-4	--		1.1 J	1.3 J	0.98 J	U
Copper	7440-50-8	200 ST		7.7 J	U	U	U
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		***2600***	U	U	9.6 J
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		9860	***43200***	***45600***	***47500***
Manganese	7439-96-5	300 ST#		***135***	3.4 J	UB	5.6 J
Mercury	7439-97-6	0.7 ST		UBJ	UB	U	0.11 J
Nickel	7440-02-0	100 ST		9 J	27.4 J	6.8 J	26.6 J
Potassium	7440-09-7	--		12400	3470 J	3550 J	3100 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		11100	***46100***	***63300***	***65500***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	UB	U
Zinc	7440-66-6	2000 GV		110	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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	11G-1 02/26/18 145' 22' DOWN	11G-1 08/31/18 145' 22' DOWN	11G-1 02/13/19 145' 22' DOWN	11G-1 08/14/19 145' 22' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	115 J	U	U
Antimony	7440-36-0	3 ST		UB	U	U	U
Arsenic	7440-38-2	25 ST		4.3 J	U	U	U
Barium	7440-39-3	1000 ST		53.6 J	58.8 J	55.3 J	58.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		892	955	922	959
Cadmium	7440-43-9	5 ST		U	U	UB	U
Calcium	7440-70-2	--		2120	1600	1960	1960
Chromium, Hexavalent	18540-29-9	50 ST		UJ	11 J	UJ	UJ
Chromium, Total	7440-47-3	50 ST		UB	7.8 J	3.6 J	U
Cobalt	7440-48-4	--		23 J	23.5 J	23 J	23.7 J
Copper	7440-50-8	200 ST		22.5 J	39.2	22.6 J	21 J
Cyanide	57-12-5	200 ST		UJ	U	U	2.8 J
Iron	7439-89-6	300 ST#		***479 J***	***636***	***451***	***462***
Lead	7439-92-1	25 ST		U	1.3 J	U	U
Magnesium	7439-95-4	35000 GV		5450	6440	6800	7170
Manganese	7439-96-5	300 ST#		***1780***	***964***	***1520***	***1500***
Mercury	7439-97-6	0.7 ST		UB	UB	U	0.11 J
Nickel	7440-02-0	100 ST		***113***	***104***	98.6	***102***
Potassium	7440-09-7	--		70700	71500	68400	72900
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		***227000***	***255000***	***249000***	***248000***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		U	1.8 J	UB	U
Zinc	7440-66-6	2000 GV		UB	UB	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	11G-2	11G-2	11G-2	11G-2
			Sample_date	02/26/18	08/31/18	02/13/19	08/14/19
			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	--		UB	182 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		234	221	177 J	145 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		***1670***	***1600***	***1490***	***1240***
Cadmium	7440-43-9	5 ST		U	UB	U	U
Calcium	7440-70-2	--		22300	17100	17000	25600
Chromium, Hexavalent	18540-29-9	50 ST		UJ	20 J	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	7.9 J	2.8 J	U
Cobalt	7440-48-4	--		37.9 J	33.7 J	33.4 J	25.9 J
Copper	7440-50-8	200 ST		25.3	85	22.9 J	11.3 J
Cyanide	57-12-5	200 ST		UJ	U	U	2.1 J
Iron	7439-89-6	300 ST#		***687 J***	***951***	***627***	***1290***
Lead	7439-92-1	25 ST		U	4.1 J	U	U
Magnesium	7439-95-4	35000 GV		19700	16200	17000	17100
Manganese	7439-96-5	300 ST#		***2630***	***2940***	***2490***	***3640***
Mercury	7439-97-6	0.7 ST		UB	UB	U	0.1 J
Nickel	7440-02-0	100 ST		***210***	***194***	***175***	***136***
Potassium	7440-09-7	--		105000	95500	84600	67900
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		***384000***	***394000***	***375000***	***302000***
Thallium	7440-28-0	0.5 GV		U	U	U	***6 J***
Vanadium	7440-62-2	--		U	1.8 J	UB	U
Zinc	7440-66-6	2000 GV		U	UB	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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	11M-1 08/19/15 320' -154' DOWN	11M-1 08/09/16 320' -154' DOWN	11M-1 08/03/17 320' -154' DOWN	11M-1 08/14/19 320' -154' 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	12M-1 08/09/17 338' -163' DOWN	12M-1 02/22/18 338' -163' DOWN	12M-1 02/14/19 338' -163' DOWN	12M-1 08/15/19 338' -163' 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		***57.7***	***25.2***	***21.2***	UB
Barium	7440-39-3	1000 ST		53.8 J	20.4 J	18.5 J	19.8 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		251	281	257	UB
Cadmium	7440-43-9	5 ST		0.35 J	U	UB	U
Calcium	7440-70-2	--		74700	72000	70100	74900
Chromium, Hexavalent	18540-29-9	50 ST			U	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		13.9 J	2.4 J	2.2 J	3.1 J
Copper	7440-50-8	200 ST		6.8 J	UB	U	5.3 J
Cyanide	57-12-5	200 ST		U	U	8.1 J	U
Iron	7439-89-6	300 ST#		***6300***	***1860***	***1430***	***1370***
Lead	7439-92-1	25 ST		9.1	UB	U	U
Magnesium	7439-95-4	35000 GV		***40700***	***39000***	***38500***	***41300***
Manganese	7439-96-5	300 ST#		***6680***	***1590***	***1350***	***1390***
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		13.7 J	13 J	11.6 J	38.1 J
Potassium	7440-09-7	--		5630	4840 J	4140 J	UB
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		***67400***	***70400***	***69900***	***71400***
Thallium	7440-28-0	0.5 GV		UB	UB	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		UB	U	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	13G-1	13G-1	13G-1	13G-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			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
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		215	U	U	U
Antimony	7440-36-0	3 ST		U	UB	U	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		21.4 J	22.6 J	24.3 J	17.9 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	20.1 J	17.2 J	U
Cadmium	7440-43-9	5 ST		0.88 J	U	UB	U
Calcium	7440-70-2	--		13500	18800	17500	11800
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		19.9	3.5 J	4.5 J	U
Cobalt	7440-48-4	--		U	U	U	U
Copper	7440-50-8	200 ST		4.8 J	U	U	7.8 J
Cyanide	57-12-5	200 ST		U	U	UJ	2.8 J
Iron	7439-89-6	300 ST#		***360***	13.8 J	34.6	U
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		5240	7030	6590	4380
Manganese	7439-96-5	300 ST#		10	5.3 J	UB	U
Mercury	7439-97-6	0.7 ST		UBJ	UB	U	U
Nickel	7440-02-0	100 ST		2.1 J	21.2 J	5.5 J	UB
Potassium	7440-09-7	--		2160 J	1530 J	1470 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		11300	14600	***20400***	18400
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		33.4	20.2	UB	19.2 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	13M-1 08/11/17 265' -155 DOWN	13M-1 02/15/18 265' -155 DOWN	13M-1 02/13/19 265' -155 DOWN	13M-1 08/14/19 265' -155 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		402	U	30.2 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		20.4 J	20.6 J	18.5 J	17.8 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		58.8	138	149	141
Cadmium	7440-43-9	5 ST		1.5 J	U	UB	U
Calcium	7440-70-2	--		45000	94900	83900	89400
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		2.4 J	U	1.7 J	U
Cobalt	7440-48-4	--		0.64 J	1.8 J	1.1 J	U
Copper	7440-50-8	200 ST		21.5 J	2.7 J	U	U
Cyanide	57-12-5	200 ST		U	U	U	2.1 J
Iron	7439-89-6	300 ST#		***469***	200	50.7	37.6
Lead	7439-92-1	25 ST		4.3 J	U	1.3 J	U
Magnesium	7439-95-4	35000 GV		9110	***70400***	***61300***	***65600***
Manganese	7439-96-5	300 ST#		15.4	27.2	26.4	24.3
Mercury	7439-97-6	0.7 ST		U	UB	U	U
Nickel	7440-02-0	100 ST		4 J	43.8	9.1 J	UB
Potassium	7440-09-7	--		11300	4580 J	4280 J	3750 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		16000	***63000***	***61700***	***52000***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		9.1 J	U	UB	U
Zinc	7440-66-6	2000 GV		41.2	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	14G-1A	14G-1A	14G-1A	14G-1A
		Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
		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	--	UB	U	29.5 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	54.4 J	28.4 J	36.1 J	39 J
Beryllium	7440-41-7	3 GV	U	U	U	U
Boron	7440-42-8	1000 ST	122	122	151	168
Cadmium	7440-43-9	5 ST	3.5	U	U	U
Calcium	7440-70-2	--	47800	38800	48000	49100
Chromium, Hexavalent	18540-29-9	50 ST	UB	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST	21.4	U	U	U
Cobalt	7440-48-4	--	3.6 J	3.6 J	4.2 J	4.6 J
Copper	7440-50-8	200 ST	3.8 J	0.52 J	U	U
Cyanide	57-12-5	200 ST	U	U	2.8 J	2.4 J
Iron	7439-89-6	300 ST#	***1640***	U	39.3	14.8 J
Lead	7439-92-1	25 ST	10.4	U	1.4 J	U
Magnesium	7439-95-4	35000 GV	21300	20100	27100	28200
Manganese	7439-96-5	300 ST#	***44.9***	U	UB	U
Mercury	7439-97-6	0.7 ST	U	UB	U	U
Nickel	7440-02-0	100 ST	23.4 J	23.3 J	6.4 J	27.4 J
Potassium	7440-09-7	--	15600	4540 J	4310 J	4130 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	***56300***	***50300***	***66500***	***71600***
Thallium	7440-28-0	0.5 GV	U	UB	U	U
Vanadium	7440-62-2	--	2.2 J	U	UB	U
Zinc	7440-66-6	2000 GV	76.6	U	UB	5.4 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	14G-2 08/02/17 264' -103 DOWN	14G-2 02/14/18 264' -103 DOWN	14G-2 02/11/19 264' -103 DOWN	14G-2 08/13/19 264' -103 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		52.2 J	48.6 J	56 J	53.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		129	116	137	131
Cadmium	7440-43-9	5 ST		0.85 J	U	UB	U
Calcium	7440-70-2	--		39300	40000	46900	43200
Chromium, Hexavalent	18540-29-9	50 ST		UB	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		9.9 J	3.4 J	7 J	6 J
Cobalt	7440-48-4	--		4.6 J	3.5 J	3.8 J	3.2 J
Copper	7440-50-8	200 ST		3.9 J	U	U	7.3 J
Cyanide	57-12-5	200 ST		U	U	2.8 J	U
Iron	7439-89-6	300 ST#		***676***	16.2 J	48.5	72.6
Lead	7439-92-1	25 ST		7.5	U	U	U
Magnesium	7439-95-4	35000 GV		23600	24200	28700	26800
Manganese	7439-96-5	300 ST#		***20.8***	U	UB	U
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		21.1 J	37 J	28.2 J	45.8
Potassium	7440-09-7	--		2750 J	2430 J	2430 J	2250 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		***45200***	***45500***	***53800***	***49100***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		29.2	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	14M-1	14M-1	14M-1	14M-1
			Sample_date	02/14/18	09/05/18	02/11/19	08/13/19
			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	--		U	157 J	19.7 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		35.6 J	50.6 J	37.1 J	36.4 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		***1090***	***1120***	***1160***	***1130***
Cadmium	7440-43-9	5 ST		U	UB	UB	U
Calcium	7440-70-2	--		93400	91800	97100	88100
Chromium, Hexavalent	18540-29-9	50 ST		UJ	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	2.5 J	U	U
Cobalt	7440-48-4	--		14.3 J	12.4 J	13.7 J	13.4 J
Copper	7440-50-8	200 ST		3.8 J	65.9	6 J	8.7 J
Cyanide	57-12-5	200 ST		U	U	2.2 J	U
Iron	7439-89-6	300 ST#		***607***	***518***	***689***	***551***
Lead	7439-92-1	25 ST		U	2.6 J	3.7 J	U
Magnesium	7439-95-4	35000 GV		***58200***	***56200***	***59600***	***54500***
Manganese	7439-96-5	300 ST#		***4900***	***3920***	***5380***	***5130***
Mercury	7439-97-6	0.7 ST		U	U	U	U
Nickel	7440-02-0	100 ST		***133***	100	***105***	***124***
Potassium	7440-09-7	--		38900	40300	38500	40300
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		***277000***	***286000***	***307000***	***267000***
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	UB	UB	U
Zinc	7440-66-6	2000 GV		U	UB	UB	5.6 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	15G-1 08/19/15 160' 23' DOWN	15G-1 08/09/16 160' 23' DOWN	15G-1 08/14/17 160' 23' DOWN	15G-1 08/15/19 160' 23' 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	16G-1 08/14/15 57' 20' DOWN	16G-1 08/10/16 57' 20' DOWN	16G-1 08/10/17 57' 20' DOWN	16G-1 08/21/19 57' 20' 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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	16M-1 08/10/17 240' -163 DOWN	16M-1 02/15/18 240' -163 DOWN	16M-1 02/12/19 240' -163 DOWN	16M-1 08/21/19 240' -163 DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		96.2 J	U	19.4 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		7.5 J	5.4 J	5.4 J	5.3 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		67.2	66.5	80.4	UB
Cadmium	7440-43-9	5 ST		UB	U	U	U
Calcium	7440-70-2	--		50800	52500	49600	50300
Chromium, Hexavalent	18540-29-9	50 ST		U	U	UJ	U
Chromium, Total	7440-47-3	50 ST		1.6 J	U	U	U
Cobalt	7440-48-4	--		1.7 J	2.9 J	2.8 J	2.6 J
Copper	7440-50-8	200 ST		3 J	U	U	U
Cyanide	57-12-5	200 ST		U	U	4.8 J	U
Iron	7439-89-6	300 ST#		97.9	U	U	U
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		32300	32500	31300	31800
Manganese	7439-96-5	300 ST#		27.2	8.2 J	UB	6.4 J
Mercury	7439-97-6	0.7 ST		UBJ	UB	U	U
Nickel	7440-02-0	100 ST		8 J	28.2 J	9 J	24.9 J
Potassium	7440-09-7	--		3180 J	2610 J	2320 J	UB
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		***41100***	***41000***	***47100***	***46200***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		2.5 J	U	UB	U
Zinc	7440-66-6	2000 GV		14.5 J	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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	18G-1 08/02/17 157' 11' DOWN	18G-1 02/16/18 157' 11' DOWN	18G-1 02/13/19 157' 11' DOWN	18G-1 08/13/19 157' 11' DOWN
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		UB	U	43.4 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		50.2 J	42.5 J	29.8 J	40.8 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		352	329	236	193
Cadmium	7440-43-9	5 ST		0.36 J	U	UB	U
Calcium	7440-70-2	--		6210	5770	5080	10600
Chromium, Hexavalent	18540-29-9	50 ST		UB	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		16.1 J	11 J	11.8 J	13.6 J
Copper	7440-50-8	200 ST		15.4 J	12.8 J	12.9 J	10.5 J
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		***360***	***67.8***	***53.1***	***20.9***
Lead	7439-92-1	25 ST		5.2	U	2.2 J	U
Magnesium	7439-95-4	35000 GV		4930	4550	3850	6810
Manganese	7439-96-5	300 ST#		***11300***	***12700***	***9940***	***12000***
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		38.8 J	49	25.6 J	28.8 J
Potassium	7440-09-7	--		30800	26600	19400	16800
Selenium	7782-49-2	10 ST		U	U	U	U
Silver	7440-22-4	50 ST		U	U	U	2.4 J
Sodium	7440-23-5	20000 ST		***109000***	***106000***	***97100***	***111000***
Thallium	7440-28-0	0.5 GV		UB	U	***7.5 J***	***12.7***
Vanadium	7440-62-2	--		U	U	UB	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

