



Brookfield Avenue Landfill Remediation, Operable Unit 1

DEC Site No. 243006

Field Investigation Report

November 6, 2008

Overview

In September 2007, the New York City Department of Environmental Protection (NYC DEP) received bids for the construction of the Brookfield Avenue Landfill Remediation, Operable Unit 1, Contract LF-BAL-1G. The bids prices received exceeded the construction budget and a construction contract has not been awarded.

In an effort to reduce construction costs for a potential re-bid, NYC DEP asked Camp Dresser & McKee (CDM) to take a second look at the design and evaluate potential re-engineering opportunities. Re-engineering opportunities include modifications to the designs of environmental protection systems such as groundwater barrier walls and landfill gas collection systems. To better understand the ramifications of re-engineering these systems, data from recent environmental sampling is required. The most recent comprehensive environmental sampling of the Brookfield Avenue Landfill was conducted in 1997, over 10-years ago. As part of the OU2 Remedial Investigation, surface water and sediment from water bodies surrounding the landfill were sampled in 2003.

The objective of the additional sampling and analysis program was to further understand the groundwater contamination and subsurface geology to better assess the potential environmental impacts of design modifications. In August 2008, NYC DEP submitted a Work Plan to New York State Department of Environmental Conservation (NYS DEC) that provided site-specific information and procedures applicable to the activities and analytical program. This information included the scope of sampling and analysis; definitions and goals for data quality and required types, and quantities of QA/QC samples; field documentation requirements; sample handling, custody, and shipping; instrument calibration and maintenance; auditing; data reduction, validation, and reporting; corrective action requirements; and QA reporting specific to the collection of samples and the analyses performed by CDM personnel and the personnel and laboratories subcontracted by CDM.

NYS DEC verbally approved the Work Plan on August 22, 2008. The sampling program was completed in general accordance with the approved Work Plan.

Perimeter Landfill Gas Monitoring

On August 28 and 29, 2008, thirteen (13) of eighteen (18) landfill gas-monitoring wells (GP-001 through GP-010 and GP-012, GP-013, and GP-0015) were sampled for the presence of landfill gas. Concentrations of methane (CH_4), carbon dioxide (CO_2), oxygen (O_2), were obtained using a Landtec GEM 500 Gas Analyzer. Hydrogen sulfide (H_2S) was analyzed using a MSA Solaris gas meter. Landfill gas monitoring wells GP-11, GP-14, GP-16, GP-17 and GP-18 could not be located in the field due to dense vegetative overgrowth.

The attached site plan (Figure 1) shows each monitoring location and Table 1 shows a summary of the perimeter gas monitoring results.

August 2008 Monitoring Summary

- Methane (CH_4) was detected at GP-001 at a level of 0.9 percent by volume (18 percent of the lower explosive limit (LEL)). This reading was thought to be erroneous due to the well being sprayed with wasp killer prior to sampling. The well was re-sampled the following day and methane was not detected.
- Methane was detected at GP-002 at a level of 0.1 percent by volume (2 percent LEL). Prior to sampling, readings of the ambient air showed a level of 0.1 percent methane; therefore this reading at GP-002 is considered to be zero and attributed to meter drift.
- Hydrogen sulfide (H_2S) was not detected in any monitoring well.
- Oxygen (O_2) and carbon dioxide (CO_2) were detected at various levels in the majority of wells sampled.

Discussion of Monitoring and Results

Results of the perimeter gas monitoring were consistent with that of an aging landfill. Landfill gas is produced as a byproduct of the biodegradation of organic matter in an anaerobic (without oxygen) environment. The primary gas byproducts are methane (CH_4) and carbon dioxide (CO_2) in equal parts along with other trace gases such as hydrogen sulfide (H_2S). As a landfill ages, the amount of available organic matter decreases and gas production decreases. In general, the gas production phase of a landfill spans approximately 30-years. The Brookfield landfill was closed in 1980, 28-years ago. As such, the gas production phase is nearing completion.

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The gas monitoring wells are located along the western (Richmond Ave), southern (Arthur Kill Road) and eastern perimeters of the landfill. The northern border abuts Richmond Creek. Methane is relatively insoluble in water, therefore, migration to the north, through Richmond creek is considered very unlikely.

The landfill gas monitoring wells had not been sampled in several years. Many of the well covers were rusted shut and needed to be forced open. Many well casings were filled with water and rodent or insect nests.

Due to the advanced age of the Brookfield Avenue Landfill and the decreasing rate of landfill gas generation, it was expected that little or no landfill gas would be present at the perimeter of the landfill. The likelihood of landfill gas migrating off-site is increasingly low.

Groundwater Monitoring

Groundwater monitoring was conducted between August 27, 2008 and September 2, 2008. Monitoring wells for sampling and analysis were specifically selected to; 1) to obtain a representative sample of the groundwater surrounding the landfill at varying depths; and 2) for general accessibility – the landfill is extremely overgrown and locating and accessing the wells was challenging. Figure 1 shows all Monitoring Locations.

Wells Sampled

On August 27, 2008 CDM and Test America Inc. representatives were on-site to conduct groundwater monitoring. Monitoring began at the cluster of four (4) wells near the main entrance on Brookfield Avenue. Monitoring wells MW-11A, 12D, 13D and 14D were sampled on the first day. These wells were all relatively deep; 110.7-feet, 161.6-feet, 76.8-feet, and 117.1-feet, respectively.

On August 28, 2008, monitoring wells MW-10S, 10M, 12M, 12S, 28S and 28D were sampled. The depths of these wells were relatively shallow at 9.9-feet, 31.45-feet, 22.70-feet, 9.05-feet, 19.87-feet and 45-feet, respectively.

On August 29, 2008, monitoring wells MW-20S, 20D, 3S, 3D, and 23-SUB were sampled. Depths of the wells were 16.55-feet, 31.65-feet, 68.45-feet, 145.90-feet and 103.22-feet, respectively.

On September 2, 2008, monitoring wells MW-26S and 27D were sampled. Depths of these wells were 54.43-feet and 43.75-feet, respectively.

Data Collected

Samples were collected by Test America under the observation of CDM personnel and sent to certified laboratories for analysis.

Table 2 shows Purge Information and Field Parameters measured in the field including, depth to bottom of well, pH, temperature, dissolved oxygen, etc.

Table 3 shows Semi-Volatile Organic Compounds via EPA Method 525.2.

Table 4 shows Nitrogen via EPA Method 351.2.

Table 5 shows Volatile Organic Compounds via EPA Method 524.2.

Table 6 shows Metals analysis for the RCRA 8 plus 4.

Table 7 shows Wet Chemistry analysis.

Table 8 shows Chlorinated Pesticides via EPA Method 508.

Data Quality Review

CDM conducted a data quality review to determine if the results are considered reasonable and usable for the evaluation of site conditions. In addition to the QA/QC criteria, all of the data were reviewed to determine if detection limits were sufficiently low relative to detection limits specified by the analytical method. The data review indicated that all of the reported data are likely to be usable, that is, no data appeared to be outside QA/QC criteria to the extent that rejection would be warranted. For example, no surrogate recoveries for organic compounds were less than 10%. For more data qualification, see attached memo from Ms. Pamela O. Lamie to Mr. Christopher Koehler dated October 31, 2008.

Data Comparison

Results from the 2008 monitoring round were also compared to results from the 1997 monitoring round. Table 9 shows a comparison of contaminants detected in 1997 and 2008.

Table 9 shows a Comparison of Metals Detected in 1997 and 2008 for the RCRA 8 plus 4.

Table 10 shows a Comparison of Wet Chemistry in 1997 and 2008.

Table 11 shows Comparison of Volatile Organic Compounds Detected in 1997 and 2008.

Table 12 shows a Comparison of Semi-Volatile Organic Compounds Detected in 1997 and 2008.

The attached Tables 9 through 12 present the 1997 and 2008 data compared side-by-side. The tables only show analytes detected. If an analyte was not detected, it is not shown. The detection limit in the first column applies to the 1997 analyses.

Some observations:

Metals – Overall there are only minor difference between the 1997 results (where available) and the 2008 results. Exceptions include GW-20S, where the 2008 results are markedly higher than 1997 (but still below class GA groundwater standards) and GW-3S, where 2008 results are markedly lower.

Wet Chemistry – In the OUI Remedial Investigation (RI), ammonia and alkalinity were used as two indicators of leachate. Based on the 1997 results, wells MW-10S and MW-10M were identified as being impacted by leachate. The latest sampling results indicate that ammonia levels in these two wells have declined, but still elevated over “clean” shallow groundwater. The remaining data does not show any significant differences when compared to the 1997 data.

Volatiles/Semi-Volatiles – Sporadic, low-level detections still persist in the 2008 sample results. Tetrahydrofuran was detected in MW-11A at 1,600 parts per billion (ppb). This analyte was not analyzed for in 1997. MW-10S and MW-10M show several low level hits of VOCs and semi-VOCs, which indicates they are still impacted by leachate, even though their wet chemistry results improved. MW-12S (SAC-20) was free of VOCs; previously it had low-level detections of toluene and chloroform.

Overall – CDM notes no dramatic change in the groundwater quality since the 1997 sampling event.

Sediment Sampling

On August 28, 2008, CDM representatives joined AquaSurvey Inc. representatives to sample sediment from two (2) wetland locations located within the perimeter of the Brookfield Avenue Landfill. At that time, the ponds were experiencing a low water level condition and AquaSurvey's equipment was unable to gain access to the ponds.

On September 19, 2008, CDM collected eleven (11) soil samples utilizing hand tools at the Brookfield Avenue Landfill's two wetland locations. See Figure2, Monitoring Locations. Laboratory tests were performed on select sediment/soil samples collected during the exploration program.

Field Exploration Program Conditions and Constraints

One main access path to Wetland #1 was cleared for sampling purposes. Wetland #2 was accessed through an existing clearing. The general sampling conditions and constraints are explained below:

Wetland #1: Four samples (BP-01 through BP-04) were collected along the perimeter of the wetland where less overgrown vegetation was present. Due to standing water and very soft ground, no samples could be collected from the interior of the wetland.

Wetland #2: A total of seven samples (SP-01 through SP-07) were collected. Six (6) samples were collected along the perimeter of the wetland, approximately 2 to 4 feet inside from the edge and one sample (SP-06) was collected close to the center of the pond.

The sediment samples were collected in Ziploc® bags, and the sampling depth varied from about 0 to 6 inches below the soil surface. Representative soil samples were sent to the geotechnical laboratory for laboratory testing. Figure 2 shows the approximate soil sampling locations.

Geotechnical Laboratory Testing

Eleven (11) grain size analyses and eleven (11) moisture contents were performed in accordance with ASTM D422 and ASTM D2216, respectively. In addition, ten (10) Atterberg Limit tests and six (6) organic content analyses were performed in accordance with ASTM D4318 and ASTM D2974, respectively.

Variation in Sediment/Soil Conditions

The interpretation of general sediment/soil conditions presented herein is based on sediment/soil and water conditions observed at the sampling locations. Sediment/soil conditions may vary at locations other than the locations of the field-sampling program.

Sediment/Soil Conditions

Wetland #1: The sediment at Wetland #1 (BP-01 through BP-04) consisted of black organic sandy material (muck). Geotechnical laboratory test data shows that the sediment consists of clayey sand and silty sand with a high organic content.

Wetland #2: The sediment at Wetland #2 varied from black organic sandy silt (SP-01, SP-02, SP-06, and SP-07) located at the entrance and south face of the wetland and brown silty sand (SP-03 through SP-05) located around the northern perimeter and center of the wetland. Geotechnical laboratory test data shows that the sediment varies from sandy elastic silt with high organic content (muck) to silty sand and sandy lean clay.

Sediment Discussion

CDM was able to develop design alternatives including lime stabilization and Portland cement stabilization using the information gathered from this sampling program. Stabilization of the wetland areas is the subject of a separate Technical Memo dated October 31, 2008.

Attachment

Technical Memo from Pamela Lamie to Christopher Koehler Oct. 31 2008.