			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	02/16/18	09/06/18	02/13/19	08/13/19
			Depth of Well BGS	197'	197'	197'	197'
			Depth to bottom screen, relative to MSL	-29	-29	-29	-29
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	45.2 J	19.4 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		48.8 J	57.7 J	52.2 J	55.6 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		182	177	158	160
Cadmium	7440-43-9	5 ST		U	UB	UB	U
Calcium	7440-70-2	--		22200	22000	23100	23600
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	56.6	5.4 J	U
Cobalt	7440-48-4	--		13.3 J	16 J	11.8 J	11 J
Copper	7440-50-8	200 ST		1 J	UB	3 J	9.3 J
Cyanide	57-12-5	200 ST		U	U	U	U
Iron	7439-89-6	300 ST#		U	***356***	***27.5***	U
Lead	7439-92-1	25 ST		U	U	U	U
Magnesium	7439-95-4	35000 GV		8160	8860	8340	8330
Manganese	7439-96-5	300 ST#		***4630***	***7000***	***4790***	***7030***
Mercury	7439-97-6	0.7 ST		U	UB	U	U
Nickel	7440-02-0	100 ST		25.5 J	11.6 J	9.3 J	10.6 J
Potassium	7440-09-7	--		10100	12300	12000	14000
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		***77200***	***87400***	***95600***	***95100***
Thallium	7440-28-0	0.5 GV		U	U	***6 J***	***5.9 J***
Vanadium	7440-62-2	--		U	UB	UB	U
Zinc	7440-66-6	2000 GV		U	UB	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 Sample_date Depth of Well BGS Depth to bottom screen, relative to MSL Gradient relative to MSW	22M-1 02/26/18 222' -164' UP	22M-1 09/05/18 222' -164' UP	22M-1 02/12/19 222' -164' UP	22M-1 08/16/19 222' -164' UP
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	307 J	281	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		30.3 J	33 J	34.4 J	32.9 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		UB	40.4 J	39.6 J	UB
Cadmium	7440-43-9	5 ST		U	UB	UB	U
Calcium	7440-70-2	--		16200	18100	17400	17600
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	U	U
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		0.49 J	U	0.97 J	U
Copper	7440-50-8	200 ST		UB	U	U	U
Cyanide	57-12-5	200 ST		U	U	2.9 J	2.1 J
Iron	7439-89-6	300 ST#		38.2 J	***469***	248	21.1
Lead	7439-92-1	25 ST		U	U	2.3 J	U
Magnesium	7439-95-4	35000 GV		4910	5340	5160	5140
Manganese	7439-96-5	300 ST#		UB	UB	UB	5.3 J
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		11.6 J	U	U	9.8 J
Potassium	7440-09-7	--		2210 J	2130 J	2360 J	UB
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		16200	17800	18300	17800
Thallium	7440-28-0	0.5 GV		UB	U	U	U
Vanadium	7440-62-2	--		U	UB	UB	U
Zinc	7440-66-6	2000 GV		U	UB	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	23M-1	23M-1	23M-1	23M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/14/19
			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	--		41.2 J	U	16.9 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		7.6 J	5 J	5 J	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		78.5	75.3	78.1	75.2
Cadmium	7440-43-9	5 ST		1.1 J	U	UB	U
Calcium	7440-70-2	--		34800	37800	37100	37600
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	--		1.3 J	0.97 J	1.6 J	U
Copper	7440-50-8	200 ST		U	U	2.8 J	12.9 J
Cyanide	57-12-5	200 ST		U	U	3.5 J	2.1 J
Iron	7439-89-6	300 ST#		76	U	U	U
Lead	7439-92-1	25 ST		1.4 J	U	2.2 J	U
Magnesium	7439-95-4	35000 GV		17000	18300	18100	18100
Manganese	7439-96-5	300 ST#		54	49.2	50.7	53.4
Mercury	7439-97-6	0.7 ST		UJ	UB	U	U
Nickel	7440-02-0	100 ST		1 J	20.9 J	0.99 J	U
Potassium	7440-09-7	--		8560	2030 J	1860 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		***27900***	***27400***	***29400***	***26900***
Thallium	7440-28-0	0.5 GV		U	U	U	U
Vanadium	7440-62-2	--		0.94 J	U	UB	U
Zinc	7440-66-6	2000 GV		8.4 J	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-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*
			Sample_date	04/05/17	06/09/17	08/04/17	10/27/17
			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
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		272	560	579	446
Biochemical Oxygen Demand (BOD)	BOD5	---		1 J	1 J	UB	1.0 J
Bromide	24959-67-9	2 GV		0.16 J	1.2	1.5	1.4
Chloride (as Cl)	16887-00-6	250 ST		85.6	171	227	225
Cod - Chemical Oxygen Demand	COD	---		23.4	29.6	42.1	45.7
Color	COLOR	---		U	U	U	10.0
Hardness (as CaCO3)	HARD	---		260	470	450	480
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.96	***4.3***	***4.9 J***	***5.0***
Nitrogen, Kjeldahl, Total	KN	---		0.68	26.6	7.8 J	6.0
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		3.6	0.68	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		1.7	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.033***	***0.003 J***	UB	***0.003 J***
Sulfate (as SO4)	14808-79-8	250 ST		33.5	31.5	36.1	34.7
Total Dissolved Solids	E-10173	---		440	748	842	912
Total Organic Carbon	TOC	---		4.4	9.2	9.6	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*
			Sample_date	12/18/17	02/21/18	04/27/18	07/03/18
			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
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		401	415	466	476
Biochemical Oxygen Demand (BOD)	BOD5	---		1 J	U	U	2.0
Bromide	24959-67-9	2 GV		1.5	1.7	1.6	1.8
Chloride (as Cl)	16887-00-6	250 ST		240	218	212	251
Cod - Chemical Oxygen Demand	COD	---		36.8	43.1	48.2	56.3
Color	COLOR	---		5	5	U	5.0
Hardness (as CaCO3)	HARD	---		400	280	460	700
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***4.9***	***5.5 J***	***4.7***	***4.0***
Nitrogen, Kjeldahl, Total	KN	---		6.2	6.2 J	6	24.6
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.015 J	UJ	3	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.004 J***	UB	***0.0051***	0.004 J
Sulfate (as SO4)	14808-79-8	250 ST		24.9	37.6	37.7	43.3
Total Dissolved Solids	E-10173	---		780	846	863	876
Total Organic Carbon	TOC	---		10.4	8.6	8.2	10.8

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
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	09/07/18	1025/18	12/24/18	02/14/19	08/19/19
			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
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV						
Alkalinity, Total (as CaCO3)	ALK	---		530 J	485	541	551	494
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	U	U	UB
Bromide	24959-67-9	2 GV		1.7	1.6	1.6	1.8	2
Chloride (as Cl)	16887-00-6	250 ST		195	203	230	U	231
Cod - Chemical Oxygen Demand	COD	---		64.5	47.2	45.1	38.9 J	34.5
Color	COLOR	---		5	10	5	10.0	U
Hardness (as CaCO3)	HARD	---		360	400	500	500	420
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***5.2***	***4.6***	***4.6***	***4.9***	***4.7***
Nitrogen, Kjeldahl, Total	KN	---		6.2 J	6.4	4.5	7.2 J	5.3 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		U	U	U	UJ	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	***0.0110***	***0.0084***	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		35	37.7	37.2	41.1	45.8
Total Dissolved Solids	E-10173	---		810	872	824	824	770
Total Organic Carbon	TOC	---		8.8	10	10.4	10.4	9.8

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
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	08/14/17	02/21/18	02/14/19	08/19/19
			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	---		261	153	211	201
Biochemical Oxygen Demand (BOD)	BOD5	---		1 J	U	U	UB
Bromide	24959-67-9	2 GV		0.25 J	0.22 J	0.43 J	0.28 J
Chloride (as Cl)	16887-00-6	250 ST		72.7	64.2	39.5 J	68.7
Cod - Chemical Oxygen Demand	COD	---		19.2	13.5	10 J	10.2
Color	COLOR	---			U	U	U
Hardness (as CaCO3)	HARD	---		193	180	180	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.088 J	0.021 J	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UB	UJ	UJ	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		5.9	6.3 J	0.96 J	7
Nitrogen, Nitrite	14797-65-0	1 ST		UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.002 J***	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		31.1	26.9	46.0	31.7
Total Dissolved Solids	E-10173	---		365	383	351	348
Total Organic Carbon	TOC	---		1.6	UB	1.0	1.8

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
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	08/11/17	02/16/18	02/11/19	08/16/19
			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	---		172 J	158	178 J	198
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.11 J	U	0.14 J	0.13 J
Chloride (as Cl)	16887-00-6	250 ST		88.9	73.6	90	104
Cod - Chemical Oxygen Demand	COD	---		40	30.4 J	U	10.2
Color	COLOR	---		5	U	5	U
Hardness (as CaCO3)	HARD	---		136 J	120	88	110
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.33	0.3	UB
Nitrogen, Kjeldahl, Total	KN	---		0.88	1.8 J	0.7 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	UJB	0.88	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	0.14 J	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	U	UB	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		48.5	27.6	25.2 J	44.5
Total Dissolved Solids	E-10173	---		413	354	364	398
Total Organic Carbon	TOC	---		2.1 J	UJB	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	
*	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	4M-1	4M-1	4M-1	4M-1
			Sample_date	02/16/18	09/04/18	02/11/19	08/16/19
			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	---		1110	1200	1200	1240
Biochemical Oxygen Demand (BOD)	BOD5	---		U	2.6	U	UB
Bromide	24959-67-9	2 GV		***4.4***	***4.4***	***4.9***	***4.8***
Chloride (as Cl)	16887-00-6	250 ST		***412***	***492***	***687***	***479***
Cod - Chemical Oxygen Demand	COD	---		292 J	283 J	260	288
Color	COLOR	---		200	150	200	125
Hardness (as CaCO3)	HARD	---		320	267	300	260
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***172***	***171***	***173***	***179***
Nitrogen, Kjeldahl, Total	KN	---		206 J	192 J	178 J	191 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	UJ	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	UJ	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.024***	***0.047***	UB	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		7.7	UB	9.9 J	10.6
Total Dissolved Solids	E-10173	---		1580	1350	1600	1530
Total Organic Carbon	TOC	---		79.6 J	72.5 J	79.9	76.4

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	4M-2	4M-2	4M-2	4M-2
			Sample_date	08/11/17	02/26/18	02/11/19	08/16/19
			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	---		24.8 J	232	276 J	336
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	2.3	U	UB
Bromide	24959-67-9	2 GV		***2.3***	***2.1***	***2.5***	***2.8***
Chloride (as Cl)	16887-00-6	250 ST		***286***	***261***	***397***	***311***
Cod - Chemical Oxygen Demand	COD	---		48.4	43.1	30.6	41.1
Color	COLOR	---		5	U	5	U
Hardness (as CaCO3)	HARD	---		280 J	240	280	240
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***5.6***	***3.6***	***4.2***	***5.5***
Nitrogen, Kjeldahl, Total	KN	---		6.5	4.1 J	5.3 J	8.8 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		3.3 J	0.13 J	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		0.2	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		59.1	53.6	56.5 J	56.9
Total Dissolved Solids	E-10173	---		736	736	700	746
Total Organic Carbon	TOC	---		9.1 J	7.3	7.7	9.3

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	6G-1	6G-1	6G-1	6G-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			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	---		92.8 J	314	57.4	62.6
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.039 J	0.038 J	UB	UB
Chloride (as Cl)	16887-00-6	250 ST		39	34.9	29.5 J	26.1 J
Cod - Chemical Oxygen Demand	COD	---		17.2	15.7	UJ	10.2 J
Color	COLOR	---		U	5	U	U
Hardness (as CaCO3)	HARD	---		56	50	30	43.3
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UBJ	UB	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	U	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.2	U	2.8 J	2 J
Nitrogen, Nitrite	14797-65-0	1 ST		UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		U	UB	U	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		14	15.3	27.7	17
Total Dissolved Solids	E-10173	---		190	553	127	151
Total Organic Carbon	TOC	---		0.64 J	0.38 J	0.27 J	UJ

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	6G-2	6G-2	6G-2	6G-2
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			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	---		177 J	133	158	170
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.057 J	0.057 J	UB	UB
Chloride (as Cl)	16887-00-6	250 ST		55.9	57.9	41 J	76.3
Cod - Chemical Oxygen Demand	COD	---		17.2	U	UJ	UJ
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		104	84	80	100
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UBJ	0.098 J	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	UJ	UBJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1	UB	2.8 J	3 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	U	UB
Sulfate (as SO4)	14808-79-8	250 ST		20	21.6	29.6	52.6
Total Dissolved Solids	E-10173	---		286	297	312	364
Total Organic Carbon	TOC	---		1.4	0.72 J	0.76 J	0.72 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	6G-3	6G-3	6G-3	6G-3
			Sample_date	08/09/17	02/23/18	02/14/19	08/15/19
			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	---		207 J	204	220	214
Biochemical Oxygen Demand (BOD)	BOD5	---			U	U	UB
Bromide	24959-67-9	2 GV		0.29 J	0.32 J	0.58	0.38 J
Chloride (as Cl)	16887-00-6	250 ST		48.8	42.1	88.3 J	86.7
Cod - Chemical Oxygen Demand	COD	---		33.8	24.1	20.3 J	25.6 J
Color	COLOR	---		10	5	10	5
Hardness (as CaCO3)	HARD	---		196	172	160	160
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***6.4 J***	***7.5***	***6.9***	***7.7***
Nitrogen, Kjeldahl, Total	KN	---		9.4 J	7.3 J	8.4 J	7.1 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.21	U	UJ	U
Nitrogen, Nitrite	14797-65-0	1 ST		UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		21.3	22.6	41.9	22.7
Total Dissolved Solids	E-10173	---		330	311	338	370 J
Total Organic Carbon	TOC	---		5.5	4.9	4.3	3.9 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	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
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	7M-1	7M-1	7M-1	7M-1
			Sample_date	08/10/17	02/23/18	02/12/19	08/20/19
			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	---		39.4 J	29	26.5	25.5
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.037 J	0.035 J	0.059 J	UB
Chloride (as Cl)	16887-00-6	250 ST		29.2	30.1	37.7	38
Cod - Chemical Oxygen Demand	COD	---		U	U	U	U
Color	COLOR	---		10	U	U	U
Hardness (as CaCO3)	HARD	---		68 J	60	54	26.7
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.36	0.49	0.64
Nitrogen, Kjeldahl, Total	KN	---		UJ	U	UB	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.4 J	2.3	1.6 J	2.5 J
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		28.6	28.9	34.3 J	34.9
Total Dissolved Solids	E-10173	---		148	157	116 J	152
Total Organic Carbon	TOC	---		0.89 J	0.77 J	0.59 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	
*	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	8G-1	8G-1	8G-1	8G-1
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	---		91 J	23.2	17.4	16.8
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.11 J	0.17 J	0.21 J	0.28 J
Chloride (as Cl)	16887-00-6	250 ST		***360***	***425***	U	***1120***
Cod - Chemical Oxygen Demand	COD	---		38	28.3	36.8 J	43.3
Color	COLOR	---		20	U	U	U
Hardness (as CaCO3)	HARD	---		213 J	180	260	400
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	UB	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UB	U	U	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.2	2.7 J	3.4 J	3.3
Nitrogen, Nitrite	14797-65-0	1 ST		UB	UJ	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		18.9	24.6	17.6	20.7
Total Dissolved Solids	E-10173	---		825	882	996	1440
Total Organic Carbon	TOC	---		2.9 J	0.59 J	0.28 J	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	08/14/17	02/27/18	02/15/19	08/19/19
			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	---		248 J	210	209	264
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	U	UB
Bromide	24959-67-9	2 GV		0.27 J	0.31 J	0.32 J	0.53
Chloride (as Cl)	16887-00-6	250 ST		76.9	81.7	U	99.8
Cod - Chemical Oxygen Demand	COD	---		44.2	15.7	12.1 J	12.4
Color	COLOR	---		80	U	U	U
Hardness (as CaCO3)	HARD	---		207 J	173	170	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***5.3***	***8.8***	***4.8***	***4.9***
Nitrogen, Kjeldahl, Total	KN	---		6.4 J	9 J	4.1 J	4.2 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.39	5.2 J	8.9 J	6.2
Nitrogen, Nitrite	14797-65-0	1 ST		0.022 J	UJ	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		40.6	25.8	30	31.9
Total Dissolved Solids	E-10173	---		453	378	326	394
Total Organic Carbon	TOC	---		8.8 J	2.9	1.8	2.9

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

Units in mg/l			Sample ID	8M-2	8M-2	8M-2	8M-2
			Sample_date	08/14/17	02/27/18	02/15/19	08/19/19
			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	---		50.2	36	42.2	43.4
Biochemical Oxygen Demand (BOD)	BOD5	---		1 J	U	U	UB
Bromide	24959-67-9	2 GV		0.074 J	0.066 J	U	0.14 J
Chloride (as Cl)	16887-00-6	250 ST		48.6	19.6	UBJ	28.7
Cod - Chemical Oxygen Demand	COD	---		27.6	U	10 J	U
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		56	44	52	46.7
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.18	0.35	0.29	UB
Nitrogen, Kjeldahl, Total	KN	---		0.86 J	0.21 J	UBJ	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.1	0.52 J	1.2 J	0.82
Nitrogen, Nitrite	14797-65-0	1 ST		UB	UJ	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.009***	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		6.6	4.2 J	U	5.4
Total Dissolved Solids	E-10173	---		126	100	87	106
Total Organic Carbon	TOC	---		0.96 J	0.4 J	0.32 J	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	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

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

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
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
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	10M-1	10M-1	10M-1	10M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			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	---		92.4 J	270	317	334
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	U	UB
Bromide	24959-67-9	2 GV		0.064 J	0.13 J	0.69	0.7
Chloride (as Cl)	16887-00-6	250 ST		26	75.1	115	120
Cod - Chemical Oxygen Demand	COD	---		10.9	17.8 J	12.1	10.2
Color	COLOR	---		40	U	U	U
Hardness (as CaCO3)	HARD	---		72 J	350	300	320
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.51	0.43	0.61
Nitrogen, Kjeldahl, Total	KN	---		1 J	0.76 J	0.96 J	UB
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.3 J	UJB	3.3 J	4.2 J
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		6.1	25	32.2 J	32.7
Total Dissolved Solids	E-10173	---		149	480	460 J	478
Total Organic Carbon	TOC	---		3.4	2	2.5	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	11G-1	11G-1	11G-1	11G-1
			Sample_date	02/26/18	08/31/18	02/13/19	08/14/19
			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	---		731	1170	733	741
Biochemical Oxygen Demand (BOD)	BOD5	---		4.3	3.8	3.1	UB
Bromide	24959-67-9	2 GV		1.7	U	1.8	2
Chloride (as Cl)	16887-00-6	250 ST		113	***498***	U	***277***
Cod - Chemical Oxygen Demand	COD	---		163	156	150	151
Color	COLOR	---		100	100	150	125
Hardness (as CaCO3)	HARD	---		28	34	34	30
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***120***	***119***	***127***	***125***
Nitrogen, Kjeldahl, Total	KN	---		123 J	104 J	132 J	135 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	U	UB	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.042***	***0.05***	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		0.73 J	UB	U	U
Total Dissolved Solids	E-10173	---		756	1150	804 J	864
Total Organic Carbon	TOC	---		43.3	45 J	43.9	46.2

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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Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	11G-2	11G-2	11G-2	11G-2
			Sample_date	02/26/18	08/31/18	02/13/19	08/14/19
			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	---		961	1120	992	871
Biochemical Oxygen Demand (BOD)	BOD5	---		U	3.4	4.9	UB
Bromide	24959-67-9	2 GV		***4.2***	U	***4***	***3.5***
Chloride (as Cl)	16887-00-6	250 ST		***406***	***479***	42.6	***385***
Cod - Chemical Oxygen Demand	COD	---		240	244	221	149
Color	COLOR	---		100	100	150	125
Hardness (as CaCO3)	HARD	---		133	100	108	100
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***169***	***176***	***153***	***119***
Nitrogen, Kjeldahl, Total	KN	---		195 J	204 J	178 J	132 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	U	UB	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UJB	***0.025 J***	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		2.9 J	UB	4.1 J	5.5
Total Dissolved Solids	E-10173	---		1420	762	552 J	1030
Total Organic Carbon	TOC	---		62.4	61.8 J	56.6	42

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
Post Closure Groundwater Monitoring Program
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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Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	12M-1	12M-1	12M-1	12M-1
			Sample_date	08/09/17	02/22/18	02/14/19	08/15/19
			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	---		320 J	105	372	375
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.58	0.037 J	1.4	0.89
Chloride (as Cl)	16887-00-6	250 ST		81.6	34.8	60.4 J	108
Cod - Chemical Oxygen Demand	COD	---		31.7	24.1	22.4 J	25.6
Color	COLOR	---		U	U	15	5
Hardness (as CaCO3)	HARD	---		340	280	380	320
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UBJ	**2.1**	1.2	1.4
Nitrogen, Kjeldahl, Total	KN	---		1.6 J	2 J	2.1 J	1.9 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.1	2.1	3.3 J	0.45 J
Nitrogen, Nitrite	14797-65-0	1 ST		UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UBJ
Sulfate (as SO4)	14808-79-8	250 ST		36.6	15.3	28.7	38.3
Total Dissolved Solids	E-10173	---		521	205	516	506
Total Organic Carbon	TOC	---		4.6	35.2	5.2	5.6 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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Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	13G-1	13G-1	13G-1	13G-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			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	---		15.4 J	20	22.8	24.1
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.077 J	U	0.078 J	UB
Chloride (as Cl)	16887-00-6	250 ST		35.5	43.3	49.1	42.2
Cod - Chemical Oxygen Demand	COD	---		13	11.4 J	U	UJ
Color	COLOR	---		10	U	U	U
Hardness (as CaCO3)	HARD	---		54 J	76	65	40
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.78	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UB	UJ	UJ	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.2	UJB	2.8	1.7 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	***0.044*** ***J***
Sulfate (as SO4)	14808-79-8	250 ST		24.3	29	26 J	19
Total Dissolved Solids	E-10173	---		150	168	143 J	135
Total Organic Carbon	TOC	---		UBJ	UB	0.33 J	UJ

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	13M-1	13M-1	13M-1	13M-1
			Sample_date	08/11/17	02/15/18	02/13/19	08/14/19
			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	---		131 J	473	484	483
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		U	0.29 J	0.9	0.88
Chloride (as Cl)	16887-00-6	250 ST		21	97	U	108
Cod - Chemical Oxygen Demand	COD	---		132	30.4 J	22.4	23.4 J
Color	COLOR	---		500	U	15	U
Hardness (as CaCO3)	HARD	---		140 J	500	500	460
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	1.7	0.82	1.4
Nitrogen, Kjeldahl, Total	KN	---		4.4	1.7 J	2.1 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.3	UJ	UB	U
Nitrogen, Nitrite	14797-65-0	1 ST		0.37	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.018***	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		11	11.3	16.1 J	17
Total Dissolved Solids	E-10173	---		305	651	612 J	572
Total Organic Carbon	TOC	---		40.7 J	5.5	5.5	4.6 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	14G-1A	14G-1A	14G-1A	14G-1A
			Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
			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	---		498	169	222	242
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.19 J	U	0.36 J	0.43 J
Chloride (as Cl)	16887-00-6	250 ST		58.2	55.1	85.8	96.7
Cod - Chemical Oxygen Demand	COD	---		38	13.5 J	U	U
Color	COLOR	---			U	U	U
Hardness (as CaCO3)	HARD	---		150	190	200	210
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.028 J	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	0.13 J	UB	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		5.7	5.5 J	7 J	6.8
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	U	UB
Sulfate (as SO4)	14808-79-8	250 ST		24.9	31.5	30.9 J	31.6
Total Dissolved Solids	E-10173	---		364	357	378	404
Total Organic Carbon	TOC	---		2.5	1.7	1.5	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

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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	14G-2	14G-2	14G-2	14G-2
			Sample_date	08/02/17	02/14/18	02/11/19	08/13/19
			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	---		263	172	200	207
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	7.4 J	U	UB
Bromide	24959-67-9	2 GV		0.14 J	U	0.3 J	0.33 J
Chloride (as Cl)	16887-00-6	250 ST		48.3	50.6	70.2	76.7
Cod - Chemical Oxygen Demand	COD	---		23.4	UJ	U	U
Color	COLOR	---			U	U	U
Hardness (as CaCO3)	HARD	---		190	200	190	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.072 J	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	UJ	UB	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		5.9	6.9 J	6 J	5.9
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	U	UB
Sulfate (as SO4)	14808-79-8	250 ST		24.2	24	29.7 J	31.9
Total Dissolved Solids	E-10173	---		316	353	372	326
Total Organic Carbon	TOC	---		1.6	UB	1.2	0.94 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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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	02/14/18	09/05/18	02/11/19	08/13/19
			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	---		735	810 J	857	841
Biochemical Oxygen Demand (BOD)	BOD5	---		UJ	U	U	21.8
Bromide	24959-67-9	2 GV		***3.7***	***3.5***	***4***	***4***
Chloride (as Cl)	16887-00-6	250 ST		***320***	***432***	24.7	***441***
Cod - Chemical Oxygen Demand	COD	---		134 J	134 J	132	114
Color	COLOR	---		30	40	75	50
Hardness (as CaCO3)	HARD	---		480	320	440	300
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***60.1***	***62.7***	***64.6***	***63.9***
Nitrogen, Kjeldahl, Total	KN	---		60 J	65.4 J	69.7 J	69.3 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJ	U	U	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.028***	***0.035***	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		15.3	17.2	18.9 J	19.2
Total Dissolved Solids	E-10173	---		1330	1120	1300	1200
Total Organic Carbon	TOC	---		32.1	32.2 J	33.5	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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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

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Blydenburgh Road Landfill Complex
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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

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Leachate Indicators

Units in mg/l			Sample ID	16M-1	16M-1	16M-1	16M-1
			Sample_date	08/10/17	02/15/18	02/12/19	08/21/19
			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	---		256 J	240	219	223
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.29 J	0.27 J	0.34 J	UB
Chloride (as Cl)	16887-00-6	250 ST		71	57.4	104	160
Cod - Chemical Oxygen Demand	COD	---		6.8 J	13.5 J	U	U
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		187 J	260	240	220
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.029 J	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	UJ	UB	U
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		4.2 J	UJB	4.4 J	5.9 J
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		30.2	25.2	32 J	31.5
Total Dissolved Solids	E-10173	---		399	378	356 J	360
Total Organic Carbon	TOC	---		2.1	UB	1.1	0.92 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	18G-1	18G-1	18G-1	18G-1
			Sample_date	08/02/17	02/16/18	02/13/19	08/13/19
			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	---		473	277	194	158
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.37 J	U	0.22 J	0.39 J
Chloride (as Cl)	16887-00-6	250 ST		104	99.1	U	181
Cod - Chemical Oxygen Demand	COD	---		65	57.9 J	38.9	21.2
Color	COLOR	---			15	20	10
Hardness (as CaCO3)	HARD	---		76	64	42	85
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***42.2 J***	***41.9***	***26.1***	***20.1***
Nitrogen, Kjeldahl, Total	KN	---		51.5 J	40.2 J	23.9 J	19.5 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		0.48	UJB	1.6	3.5
Nitrogen, Nitrite	14797-65-0	1 ST		UJ	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		0.009	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		15.2	17	28.5 J	34.7
Total Dissolved Solids	E-10173	---		394	421	270 J	396
Total Organic Carbon	TOC	---		8.5	7.2	4.4	4.4

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

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Monitoring Well Sample Results
Leachate Indicators

Units in mg/l			Sample ID	18G-2	18G-2	18G-2	18G-2
			Sample_date	02/16/18	09/06/18	02/13/19	08/13/19
			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	---		127	188 J	176	183
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	U	UB
Bromide	24959-67-9	2 GV		0.15 J	0.11 J	0.28 J	0.29 J
Chloride (as Cl)	16887-00-6	250 ST		64.6	80.7	91.2	98.1
Cod - Chemical Oxygen Demand	COD	---		22 J	25.7	22.4	U
Color	COLOR	---		U	5	U	U
Hardness (as CaCO3)	HARD	---		90	92	96	95
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		2	1.8	***2.5***	***3.1***
Nitrogen, Kjeldahl, Total	KN	---		2.2 J	2 J	3 J	3.8 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		UJB	3.2	6.1	8.6
Nitrogen, Nitrite	14797-65-0	1 ST		U	UJ	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		21.2	26	25.5 J	21.2
Total Dissolved Solids	E-10173	---		334	341	342 J	456
Total Organic Carbon	TOC	---		1.6	1.7	2.3	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	22M-1	22M-1	22M-1	22M-1
			Sample_date	02/26/18	09/05/18	02/12/19	08/16/19
			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	---		30.6	31.4 J	32.8	31.6
Biochemical Oxygen Demand (BOD)	BOD5	---		U	U	U	UB
Bromide	24959-67-9	2 GV		0.04 J	0.038 J	0.055 J	0.099 J
Chloride (as Cl)	16887-00-6	250 ST		31.3	44.4	43.9	46.8
Cod - Chemical Oxygen Demand	COD	---		17.8	15.5 J	U	U
Color	COLOR	---		U	U	U	U
Hardness (as CaCO3)	HARD	---		54	62	56	53.3
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		0.75	1.2	0.69	0.74
Nitrogen, Kjeldahl, Total	KN	---		0.22 J	2.1 J	0.67 J	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		1.3 J	2	1.4 J	2 J
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		20.7	21.5	23.1 J	23
Total Dissolved Solids	E-10173	---		142	134	110 J	160
Total Organic Carbon	TOC	---		0.67 J	UB	0.76 J	0.76 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	08/10/17	02/15/18	02/12/19	08/14/19
			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	---		146 J	112	128	125
Biochemical Oxygen Demand (BOD)	BOD5	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.12 J	U	0.17 J	UB
Chloride (as Cl)	16887-00-6	250 ST		42.5	39.3	47.8	42.9
Cod - Chemical Oxygen Demand	COD	---		17.2	32.5 J	U	U
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		133 J	180	150	140
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	0.083 J	U	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	UJ	UB	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.6 J	UJB	3.1 J	U
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		39.8	41	82 J	45.3
Total Dissolved Solids	E-10173	---		238	282	262 J	298
Total Organic Carbon	TOC	---		3.3	2.9	2.8	3.3