Figures

Figure 1 - Monitoring Locations
Figure 2 - Approximate Soil Sampling Location Plan

Tables

Table 1 - Landfill Gas Monitoring.
Table 2 - Purge Information and Field Parameters.
Table 3 - Semi-Volatile Organic Compounds via EPA Method 525.2.
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Table 9 - Comparison of Metals Detected in 1997 and 2008 for the RCRA 8 plus 4.
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Technical Memorandum

To: Christopher Koehler

From: Pamela Lamie

Date: October 31, 2008

Subject: Brookfield Landfill Data Quality Review

Four Brookfield Landfill laboratory analytical data packages prepared by Test America (Y735, Y786, Y844, and Y938) were reviewed for data quality. This data quality review was conducted to determine if the data are considered reasonable and usable for the evaluation of site conditions. The following quality assurance/quality control (QA/QC) criteria were reviewed for each analytical parameter group:

- Volatile organic compounds (VOCs) - holding times, internal standards, surrogates, method blanks, blank spike/blank spike duplicates
- Semi-volatile organic compounds (SVOCs) - holding times, surrogates, method blanks, laboratory control samples (LCS)
- Pesticides - holding times, initial and continuing calibration, surrogates, method blanks, LCS
- Metals - holding times, method blanks, matrix spikes (MS), laboratory duplicates, LCS
- General chemistry parameters - holding times, method blanks, MS/matrix spike duplicates, laboratory duplicates, LCS

In addition to the QA/QC criteria listed above, all of the data were reviewed to determine if detection limits were sufficiently low relative to detection limits specified by the analytical method.

The data review indicated that all of the reported data are likely to be usable, that is, no data appeared to be outside QA/QC criteria to the extent that rejection would be warranted. For example, no surrogate recoveries for organic compounds were less than 10%. In addition, a review of detection limits indicated that they are sufficiently low.

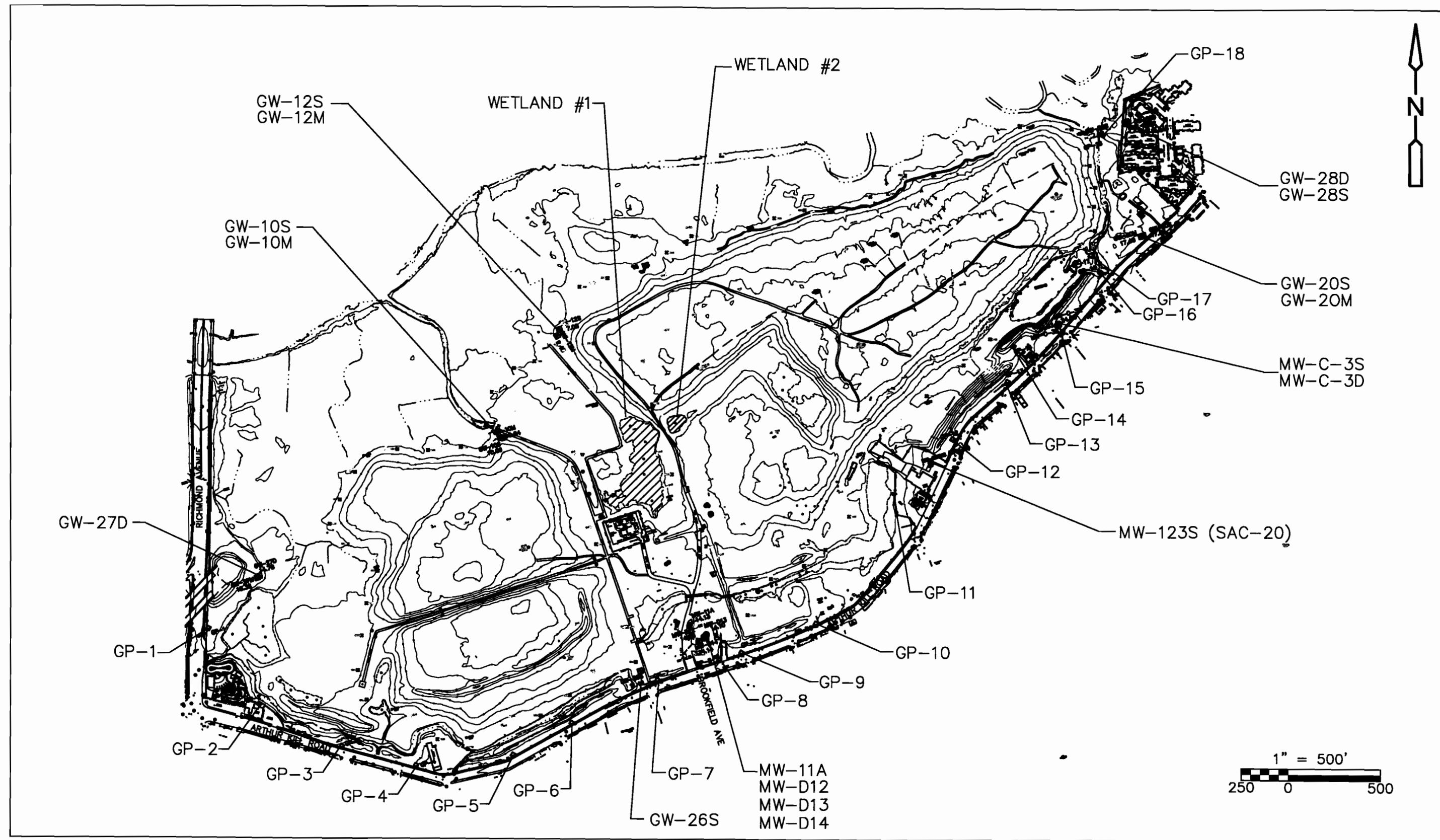
In general, the data review indicated that one or more pesticides results would require qualification in each of the four data packages due to one out of two surrogate spike recoveries below acceptance criteria. Both detected concentrations and nondetected pesticide

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results would be considered biased low. SVOC results had surrogate spike recoveries that were above and below acceptance criteria in data package Y844. These results would also be qualified as estimated, with some results biased high and other results biased low.