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-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	8/4/17	2/23/18	02/15/19	08/14/19
		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	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	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	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	EW-2
		Sample_date	8/2/17(A)	8/4/17(B)	9/12/17(A)	10/18/17(A)	11/15/17(A)
		Depth of Well BGS	223'	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-53	-53	-53
		Gradient relative to MSW	DOWN	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	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	U	U	U	U	U
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++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U	1.1	U
2-Hexanone	591-78-6	50 GV	U	U	U	U	U
Acetone	67-64-1	50 GV	U	U	15.3	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	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds		---	0	0	15.3	1.1	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	EW-2
		Sample_date	12/11/17(A)	1/12/18(A)	2/09/18(A)	2/26/18(B)	3/12/18(A)
		Depth of Well BGS	223'	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-54	-53	-54
		Gradient relative to MSW	DOWN	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	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	U	U	U	U	U
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++	U	U	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	1.1	1.1	U	1.6	1.2
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	U	U	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
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	U	U	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U	U	U
Total Volatile Organic Compounds		---	1.1	1.1	0	1.6	1.2

+	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	4/10/18(A)	5/07/18(A)	6/05/18(A)	7/02/18(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-53	-53	-54
		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	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	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	1.1	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	8/13/18(A)	9/10/18(A)	10/3/18(A)	11/7/18(A)
		Depth of Well BGS	223'	223'	223'	223'
		Depth to bottom screen, relative to MSL	-53	-54	-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	12/5/18(A)	1/7/19(A)	2/11/19(A)	2/15/19(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	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	3/8/19(A)	4/8/19(A)	5/13/19(A)	6/12/19(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	7/15/19(A)	8/8/19(A)	8/16/19(B)	9/11/19(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-3	EW-3	EW-3	EW-3
			Sample_date	8/3/17	2/15/18	02/13/19	08/13/19
			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	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++		1.3	1.2	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	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		---		1.3	1.2	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	8/3/17	2/15/18	02/15/19	08/13/19
			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	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++		1.3	U	U	U
2-Hexanone	591-78-6	50 GV		U	U	U	U
Acetone	67-64-1	50 GV		U	1.5 J	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	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		---		1.3	1.5	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-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	8/07/17(A)	8/11/17 (B)	9/12/17(A)	10/18/17(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	12.8	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	12.8	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	11/15/17(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
		Sample_date	8/8/19(A)	8/14/19(B)	9/11/19(A)
		Depth of Well BGS	215'	215'	223'
		Depth to bottom screen, relative to MSL	-137'	-137'	-53
		Gradient relative to MSW	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
1,1,1-Trichloroethane	71-55-6	5 ST	U	U	U
1,1,2,2-Tetrachloroethane	79-34-5	5 ST	U	U	U
1,1,2-Trichloroethane	79-00-5	1 ST	U	U	U
1,1-Dichloroethane	75-34-3	5 ST	U	U	U
1,1-Dichloroethene	75-35-4	5 ST	U	U	U
1,2,3-Trichloropropane	96-18-4	0.04 ST	U	U	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04 ST	U	U	U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006 ST	U	UJ	U
1,2-Dichlorobenzene	95-50-1	3 ST++	U	U	U
1,2-Dichloroethane	107-06-2	0.6 ST	U	U	U
1,2-Dichloropropane	78-87-5	1 ST	U	U	U
1,4-Dichlorobenzene	106-46-7	3 ST++	U	U	U
2-Hexanone	591-78-6	50 GV	U	U	U
Acetone	67-64-1	50 GV	U	U	U
Acrylonitrile	107-13-1	5 ST	U	U	U
Benzene	71-43-2	1 ST	U	U	U
Bromochloromethane	74-97-5	5 ST	U	U	U
Bromodichloromethane	75-27-4	50 GV	U	U	U
Bromoform	75-25-2	50 GV	U	U	U
Bromomethane	74-83-9	5 ST	U	U	U
Carbon Disulfide	75-15-0	60 GV	U	U	U
Carbon Tetrachloride	56-23-5	5 ST	U	U	U
Chlorobenzene	108-90-7	5 ST	U	U	U
Chlorodifluoromethane (Freon 22)	75-45-6	---	U	U	U
Chloroethane	75-00-3	5 ST	U	U	U
Chloroform	67-66-3	7 ST	U	U	U
Chloromethane	74-87-3	5 ST	U	U	U
Cis-1,2-Dichloroethylene	156-59-2	5 ST	U	U	U
Cis-1,3-Dichloropropene	10061-01-5	0.4 ST	U	U	U
Dibromochloromethane	124-48-1	50 GV	U	U	U
Dibromomethane	74-95-3	5 ST	U	U	U
Dichlorofluoromethane (Freon 21)	75-43-4	5 ST	U	U	U
Ethylbenzene	100-41-4	5 ST	U	U	U
Iodomethane (Methyl Iodide)	74-88-4	5 ST	U	UJ	U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	50 GV	U	U	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	---	U	U	U
Methylene Chloride	75-09-2	5 ST	U	U	U
Styrene	100-42-5	5 ST	U	U	U
Tetrachloroethylene(PCE)	127-18-4	5 ST	U	U	U
Toluene	108-88-3	5 ST	U	U	U
Trans-1,2-Dichloroethene	156-60-5	5 ST	U	U	U
Trans-1,3-Dichloropropene	10061-02-6	0.4 ST	U	UJ	U
Trans-1,4-Dichloro-2-Butene	110-57-6	5 ST	U	U	U
Trichloroethylene (TCE)	79-01-6	5 ST	U	U	U
Trichlorofluoromethane	75-69-4	5 ST	U	U	U
Vinyl Acetate	108-05-4	---	U	U	U
Vinyl Chloride	75-01-4	2 ST	U	U	U
Xylenes, Total	XYLENES	5 ST+	U	U	U
Total Volatile Organic Compounds		---	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	8/4/17	2/23/18	02/15/19	08/14/19
			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		34.4 J	36.8 J	36.6 J	37.8 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		116	125	122	112
Cadmium	7440-43-9	5 ST		0.098 J	U	UB	U
Calcium	7440-70-2	--		26000	28200	30500	31500
Chromium, Hexavalent	18540-29-9	50 ST		U	U	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		4.3 J	4.4 J	4 J	U
Copper	7440-50-8	200 ST		12 J	UB	3.7 J	U
Cyanide	57-12-5	200 ST		U	U	102	2.8 J
Iron	7439-89-6	300 ST#		U	***11.2*** J	U	U
Lead	7439-92-1	25 ST		1.9 J	U	U	U
Magnesium	7439-95-4	35000 GV		10200	11100	11200	11200
Manganese	7439-96-5	300 ST#		***481***	***558***	***700***	***842***
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		4.4 J	5 J	19.9 J	UB
Potassium	7440-09-7	--		3520 J	3570 J	3580 J	3460 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		***73100***	***84000***	***76700***	***80700***
Thallium	7440-28-0	0.5 GV		U	UB	U	***4.1 J***
Vanadium	7440-62-2	--		U	U	0.82 J	U
Zinc	7440-66-6	2000 GV		40.3	10.9 J	5.3 J	29

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-2	EW-2	EW-2	EW-2
			Sample_date	8/4/17 (B)	2/26/18 (B)	2/15/19 (B)	8/16/19 (B)
			Depth of Well BGS	223'	223'	223'	223'
			Depth to bottom screen, relative to MSL	-53	-53	-53	-53
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	UB	UB	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		13.3 J	16.4 J	24.8 J	13.5 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		144	165	127	UB
Cadmium	7440-43-9	5 ST		U	U	U	U
Calcium	7440-70-2	--		35400	33200	26200	24500
Chromium, Hexavalent	18540-29-9	50 ST		U	UJ	U	U
Chromium, Total	7440-47-3	50 ST		U	U	3 J	U
Cobalt	7440-48-4	--		4.7 J	3.6 J	7 J	3.9 J
Copper	7440-50-8	200 ST		U	UB	16.1 J	8.6 J
Cyanide	57-12-5	200 ST		U	UJ	4.5 J	2.1 J
Iron	7439-89-6	300 ST#		***2580***	***10200*** J	***11000***	***5860***
Lead	7439-92-1	25 ST		2.6 J	U	1.6 J	U
Magnesium	7439-95-4	35000 GV		13800	12000	8740	8060
Manganese	7439-96-5	300 ST#		***245***	***419***	***273***	***227***
Mercury	7439-97-6	0.7 ST		UB	U	U	U
Nickel	7440-02-0	100 ST		6.3 J	21 J	24.2 J	18.4 J
Potassium	7440-09-7	--		6910	7060	5760	5570
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		***65800***	***79900***	***88400***	***89200***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	U	U
Zinc	7440-66-6	2000 GV		UB	12.2 J	45.3	16.5 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

Units in ug/l			Sample ID	EW-3	EW-3	EW-3	EW-3
			Sample_date	8/3/17	2/15/18	02/13/19	08/13/19
			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
METALS	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Aluminum	7429-90-5	--		U	U	128 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		46 J	47 J	45.9 J	47.4 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		146	146	139	148
Cadmium	7440-43-9	5 ST		U	U	UB	U
Calcium	7440-70-2	--		46400	49400	48400	48700
Chromium, Hexavalent	18540-29-9	50 ST		UB	U	UJ	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		14.6 J	10.7 J	12.1 J	13.7 J
Copper	7440-50-8	200 ST		4 J	2.8 J	6 J	U
Cyanide	57-12-5	200 ST		U	U	98.5 J	U
Iron	7439-89-6	300 ST#		U	U	24.1	U
Lead	7439-92-1	25 ST		2.2 J	U	2.2 J	2.5 J
Magnesium	7439-95-4	35000 GV		28500	30800	30300	29500
Manganese	7439-96-5	300 ST#		***491***	***417***	***413***	***475***
Mercury	7439-97-6	0.7 ST		UB	UB	U	U
Nickel	7440-02-0	100 ST		10.2 J	36.1 J	9.1 J	UB
Potassium	7440-09-7	--		5170	5090	4570 J	4730 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		***58300***	***62500***	***65800***	***63400***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	UB	U
Zinc	7440-66-6	2000 GV		UB	6.6 J	UB	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-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	8/3/17	2/15/18	02/15/19	08/13/19
			Depth of Well BGS	305'	213'	213'	305'
			Depth to bottom screen, relative to MSL	-138	-141	-141	-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	U	***3.7 J***	U
Arsenic	7440-38-2	25 ST		U	U	U	U
Barium	7440-39-3	1000 ST		55.4 J	53.1 J	55 J	53.3 J
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		235	210	247	239
Cadmium	7440-43-9	5 ST		U	U	UB	U
Calcium	7440-70-2	--		46100	46400	47100	46600
Chromium, Hexavalent	18540-29-9	50 ST		UB	U	U	UJ
Chromium, Total	7440-47-3	50 ST		U	U	U	U
Cobalt	7440-48-4	--		11 J	10 J	10.2 J	9.2 J
Copper	7440-50-8	200 ST		U	3.4 J	6 J	U
Cyanide	57-12-5	200 ST		U	U	18.6	2.3 J
Iron	7439-89-6	300 ST#		UB	18.8 J	37.9	20.6
Lead	7439-92-1	25 ST		2 J	U	U	U
Magnesium	7439-95-4	35000 GV		26500	26900	27200	26400
Manganese	7439-96-5	300 ST#		***363***	298	336	331
Mercury	7439-97-6	0.7 ST		U	UB	U	U
Nickel	7440-02-0	100 ST		17.3 J	34.4 J	34.8 J	16.4 J
Potassium	7440-09-7	--		9820	8700	9460	9200
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		***61400***	***61200***	***65600***	***64200***
Thallium	7440-28-0	0.5 GV		U	UB	U	U
Vanadium	7440-62-2	--		U	U	0.98 J	U
Zinc	7440-66-6	2000 GV		UB	18.8 J	23.5	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-5
Blydenburgh Road Landfill Complex
Post Closure Groundwater Monitoring Program
Extraction Well Sample Results
Inorganic Parameters

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'	215'
			Depth to bottom screen, relative to MSL	-141	-141	-141	-137'
			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

			Sample ID	EW-6	EW-6	EW-6	EW-6
			Sample_date	2/28/17(B)	8/11/17(B)	2/16/18(B)	8/14/19(B)
			Depth of Well BGS	215'	215'	215'	215'
			Depth to bottom screen, relative to MSL	-137'	-137'	-137'	-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	25 J	24.9 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		8.8 J	8.8 J	U	U
Beryllium	7440-41-7	3 GV		U	U	U	U
Boron	7440-42-8	1000 ST		33.0 J	UB	30.1 J	37.6 J
Cadmium	7440-43-9	5 ST		U	U	0.30 J	U
Calcium	7440-70-2	--		22100	22100	20000	25500
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	U	U	U
Copper	7440-50-8	200 ST		U	13.6 J	1.3 J	U
Cyanide	57-12-5	200 ST		UJ	U	U	2.8 J
Iron	7439-89-6	300 ST#		59.3 J	87.7	UJ	44.6
Lead	7439-92-1	25 ST		2.2 J	U	4.5 J	U
Magnesium	7439-95-4	35000 GV		11600	11800	10600	13800
Manganese	7439-96-5	300 ST#		UB	6.7 J	6.6 J	10.7
Mercury	7439-97-6	0.7 ST		U	U	UB	U
Nickel	7440-02-0	100 ST		U	U	U	U
Potassium	7440-09-7	--		1160 J	1750 J	1000 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		8150	7890	9010 J	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		UB	16.3 J	8.1 J	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	8/4/17	2/23/18	02/15/19	08/14/19
			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	---		198	151	173	184
Biochemical Oxygen Demand (BOD)	BOD	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.067 J	0.081 J	UB	UB
Chloride (as Cl)	16887-00-6	250 ST		58	61.7	67.7 J	80.5
Cod - Chemical Oxygen Demand	COD	---		U	17.8	20.3 J	U
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		116	104	112	107
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UBJ	UB	U	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	U	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.1	1.9	2.8 J	1.6 J
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		22.2	19.4	25.3	29.2
Total Dissolved Solids	E-10173	---		301	324	312	344
Total Organic Carbon	TOC	---		0.81 J	1.2	0.66 J	0.81 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	8/4/17 (B)	2/26/18 (B)	2/15/19 (B)	8/16/19 (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	---		157	168	169	184
Biochemical Oxygen Demand (BOD)	BOD	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.11 J	0.2 J	UB	0.12 J
Chloride (as Cl)	16887-00-6	250 ST		74.8	81.5	U	80.2
Cod - Chemical Oxygen Demand	COD	---		21.3	22	16.2 J	U
Color	COLOR	---		5	100	150	75
Hardness (as CaCO3)	HARD	---		148	120	96	70
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UBJ	0.5	0.24	UB
Nitrogen, Kjeldahl, Total	KN	---		UBJ	1.3 J	UB	UBJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.2	1.4 J	3.4 J	1.1 J
Nitrogen, Nitrite	14797-65-0	1 ST		UB	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UJ
Sulfate (as SO4)	14808-79-8	250 ST		27.6	22.5	27.8	19.7
Total Dissolved Solids	E-10173	---		338	371	334	316
Total Organic Carbon	TOC	---		1.6	2	0.92 J	0.97 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	8/3/17	2/15/18	02/13/19	08/13/19
			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	---		233 J	225	269	279
Biochemical Oxygen Demand (BOD)	BOD	---		UB	U	U	UB
Bromide	24959-67-9	2 GV		0.17 J	U	0.22 J	UB
Chloride (as Cl)	16887-00-6	250 ST		64.5	57.9	74.2	76
Cod - Chemical Oxygen Demand	COD	---		17.2	19.9 J	14.1	U
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		220	230	200	220
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***3.3 J***	***3.2***	***2.1***	***2.9***
Nitrogen, Kjeldahl, Total	KN	---		5.2 J	2.9 J	3.3 J	3.4 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		2.4	UJB	4	2.5
Nitrogen, Nitrite	14797-65-0	1 ST		U	U	U	U
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		UB	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		24.8	23.2	30.2 J	31.3
Total Dissolved Solids	E-10173	---		373	391	422 J	408
Total Organic Carbon	TOC	---		2.3	2.5	2.2	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	8/3/17	2/15/18	02/15/19	08/13/19
			Depth of Well BGS	305'	213'	213'	305'
			Depth to bottom screen, relative to MSL	-138	-141	-141	-138
			Gradient relative to MSW	DOWN	DOWN	DOWN	DOWN
Chemical Name	CAS Number	NYSDEC CLASS GA GROUNDWATER ST/GV					
Alkalinity, Total (as CaCO3)	ALK	---		242 J	238	39.7	251
Biochemical Oxygen Demand (BOD)	BOD	---		9.4	14.3	21.2	26
Bromide	24959-67-9	2 GV		0.34 J	0.16 J	0.47 J	0.49 J
Chloride (as Cl)	16887-00-6	250 ST		74.4	69.4	U	83.6
Cod - Chemical Oxygen Demand	COD	---		21.3	26.2 J	28.6 J	U
Color	COLOR	---		5	5	15	10
Hardness (as CaCO3)	HARD	---		196	130	200	200
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		***11.7 J***	***9.9***	***11.1***	***10.3***
Nitrogen, Kjeldahl, Total	KN	---		14.3 J	12.2 J	11.7 J	11.2 J
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		5.3	7.8 J	6.6 J	4
Nitrogen, Nitrite	14797-65-0	1 ST		0.66	0.63 J	0.3 J	0.66 J
Phenolics, Total Recoverable	TOTPHEN	0.001 ST		***0.0488***	UB	UB	UB
Sulfate (as SO4)	14808-79-8	250 ST		28	28.5	33.7	36.6
Total Dissolved Solids	E-10173	---		435	419	452	394
Total Organic Carbon	TOC	---		4.4	4.2	5.1 J	4.8