It should be noted that formal data validation has not been completed for these packages. While some qualification of the data would be required, as would be expected with any formal data validation process, qualification would be minimal relative to the quantity of data reported overall. Data qualification would indicate that some of the data should be considered estimated, likely biased either high or low, but overall, the data are in conformance with laboratory method requirements.

Overall, the Brookfield Landfill analytical data are of sufficient quality to be considered reasonable and usable in the assessment of environmental conditions at the site.



BROOKFIELD AVENUE LANDFILL

DESIGN EVALUATION STUDY

OCTOBER 2008

FIGURE 1

MONITORING LOCATIONS

AUGUST/SEPTEMBER 2008



CDM

APPROXIMATE SOIL SAMPLING LOCATION PLAN

Field Exploration Program
Brookfield Ave. Landfill, Staten Island, New York

FIGURE 2

9/19/2008

TABLE 1
BROOKFIELD AVENUE LANDFILL
STATEN ISLAND, NEW YORK
LANDFILL GAS MONITORING

AUGUST 2008

Gas Well No.	Type	Date	CH ₄ (%)		%LEL		CO ₂ (%)		O ₂ (%)		H ₂ S (ppm)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
GP-001	WELL	09/28/08	0.9	0.1	18.0	2.0	1.8	1.9	18.6	18.6	0.0	0.0
GP-001*	WELL	09/29/08	0.0	0.0	0.0	0.0	1.4	1.6	19.1	18.9	0.0	0.0
GP-002	WELL	09/28/08	0.1	0.0	2.0	0.0	0.0	4.8	19.8	16.1	0.0	0.0
GP-003	WELL	09/29/08	0.0	0.0	0.0	0.0	5.5	5.8	14.9	14.3	0.0	0.0
GP-004	WELL	09/29/08	0.0	0.0	0.0	0.0	2.5	3.0	18.2	17.6	0.0	0.0
GP-005	WELL	09/29/08	0.0	0.0	0.0	0.0	0.0	0.0	19.5	19.6	0.0	0.0
GP-006	WELL	09/29/08	0.0	0.0	0.0	0.0	0.4	1.0	19.7	19.2	0.0	0.0
GP-007	WELL	09/29/08	0.0	0.0	0.0	0.0	2.9	3.6	17.5	16.9	0.0	0.0
GP-008	WELL	09/28/08	0.0	0.0	0.0	0.0	0.8	0.8	19.1	18.8	0.0	0.0
GP-009	WELL	09/28/08	0.0	0.0	0.0	0.0	0.2	1.2	20.3	19.6	0.0	0.0
GP-010	WELL	09/28/08	0.0	0.0	0.0	0.0	6.4	9.2	14.7	12.0	0.0	0.0
GP-011	WELL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GP-012	WELL	09/28/08	0.0	0.0	0.0	0.0	4.9	7.2	11.1	5.4	0.0	0.0
GP-013	WELL	09/28/08	0.0	0.0	0.0	0.0	0.0	0.0	20.6	20.9	0.0	0.0
GP-014	WELL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GP-015	WELL	09/28/08	0.0	0.0	0.0	0.0	2.3	4.2	17.8	16.0	0.0	0.0
GP-016	WELL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GP-017	WELL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GP-018	WELL	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
AMBIENT READINGS		08/28/08	0.1	--	2.0	0.0	0.0	0.0	20.0	--	0.0	0.0
		08/29/08	0.0	--	0.0	0.0	0.0	0.0	20.0	--	0.0	0.0

Notes:

1. Wells and probes were purged for approximately 2 minutes before final readings were recorded.
2. Methane measured with a GEM-500 and MSA Solaris combustible gas indicators.

NS - Not sampled

* Well GP-001 was resampled after allowing 24-hours for insecticide used previous day to dissipate.

Table 3
Brookfield Avenue Landfill
Staten Island, New York
Semi-Volatile Organics, EPA Method 525.2