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	2/28/17(B)	8/11/17 (B)	2/16/18 (B)	8/16/19 (B)
			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	---		78.2	80.2 J	65.3	91
Biochemical Oxygen Demand (BOD)	BOD	---		UB	UB	U	UB
Bromide	24959-67-9	2 GV		0.04 J	0.04 J	U	UB
Chloride (as Cl)	16887-00-6	250 ST		10.4	13.3	14.0	20.4
Cod - Chemical Oxygen Demand	COD	---		UB	8.8 J	UJ	U
Color	COLOR	---		5	U	U	U
Hardness (as CaCO3)	HARD	---		100	116 J	88 D	107
Nitrogen, Ammonia (as N)	7664-41-7	2 ST		UB	UB	0.11	UB
Nitrogen, Kjeldahl, Total	KN	---		U	U	U	UJ
Nitrogen, Nitrate (as N)	14797-55-8	10 ST		4.3	4.2	3.71 D	4.4 J
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		16.1	20.1	20.0	22.8
Total Dissolved Solids	E-10173	---		142	156	132	181
Total Organic Carbon	TOC	---		U	UBJ	U	0.97 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 B

FIELD OBSERVATION LOGS

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/19/19

SAMPLE ID: GM-1S_8/19/19
WELL ID: GM-1S
SAMPLERS: K. Robins

	Time On-site:	Time Off-site:
		.

Depth of well (from top of casing) ..... 135.00' Time:
Initial static water level (from top of casing) ..... 109.59' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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:	25.41	ft. of water x 0.65 =	16.5	gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.75	17.24	0.746	0.0	7.38	101
15	7.35	16.30	0.743	0.0	5.74	103
30	7.35	16.31	0.741	0.0	5.61	105
45	7.37	16.21	0.735	0.0	5.60	100
60	7.40	16.21	0.734	0.0	5.56	96
75	7.43	16.18	0.732	0.0	5.81	93
Sample	7.46	16.75	0.730	0.0	4.73	93

Sampling

Time of Sample Collection: 3:45 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 7.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/19/19

SAMPLE ID: GM-1I_8/19/19
WELL ID: GM-1I
SAMPLERS: K. Robins

Time On-site:

Time Off-site: .

Depth of well (from top of casing) ..... 285.00' Time:
Initial static water level (from top of casing) ..... 109.70' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 175.30 ft. of water x 0.65 = 114 gallons

volume of water removed: 450 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.69	15.87	0.645	0.0	6.03	41
100	7.87	14.19	0.648	0.0	4.13	41
200	7.85	14.37	0.652	0.0	4.99	51
300	7.86	14.40	0.655	0.0	4.76	57
400	7.87	14.47	0.656	0.0	4.69	66
450	7.87	14.47	0.656	0.0	4.67	66
Sample	7.87	14.50	0.656	0.0	4.19	70

Sampling

Time of Sample Collection: 2:40 p.m.

Method:

	Stainless steel bailer
	Teflon bailer
	Pos. Disp. Pump
X	Disposable bailer
	Dedicated pump
	Other: Disposable Bladder Pump (Low Flow)

Analyses:

	TCL VOCs	602	503	Other	
	TCL SVOCs				
	Priority Pollutant Metals & Iron				
X	Other	NYCRR Part 360 Baseline plus Freon 21/Freon 22			

Observations

Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/19/19

SAMPLE ID: GM-1D_8/19/19
WELL ID: GM-1D
SAMPLERS: K. Robins

Time On-site:

Time Off-site: .

Depth of well (from top of casing) ..... 399.00' Time:
Initial static water level (from top of casing) ..... NA Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Sample	7.35	15.68	1.45	0.0	2.85	-51

Sampling
Time of Sample Collection: 1:45 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- Disposable bailer
- Dedicated pump
- x Other: Sample spigot

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Sunny, humid 80-85 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 8/20/19

SAMPLE ID: GM-2S_8/20/19
WELL ID: GM-2S
SAMPLERS: K. Robins

Time On-site: Time Off-site: .

Depth of well (from top of casing) ..... 149.00' Time:
Initial static water level (from top of casing) ..... 119.41' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 29.59 ft. of water x 0.65 = 19 gallons

volume of water removed: 110 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.19	15.04	0.192	0.0	4.93	206
30	4.80	14.52	0.172	0.0	4.26	254
60	4.86	14.56	0.175	0.0	4.20	251
90	4.83	14.55	0.174	0.0	4.13	254
110	4.69	14.52	0.172	0.0	4.23	261
Sample	4.93	14.72	0.173	0.0	3.14	250

Sampling

Time of Sample Collection: 1:00 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Clear, sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 6.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/20/19

SAMPLE ID: GM-2I_8/20/19
WELL ID: GM-2I
SAMPLERS: K. Robins

Time On-site: Time Off-site: .

Depth of well (from top of casing) ..... 298.00' Time:
Initial static water level (from top of casing) ..... 120.01' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 177.99 ft. of water x 0.65 = 115.7 gallons

volume of water removed: 375 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.07	14.62	0.234	0.0	17.64	186
100	7.38	12.35	0.283	0.0	11.60	147
200	7.85	12.16	0.283	0.0	10.65	130
300	8.22	12.03	0.284	0.0	10.12	115
375	8.28	12.00	0.285	0.0	10.09	112
Sample	7.88	12.08	0.285	0.0	7.00	135

Sampling

Time of Sample Collection: 12:15 p.m.

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

Analyses:
- ____ TCL VOCs 602 ____ 503 ____ Other ____
- ____ TCL SVOCs
- ____ Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Clear, sunny, humid 80-85 F
Sample description: Clear
Free Product? yes ____ no x describe
Sheen? yes ____ no x describe
Odor? yes ____ no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/20/19

SAMPLE ID: GM-2D_8/20/19
WELL ID: GM-2D
SAMPLERS: K. Robins

Time On-site:

Time Off-site: .

Depth of well (from top of casing) ..... 398.00' Time:
Initial static water level (from top of casing) ..... 120.56' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 277.44 ft. of water x 0.65 = 180.3 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	4.43	13.49	0.046	0.0	5.15	259
100	4.59	11.88	0.045	0.0	1.39	144
200	4.75	11.52	0.046	0.0	1.04	101
300	4.86	11.44	0.046	0.0	0.58	96
400	4.89	11.37	0.046	0.0	0.80	98
500	4.89	11.35	0.046	0.0	0.64	99
550	4.92	11.35	0.046	0.0	0.56	98
Sample	4.99	11.46	0.046	0.0	0.56	97

Sampling

Time of Sample Collection: 10:15 a.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Clear, sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

Collected MS/MSD samples at well GM-2D

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/16/19

SAMPLE ID: 4G-1_8/16/19
WELL ID: 4G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 164.00' Time:
Initial static water level (from top of casing) ..... 126.37' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 37.63 ft. of water x 0.65 = 24.5 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.25	24.46	0.909	0.0	0.71	-100
20	6.16	24.43	1.05	0.0	0.28	-125
40	6.20	24.42	1.06	0.0	0.24	-129
60	6.27	24.42	1.05	0.0	0.19	-134
80	6.30	24.42	1.05	0.0	0.18	-126
100	6.30	24.42	1.05	0.0	0.18	-136
Sample	6.31	24.45	1.05	0.0	0.38	-135

Sampling

Time of Sample Collection: 1:15 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/16/19

SAMPLE ID: 4G-2_8/16/19
WELL ID: 4G-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 211.00' Time:
Initial static water level (from top of casing) ..... 128.09' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 82.91 ft. of water x 0.65 = 53.9 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.11	24.61	0.711	0.0	0.66	91
30	6.19	23.96	0.757	0.0	0.81	63
60	6.32	22.75	0.767	0.0	0.37	-52
90	6.37	22.71	0.755	0.0	0.31	-54
120	6.40	22.70	0.755	0.0	0.31	-53
150	6.42	22.71	0.742	0.0	0.27	-49
180	6.42	22.69	0.740	0.0	0.26	-48
Sample	6.35	22.78	0.739	0.0	0.33	-43

Sampling

Time of Sample Collection: 12:10 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/16/19

SAMPLE ID: 4M-1_8/16/19
WELL ID: 4M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 325.00' Time:
Initial static water level (from top of casing) ..... 127.30' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 197.65 ft. of water x 0.65 = 128 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.91	23.77	3.33	0.0	11.31	-73
100	7.11	20.46	3.66	0.0	4.94	-137
200	7.05	20.29	3.71	0.0	3.13	-130
300	7.17	20.25	3.81	0.0	3.07	-129
400	7.14	20.25	3.78	0.0	3.46	-93
450	7.16	20.24	3.89	0.0	3.28	-105
Sample	7.21	20.32	3.93	0.0	1.04	-108

Sampling
Time of Sample Collection: 10:00 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Sunny, humid 80-85 F
Sample description: Yellow tint
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes x no describe Leachate odor

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/16/19

SAMPLE ID: 4M-2_8/16/19
WELL ID: 4M-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 486.00' Time:
Initial static water level (from top of casing) ..... 130.05' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 355.95 ft. of water x 0.65 = 231 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.64	22.77	1.43	0.0	2.46	-40
100	5.91	18.23	1.45	0.0	0.45	-77
200	6.23	15.64	1.73	0.0	0.27	-98
300	6.21	15.61	1.68	0.0	0.24	-95
400	6.17	15.27	1.56	0.0	0.24	-86
500	6.17	15.27	1.55	0.0	0.29	-86
600	6.14	15.16	1.52	0.0	0.49	-82
700	6.15	15.11	1.50	0.0	0.42	-82
Sample	6.15	15.15	1.51	0.0	0.29	-81

Sampling
Time of Sample Collection: 10:10 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes x no describe Sulfur odor

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/15/19

SAMPLE ID: 6G-1_8/15/19
WELL ID: 6G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 147.00' Time:
Initial static water level (from top of casing) ..... 138.60' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 8.40 ft. of water x 0.65 = 5.46 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.74	18.44	0.139	0.0	18.00	170
10	6.20	18.53	0.184	0.0	14.30	232
20	6.21	18.52	0.190	0.0	14.20	236
30	6.24	18.20	0.194	0.0	14.16	238
40	6.23	18.49	0.200	0.0	14.14	240
50	6.24	18.49	0.199	0.0	14.14	244
60	6.24	18.50	0.202	0.0	13.78	244
Sample	6.36	18.53	0.202	0.0	10.53	236

Sampling

Time of Sample Collection: 12:00 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 75-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/15/19

SAMPLE ID: 6G-2_8/15/19
WELL ID: 6G-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 230.00' Time:
Initial static water level (from top of casing) ..... 136.95' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 93.05 ft. of water x 0.65 = 60.5 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.54	18.71	0.574	0.0	15.21	124
50	6.18	19.35	0.641	0.0	1.88	124
100	6.27	19.51	0.651	0.0	0.80	103
150	6.39	19.49	0.648	0.0	0.81	87
200	6.39	19.49	0.648	0.0	0.81	87
225	6.38	19.50	0.648	0.0	0.77	87
Sample	6.42	19.51	0.648	0.0	1.14	85

Sampling

Time of Sample Collection: 11:10 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 75-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/15/19

SAMPLE ID: 6G-3_8/15/19
WELL ID: 6G-3 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 315.00' Time:
Initial static water level (from top of casing) ..... 138.03' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 176.97 ft. of water x 0.65 = 115 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.35	19.35	0.609	0.0	2.64	401
100	6.85	18.12	0.658	0.0	0.80	-145
200	6.99	17.78	0.680	0.0	0.91	-118
300	6.84	17.78	0.666	0.0	0.87	-97
350	6.84	17.78	0.666	0.0	0.84	-97
Sample	6.90	17.84	0.670	0.0	0.53	-97

Sampling

Time of Sample Collection: 9:40 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 75-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/15/19

SAMPLE ID: 6M-1_8/15/19
WELL ID: 6M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 545.00' Time:
Initial static water level (from top of casing) ..... 137.43' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 407.57 ft. of water x 0.65 = 265 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.16	19.63	0.260	0.0	12.86	136
100	6.70	17.77	0.582	0.0	1.21	100
200	6.80	14.70	0.605	0.0	1.35	75
300	6.55	13.92	0.300	0.0	0.72	15
400	6.49	13.84	0.272	0.0	0.94	9
500	6.49	13.70	0.259	0.0	0.65	8
600	6.53	13.73	0.249	0.0	0.96	2
700	6.57	13.72	0.244	0.0	0.59	-2
800	6.55	13.65	0.237	0.0	0.81	-2
Sample	6.73	13.70	0.237	0.0	0.67	-10

Sampling
Time of Sample Collection: 10:30 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Sunny, humid 75-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes x no describe Sulfur odor

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/20/19

SAMPLE ID: 7M-1_8/20/19
WELL ID: 7M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 214.00' Time:
Initial static water level (from top of casing) ..... 25.39' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 188.61 ft. of water x 0.65 = 123 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.18	13.15	0.187	0.0	9.91	232
100	4.63	13.02	0.181	0.0	4.75	254
200	4.67	12.98	0.180	0.0	0.65	255
300	4.68	12.97	0.180	0.0	0.50	260
400	4.67	12.96	0.179	0.0	0.43	266
500	4.68	12.94	0.178	0.0	0.78	269
Sample	4.91	13.00	0.179	0.0	0.57	258

Sampling
Time of Sample Collection: 4:30 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Clear, sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/19/19

SAMPLE ID: 8G-1_8/19/19
WELL ID: 8G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 114.00' Time:
Initial static water level (from top of casing) ..... 93.35' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 20.65 ft. of water x 0.65 = 13.4 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.63	15.48	2.89	0.6	19.69	125
15	5.92	15.08	3.11	0.0	19.34	154
30	5.84	15.05	2.98	0.0	19.91	165
45	5.84	15.05	2.96	0.0	19.88	166
60	5.82	14.99	2.81	0.0	19.50	175
75	5.82	15.00	2.76	0.0	19.53	178
Sample	5.83	12.36	2.73	0.0	12.34	182