August - September 2008

Sample ID	MW-11A	D12	D14	D13	FB062706	GW-108	GW-10M	GW-12M	GW-12S	GW-26S	GW-26D	FB062808	GW-20S	GW-20S-DUP	GW-20M	MW-C-3M	MW-C-3D	MW-C-3D-DUP	FB062906	Field Blank	MW-121S (SAC-30)	MW-121S DUP (SAC-30)	GW-26S	GW-27D
Lab Sample Number	880-39967-1	880-39967-2	880-39967-3	880-39967-4	880-39967-5	880-40054-1	880-40054-2	880-40054-3	880-40054-4	880-40054-5	880-40054-6	880-40054-7	880-40054-8	880-40054-9	880-40054-10	880-40054-11	880-40054-12	880-40054-13	880-40054-14	880-40054-15	880-40054-16	880-40054-17	880-40054-18	880-40054-19
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Dilution Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
GC/MS Semi VOA - 525.2																								
Acephenanthrene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acephenanthrylene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acetochlor	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.53 U	0.48 U	0.48 U	0.51 U	0.50 U	0.49 U	0.49 U	0.53 U	0.48 U	0.52 U	0.50 U	0.49 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U
Alachlor	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Anthracene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.14 J	0.19 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U
Atrazine	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzofluoranthene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzofluoranthene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzofluoranthene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Benzofluoranthene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bis(2-ethylhexyl) phthalate	2.1 U	0.87 J	5.0	1.5 J	2.1 U	1.9 U	0.55 J	0.58 J	2.0 U	1.2 J	1.1 J	0.85 J	1.8 J	1.9 U	2.1 U	0.90 J	1.8 J	2.1 U	2.0 U	2.8 U	2.8 U	2.7 U	4.8 J	1.2 J
Bromacil	0.51 U	0.51 U	0.52 U	0.52 U	0.53 U	0.48 U	0.48 U	0.51 U	0.50 U	0.49 U	0.49 U	0.53 U	0.48 U	0.52 U	0.50 U	0.49 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Butachlor	0.51 U	0.51 U	0.52 U	0.52 U	0.53 U	0.48 U	0.48 U	0.51 U	0.50 U	0.49 U	0.49 U	0.53 U	0.48 U	0.52 U	0.50 U	0.49 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Butylate	0.77 U	0.77 U	0.77 U	0.77 U	0.79 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Butyl benzyl phthalate	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.72 U	0.72 U	0.78 U	0.75 U	0.73 U	0.73 U	0.79 U	0.73 U	0.8 U	0.77 U	0.75 U	0.73 U	0.8 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Chlorobenzene	0.51 U	0.51 U	0.52 U	0.52 U	0.53 U	0.48 U	0.48 U	0.51 U	0.50 U	0.49 U	0.49 U	0.53 U	0.48 U	0.52 U	0.50 U	0.49 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Chlorobenzene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chlorobenzene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chlorobenzene	0.51 U	0.51 U	0.52 U	0.52 U	0.53 U	0.48 U	0.48 U	0.51 U	0.50 U	0.49 U	0.49 U	0.53 U	0.48 U	0.52 U	0.50 U	0.49 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Chrysene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
cis-Permethrin	0.51 U	0.51 U	0.52 U	0.52 U	0.53 U	0.48 U	0.48 U	0.51 U	0.50 U	0.49 U	0.49 U	0.53 U	0.48 U	0.52 U	0.50 U	0.49 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Cyfluthrin	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Decalin	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dibenz(a,h)anthracene	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dichlorvos	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Di(2-ethylhexyl)adipate	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Diethyl phthalate	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Dimethyl phthalate	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Di-n-butyl phthalate	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Dieldrin																								
2,4-Dinitrochlorobenzene	0.77 U	0.77 U	0.77 U	0.77 U	0.79 U	0.72 U	0.72 U	0.72 U	0.76 U	0.75 U	0.73 U	0.73 U	0.79 U	0.73 U	0.73 U	0.75 U	0.73 U	0.73 U	0.79 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2,6-Dinitrochlorobenzene	0.77 U	0.77 U	0.77 U	0.77 U	0.79 U	0.72 U	0.72 U	0.72 U	0.76 U	0.75 U	0.73 U	0.73 U	0.79 U	0.73 U	0.73 U	0.75 U	0.73 U	0.73 U	0.79 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
Diphenamid	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U	0.19 U	0.21 U	0.20 U	0.21 U	0.20 U	0.19 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
EPTC	0.21 U	0.20 U	0.21 U	0.21 U																				

Table 4
Brookfield Avenue Landfill
Staten Island, New York
Nitrogen, EPA Method 351.2

August - September 2008

Sample ID	MW-11A	D12	D14	D13	FB082708	FIELD BLANK	GW-10S	GW-10M	GW-12M	GW-12S	GW-28S	GW-28D	FB082808	GW-20S	GW-20M	MW-C-3M	MW-C-3D	FB082908	MW-123S (SAC-20)	MW-123S DUP (SAC-20)	GW-26S	GW-27D
Lab Sample Number	220-6328-1	220-6328-2	220-6328-3	220-6328-4	220-6328-5	220-6383-1	220-6373-1	220-6373-2	220-6373-3	220-6373-4	220-6373-5	220-6373-6	220-6373-7	220-6374-1	220-6374-2	220-6374-3	220-6374-4	220-6374-5	220-6383-2	220-6383-3	220-6383-4	220-6383-5
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Dilution Factor	1	1	1	1	1	1	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Units																						
General Chemistry	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Nitrogen, Kjeldahl - mg/L	1.1	0.50 U	0.50 U	0.17 J	0.13 J	0.50 U	65.70	17.70	4.90	5.00	0.39 J	0.14 J	0.50 U	1.90 J	0.75 J	0.14 U	0.50 U	0.50 U	0.31 J	0.50 U	3.4	0.14 J

QUALIFIERS

General Chemistry

- J: Sample result is greater than the MDL but below the CRDL
N: Spiked sample recovery is not within control limits.
U: Indicates analyzed for but not detected.

Table 5
Brookfield Avenue Landfill
Staten Island, New York
Volatile Organic Compounds, EPA Method 524.2
August - September 2008

Sample ID	Detection Limit	MW-11A	D12	D14	D13	FB02708	TB	GW-10S	GW-10M	GW-12M	GW-12S	GW-20S	GW-20M	FB02808	TB	GW-20S	GW-20M	MW-C-3M	MW-C-3D	FB02908	TB	Tip Blank	Field Blank	MW-123S (SAC-20)	MW-123S-DUP (SAC-20)	GW-26S	GW-27D	
Lab Sample No.		946267	946268	946269	946270	946271	946272	946546	946549	946550	946551	946552	946553	946554	946555	947112	947113	947114	947115	947116	947117	947183	947764	947765	947766	947767	947768	
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
Dilution Factor		100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Dichlorodifluoromethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chloromethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Vinyl Chloride	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromomethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chloroethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Trichlorofluoromethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1-Dichloroethene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Methylene Chloride	0.5	50	U	0.5	U	0.5	U	3.7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	0.5	U	0.5	U	0.5	U	0.5	U	
trans-1,2-Dichloroethene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1-Dichloroethane	0.5	50	U	0.5	U	1.6	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
cis-1,2-Dichloroethene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
2,2-Dichloropropane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromodichloromethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chloroform	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,1-Trichloroethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1-Dichloropropene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Carbon Tetrachloride	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Benzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.9	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Trichloroethene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dichloropropane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromomethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromodichloromethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
cis-1,3-Dichloropropene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Toluene	0.5	50	U	0.5	U	1.3	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
trans-1,3-Dichloropropene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,2-Trichloroethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Tetrachloroethene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,3-Dichloropropane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Dibromodichloromethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dibromobenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Chlorobenzene	0.5	50	U	0.5	U	3.1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,1,2-Tetrachloroethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Ethylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Xylene (Total)	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Xylene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Styrene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Benzofuran	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Isopropylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,1,2,2-Tetrachloroethane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
Bromobenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2,3-Trichloropropane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
n-Propylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
2-Chlorobutane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,3,5-Trimethylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
4-Chlorobutane	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
tert-Butylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2,4-Trimethylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
sec-Butylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
m-Dichlorobenzene	0.5	50	U	0.5	U	4.6	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
4-Dichlorobenzene	0.5	50	U	0.5	U	4.3	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
p-Dichlorobenzene	0.5	50	U	0.5	U	4.3	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
n-Butylbenzene	0.5	50	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
o-Dichlorobenzene	0.5	50	U	0.5	U	11	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dibromo-3-Chloropropane	1	100	U	1	U																							

Table 6
Brookfield Avenue Landfill
Staten Island, New York
Metals via EPA Method 524.2

August - September 2008

Sample ID	Detection Lmt	MW-11A		D12		D14		D13		FB082708		GW-10S		GW-10M		GW-12M		GW-12S		GW-28S		GW-28D		FB082808		GW-20S		GW-20M		MW-C-3M		MW-C-3D		FB082908		Field_Blank		MW-123S (SAC-20)		MW-123S-DUP (SAC-20)		GW-26S		GW-27D			
Lab Sample No.		946267		946268		946269		946270		946271		946548		946549		946550		946551		946552		946553		946554		947112		947113		947114		947115		947116		947784		947785		947786		947767		947768			
Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER			
Dilution Factor																																															
Units		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Arsenic	0.097	0.45	B	0.214	B	2.86		0.578	B	0.184	B	1.20	B	2.07	B	7.74		1.52	B	1.24	B	2.27	B	0.128	B	5.64		1.46	B	1.54	B	0.356	B	0.13	B	0.106	B	2.08	B	2.99		1.42	B	0.296	B		
Barium	0.120	332		32.1		539		332		0.194	B	455		439		69		289		219		194		0.212	B	268		453		88.5		39.4		0.12	U	0.12	U	155		150		522		1020			
Cadmium	0.135	0.193	B	0.138	B	0.148	B	0.828	B	0.135	U	0.135	U	0.209	B	0.453	B	0.135	U	0.135	U	0.146	B	0.135	U	0.548	B	0.135	U	0.135	U	0.135	U	0.135	U	0.135	U	0.135	U	0.135	U	0.135	U	0.135	U	0.135	U
Chromium	0.102	1.1	B	0.434	B	1.14	B	1.44	B	0.246	B	3.30	B	2.49	B	2.06	B	1.43	B	0.326	B	2.3	B	0.104	B	34.3		0.642	B	1.21	B	2.14	B	0.102	U	0.337	B	2.58	B	2.65	B	3.87	B	0.214	B		
Copper	0.065	4.28	B	2.51	B	14.8		5.15		0.899	B	1.66	B	17.4		20.1		1.64	B	1.87	B	18.8		0.314	B	64.2		2.24	B	1.49	B	3.59	B	0.874	B	1.54	B	5.93		6.59		4.51	B	1.01	B		
Iron	12.7	182		1060		4050		1740		12.7	U	16000		4170		8580		4260		9310		2800		12.7	U	56100		453		376		4400		12.7	U	12.7	U	510		522		1370		12.7	U		
Lead	0.026	4.86		1.08	B	2.83		2.3		0.058	B	1.6		0.622	B	1.41	B	0.15	B	0.1	B	1.56		0.036	B	19.7		0.448	B	0.294	B	4.3		0.026	B	0.03	B	3.62		4.76		3.48		0.032	B		
Manganese	0.223	4.94	B	31.1		1110		149		0.26	B	186		156		2230		1190		6800		3880		0.348	B	1700		2400		82.3		277		0.223	U	0.223	U	253		259		318		2850			
Mercury	0.100	0.142	B	0.1	U	0.107	B	0.1	U	0.101	B	0.1	U	0.131	B	0.116	B	0.1	U	0.116	B	0.1	U	0.117	B	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Selenium	0.100	0.12	B	0.1	U	0.1	U	0.158	B	0.1	U	0.265	B	0.756	B	0.438	B	0.279	B	0.1	U	0.131	B	0.1	U	6.59		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	1.27	B	1.69	B	0.102	B	0.1	U
Silver	0.034	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.186	B	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U
Zinc	0.947	9.75	B	20.1		28.5		11.3	B	1.84	B	7.76	B	27.5		88.5		5.06	B	7.19	B	54.2		8.86	B	292		37.5		4.34	B	14.7	B	3.43	B	2.97	B	14.3	B	14.7	B	10.6	B	6	B		

NR - Not analyzed.
U - The compound was not detected at the indicated concentration.
B - Reported value is less than the Reporting Limit but greater than the Instrument Detection Limit.
N - The spiked sample recovery is not within control limits.

Table 7
Brookfield Avenue Landfill
Staten Island, New York
Wet Chemistry Study

August - September 2008

Sample ID	MW-11A		D12		D14		D13		FB082708		GW-10S		GW-10M		GW-12M		GW-12S		GW-28S		GW-28D		FB082808		GW-20S		GW-20M		MW-C-3M		MW-C-3D		FB082908		Field_Blank		MW-123S (SAC-20)		MW-123S DUP (SAC-20)		GW-26S		GW-27D	
Lab Sample No.	946267		946268		946269		946270		946271		946548		946549		946550		946551		946552		946553		946554		947112		947113		947114		947115		947116		947764		947765		947766		947767		947768	
Matrix	WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Dilution Factor																																												
WET CHEMISTRY																																												
Alkalinity (mg/l)	1780		17.2		295		443		5	U	1210		512		644		446		555		330		5	U	191		267		24.4		28.8		5	U	5	U	243		248		1180		116	
Ammonia as Nitrogen (mg/l)	0.15		0.1	U	0.1	U	0.14		0.1	U	84.1		6.5		6.5		1.7		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	1.6		0.21	
COD (mg/l)	12		10	U	10	U	12		10	U	181		183		591		523		82.1		20.3		10	U	704		18.2		10	U	10	U	10	U	10	U	22.4		16.2		246		175	
Chloride (mg/l)	10.1		9.8		63.7		49.2		5	U	513		664		8830		7920		1050		159		5	U	10.9		234		66.1		5	U	5	U	5	U	33		33		121		615	
Nitrate as Nitrogen (mg/l)	0.5		0.48		0.1	U	0.1	U	0.1	U	1.2		47.4		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrite as Nitrogen (mg/l)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.16		0.74		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (mg/l)	5	U	9.8		48.7		8.9		5	U	5	U	457		1020		1010		157		83.5		5	U	24.3		17.8		43.2		16.9		5	U	5	U	70.8		71.5		5	U	5	U
Total Dissolved Solids (mg/l)	2200		76		606		540		10	U	2130		2970		18500		16900		2800		822		10	U	259		436		243		50		10	U	10	U	495		547		1390		1740	

NR - Not analyzed.
U - The compound was not detected at the indicated concentration.
0 - Non-Ignitable.
1 - Ignitable.