Sampling

Time of Sample Collection: 12:00 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/19/19

SAMPLE ID: 8M-1_8/19/19
WELL ID: 8M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 270.00' Time:
Initial static water level (from top of casing) ..... 94.19' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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:	175.81	ft. of water x 0.65 =	114.3	gallons

volume of water removed: 450 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.20	15.51	0.642	0.0	3.37	95
100	7.20	13.99	0.801	0.0	1.19	67
200	7.24	13.94	0.799	0.0	1.02	38
300	7.27	13.91	0.800	0.0	0.96	28
400	7.28	13.89	0.801	0.0	0.94	25
450	7.27	13.89	0.805	0.0	0.90	26
Sample	7.27	13.93	0.804	0.0	0.90	30

Sampling

Time of Sample Collection: 10:30 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 7.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/19/19

SAMPLE ID: 8M-2_8/19/19
WELL ID: 8M-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 384.00' Time:
Initial static water level (from top of casing) ..... 94.45' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 289.55 ft. of water x 0.65 = 188 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.48	14.74	0.454	0.0	2.74	197
100	5.97	13.25	0.355	0.0	0.99	170
200	6.03	12.26	0.199	0.0	0.63	133
300	6.14	11.95	0.186	0.0	0.58	100
400	6.15	11.93	0.184	0.0	0.45	97
500	6.21	11.92	0.180	0.0	1.18	90
600	6.25	11.92	0.178	0.0	1.06	87
Sample	6.32	11.99	0.177	0.0	1.04	82

Sampling
Time of Sample Collection: 9:35 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 7.0
Blind Duplicate-2 sample collected

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/20/19

SAMPLE ID: 9G-1_8/20/19
WELL ID: 9G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 68.00' Time:
Initial static water level (from top of casing) ..... 48.10' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 19.90 ft. of water x 0.65 = 13 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.49	13.39	0.030	0.0	18.60	153
15	5.44	12.77	0.032	0.0	16.81	224
30	5.34	12.77	0.033	0.0	15.38	240
45	5.20	12.77	0.033	0.0	14.53	248
60	5.26	12.84	0.033	0.0	14.36	247
75	5.04	12.25	0.033	0.0	15.03	263
90	5.05	12.33	0.033	0.0	15.13	263
105	5.06	12.60	0.033	0.0	14.76	265
Sample	5.09	13.00	0.034	0.0	11.34	269

Sampling
Time of Sample Collection: 2:20 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Clear, sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/21/19

SAMPLE ID: 10G-1_8/21/19
WELL ID: 10G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 69.00' Time:
Initial static water level (from top of casing) ..... 48.41' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 20.59 ft. of water x 0.65 = 61.8 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.56	14.33	0.381	0.0	14.57	229
30	4.77	13.97	0.385	0.0	11.59	257
60	4.68	13.90	0.385	0.0	11.37	275
90	4.71	13.88	0.385	0.0	11.18	280
120	4.72	13.83	0.382	0.0	11.62	286
Sample	4.89	14.01	0.380	0.0	7.68	280

Sampling

Time of Sample Collection: 10:40 a.m.

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

Analyses:
- ____ TCL VOCs 602 ____ 503 ____ Other ____
- ____ TCL SVOCs
- ____ Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Overcast, 80-85 F
Sample description: Clear
Free Product? yes ____ no x describe ____
Sheen? yes ____ no x describe ____
Odor? yes ____ no x describe ____

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/21/19

SAMPLE ID: 10M-1_8/21/19
WELL ID: 10M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 256.00' Time:
Initial static water level (from top of casing) ..... 48.12'' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 207.88 ft. of water x 0.65 = 135 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.87	14.32	0.419	0.0	6.33	140
100	6.90	12.86	0.450	0.0	1.81	145
200	7.17	12.48	0.506	0.0	0.95	126
300	7.21	12.42	0.535	0.0	1.12	112
400	7.26	12.37	0.541	0.0	0.69	103
500	7.30	12.35	0.565	0.0	0.68	95
565	7.31	12.36	0.561	0.0	0.62	95
Sample	7.40	12.47	0.574	0.0	0.61	91

Sampling
Time of Sample Collection: 9:35 a.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Overcast, 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: 11G-1_8/14/19
WELL ID: 11G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 145.00' Time:
Initial static water level (from top of casing) ..... 127.09' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 17.81 ft. of water x 0.65 = 11.6 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.24	25.52	2.48	0.0	4.02	-84
15	7.23	25.68	2.61	0.0	1.05	-105
30	7.22	25.68	2.62	0.0	0.78	-108
45	7.24	25.69	2.61	0.0	0.61	-112
60	7.24	25.69	2.61	0.0	0.60	-113
Sample	7.25	25.66	2.59	0.0	0.88	-112

Sampling
Time of Sample Collection: 10:30 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Partly cloudy, humid 70-75 F
Sample description: Clear, yellow tint
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 3.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: 11G-2_8/14/19
WELL ID: 11G-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 221.00' Time:
Initial static water level (from top of casing) ..... 126.47' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 94.53 ft. of water x 0.65 = 61.4 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.77	22.63	2.49	0.0	1.12	-114
50	6.81	22.59	2.56	0.0	0.92	-121
100	6.94	22.54	2.60	0.0	0.85	-135
150	6.96	22.50	2.60	0.0	0.80	-138
200	6.97	22.48	2.62	0.0	0.82	-140
250	7.01	22.48	2.62	0.0	0.70	-141
Sample	6.98	22.54	2.62	0.0	0.77	-138

Sampling
Time of Sample Collection: 9:10 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Partly cloudy, humid 70-75 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes x no describe Slight yellow tint, slight sulfuric odor

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: 11M-1_8/14/19
WELL ID: 11M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 320.00' Time:
Initial static water level (from top of casing) ..... 127.46 Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 192.54 ft. of water x 0.65 = 125.2 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.04	24.27	0.364	0.0	5.15	123
50	5.73	16.70	0.325	0.0	3.74	28
100	5.88	15.12	0.416	0.0	0.99	50
150	5.90	14.98	0.423	0.0	0.93	54
200	6.02	14.77	0.431	0.0	1.22	62
250	6.02	14.76	0.431	0.0	1.18	62
300	6.06	14.72	0.435	0.0	0.82	60
350	6.12	14.67	0.442	0.0	0.65	58
400	6.13	14.63	0.445	0.0	0.61	59
Sample	6.17	14.70	0.448	0.0	0.64	58

Sampling

Time of Sample Collection: 8:35 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Partly cloudy, humid 70-75 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes x no describe Slight sulfur odor

Comments:

GPM = 6.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/15/19

SAMPLE ID: 12M-1_8/15/19
WELL ID: 12M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 338.00' Time:
Initial static water level (from top of casing) ..... 136.93' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 201.07 ft. of water x 0.65 = 130.7 gallons

volume of water removed: 450 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.51	19.62	0.972	0.0	1.17	76
100	6.82	16.64	1.00	0.0	0.57	-92
200	6.81	16.56	1.00	0.0	0.75	-93
300	6.80	16.45	0.998	0.0	0.47	-93
400	6.80	16.42	0.997	0.0	0.54	-92
450	6.80	16.42	0.997	0.0	0.52	-92
Sample	6.90	16.66	0.999	0.0	2.85	-51

Sampling

Time of Sample Collection: 3:35 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 75-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: 13G-1_8/14/19
WELL ID: 13G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 93.00' Time:
Initial static water level (from top of casing) ..... 69.60' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 23.40 ft. of water x 0.65 = 15.2 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.87	12.90	0.206	0.0	-	140
15	4.80	12.50	0.214	0.0	-	200
30	4.93	12.52	0.214	0.0	19.55	198
45	5.83	13.24	0.174	0.0	14.76	202
60	5.62	13.12	0.174	0.0	14.04	216
75	5.20	12.83	0.176	0.0	13.02	248
90	5.19	12.81	0.176	0.0	12.84	253
Sample	5.20	13.52	0.178	0.0	9.58	263

Sampling

Time of Sample Collection: 4:15 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Partly cloudy, humid 70-75 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 4.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: 13M-1_8/14/19
WELL ID: 13M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 265.00' Time:
Initial static water level (from top of casing) ..... 69.18' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 195.82 ft. of water x 0.65 = 127.3 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.87	12.03	0.946	0.0	1.05	-125
100	7.21	11.31	1.03	0.0	0.65	-115
200	7.11	11.25	1.09	0.0	0.60	-78
300	7.09	11.21	1.11	0.0	0.51	-70
400	7.09	11.19	1.11	0.0	0.49	-69
500	7.08	11.19	1.10	0.0	0.56	-67
Sample	7.11	11.26	1.12	0.0	0.46	-66

Sampling

Time of Sample Collection: 3:40 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Partly cloudy, humid 70-75 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes x no describe Slight leachate odor

Comments:

GPM = 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/13/19

SAMPLE ID: 14G-1A_8/13/19
WELL ID: 14G-1A
SAMPLERS: K. Robins

Time On-site:

Time Off-site: .

Depth of well (from top of casing) ..... 220.00' Time:
Initial static water level (from top of casing) ..... 119.95' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 100.05 ft. of water x 0.65 = 65 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.08	18.50	0.822	9.6	2.61	44
25	7.06	16.54	0.814	0.0	10.14	22
50	7.05	16.43	0.814	0.0	10.52	36
75	7.07	16.41	0.814	0.0	9.92	50
100	7.07	16.41	0.814	0.0	9.95	51
125	7.06	16.38	0.814	0.0	9.80	57
150	7.06	16.39	0.813	0.0	10.31	62
175	7.06	16.38	0.813	0.0	10.39	62
200	7.05	16.39	0.812	0.0	10.43	67
Sample	7.03	16.49	0.812	0.0	9.05	76

Sampling

Time of Sample Collection: 10:40 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/13/19

SAMPLE ID: 14G-2_8/13/19
WELL ID: 14G-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 264.00' Time:
Initial static water level (from top of casing) ..... 120.56' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 143.44 ft. of water x 0.65 = 93.3 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.60	20.16	0.556	0.0	9.01	584
50	6.88	16.82	0.563	0.0	6.70	494
100	6.99	16.50	0.575	0.0	6.43	318
150	7.05	16.58	0.578	0.0	6.34	286
200	7.13	16.52	0.598	0.0	7.34	256
250	7.16	16.50	0.588	0.0	6.46	246
300	7.18	16.48	0.591	0.0	6.14	238
Sample	7.21	16.56	0.591	0.0	4.84	244

Sampling

Time of Sample Collection: 9:50 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/13/19

SAMPLE ID: 14M-1_8/13/19
WELL ID: 14M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 355.00' Time:
Initial static water level (from top of casing) ..... 120.53' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 234.47 ft. of water x 0.65 = 152.4 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.45	17.82	2.57	0.0	2.03	-55
50	6.56	16.68	2.57	0.0	1.18	-70
100	6.62	16.42	2.57	0.0	1.06	-64
150	6.64	15.93	2.58	0.0	1.34	-75
200	6.67	15.88	2.58	0.0	0.97	-80
250	6.69	15.86	2.60	0.0	0.94	-83
300	6.70	15.84	2.61	0.0	1.07	-86
350	6.70	15.84	2.61	0.0	1.06	-87
400	6.71	15.83	2.61	0.0	1.03	-88
450	6.72	15.84	2.61	0.0	1.08	-88
475	6.72	15.83	2.61	0.0	1.14	-89
Sample	6.72	15.89	2.61	0.0	1.10	-86

Sampling

Time of Sample Collection: 9:10 a.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

/FieldForms/

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/15/19

SAMPLE ID: 15G-1_8/15/19
WELL ID: 15G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 160.00' Time:
Initial static water level (from top of casing) ..... 141.62' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 18.38 ft. of water x 0.65 = 12 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.22	14.24	0.227	0.0	16.59	159
25	5.13	13.41	0.230	0.0	10.93	203
50	5.49	13.26	0.230	0.0	10.09	200
75	5.51	13.24	0.230	0.0	11.24	201
100	5.53	13.25	0.233	0.0	10.15	200
Sample	5.52	13.64	0.232	0.0	7.99	203

Sampling

Time of Sample Collection: 5:45 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 75-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/21/19

SAMPLE ID: 16G-1_8/21/19
WELL ID: 16G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 57.00' Time:
Initial static water level (from top of casing) ..... 37.84' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 19.16 ft. of water x 0.65 = 12.5 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.74	14.55	0.082	0.0	14.34	225
30	5.22	14.34	0.087	0.0	13.96	258
60	5.26	14.39	0.088	0.0	13.83	270
90	5.23	14.36	0.088	0.0	13.47	273
120	5.26	14.33	0.088	0.0	13.83	274
Sample	5.51	14.52	0.084	0.0	9.81	266

Sampling

Time of Sample Collection: 1:55 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Overcast, 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/21/19

SAMPLE ID: 16M-1_8/21/19
WELL ID: 16M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 240.00' Time:
Initial static water level (from top of casing) ..... 37.79' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 202.21 ft. of water x 0.65 = 131 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.73	15.14	0.461	0.0	8.44	223
100	6.73	13.00	0.464	0.0	0.73	206
200	6.78	12.94	0.469	0.0	0.80	191
300	6.82	12.93	0.474	0.0	0.80	180
400	6.83	12.90	0.476	0.0	0.51	174
500	6.85	12.86	0.479	0.0	0.43	177
Sample	6.92	12.96	0.480	0.0	0.61	154

Sampling
Time of Sample Collection: 1:00 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Overcast, 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/13/19

SAMPLE ID: 18G-1_8/13/19
WELL ID: 18G-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 157.50' Time:
Initial static water level (from top of casing) ..... 126.64' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 31.10 ft. of water x 0.65 = 20.2 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.05	21.22	0.944	0.0	4.73	68
20	6.21	21.32	0.931	0.0	4.09	45
40	6.37	21.34	0.926	0.0	3.71	39
60	6.40	21.33	0.921	0.0	3.81	37
80	6.41	21.34	0.918	0.0	3.49	36
100	6.42	21.32	0.909	0.0	3.50	34
Sample	6.37	21.37	0.908	0.0	3.48	38

Sampling
Time of Sample Collection: 1:25 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/13/19

SAMPLE ID: 18G-2_8/13/19
WELL ID: 18G-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 197.50' Time:
Initial static water level (from top of casing) ..... 126.77' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 70.73 ft. of water x 0.65 = 46.0 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.03	21.59	0.662	0.0	5.62	136
25	5.99	21.75	0.727	0.0	1.82	126
50	6.21	21.74	0.739	0.0	1.29	110
75	6.27	21.72	0.739	0.0	1.08	106
100	6.27	21.72	0.739	0.0	1.12	106
125	6.27	21.71	0.740	0.0	1.32	106
150	6.28	21.71	0.739	0.0	1.32	106
Sample	6.26	21.74	0.739	0.0	1.39	104

Sampling
Time of Sample Collection: 12:30 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 5.0

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/16/19

SAMPLE ID: 22M-1_8/16/19
WELL ID: 22M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 222.50' Time:
Initial static water level (from top of casing) ..... 19.05' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 203.45 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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.63	13.20	0.254	7.1	0.88	-84
100	5.29	13.17	0.234	3.4	0.34	11
200	5.38	13.11	0.255	0.0	0.27	71
300	5.39	13.09	0.253	0.0	0.22	99
400	5.40	13.07	0.251	0.0	0.19	113
450	5.26	13.09	0.251	0.0	0.22	124
500	5.25	13.08	0.250	0.0	0.22	122
550	5.26	13.08	0.250	0.0	0.25	129
Sample	5.37	13.28	0.251	0.0	0.31	126

Sampling
Time of Sample Collection: 3:45 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Sunny, humid 80-85 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 7.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: 23M-1_8/14/19
WELL ID: 23M-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 240.00' Time:
Initial static water level (from top of casing) ..... 34.83' Time:

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

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: 205.17 ft. of water x 0.65 = 133.4 gallons

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

Field Tests

Volume of Purge Water (in ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.85	12.99	0.428	0.0	6.12	143
100	6.78	12.32	0.459	0.0	1.31	107
200	6.69	12.08	0.465	0.0	0.73	114
300	6.64	12.05	0.462	0.0	0.61	115
400	6.64	12.03	0.463	0.0	0.57	116
450	6.63	12.04	0.462	0.0	0.55	116
Sample	6.61	12.61	0.461	0.0	1.08	117

Sampling
Time of Sample Collection: 12:30 p.m.