Table 8
Brookfield Avenue Landfill
Staten Island, New York
Chlorinated Pesticides, EPA Method 508

August - September 2008

Sample ID	MW-11A	D12	D14	D13	FB082708	GW-10S	GW-10M	GW-12M	GW-12S	GW-28S	GW-28D	FB082808	GW-20S	GW-20M	MW-C-3M	MW-C-3D	FB082908	Field Blank	MW-123S (SAC-20)	MW-123S DUP (SAC-20)	GW-26S	GW-27D
Lab Sample Number	680-39967-1	680-39967-2	680-39967-3	680-39967-4	680-39967-5	680-40054-1	680-40054-2	680-40054-3	680-40054-4	680-40054-5	680-40054-6	680-40054-7	680-40054-8	680-40054-9	680-40054-10	680-40054-11	680-40054-12	680-40092-1	680-40092-2	680-40092-3	680-40092-4	680-40092-5
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Dilution Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
GC Semi VOA - 508																						
Aldrin	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
alpha-BHC	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
beta-BHC	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Chlordane (technical)	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.26 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4,4'-DDD	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDE	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDT	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
delta-BHC	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Dieldrin	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan I	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Endosulfan II	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan sulfate	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin aldehyde	0.048 U	0.049 U	0.048 U	0.048 U	0.049 U	0.047 U	0.047 U	0.047 U	0.049 U	0.049 U	0.049 U	0.052 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
gamma-BHC (Lindane)	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Heptachlor	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Heptachlor epoxide	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.026 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Methoxychlor	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.26 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Mirex	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.26 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Toxaphene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U

QUALIFIERS

GC Semi VOA

- J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
X: Surrogate exceeds the control limits

GC/MS Semi VOA

- *: LCS or LCSD exceeds the control limits
E: Result exceeded calibration range, secondary dilution required.
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
X: Surrogate exceeds the control limits

Table 9
Brookfield Avenue Landfill
Staten Island, New York
Comparison of Metals Detected in 1997 and 2008

August - September 2008

Sample ID	Detection Lmt	MW-11A		D12		D14		D13		GW-10S		GW-10M		GW-12M		GW-12S		GW-28M		GW-28D		GW-20S		GW-20M		MW-C-3S		MW-C-3D		MW-123 (SAC-20)		GW-26S		GW-27D	
		May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08
Arsenic	0.097	NA	0.45	NA	0.214	NA	2.86	NA	0.578	1.20		2.07		7.74		1.52		1.24		2.27		5.64		1.46		1.54	NA	0.356	NA	2.08		1.42		0.296	
Barium	0.120	NA	332	NA	32.1	NA	539	NA	332	384	455	196	439	56.5	69	115	289	153J	219	205J	194	70.4	268	391	453	197	88.5	NA	39.4	NA	155	138	522	1373J	1020
Cadmium	0.135	NA	0.193	NA	0.138	NA	0.148	NA	0.828			0.209		0.453						0.146		0.548					NA	NA	NA						
Chromium	0.102	NA	1.1	NA	0.434	NA	1.14	NA	1.44	3.30		2.49		2.06		1.43		0.326		2.3		34.3	15.1	0.642		1.21	NA	2.14	NA	2.58		3.87		0.214	
Copper	0.065	NA	4.28	NA	2.51	NA	14.8	NA	5.15	1.66		17.4		20.1		1.64	7.7	1.87	14	18.8	8.4	64.2	16.8	2.24	22	1.49	NA	3.59	NA	5.93	14.1	4.51	9.2	1.01	
Iron	12.7	NA	182	NA	1060	NA	4050	NA	1740	16300J	16000	13900J	4170	14200J	8580	254J	4260	8100J	9310	3300J	2800	215	56100	3640	453	8220J	376	NA	4400	NA	510	526J	1370	754.00J	
Lead	0.026	NA	4.86	NA	1.08	NA	2.83	NA	2.3	1.6	3.3J	0.622	1.10J	1.41		0.15	14.3	0.1		1.56		19.7	11.4	0.448		0.294	NA	4.3	NA	3.62	1.8	3.48	7.2	0.032	
Manganese	0.223	NA	4.94	NA	31.1	NA	1110	NA	149	209J	186	826J	156	2410J	2230	553J	1190	3220	6800	2180	3880	16.1	1700	2080	2400	1140	82.3	NA	277	NA	253	168J	318	1100	2850
Mercury	0.100	NA	0.142	NA		NA	0.107	NA				0.131		0.116		2.80J	0.279	1.40J		0.131		1.9	6.59				NA		NA	1.27		0.102			
Selenium	0.100	NA	0.12	NA		NA		NA	0.158	0.265		0.756	2.60J	0.438								2.90J	0.186				NA		NA						
Silver	0.034	NA		NA		NA		NA			2.90J										1.40J	0.131	1.9	6.59			NA		NA						
Zinc	0.947	NA	9.75	NA	20.1	NA	28.5	NA	11.3	16.8	7.76	7	27.5	8.8	88.5	8.1	5.06	22.4	7.19	32.3	54.2	17.6	292	63.9	37.5	46.7	4.34	NA	14.7	NA	14.3	41.2	10.6	20.5	6

Notes:
All units in micrograms per liter (parts per billion)
- Indicates results below detection limits
J - Indicates the analytical is an estimated concentration between the Method Detection Limit and the Reporting Limit
NA - Data not available

Table 10
Brookfield Avenue Landfill
Staten Island, New York
Comparison of Wet Chemistry in 1997 and 2008

August - September 2008

Sample ID	MW-11A		D12		D14		D13		GW-10S		GW-10M		GW-12M		GW-12S		GW-28M		GW-28D		GW-20S		GW-20M		MW-C-3S		MW-C-3D		MW-123S (SAC-20)		GW-26S		GW-27D	
	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08
Alkalinity (mg/l)	NA	1780	NA	17.2	NA	295	NA	443	1460	1210	1880	512	509	644	837	446	347	555	415	330	194	191	540	267	569	24.4	NA	28.8	NA	243	437	1180	125	116
Ammonia as Nitrogen (mg/l)	NA	0.15	NA				0.12	0.14	149	84.1	17	6.5	3.32	6.5	35.9	1.7	0.56		0.13		0.12				0.2		NA		0.19		0.7	1.6	0.22	0.21
COD (mg/l)	NA	12	11		NA		54	12	213	181	501	183	1002	591	447	523	29	82.1	34	20.3	46	704	39	18.2	30		NA		9	22.4	26	246	77	175
Chloride (mg/l)	NA	10.1	NA	9.8	NA	63.7	NA	49.2	798	513	4470	664	9730	8830	6120	7920	64.7	1050	442	159	75.4	10.9	269	234	52.5	66.1	NA		NA	33	75.4	121	892	615
Nitrate as Nitrogen (mg/l)	NA	0.5	NA	0.48	NA		NA			1.2		47.4								3.62	2.2	0.22	0.41			0.12	NA	0.17	NA	0.74	0.12			
Nitrite as Nitrogen (mg/l)	NA		NA		NA		NA			0.16		0.74								0.1		0.02					NA		NA					
Sulfate (mg/l)	NA		NA	9.8	NA	48.7	NA	8.9		211	457	641	1020		188	1010	230	157	219	83.5	37.3	24.3	27.6	17.8	31.8	43.2	NA	16.9	NA	70.8	55.1		18.3	
Total Dissolved Solids (mg/l)	NA	2200	NA	76	NA	606	NA	540	2140	2130	8800	2970	18300	18500	8970	16900	482	2800	1138	822	259	259	804	436	668	243	NA	50	NA	495	527	1390	2010	1740
Nitrogen, Kjeldahl - mg/L	NA	1.1	NA		NA		NA	0.17J	127	65.70	32.40	17.70	5.28	4.90	35.60	5.00	0.25	0.39J	0.83	0.14J	0.86	1.90	0.72	0.75	1.58	0.14J	NA		NA	0.31J	1.84	3.4	0.68	0.14J

Notes:
- Indicates results below detection limits
J - Indicates the analytical is an estimated concentration between the Method Detection Limit and the Reporting Limit
NA - Data not available

Table 11
Brookfield Avenue Landfill
Staten Island, New York
Comparison of Volatile Organic Compounds Detected in 1997 and 2008

August - September 2008

Sample ID	Detection Lmt	MW-11A		D12		D14		D13		GW-10S		GW-10M		GW-12M		GW-12S		GW-28M		GW-28D		GW-20S		GW-20M		MW-C-3S		MW-C-3D		MW-123S (SAC-20)		GW-26S		GW-27D	
		May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08
Methylene Chloride	0.5	NA		5.00J		NA		4.20J														0.7						NA							
1,1-Dichloroethane	0.5	NA				NA	1.6		0.9																			NA							
Chloroform	0.5	NA				NA																						NA							
Benzene	0.5	NA				NA				5.3	0.9																	NA			31				
Bromodichloromethane	0.5	NA				NA																						NA							
Toluene	0.5	NA		1.70J		NA			1.3																			NA			2.0J				
Chlorobenzene	0.5	NA				NA		5.4	3.1	13	3																	NA			24				
m-Dichlorobenzene	0.5	NA				NA			4.6																			NA							
p-Dichlorobenzene	0.5	NA				NA			4.3		1																	NA							
o-Dichlorobenzene	0.5	NA				NA			11																			NA							
MTBE	0.5	NA				NA	1.5														0.9				0.5			NA							
Diethyl Ether	0.5	NA				NA					3		1.7				0.6		0.5									NA							
Acetone	2.5	NA				NA					14	10	8.8		5.3													NA					40		
Carbon Disulfide	0.5	NA				NA										22												NA							
2-Butanone	0.5	NA				NA																						NA							
Tetrahydrofuran	0.5	NA	1600			NA	1.1		1.5		2.6		1.4				0.7											NA					4		
4-Methyl-2-pentanone	0.5	NA				NA						0.60J																NA							

Notes:
All units in micrograms per liter (parts per billion)
- Indicates results below detection limits
J - Indicates the analytical is an estimated concentration between the Method Detection Limit and the Reporting Limit
NA - Data not available

Table 12
Brookfield Avenue Landfill
Staten Island, New York
Comparison of Semi-Volatile Organic Compounds

August - September 2008

Sample ID	MW-11A		D12		D14		D13		GW-10S		GW-10M		GW-12M		GW-12S		GW-28M		GW-28D		GW-20S		GW-20M		MW-C-3S		MW-C-3D		MW-123S (SAC-20)		GW-26S		GW-27D	
	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08	May-97	Aug-08		
Acenaphthene	NA		NA		NA		NA		1.00J	0.92																NA		NA						
Bis(2-ethylhexyl) phthalate	NA		NA		NA	5.0	NA										7.0J		2.0J							NA		NA	2.8			1.0J		
Butyl benzyl phthalate	NA		NA		NA		NA										1.0J		4.0J							NA		NA						
Di-n-butyl phthalate	NA		NA		NA		NA												1.0J							NA		NA						
Fluorene	NA		NA		NA		NA			0.46																NA		NA						
Phenanthrene	NA		NA		NA		NA			0.45																NA		NA						

Notes:
All units in micrograms per liter (parts per billion)
- Indicates results below detection limits
J - Indicates the analytical is an estimated concentration between the Method Detection Limit and the Reporting Limit
NA - Data not available
No Pesticides or PCBs were detected in 1997 or 2008