Method:
- Stainless steel bailer
- Teflon bailer
- Pos. Disp. Pump
- X Disposable bailer
- Dedicated pump
- Other: Disposable Bladder Pump (Low Flow)

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Partly cloudy, humid 70-75 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

GPM = 6.5

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: EW-1_8/14/19
WELL ID: EW-1 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 225' Time:
Initial static water level (from top of casing) ..... NA Time:

Purging Method

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

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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Sample	6.17	20.37	0.602	0.0	7.90	169

Sampling
Time of Sample Collection: 1:10 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Partly cloudy, humid 70-75 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 8/16/19

SAMPLE ID: EW-2_8/16/19
WELL ID: EW-2 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 223' Time:
Initial static water level (from top of casing) ..... NA Time:

Purging Method

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

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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Sample	7.00	20.34	0.989	53.5	7.74	-66

Sampling

Time of Sample Collection: 9:30 a.m.

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

Analyses:
____ TCL VOCs 602 ____ 503 ____ Other ____
____ TCL SVOCs
____ Priority Pollutant Metals & Iron
X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Sunny, humid 80-85 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 8/13/19

SAMPLE ID: EW-3_8/13/19
WELL ID: EW-3 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

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 Pump		Ded. Pump	X

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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Sample	7.46	17.28	0.636	0.0	8.58	180

Sampling
Time of Sample Collection: 2:05 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes no x describe
Sheen? yes no x describe
Odor? yes no x describe

Comments:

Collected MS/MSD sample.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/13/19

SAMPLE ID: EW-4_8/13/19
WELL ID: EW-4 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

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 Pump ____ Ded. Pump X

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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Sample	7.35	17.65	0.673	0.0	6.37	177

Sampling

Time of Sample Collection: 4:00 p.m.

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

Analyses:
____ TCL VOCs 602 _____ 503 _____ Other _____
____ TCL SVOCs
____ Priority Pollutant Metals & Iron
X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations

Weather/Temperature: Overcast, 70-80 F
Sample description: Clear
Free Product? yes ____ no x describe
Sheen? yes ____ no x describe
Odor? yes ____ no x describe

Comments:

Blind Duplicate-1 sample collected.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Blydenburgh Road Landfill Complex DATE 8/14/19

SAMPLE ID: EW-6_8/14/19
WELL ID: EW-6 Time On-site: Time Off-site:
SAMPLERS: K. Robins .

Depth of well (from top of casing) ..... 215' Time:
Initial static water level (from top of casing) ..... NA Time:

Purging Method

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

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 ml)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Sample	6.18	15.10	0.302	0.0	7.43	14

Sampling
Time of Sample Collection: 1:45 p.m.

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

Analyses:
- TCL VOCs 602 503 Other
- TCL SVOCs
- Priority Pollutant Metals & Iron
- X Other NYCRR Part 360 Baseline plus Freon 21/Freon 22

Observations
Weather/Temperature: Partly cloudy, humid 70-75 F
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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Islip Resource Recovery	Report To: Anthony Varrichio	Attention: Anthony Varrichio P.E.
Address: 401 Main Street	Copy To: Keith Robins (D+B Engineers + Architects PC)	Company Name: ISRRA
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 #: (3763) Third Qtr 2019	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

	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	Residual Chlorine (Y/N)
1	WQ	-	8/13/19	[illegible]	-	-		2	-	-	1	2	-	-	1	-	N	1	1	1	1	1	✓	1	N
2	GW	G	8/13/19	0910	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
3	GW	G	8/13/19	0950	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
4	GW	G	8/13/19	1040	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
5	GW	G	8/13/19	1230 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
6	GW	G	8/13/19	1250 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
7	GW	G	8/13/19	2:05 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
8	GW	G	8/13/19	4:05 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
9	GW	G	8/13/19	2:05 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
10	GW	G	8/13/19	2:05 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
11	GW	G	8/13/19	0000	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N
12	WQ	G	8/13/19	430 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N

Trip Blank - 8/13/19
14M-1 - 8/13/19
14G-2 - 8/13/19
4G-1A - 8/13/19
18G-2 - 8/13/19
18G-1 - 8/13/19
EW-3 - 8/13/19
EW-4 - 8/13/19
EW-3 - 8/13/19 (MS)
EW-3 - 8/13/19 (MSD)
Blind Duplicate - 1
Field Blank - 1

NYCRR Part 360 Baseline Parameters plus Freon 21 Freon 22

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Report sent to lab data@db-eng.com (Category B and EQuIS) Also run Freon 21/Freon 22	Keith Robins/D+B	8/14/19	0910				

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Keith Robins		
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed:	8/14/19 0900

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C	
Required Client Information:	Required Project Information:	Invoice Information:	
Company: Islip Resource Recovery	Report To: Anthony Varrichio	Attention:	
Address: 401 Main Street	Copy To:	Company Name:	Regulatory Agency
NY 11751		Address:	
avarrichio@islipny.gov	Purchase Order #:	Pace Quote:	
(631)595-3749 Fax	Project Name: Blydenburgh LF-Post Closure - Baseline	Pace Project Manager: jennifer.aracri@pacelabs.com,	State / Location
Requested Due Date:	Project #:	Pace Profile #: 5516	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

SAMPLE ID	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	Residual Chlorine (Y/N)
Trip Blank - 8/14/19																								
11 M-1 - 8/14/19	GW	G	8/14/19	0835																				
11 S-3 - 8/14/19	GW	G	8/14/19	0910																				
11 S-1 - 8/14/19	GW	G	8/14/19	1030																				
23M-1 - 8/14/19	GW	G	8/14/19	1230 pm				9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	N
EW-1 - 8/14/19	GW	G	8/14/19	110 pm				9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	N
EW-6 - 8/14/19	GW	G	8/14/19	145 pm				9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	N
13M-1 - 8/14/19	GW	G	8/14/19	340 pm				9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	N
13G-1 - 8/14/19	GW	G	8/14/19	415 pm				9	2	3	1	2	1	8	8	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	N

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

...n A ...ed Client Information:		Section B Required Project Information:		Section C Invoice Information:	
...ny:	Islip Resource Recovery	Report To:	Anthony Varrichio	Attention:	Anthony Varrichio
...s:	401 Main Street	Copy To:	Keith Robins of D&B Engineers Architects P.C.	Company Name:	IRRA
...Y 11751				Address:	401 Main Street, Islip New York
	avarrichio@islipny.gov	Purchase Order #:		Pace Quote:	
	(631)595-3749 Fax	Project Name:	Blydenburgh LF-Post Closure - Baseline	Pace Project Manager:	jennifer.aracri@pacelabs.com,
...sted Due Date:	Standard	Project #:	3763 - third QTR 2019	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 for all analyses

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	Residual Chlorine (Y/N)
TRIP Blank-8/15/19	AQ	-	8/15/19	-	-	-		2	-	-	-	2	-	-	-	-	-	-	-	-	-	✓	-	N
GM-1-8/15/19	GW	G	8/15/19	1030 am	-	-		9	2	3	1	2	1	-	-	-	✓	✓	✓	✓	✓	✓	✓	N
6G-3-8/15/19	GW	G	8/15/19	0940	-	-		9	2	3	1	2	1	-	-	-	✓	✓	✓	✓	✓	✓	✓	N
6G-2-8/15/19	GW	G	8/15/19	1110 am	-	-		9	2	3	1	2	1	-	-	-	✓	✓	✓	✓	✓	✓	✓	N
6G-1-8/15/19	GW	G	8/15/19	1220 am	-	-		9	2	3	1	2	1	-	-	-	✓	✓	✓	✓	✓	✓	✓	N
12M-1-8/15/19	GW	G	8/15/19	335	-	-		9	2	3	1	2	1	-	-	-	✓	✓	✓	✓	✓	✓	✓	N
15G-1-8/15/19	GW	G	8/15/19	545 pm	-	-		9	2	3	1	2	1	-	-	-	✓	✓	✓	✓	✓	✓	✓	N

NYCRR Part 360 Baseline, plus Freons/22

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Provide Category "B" and EQuIS soil data also to LabData@db-eng.com	Keith Robins D&B	08/16/19	0700				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Robins

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 08/16/19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C
ed Client Information:	Required Project Information:	Invoice Information:
ny Islip Resource Recovery	Report To: Anthony Varrichio	Attention: Anthony Varrichio
s: 401 Main Street	Copy To: Keith Robins	Company Name: IRRA
Y 1751	DTB Engineers / Architects P.C	Address: 401 Main Street, Islip NY
avarrichio@islipny.gov	Purchase Order #:	Pace Quote:
(631)595-3749 Fax	Project Name: Blydenburgh LF-Post Closure - Baseline	Pace Project Manager: jennifer.aracri@pacelabs.com,
sted Due Date: 5 T Andard	Project #: 3763 - Third Qtr 2019	Pace Profile #: 5516

Regulatory Agency

State / Location: NY

Requested Analysis Filtered (Y/N)

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	Y/N	Analyses Test: BOD5,Br,Cl,SO4,ALK,TDS	NO2,Color,Cr+6	COD,NH3,NO3,Phenols TKN	TOC	TAL Metals +Hardness	Volatiles +Freons	Cyanide	Residual Chlorine (Y/N)	NYCRR Part 360 plus Freon 21 and Freon 22
TripBlank-8/16/19	AQ	-	8/16/19	-	-	-		2	-	-	-	2	-	-	-	-	N	1	-	-	-	✓	-	N	
4M-1-8/16/19	GW	G	8/16/19	1080 am	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N	
4M-2-8/16/19	GW	G	8/16/19	1040	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N	
4G-2-8/16/19	GW	G	8/16/19	1210 pm	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N	
4G-1-8/16/19	GW	G	8/16/19	1150	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N	
22M-1-8/16/19	GW	G	8/16/19	1345	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N	
EW-2-8/16/19	GW	G	8/16/19	0930	-	-		9	2	3	1	2	1	-	-	-	N	✓	✓	✓	✓	✓	✓	✓	N	

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
CATEGORY "B" and EQUIS also send data to Labdata@dtbeng.com	Keith Robins / DTB	8/16/19	1640		8/16/19	1640	1.8

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEITH ROBINS

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 8/16/19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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 of D&B Engineers + Architects P.C.
Purchase Order #:
Project Name: Blydenburgh LF-Post Closure - Baseline
Project #: 3763-19 (Third QRT 2019)

Section C
Invoice Information:
Attention: Anthony Varrichio
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

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	Residual Chlorine (Y/N)
1	Trip Blank-8/19/19	AQ	–	8/19/19	–	–	–		2	–	–	–	2	–	–	–	–		–	–	–	–	–	✓	–	N
2	8M-2 -8/19/19	GW	G	8/19/19	0935	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
3	8M-1 -8/19/19	GW	G	8/19/19	1030	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
4	8G-1 -8/19/19	GW	G	8/19/19	1200 pm	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
5	Blind Duplicate-2-8/19/19	GW	G	8/19/19	0000	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
6	GM-1I -8/19/19	GW	G	8/19/19	240 pm	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
7	GM-1S -8/19/19	GW	G	8/19/19	3:45 pm	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
8	GM-1D -8/19/19	GW	G	8/19/19	145 pm	–	–		9	2	3	1	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓	N
9																										
10																										
11																										
12																										

NYCRR Part 360 Baseline plus Freon 21/22

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Provide CATEGORY B and EQuIS Deliverable. Associated data to: LABdata@db-eng.com	Keith Robins (D&B)	08/20/19	0700				

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Keith Robins
SIGNATURE of SAMPLER: Keith Robins
DATE Signed: 08/20/19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C
Client Information:	Required Project Information:	Invoice Information:
Islip Resource Recovery	Report To: Anthony Varrichio	Attention: Anthony Varrichio
401 Main Street	Copy To: KEITH ROBINS of D&B ENGINEERS & ARCHITECTS, P.C.	Company Name: ISRAD
11751	Purchase Order #:	Address: 401 MAIN STREET, ISLIP, NEW YORK
avarrichio@islipny.gov	Project Name: Blydenburgh LF-Post Closure - Baseline	Pace Quote:
(631)595-3749 Fax	Project #: 3763-19 [TASK 2021 2019]	Pace Project Manager: jennifer.aracri@pacelabs.com,
Due Date: STANDARD		Pace Profile #: 5516

Regulatory Agency

State / Location: NY

Requested Analysis Filtered (Y/N)

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	Residual Chlorine (Y/N)	NYCRR PART 360 Baseline Parameters Plus Freon 21/22
Trip Blank - 8/20/19	WQ	1	8/20/19	—	—	—		2	—	—	—	2	—	—	—	—	N	1	1	1	1	1	1	1	N	
GM-2D - 8/20/19	GW	G	8/20/19	10:15	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	
GM-2D - 8/20/19 (MS)	GW	G	8/20/19	10:15	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	
GM-2D - 8/20/19 (MSD)	GW	G	8/20/19	10:15	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	
GM-2I - 8/20/19	GW	G	8/20/19	12:15 pm	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	
GM-2S - 8/20/19	GW	G	8/20/19	1:00 pm	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	
9G-1 - 8/20/19	GW	G	8/20/19	2:20 pm	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	
7M-1 - 8/20/19	GW	G	8/20/19	3:30 pm	—	—		9	2	3	1	2	1	—	—	—	N	✓	✓	✓	✓	✓	✓	✓	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Provide CATAGORY "B" and EQUIS Deliverables to send data to: Lab data @ db-engineers	Keith Robins (D&B)	08/21/19	07:00				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Robins

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 08/21/19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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, P.E
Address: 401 Main Street	Copy To: Keith Robins at D&B Engineers + Architects, PC	Company Name: IRRA
11751		Address: 401 Main Street, Islip, NY
avarrichio@islipny.gov	Purchase Order #:	Pace Quote:
(631)595-3749 Fax	Project Name: Blydenburgh LF-Post Closure - Baseline	Pace Project Manager: jennifer.aracri@pacelabs.com,
Requested Due Date: Standard	Project #: 3763-19 (Third QRT 2019)	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)

SAMPLE ID	MATRIX CODE	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	Residual Chlorine (Y/N)	
Y/N																	N	N	N	N	N	N	N		Part 360 Baseline Parameters plus Freons 1/22
Trip Blank-8/21/19	AQ	–	8/21/19	–	–	–		2	X	X	X	2	X	X	X	X	–	–	–	–	–	✓	–	N	
Field Blank 2-8/21/19	DW	G	8/21/19	0900	–	–		9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	N	
10M-1-8/21/19	GW	G	8/21/19	0935	–	–		9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	N	
10G-1-8/21/19	GW	G	8/21/19	1040	–	–		9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	N	
16M-1-8/21/19	GW	G	8/21/19	1pm	–	–		9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	N	
16G-1-8/21/19	GW	G	8/21/19	155pm	–	–		9	2	3	1	2	1	X	X	X	✓	✓	✓	✓	✓	✓	✓	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Provide Category B and EQUIS Deliverables. Send data also to Lab data @db-eng.com	Keith Robins (D+B)	8/21/19		[signature] PACE LI	8/21/19	15:20	1.8	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: 8/21/19

APPENDIX D

DATA VALIDATION FORMS

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill
Project Number:	3763-1B
Sample Date(s):	August 15 to 21, 2019
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 23 Soil/ 0 Field Duplicates/ 1 Trip Blanks / 5 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:	70101745 Date:9/18/2019

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: 70101745
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	70101745001	8/15/2019		X			
12M_1	70101745002	8/15/2019		X		X	X
15G_1	70101745003	8/15/2019		X		X	X
TRIP BLANK	70101745005	8/16/2019		X			
4M-1	70101745006	8/16/2019		X		X	X
4M-2	70101745007	8/16/2019		X		X	X
4G-2	70101745008	8/16/2019		X		X	X
4G-1	70101745009	8/16/2019		X		X	X
22M-1	70101745010	8/16/2019		X		X	X
EW-2	70101745011	8/16/2019		X		X	X
TRIP BLANK	70101745012	8/19/2019		X			
8M-2	70101745013	8/19/2019		X		X	X
8M-1	70101745014	8/19/2019		X		X	X
8G-1	70101745015	8/19/2019		X		X	X
BLIND DUPLICATE-2	70101745016	8/19/2019	8M-2	X		X	X
GM-1I	70101745017	8/19/2019		X		X	X
GM-1S	70101745018	8/19/2019		X		X	X
GM-1D	70101745019	8/19/2019		X		X	X
TRIP BLANK	70101745020	8/20/2019		X			
GM-2D	70101745021	8/20/2019		X		X	X
GM-2I	70101745022	8/20/2019		X		X	X
GM-2S	70101745023	8/20/2019		X		X	X
9G-1	70101745024	8/20/2019		X		X	X
7M-1	70101745025	8/20/2019		X		X	X
TRIP BLANK	70101745026	8/21/2019		X			
FIELD BLANK-2	70101745027	8/21/2019		X		X	X
10M-1	70101745028	8/21/2019		X		X	X
10G-1	70101745029	8/21/2019		X		X	X
16M-1	70101745030	8/21/2019		X		X	X
16G-1	70101745031	8/21/2019		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 LCS for cis-1,3-dichloropropene, trans-1,3-dichloropropene and trans-1,4-dichloro-2-butene associated with samples TRIP BLANK 8/15/19, 12M_1, 15G_1, TRIP BLANK 8/16/19, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1 and EW-2. They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were above the QC limits in the MS for trans-1,3-dichloropropene and 1,2-dichloropropane associated with samples TRIP BLANK 8/15/19, 12M_1, 15G_1, TRIP BLANK 8/16/19, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1 and EW-2 They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were below the QC limits in the MS for 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/19/19, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S and GM-1D. 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 bromomethane associated with samplse TRIP BLANK 8/20/19, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1, TRIP BLANK 8/21/19, FIELD BLANK-2, 10M-1, 10G-1, 16M-1 and 16G-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. Arsenic, antimony, boron, silver and potassium were detected in the field blank, initial blank and/or preparation blank. The following metals were qualified as non-detect (UB): arsenic in samples 12M_1 and 4M-1; boron all samples except 8M-2 and 4M-1; silver in samples 8M-1 and 7M-1; and potassium in samples 12M_1, 15G_1, 22M-1, 10G-1,16M-1and 16G-1.

11. The %D was above the QC limit in the serial dilution for magnesium associated with sample 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1 and FIELD BLANK-2. Magnesium was qualified as estimated (J/UJ) in the associated samples.

12. Sample 8M-2 was field duplicated and labeled BLIND DUPLICATE-2. Based on field duplicate results boron, calcium, iron, magnesium, manganese, potassium and sodium were qualified as estimated (J/UJ) in samples 8M-2 and BLIND DUPLICATE-2.

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			

%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 12M_1, 15G_1, 7M-1, 8G-1, 8M-1, 9G-1, GM-2I, GM-2S, 8M-2, BLIND DUPLICATE-2 and GM-2D. It was qualified as an estimated detection limit (UJ) in associated samples.

2A&B. Ammonia, BOD, bromide, TKN and phenolics were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): ammonia in samples GM-2D, 9G-1, 16M-1, 16G-1, GM-2S, GM-2I, 10G-1, GM-1I, GM-1S, 15G_1, 8G-1, EW-2, 4G-2, BLIND DUPLICATE-2 and 8M-2; BOD in all samples; bromide in samples GM-2I, 7M-1, 10G-1, 16M-1 and 16G-1; TKN in samples GM-2S, 9G-1, 10G-1, 16G-1, 15G_1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-2I, 8G-1, EW-2, 8M-2, 4G-2, 10M-1, 7M-1 and 22M-1 and phenolics in all samples.

7. The %Rs were below the QC limit in the MS for TKN associated with samples 12M_1, 15G_1, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1, EW-2, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D and GM-2; TOC associated with samples 12M-1 and 15G-1; and phenolics associated with all samples and were qualified as estimated (J/UJ) in associated samples.

   The %R was above the QC limit in the MS and detected above the reporting limit in the samples for nitrate in samples 12M_1, 15G_1, 22M-1, EW-2, GM-2I, GM-2S, 9G-1, 7M-1, 10M-1, 10G-1, 16M-1 and 16G-1 and were qualified as estimated (J).

8. The RPDs were above the QC limits in the duplicate for TOC associated with samples 12M-1 and 15G-1; and BOD associated with samples GM-2D, GM-2I, GM-2S and 9G-1 and were qualified as estimated (J/UJ) in associated samples.

DATA VALIDATION AND QUALIFICATION SUMMARY **Laboratory Numbers:70101745**

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
TRIP BLANK 8/19/19, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S and GM-1D	1,2-Dibromoethane (EDB) and trans-1,3-dichloropropene	UJ	The %Rs were below the QC limits in the MS
Metals			
12M_1 and 4M-1	Arsenic	UB	Detected in the initial blank, preparation blank and/or field blank
All samples except 8M-2 and 4M-1	Boron		
8M-1 and 7M-1	Silver		
12M_1, 15G_1, 22M-1, 10G-1,16M-1and 16G-1	Potassium		
8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D, GM-2I, GM-2S, 9G-1, 7M-1 and FIELD BLANK-2	Magnesium	J/UJ	The %D was above the QC limit in the serial dilution
8M-2 and BLIND DUPLICATE-2	Boron, calcium, iron, magnesium, manganese, potassium and sodium	J/UJ	Field duplicated results
General Chemistry			
12M_1, 15G_1, 7M-1, 8G-1, 8M-1, 9G-1, GM-2I, GM-2S, 8M-2, BLIND DUPLICATE-2 and GM-2D	Hexavalent chromium	UJ	Analyzed outside of holding times
GM-2D, 9G-1, 16M-1, 16G-1, GM-2S, GM-2I, 10G-1, GM-1I, GM-1S, 15G_1, 8G-1, EW-2, 4G-2, BLIND DUPLICATE-2 and 8M-2	Ammonia	UB	Detected in the FIELD BLANK and/or method blank
All samples	BOD		
GM-2I, 7M-1, 10G-1, 16M-1 and 16G-1	Bromide		
GM-2S, 9G-1, 10G-1, 16G-1, 15G_1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-2I, 8G-1, EW-2, 8M-2, 4G-2, 10M-1, 7M-1 and 22M-1	TKN		
All samples	Phenolics		

Sample ID	Analyte(s)	Qualifier	Reason(s)
General Chemistry continued			
12M_1, 15G_1, 4M-1, 4M-2, 4G-2, 4G-1, 22M-1, EW-2, 8M-2, 8M-1, 8G-1, BLIND DUPLICATE-2, GM-1I, GM-1S, GM-1D, GM-2D and GM-2	TKN	J/UJ	The %Rs were below the QC limit in the MS
12M-1 and 15G-1	TOC		
All samples	Phenolics		
12M_1, 15G_1, 22M-1, EW-2, GM-2I, GM-2S, 9G-1, 7M-1, 10M-1, 10G-1, 16M-1 and 16G-1	Nitrate	J	The %R was above the QC limit in the MS
12M-1 and 15G-1	TOC	J/UJ	The RPDs were above the QC limits in the duplicate
GM-2D, GM-2I, GM-2S and 9G-1	BOD		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/28/2019
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	Blydenburgh Road Landfill
Project Number:	3763-1B
Sample Date(s):	August 13-15, 2019
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 19 Soil/ 0 Field Duplicates/ 1 Trip Blanks / 2 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:	70101295 Date:9/13/2019

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: 70101295
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Blind Sample	Analysis			
				VOC	SVOC	MET	MISC
TRIP BLANK	70101295001	8/13/2019		X			
14M-1	70101295002	8/13/2019		X		X	X
14G-2	70101295003	8/13/2019		X		X	X
14G-1A	70101295004	8/13/2019		X		X	X
18G-2	70101295005	8/13/2019		X		X	X
18G-1	70101295006	8/13/2019		X		X	X
EW-3	70101295007	8/13/2019		X		X	X
EW-4	70101295008	8/13/2019		X		X	X
BLIND DUPLICATE _1	70101295009	8/13/2019	EW-4	X		X	X
FIELD BLANK_1	70101295010	8/13/2019		X		X	X
TRIP BLANK	70101295012	8/14/2019		X			
11M-1	70101295013	8/14/2019		X		X	X
11G-2	70101295014	8/14/2019		X		X	X
11G-1	70101295015	8/14/2019		X		X	X
23M-1	70101295016	8/14/2019		X		X	X
EW-1	70101295017	8/14/2019		X		X	X
EW-6	70101295018	8/14/2019		X		X	X
13M-1	70101295019	8/14/2019		X		X	X
13G-1	70101295020	8/14/2019		X		X	X
6M-1	70101295021	8/15/2019		X		X	X
6G-3	70101295022	8/15/2019		X		X	X
6G-2	70101295023	8/15/2019		X		X	X
6G-1	70101295024	8/15/2019		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:

3-5. The %Rs were above the QC limits in the MS for trans-1,3-dichloropropene and 1,2-dichloropropane associated with samples 6M-1, 6G-3, 6G-2 and 6G-1. They were not detected in the samples; therefore, qualification of the data was not necessary.

The %Rs were below the QC limit in the MS for 1,2-dibromoethane (EDB) and trans-1,3-dichloropropene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK_1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1 and were qualified as an estimated detection limit (UJ).

The RPD was above the QC limit in the MS/MSD for bromomethane associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK_1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1. They were not detected in the samples; therefore, qualification of the data was not necessary.

6. The %R was below the QC limit in the LCS for iodomethene associated with samples TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK_1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1 and was qualified as an estimated detection limit (UJ).

The %Rs were above the QC limits in the LCS for cis-1,3-dichloropropene, trans-1,3-dichloropropene and trans-1,4-dichloro-2-butene associated with samples 6M-1, 6G-3, 6G-2

and 6G-1. They were 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. Aluminum, nickel and potassium were detected in the initial blank. Nickel was qualified as non-detect (UB) in samples 13G-1, 6M-1, 11M-1, EW-1, 6G-1, 6G-2, 13M-1and EW-3.

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 all samples. It was qualified as an estimated detection limit (UJ) in all samples.

2A&B. Ammonia, BOD, bromide, TKN and phenolics were detected in the FIELD BLANK and/or method blank. The following general chemistry parameters were qualified as non-detect (UB): ammonia in samples 14G-2, EW-1, EW-6, 23M-1, 6G-1, 13G-1, 14G-1A, 6G-2 and 11M-1; BOD in samples 14G-2, 14G-1A, 18G-2, 18G-1, FIELD BLANK_1, 11M-1, 23M-1, EW-1, EW-6, 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, EW-3, 11G-2 and 11G-1; bromide in samples 6G-1, 13G-1, 6G-2, EW-1, EW-6, 23M-1, EW-3 and 6M-1; TKN in samples 11M-1, 6M-1, 13M-1 and 23M-1; and phenolics in all samples except 13G-1.

7. The %Rs were below the QC limit in the MS for TKN in all samples except 6G-2 and 6G-1: phenolics in sample 6G-1; and TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; and were qualified as estimated (J/UJ) in associated samples.

   The %R was above the QC limit in the MS and detected above the reporting limit in the samples for chloride in sample 6G-1; phenolics in sample 13G-1; nitrite in samples EW-4 and BLIND DUPLICATE _1; nitrate in samples EW-1, EW-6, 13G-1, 6G-2 and 6G-1; and were qualified as estimated (J).

8. The RPDs were above the QC limits in the duplicate for TOC in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; TDS in samples DUP 6M-1 and 6G-3; COD in samples 13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1; and TKN in samples 6G-2 and 6G-1 and were qualified as estimated (J/UJ) in associated samples.

DATA VALIDATION AND QUALIFICATION SUMMARY **Laboratory Numbers:70101295**

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK_1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1	1,2-Dibromoethane (EDB) and trans-1,3-dichloropropene	UJ	The %Rs were below the QC limit in the MS
TRIP BLANK 8/13/19, 14M-1, 14G-2, 14G-1A, 18G-2, 18G-1, EW-3, EW-4, BLIND DUPLICATE _1, FIELD BLANK_1, TRIP BLANK 8/14/19, 11M-1, 11G-2, 11G-1, 23M-1, EW-1, EW-6, 13M-1 and 13G-1	Iodomethene	UJ	The %R was below the QC limit in the LCS
Metals			
13G-1, 6M-1, 11M-1, EW-1, 6G-1, 6G-2, 13M-1and EW-3	Nickel	UB	Detected in the initial blank, preparation blank and/or field blank
General Chemistry			
All samples	Hexavalent chromium	UJ	Analyzed outside of holding times
14G-2, EW-1, EW-6, 23M-1, 6G-1, 13G-1, 14G-1A, 6G-2 and 11M-1	Ammonia	UB	Detected in the FIELD BLANK and/or method blank
in samples14G-2, 14G-1A, 18G-2, 18G-1, FIELD BLANK_1, 11M-1, 23M-1, EW-1, EW-6, 13M-1, 13G-1, 6M-1, 6G-3, 6G-2, 6G-1, EW-3, 11G-2 and 11G-1	BOD		
in samples 6G-1, 13G-1, 6G-2, EW-1, EW-6, 23M-1, EW-3 and 6M-1	Bromide		
11M-1, 6M-1, 13M-1 and 23M-1	TKN		
All except 13G-1	Phenolics		
All samples except 6G-2 and 6G-1	TKN	J/UJ	The %Rs were below the QC limit in the MS
6G-1	Phenolics		
13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1	TOC		
6G-1	Chloride	J	The %R was above the QC limit in the MS
EW-1, EW-6, 13G-1, 6G-2 and 6G-1	Nitrate		
EW-4 and BLIND DUPLICATE _1	Nitrite		
13G-1	Phenolics		

Sample ID	Analyte(s)	Qualifier	Reason(s)
General Chemistry continued			
13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1	TOC	J/UJ	The RPDs were above the QC limits in the duplicate
DUP 6M-1 and 6G-3	TDS		
13M-1, 13G-1, 6M-1, 6G-3, 6G-2 and 6G-1	COD		
6G-2 and 6G-1	TKN		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 10/28/2019
VALIDATION PERFORMED BY SIGNATURE: