

**Pelham Bay Landfill
Maintenance, Repair and Monitoring Program
Annual Report
NYSDEC ID Number: 203001
Bronx County
New York City Department of Environmental Protection
March 2008 through February 2009**

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March 2009



ANNUAL REPORT SUBMITTAL

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Bronx, NY 10465

Owner: New York City Department of Environmental
Protection
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Management Approval:

The data contained in this annual report has been reviewed by the undersigned for content and accuracy.

Signature: Thomas Varley

Name: Thomas Varley

Title: Regional General Manager
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Professional Engineer Review:

I certify that I am familiar with the systems associated with the Pelham Bay Landfill and I have reviewed this annual report for content and accuracy. Based on the available data and information presented to me, I am in agreement with the contents of this report.

Barbara L. Stanton, P.E.
Name

Barbara L Stanton
Signature

Date: September 8, 2009

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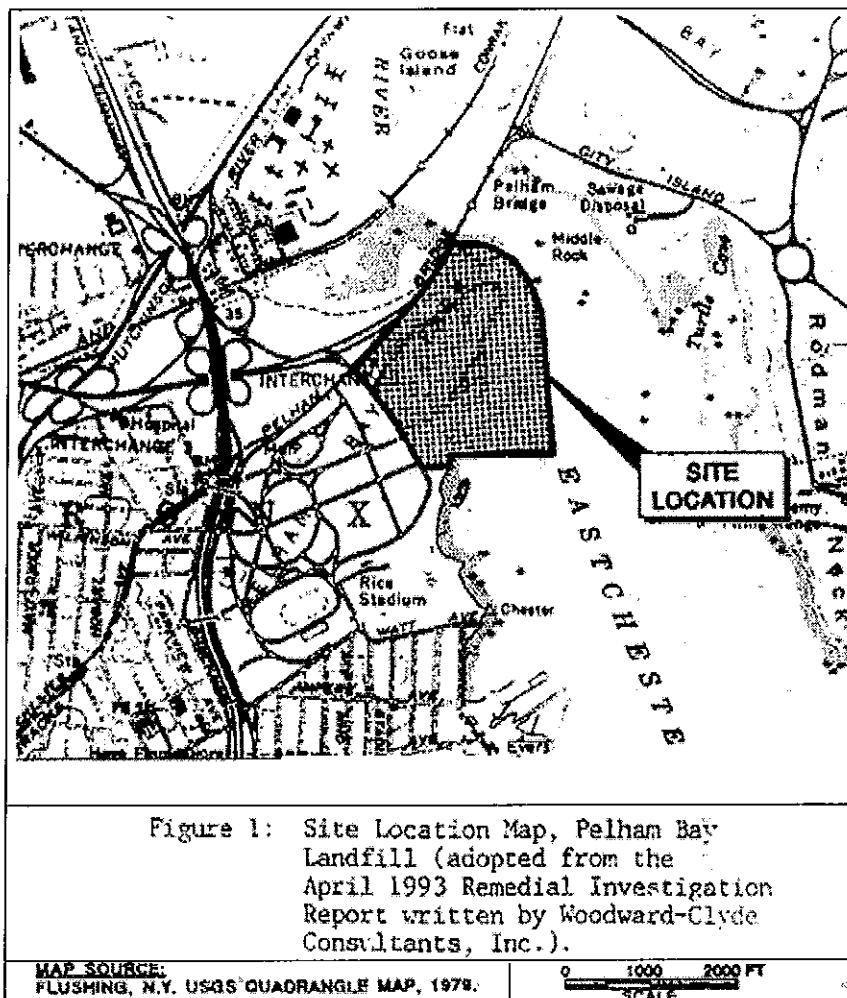
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I. INTRODUCTION

The Pelham Bay Landfill is an inactive 81-acre municipal waste landfill located in the Bronx, New York (see figure 1). The site is bordered by the Hutchinson River to the north and east, the Eastchester Bay to the east and south, the Pelham Bay Park to the southwest, and Bruckner Boulevard Extension to the northwest. The landfill has an elevation of 131 feet with steep slopes that rise to a nearly flat top. According to

records, typical wastes received at the site included: residential wastes, rubbish, street dirt, construction waste and demolition debris. The facility is currently operated and maintained by Severn Trent Environmental Services ("STES").

STES is required to perform routine inspections of the leachate and gas collection systems, inspection of the stormwater system and landfill cover, periodically sample and test groundwater, leachate, stormwater and gas condensate from various locations within the landfill. This annual report summarizes the site activities and the results from the monitoring performed during the period of March 2008 through February 2009.



II. SUMMARY OF MAJOR SYSTEMS

Provided below is an overview of the major system components and the repair actions and sampling activities performed during the reporting period.

a. Groundwater/Leachate Collection System

Description

The leachate collection and disposal system was designed for the removal of leachate from the landfill in order to protect the groundwater from contamination and limit discharges into the surrounding environment. Leachate is collected by a combination of a down gradient collector drain, collection manholes and collection sumps, curtain drain, lift stations, and storage tanks. Collected leachate stored in the holding tanks is drained to pump station D-1 which pumps through a force main to the Hunt's Point Water Pollution Control Plant (WPCP). The pumps in station D-1 are controlled by level float switches. Total flow is calculated based on recorded flow totalizer readings from the force main flow meter.

During heavy rains which may result in a combined sewer overflow (CSO) event, the leachate can be stored in the on-site storage tanks. There are five, twenty thousand gallon storage tanks which may be used for this purpose. The storage tanks are equipped with a truck filling station to allow for removal of leachate by tanker truck should the need arise.

Performance

During the reporting period covered by this Annual Report the groundwater/leachate collection system performed to the design intent. During this time period, the leachate collected by the various pump and lift stations and collection trenches was successfully transferred to the on-site storage tanks and pumped to the Hunts Point WPCP via pump station D-1.

During CSO events STES observed the proper operation of the automatic valve and associated controls. During CSO events leachate was stored in the on-site storage tanks. When CSO conditions subsided the automatic valve opened and stored leachate was transferred to D-1 and pumped to the Hunts Point WPCP.

The percent run time of the pumps in D-1 are provided in each Monthly Report. However, these percentages are not indicative of the percent operation of the system. The collection system consists of both gravity and pumped wet wells and trenches. Pump operation is controlled by pre-set float level switches in the wet wells that activate the pumps to turn on and off. For this annual reporting period the groundwater/leachate system operated continuously.

STES performs routine inspections of the leachate collections system. There are contract allowance items to address repairs if the need arises.

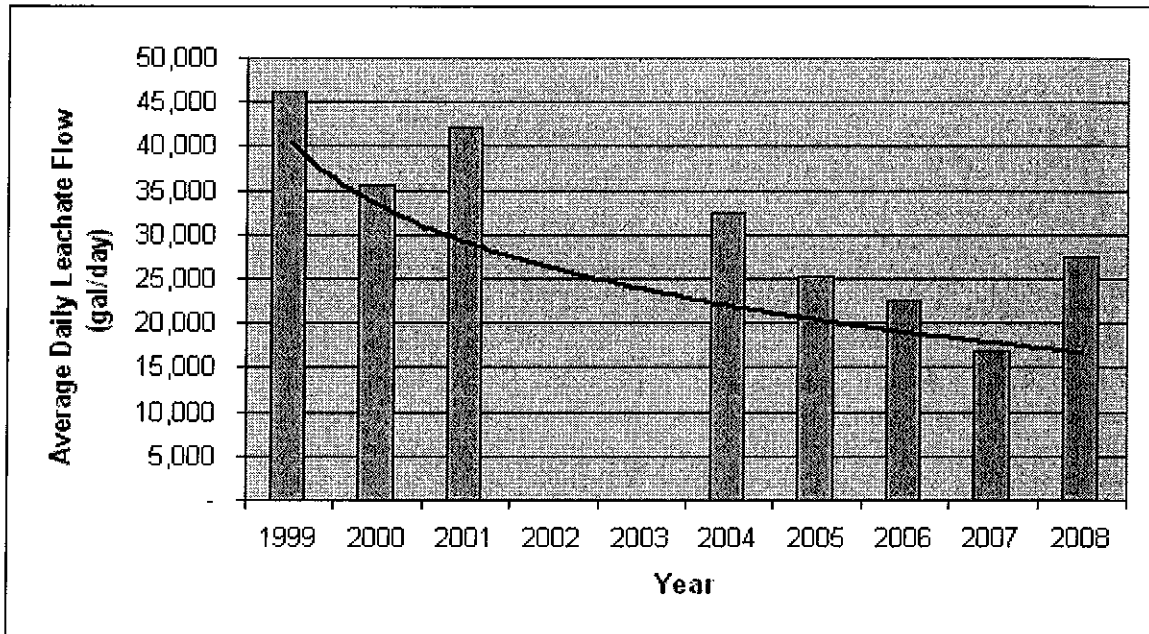
Table 1 provides a summary of the total estimated leachate pumped, monthly average daily flows, and monthly daily average minimum and maximum flows from station D-1 to the force main for the 12 month period of March 2008 through February 2009.

Table 1. Annual Groundwater/Leachate Flows

Date	Gallons Pumped	Gallons Trucked	Total Gallons Generated	Average Daily Gallons	Daily Minimum	Daily Maximum
Mar-08	818,800	0	818,800	26,413	14,433	70,000
Apr-08	658,700	0	658,700	20,743	11,700	40,000
May-08	958,633	0	958,633	30,924	18,500	50,767
Jun-08	484,867	0	484,867	16,162	11,000	29,700
Jul-08	328,400	0	328,400	10,594	7,200	25,400
Aug-08	388,725	0	388,725	12,540	4,700	30,500
Sep-08	703,175	0	703,175	23,439	7,300	55,233
Oct-08	1,160,833	0	1,160,833	37,446	15,900	79,800
Nov-08	1,315,067	0	1,315,067	43,836	32,500	56,000
Dec-08	1,855,850	0	1,855,850	59,866	43,300	142,300
Jan-09	1,396,017	0	1,396,017	45,033	22,700	68,900
Feb-09	1,246,900	0	1,246,900	44,532	37,800	51,100
Total Cumulative YTD Flow			11,315,967			

There is a downward trend in the daily average landfill leachate flows since the landfill was capped. Figure 2, Yearly Daily Average Leachate Flow, developed from available historical flow data, displays a graphical representation of this decreasing trend.

Figure 2
Yearly Average Daily Leachate Flow
Pelham Bay Landfill, Bronx, NY



Notes.

1. Averages are computed from available flow data over the calendar year (January through December)
2. 1999 data reflects the average between June and December 1999
3. 2002 and 2003 accurate flow data is unavailable

b. Landfill Gas System

Description

Landfill gas generated within the landfill is collected through twenty two (22) gas extraction wells, a gas venting layer at the surface of the landfill and a perimeter gas collection pipe around the base of the landfill. Extracted gas is conveyed via polyethylene piping to blowers and an enclosed flare system.

The gas flare system consists of two blowers and a burner management system. The burner management system includes a flame safeguard package, which monitors key parameters and shuts the unit down if an unsafe condition occurs. The key shut down interlocks are: high and low flare temperature, flame failure and low purge air flow (during purge cycle). The start-up sequence is; stack purge, pilot ignition, initiate waste gas flow, and louver adjustment to achieve set point operating temperature. The standard operating procedure for the system is in the automatic mode. In this mode the initial start-up sequence will automatically make three attempts to start the system before shutting down.

However, once the system has shutdown, all alarm conditions must be manually cleared prior to initiating the start-up sequence.

Performance

The landfill gas flare is designed to run continuously and has automatic safety shutdowns. During this reporting period the flare continued to operate as designed with periodic shutdowns. The safety shutdowns associated with the landfill gas flare are functional.

STES has recorded and reported a decrease in the methane concentration at the flare inlet which has affected the flare operation. As such, starting in July 2008, STES started a pulsed operation running the flare approximately 8 hours a day 5 days a week. This allowed the methane gas to recharge to concentration levels that allowed for efficient operation of the flare.

In September 2008, STES returned the flare system to continuous operation. Consequently, monthly gas extraction well monitoring results showed high temperature readings as well as the presence of oxygen in many of the wells. As a precaution, DEP and the site Construction Manager, ARCADIS directed STES to shut down the gas flare system on September 19th 2008. STES and ARCADIS began to systematically troubleshoot the gas flare system.

As part of the troubleshooting, STES personnel re-inspected all gas extraction well heads for possible vectors of oxygen entry into the closed LFG recovery system. As a precaution all of the extraction well head hoses were replaced, all monitoring valves were checked for seal tightness and, where needed some valves were replaced. Monitoring of the gas extraction wells and passive vent wells was increased from a monthly frequency to an as needed basis which was several times a week at times. Video logging of the gas extraction wells was performed, by ARCADIS under a separate contract.

Under the direction of the DEP and ARCADIS, STES personnel restarted the gas flare system on October 7th 2008. The system was operated in a pulsed mode, during the STES personnel on-site hours, approximately 8 hours a day Monday through Friday. The flare was operated in this mode until November 26th, 2008 when the combustion temperature could not stabilize. STES personnel detected deficiencies with the thermocouples/thermowells. Improved thermocouples with Monel thermowells were purchased, and installed by STES personnel on December 5th, 2008. The flare was restarted on December 8th, 2008 in a continuous 24 hour mode Monday through Friday, and shut down Friday afternoon through Monday morning. The shutdown allowed the methane gas concentrations to recharge in the extraction well influenced areas.

The flare was down on automatic shutdown between December 12 through 16, 2008, due to flooding in the gas condensate line. This was the result of a major

rain event Which resulted in a CSO and an automatic shutdown of the leachate collection pumping system. The leachate backed up through the collection system submerging the outlet to the gas condensate line located in wetwell D-2.

STES personnel have experienced difficulty with re-starting the flare after a shutdown, however, once re-started, the system continues to run.

The total Landfill Gas Flow for the 12 month period of March 2008 through February 2009 is provided in Table 2.

Table 2: Pelham Bay Landfill Total Landfill Gas Flow

Date	Avg Daily Flow (CF)	Daily Avg Minimum (CF)	Daily Avg Maximum (CF)	Total Gas Flow (CF)
Mar-08	751,290	0	1,907,200	23,290,000
Apr-08	1,442,630	0	2,022,500	43,278,900
May-08	1,343,555	387,000	1,781,800	41,650,200
Jun-09	959,113	0	1,662,100	28,773,400
Jul-08	439,161	0	1,597,400	13,614,000
Aug-08	266,570	0	571,800	8,263,675
Sep-08	777,451	0	1,563,600	23,323,525
Oct-08	473,958	0	1,952,100	14,692,700
Nov-08	314,333	0	796,400	9,430,000
Dec-08	736,347	0	1,924,900	22,826,750
Jan-09	953,555	0	2,236,000	29,560,217
Feb-09	641,474	0	1,670,700	17,961,267
Total Estimated Cumulative Gas Flow				276,664,634

c. Stormwater Management System

Stormwater runoff from the landfill surface is diverted through a series of swales, baffled outlets and drainage pipes and directed to one of three sedimentation ponds located around the landfill site. The ponds are connected in series, and are designed so that gravity flow empties one pond into the next via underground pipes. Effluent from the third sedimentation pond flows by gravity to an outfall located on the northeast side of the landfill. STES performs routine inspections of the stormwater management system. There are contract allowance items to

address maintenance issues if required. During this reporting period, the stormwater management system functioned as designed.

d. Landfill Cover & Auxiliary Systems

The Pelham Bay Landfill has well established cover vegetation over the landfill cap. STES performs a routine monthly inspection of the cover system for evidence of erosion, settlement or other signs of compromise to the cover. The inspection consists of visual observations of the following: side slopes, vegetation, underlying geosynthetic layer and soil components, and vandalism. Side slopes are observed for deficiencies such as surface cracks, settlement, erosion, sink holes, ponding or any other observation that could lead to unstable side slopes. The cover system is observed for any signs of sparse, stressed or undesirable vegetation and damage to the underlying geosynthetic layer.

The vegetation on the Pelham Bay landfill cover has been allowed to grow undisturbed for many years. As a result, the vegetation can reach over several feet high in some areas especially during the growing season. A thorough inspection of the landfill cover system is hampered by the dense vegetation. While the routine cover inspections will uncover major problems with the cover system, a more thorough inspection can be performed after the landfill is mowed.

During this monitoring period a program was implemented to mow only portions of the landfill each year. This enables the wildlife on the site to relocate from the mowed area to other areas of the landfill and allows a more detailed inspection of the newly mowed section of the landfill. This year 58 acres of the land fill was mowed. An inspection of the mowed areas did not uncover any major deficiencies.

The landfill roadways consist of an access road around the base perimeter of the landfill, leading to a road that continues to wind around the landfill ending at the top. The access roads have limited traffic, primarily STES pickup trucks and security personnel cars. The roads have developed ruts in various sections. STES personnel periodically fill the ruts and holes with crushed stone. Posts with reflectors are located along the curves in the roadways. During this reporting period the bent posts were straightened to vertical.

Security fences are located around the perimeter of the landfill, the MCC panel area, storage tank farm, and the gas extraction wells. All security fences are in good condition with the exception of the perimeter fence. Unauthorized personnel routinely cut access holes through the fence. Evidence shows that this is done to gain fishing access to the eastern bulkhead on Eastchester Bay. This is an ongoing issue and repairs to the fence are only short term. On several occasions the police department has issued summons to deter this activity.

III. ENVIRONMENTAL MONITORING

a. Landfill Gas Monitoring

Severn Trent performed the monthly gas extraction well monitoring as required by the Contract. The wells were monitored for percent methane, oxygen and carbon dioxide. The monitoring was performed using a Landtec GEM-500 landfill gas meter. During this reporting period, landfill gas characteristics have sporadically fluctuated. Gas concentrations at the flare inlet are just above the minimum methane concentrations to sustain continuous combustion. Table 3 includes the results from the monthly well head gas readings that were collected during the reporting period.

The gas extraction wells are vertical wells with a flexible hose connecting the well to the gas header. Periodically the flexible hose will deteriorate and will require replacement. These repairs are performed by STES personnel on an as needed basis. On wells with high oxygen readings and no break in hose or piping STES personnel made adjustments to the well valves to reduce the extraction rate. For wells where high oxygen concentrations persisted, the valves were closed and headspace monitoring was continued. If and or when the methane levels rise in those wells, the wells will be brought back on line. In September 2008 as part of the gas flare system repairs, all gas extraction wells were re-inspected by STES personnel and all flexible hoses were replaced.

Semi-annual monitoring of ten landfill surface spots and four gas monitoring wells was performed by STES personnel during this reporting period. Table 4A summarizes the results from the gas monitoring. As directed by the DEP and ARCADIS the sampling frequency was increased as part of the landfill gas systematic landfill gas troubleshooting effort. Table 4B provides a summary of the landfill surface gas monitoring. The methane concentrations in all locations were recorded as non-detect indicating there is no offsite migration of landfill gas.

b. Groundwater Monitoring

There are 15 groundwater monitoring wells located in the landfill, four monitoring wells located off-site and six piezometers. Ten of the groundwater monitoring wells are sampled semi-annually and analyzed for parameters designated as Schedule A, as summarized on Table 5A. Schedule A analysis includes Volatile Organics, Semi Volatile Organics, Pesticides, and Inorganic parameters. Groundwater monitoring well sampling was performed in May and November 2008.

The results from the groundwater monitoring are attached in Table 5B. A site map of the monitoring well locations is provided in Figure 2. Table 5B provides a

comparison of the analytical results with the NYSDEC Ambient Water Quality Standards and Guidance values. Concentrations detected over the standards are in bold and shaded.

Beginning in 2006, the NYCDEP contracted with ARCADIS Engineering to provide oversight and consulting services for the Pelham Bay Landfill. After their review of the site conditions and historical data it was determined that the effects of tidal influence were not included in the groundwater sampling protocol outlined in the OM&M manual, and the sampling protocol should be modified to provide more consistent results. The revised procedure for groundwater sampling addresses the tidal influence on the wells. Therefore, groundwater well sampling coincides with low or outgoing tide. The revised procedure was implemented for the monitoring performed by STES during this reporting period.

As the historical groundwater data from previous sampling events was collected without regard to tidal fluctuations the evaluation of trends in groundwater concentrations is inconclusive. A review of the analytical results since the implementation of the new sampling protocol beginning with the May 2006 sampling effort, indicate only a few parameters detected over the NYSDEC Ambient Water Quality standards. Only one well, MW-122 had VOC parameters detected above the ambient water quality standards for Benzene and Chlorobenzene.

c. Leachate Monitoring

The leachate capture system is designed to work by hydraulic gradient and includes a slurry wall on the southwest corner of the landfill. The slurry wall is designed to intercept landfill leachate flow and prevent it from migrating offsite. A collection trench located inside the slurry wall diverts any captured leachate to the on-site D-1 Pump Station which pumps to the NYCDEP Hunts Point WPCP. A similar trench on the offsite park side of the slurry wall collects any groundwater flow and prevents it from entering the site. The groundwater collection trench is diverted to a stormwater outfall

Groundwater elevations are used to monitor this system. The O&M Manual states a total of 15 on-site groundwater wells, four offsite monitoring wells located in the adjacent Pelham Bay Park, and six piezometers, which are designated for water elevation measurements. Historically, the groundwater elevations were collected without regard to tidal influence. In 2006 the procedure was modified to reflect tidal influences. The groundwater elevation measurements obtained by STES personnel were recorded at both low tide and high tide. Table 5C provides a summary of the groundwater elevation measurements. A review of the data during this monitoring period indicates that the collection trench is working as designed.

During this monitoring period groundwater elevation measurements were not collected from five of the designated locations. Three of the off site wells MW-117B, MW-124 and MW-124B can not be located and well numbers, MW-121, MW-126 have been abandoned.

Leachate quality is monitored semi-annually for Schedule A and Schedule B parameters. Samples are obtained from the D-1 Pump Station wet well. The Schedule B analysis includes conventional parameters and selected metals. The results from the leachate monitoring are attached in Tables 6 and 7.

d. Gas Condensate Monitoring

Gas condensate is generated at the landfill gas flare during the gas extraction process. The condensate flows by gravity via an underground pipe from the landfill gas flare to the D-2 manhole. The condensate combines with the D-2 flow and continues by gravity to the D-1 Pump Station where it is pumped to the Hunts Point WPCP.

Gas condensate sampling is not a requirement as stated in the Operations and Maintenance Manual, Section 5, Subsection 5.4.2. Gas condensate samples are obtained at the pipe connection in the D-2 manhole. Historically very small volumes of condensate have been generated which has hindered sample collection.

During this monitoring period one gas condensate sample was collected analyzed for TCLP. The results for the gas condensate monitoring are attached in Table 8.

e. Stormwater Monitoring

Stormwater discharge from the Sedimentation Pond is sampled semi-annually and analyzed for Schedule A parameters. The results from the Stormwater monitoring are attached in Table 9.

f. Industrial Wastewater Discharge Permit

The DEP issued an Industrial Wastewater Discharge Permit authorizing discharge from the Pelham Bay Landfill to the NYC sewer system. The permit was effective as of May 2007. The permit requires monthly sampling of the D-1 pump station wet well and quarterly reporting. The Self Monitoring Reports (SMR) are submitted to the NYCDEP in June, September, December and March each year. Tables 10A through 10D summarize the results of the analyses.

IV. MAINTENANCE AND REPAIRS

Maintenance activities during this monitoring period consisted of routine preventive maintenance and non-routine activities. Non-routine work includes tasks requested by the NYCDEP Project Manager and specific items identified in the contract specifications.

Preventative Maintenance

The routine preventive maintenance was performed by STES in conjunction with the scheduled inspections and as outlined in the O&M Manual. The preventative maintenance included but was not limited to site maintenance such as maintaining access to equipment, litter removal and snow removal. Preventative maintenance on the gas flare system and leachate pumping systems including maintaining in-service and spare pumps in working order, exercising all valves and maintaining the piping systems.

a. Non-Routine Tasks

Landfill Mowing

During the months of August through September 2008 landfill cover mowing was performed. A total of 54 acres of the cover was mowed. DEP personnel were on-site directing and monitoring the mowing operation.

Misc. Maintenance Repairs

Throughout the monitoring period, STES personnel repaired holes in the perimeter fence and filled in holes dug under the fence made by trespassers in order to gain access to the waterfront bulkhead. In January 2009, STES personnel also made repairs to the main entrance gate and top razor wire

During the 2008 and 2009 fall and winter season, STES personnel inspected and replaced sections of insulation around the tank farm pipe work

STES personnel replaced damaged manhole covers CP-2, CP-3 and CP-5, during the month of April 2008.

Landfill Gas System Repairs

STES personnel performed several repairs actions on the landfill gas system during the course of the reporting period. New gas flare flame scanner and amplifier were purchased and installed during the month of May 2008. In

November 2008, the gas flare thermocouples and thermowells had failed. New ones were purchased and installed. In September 2008, all of the gas extraction well flexible hoses were replaced. In January 2009 the waste inlet valve and actuator failed and required replacement.

Misc. Pump and Lift Station Repairs

STES personnel replaced Pump # 1 in Lift station # 1 and both pump #1 and Pump # 2 in Lift station #2.

b. Emergency Events

There were two storm related emergency events during the reporting period. During the month of June 2008, a windstorm brought down the power line to the offices trailers at the landfill. Emergency response and repair was performed by the STES electrical subcontractor. Temporary power was provided within 18 hours of the incident, with full repairs completed within 72 hours.

The second storm related emergency occurred during December of 2008, a major rainfall event resulted in a CSO and an automatic shutdown of the leachate collection pumping system. The leachate surcharged through the collection system submerging the outlet to the gas condensate line located in wetwell D-2. The condensate/leachate in the gas condensate line backed up to the inlet point at the gas flare. This flooded the blowers and shut down the flare system for several days. Once the CSO event was over the leachate collection system surcharge receded. The gas flare blowers were allowed to dry and were inspected by STES personnel prior to startup. To avoid future flooding of the blowers, STES personnel plan to shut down the flare prior to the onset of a major rain event.

V. SUMMARY

STES reviewed data collected from this reporting period and compared with past data and trends to determine the effectiveness of the remedial measures instituted as part of the closure plan for the Pelham Bay Landfill. Based upon our review, the evidence leads to the following conclusions:

- Groundwater level measurements on either side of the slurry wall demonstrate a hydraulic gradient towards the landfill suggesting leachate intercepted by the collection trench is contained within the landfill. Since leachate quantity has not increased, we believe the slurry wall is also effective at diverting groundwater from the adjacent Pelham Park from entering the landfill.

- Based on the results from the landfill gas monitoring wells and the surface gas monitoring there is no evidence of off-site methane gas migration.
- The results from the groundwater monitoring wells analyses do not indicate any significant increases in concentrations. In comparison of the groundwater analytical data to the PCBs, Pesticides, SVOCs and VOCs NYS Ambient Groundwater Quality Standards for Class GA Waters, there were several sporadic data points that exceeded the standards. In comparison of the groundwater analytical data to the Metals and Cyanide NYS Ambient Groundwater Quality Standards for Class GA Waters, there were several sporadic data points that exceeded the standards and in some wells the magnesium, iron and manganese levels exceeded standards.
- Throughout this reporting period, there have been several gas extraction wells that have had high oxygen levels, and it was assumed that these wells had been overdrawn. STES personnel would close the ball valve connection from these well to the main gas header to allow these wells to rebound. STES personnel continued to monitor these wells as part of the monthly LRG-2 inspection. Simultaneously, the gas flare was periodically shutting down on alarms conditions. As such, STES suspected that the volume of methane being generated by the landfill was less than the minimum required for continuous flare operation. To maintain a controlled flare operation, STES ran the flare in a pulsed mode and increased the frequency of gas monitoring well, landfill gas and gas extraction well monitoring. ARCADIS began an investigation into the cause of the decline in methane production. ARCADIS performed an evaluation of the gas flare and gas extraction well operation and construction the findings of which are included in a separate report.

Based upon our review, STES believes no changes are currently required to the remedial measures are necessary at this time. However this is an ongoing investigation into the viability of several of the gas extraction wells, this investigation may require some remedial action. The investigation is being performed by others under a separate contract to the NYCDEP.

Table 3

Gas Extraction Well Readings

Table 3
Gas Extraction Well Summary
Pelham Bay Landfill
Annual Report March 2008 through February 2009
Contract 1140-PEL

Date	3/18/2008	4/17/2008	5/27/2008	6/13/2008	7/29/2008	08/08/08	09/25/08	10/08/08	10/09/08	10/10/08	10/13/08	10/24/08
Flare Inlet												
CH ₄ %	30.7%	23.8%	22.9%	19.0%	25.4%	25.4%		37.6%	34.1%	30.8%	55.9%	55.9%
CO ₂ %	18.3%	17.5%	21.6%	19.6%	23.0%	20.2%		23.3%	23.0%	22.1%	21.8%	21.8%
O ₂ %	4.6%	5.0%	1.7%	3.6%	1.6%	1.3%		0.5%	1.1%	2.1%	0.8%	0.8%
Well Head No. 1												
CH ₄ %	13.2%	3.2%	3.8%	4.9%	1.5%	9.3%	18.8%	25.1%	21.3%	19.8%	21.3%	21.3%
CO ₂ %	8.0%	3.9%	11.8%	15.6%	3.3%	5.6%	17.7%	16.7%	16.8%	17.1%	15.9%	15.9%
O ₂ %	11.1%	18.0%	6.4%	3.2%	15.9%	12.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 2												
CH ₄ %	15.2%	5.9%	5.8%	4.3%	13.9%	14.3%	9.5%	21.0%	15.7%	14.8%	10.3%	10.3%
CO ₂ %	11.8%	11.1%	15.3%	15%	18%	17.3%	10.3%	16.9%	13.8%	16.2%	8.2%	8.2%
O ₂ %	6.9%	6.5%	2.2%	3.3%	0.7%	1.5%	7.0%	0.0%	0.0%	0.0%	7.6%	7.6%
Well Head No. 3												
CH ₄ %	5.1%	1.6%	10.5%	2.4%	9.0%	10.5%	47.3%	16.8%	12.6%	10.1%	19.3%	19.3%
CO ₂ %	6.0%	10.4%	18.1%	13.0%	14.6%	14.1%	30.0%	19.7%	19.6%	17.8%	19.6%	19.6%
O ₂ %	12.0%	8.6%	1.4%	6.3%	4.0%	5.7%	0.5%	0.0%	0.0%	1.8%	20.0%	20.0%
Well Head No. 4												
CH ₄ %	39.2%	78.2%	56.9%	33.6%	47.8%	39.1%	66.1%	65.7%	65.6%	65.1%	61.5%	62.5%
CO ₂ %	19.9%	23.7%	28.0%	16.3%	23.7%	17.5%	33.5%	30.9%	33.1%	32.9%	30.0%	30.0%
O ₂ %	8.2%	5.5%	2.9%	9.7%	4.7%	7.6%	0.5%	0.0%	0.0%	0.2%	10.0%	10.0%
Well Head No. 5												
CH ₄ %	41.5%	41.1%	39.8%	27.6%	46.5%	51.1%	56.8%	56.4%	56.3%	57.5%	57.8%	57.8%
CO ₂ %	30.2%	31.9%	29.7%	23.3%	37.4%	40.2%	42.6%	40.5%	43.7%	42.7%	41.4%	41.4%
O ₂ %	5.7%	5.2%	6.1%	7.5%	1.7%	2.0%	0.5%	0.0%	0.0%	0.0%	10.0%	10.0%

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Date	3/18/2008	4/17/2008	5/27/2008	6/13/2008	7/29/2008	08/08/08	09/25/08	10/08/08	10/09/08	10/10/08	10/13/08	10/24/08
Well Head No. 6												
CH ₄ %	21.6%	20.0%	15.6%	10.0%	17.3%	19.7%	45.1%	32.0%	27.1%	27.3%	24.0%	24.0%
CO ₂ %	10.7%	10.9%	15.5%	9.9%	15.2%	13.5%	29.5%	17.0%	17.2%	17.2%	19.2%	19.2%
O ₂ %	7.4%	6.3%	1.5%	7.7%	1.6%	3.3%	0.5%	0.0%	0.0%	0.1%	20.0%	20.0%
Well Head No. 7												
CH ₄ %	50.0%	0.3%	39.5%	1.4%	21.7%	7.4%	56.3%	54.8%	2.6%	22.8%	53.9%	53.9%
CO ₂ %	60.0%	0.0%	29.6%	0.8%	14.3%	4.6%	42.5%	39.8%	2.1%	17.3%	38.9%	38.9%
O ₂ %	20.5%	20.5%	5.8%	19.3%	12.4%	12.9%	0.9%	0.3%	19.2%	12.3%	70.0%	70.0%
Well Head No. 8												
CH ₄ %	33.4%	32.8%	39.3%	19.0%	39.5%	34.3%	50.3%	55.1%	50.8%	49.3%	49.8%	49.8%
CO ₂ %	18.3%	18.2%	24.4%	11.0%	24.3%	18.7%	28.7%	27.8%	28.3%	27.3%	26.0%	26.0%
O ₂ %	8.0%	6.9%	1.8%	11.2%	1.8%	6.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 9												
CH ₄ %	32.3%	28.6%	36.1%	19.8%	33.6%	28.1%	42.8%	45.3%	44.0%	41.5%	42.4%	42.4%
CO ₂ %	19.5%	16.1%	22.8%	11.5%	22.3%	14.8%	25.0%	25.4%	25.7%	25.1%	23.3%	23.3%
O ₂ %	4.9%	6.6%	1.6%	9.9%	1.7%	4.1%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%
Well Head No. 10												
CH ₄ %	13.5%	7.6%	10.4%	3.9%	10.9%	9.5%	46.1%	20.6%	17.4%	15.6%	20.0%	20.0%
CO ₂ %	12.4%	10.9%	16.6%	8.2%	14.4%	10.9%	29.9%	18.8%	18.5%	18.4%	18.8%	18.8%
O ₂ %	7.6%	7.8%	1.0%	10.2%	3.9%	7.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 11												
CH ₄ %	1.2%	0.7%	1.6%	0.4%	0.2%	10.0%	46.2%	26.0%	19.0%	16.9%	1.8%	1.8%
CO ₂ %	3.7%	1.2%	2.0%	1.5%	5.5%	3.1%	28.9%	17.1%	15.3%	16.7%	2.3%	2.3%
O ₂ %	16.3%	18.4%	9.3%	18.8%	17.5%	17.6%	0.4%	0.0%	2.7%	3.0%	17.5%	17.5%

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Well Head No. 12												
CH ₄ %	27.9%	10.1%	17.9%	12.0%	19.7%	17.0%	26.6%	30.7%	29.8%	21.6%	25.0%	25.0%
CO ₂ %	17.9%	11.1%	17.8%	12.7%	16.8%	13.3%	22.5%	20.2%	19.6%	18.5%	18.6%	18.6%
O ₂ %	3.5%	8.0%	1.6%	7.3%	2.5%	6.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 13												
CH ₄ %	30.3%	14.9%	17.1%	5.6%	14.6%	18.2%	23.0%	34.2%	29.4%	27.5%	28.8%	28.8%
CO ₂ %	17.9%	11.8%	19.3%	6.4%	13.9%	13.3%	22.5%	21.7%	21.0%	21.0%	19.8%	19.8%
O ₂ %	3.9%	8.2%	1.2%	14.0%	2.7%	6.9%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%
Well Head No. 14												
CH ₄ %	18.6%	10.4%	8.8%	2.8%	12.3%	15.3%	33.4%	24.6%	16.7%	13.5%	17.1%	17.1%
CO ₂ %	12.6%	10.3%	15.1%	5.9%	10.9%	12.5%	24.4%	18.6%	17.9%	18.5%	16.9%	16.9%
O ₂ %	5.4%	7.4%	2.5%	13.4%	4.6%	4.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 15												
CH ₄ %	32.4%	34.3%	41.6%	24.2%	40.0%	26.9%	56.4%	56.7%	56.9%	57.5%	58.0%	58.0%
CO ₂ %	23.5%	26.3%	36.8%	22.2%	34.7%	21.2%	43.2%	41.8%	43.3%	42.2%	40.5%	40.5%
O ₂ %	7.8%	8.0%	1.6%	8.4%	3.1%	10.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 16												
CH ₄ %	0.0%	0.3%	0.3%	0.2%	-	17.2%	12.6%	19.5%	12.2%	9.7%	12.7%	12.7%
CO ₂ %	10.0%	0.1%	0.0%	0.0%	-	11.1%	17.2%	19.4%	18.5%	18.7%	17.6%	17.6%
O ₂ %	21.0%	20.4%	20.4%	20.7%	-	3.8%	0.8%	0.0%	0.1%	0.0%	0.0%	0.0%

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Date	3/18/2008	4/17/2008	5/27/2008	6/13/2008	7/29/2008	08/08/08	09/25/08	10/08/08	10/09/08	10/10/08	10/13/08	10/24/08
Well Head No. 17												
CH ₄ %	32.3%	35.2%	43.3%	24.4%	40.7%	43.2%	57.6%	53.7%	58.7%	58.7%	58.5%	58.5%
CO ₂ %	23.6%	25.7%	22.4%	19.7%	32.6%	32.3%	41.9%	38.0%	41.5%	41.2%	40.1%	40.1%
O ₂ %	8.1%	6.3%	1.5%	8.3%	250.0%	3.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 18												
CH ₄ %	26.1%	12.1%	12.4%	6.1%	18.6%	20.3%	37.6%	35.3%	25.8%	22.9%	28.8%	28.8%
CO ₂ %	14.7%	13.4%	18.2%	12.1%	18.2%	16.0%	25.3%	23.0%	21.1%	21.2%	20.9%	20.9%
O ₂ %	6.4%	6.5%	2.1%	7.4%	2.2%	4.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 19												
CH ₄ %	24.0%	9.1%	8.8%	6.6%	13.0%	15.1%	36.4%	27.4%	21.5%	20.1%	26.5%	25.6%
CO ₂ %	14.2%	11.3%	16.0%	13.1%	15.7%	14.8%	27.2%	19.4%	18.4%	18.8%	19.0%	19.0%
O ₂ %	5.3%	6.6%	2.7%	5.5%	2.2%	3.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 20												
CH ₄ %	28.6%	29.7%	26.3%	16.2%	29.8%	33.0%	54.5%	50.5%	48.5%	47.8%	48.0%	48.0%
CO ₂ %	17.4%	17.6%	23.2%	15.8%	23.6%	23.3%	38.5%	28.5%	28.2%	27.8%	26.7%	26.7%
O ₂ %	7.1%	6.2%	1.2%	6.5%	1.3%	2.4%	0.5%	0.0%	0.0%	0.1%	0.0%	0.0%
Well Head No. 21												
CH ₄ %	30.7%	21.8%	22.1%	12.5%	29.5%	31.1%	31.8%	44.4%	39.0%	36.0%	39.6%	39.6%
CO ₂ %	17.5%	14.2%	19.4%	16.6%	20.1%	18.6%	21.5%	23.7%	22.0%	22.0%	21.5%	21.5%
O ₂ %	6.0%	6.0%	1.6%	3.3%	0.8%	3.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 22												
CH ₄ %	14.1%	15.6%	0.4%	0.2%	5.6%	11.5%	27.3%	32.7%	25.8%	30.4%	33.3%	33.3%
CO ₂ %	6.8%	9.1%	2.0%	0.2%	4.3%	7.0%	17.0%	16.8%	14.3%	17.0%	16.0%	16.0%
O ₂ %	12.8%	8.8%	20.1%	19.7%	14.7%	11.6%	4.0%	1.0%	2.5%	0.0%	0.0%	0.0%

Table 3
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Table 3

[illegible]

Table 3
Gas Extraction Well Summary
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[illegible]

Table 3
Gas Extraction Well Summary
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Date	10/29/08	10/30/08	11/06/08	11/6/08 repeat	11/11/08	11/18/08	11/21/08	12/09/08	12/18/09	01/13/09	01/30/09	02/03/09	02/11/09	02/17/09
Well Head No. 17														
CH ₄ %	55.7%	55.3%	53.4%		54.0%	53.7%	53.7%	54.3%	53.7%	51.8%	55.1%	51.1%	50.9%	51.3%
CO ₂ %	39.4%	38.6%	37.9%		37.7%	38.0%	38.8%	37.6%	36.0%	33.9%	35.2%	34.1%	33.8%	34.4%
O ₂ %	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 18														
CH ₄ %	34.9%	32.1%	33.7%		31.5%	35.3%	32.5%	39.2%	34.3%	21.1%	20.1%	19.2%	18.8%	17.6%
CO ₂ %	23.3%	22.7%	21.9%		24.5%	23.0%	21.8%	23.5%	20.7%	19.6%	20.4%	20.6%	19.7%	20.6%
O ₂ %	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 19														
CH ₄ %	26.4%	23.2%	25.9%		25.9%	27.4%	30.2%	31.4%	29.4%	20.0%	17.7%	14.7%	14.8%	14.1%
CO ₂ %	19.8%	17.6%	18.7%		18.5%	19.4%	21.1%	19.2%	18.2%	18.1%	18.2%	18.1%	17.7%	18.2%
O ₂ %	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 20														
CH ₄ %	48.7%	47.5%	49.0%		51.0%	50.5%	50.0%	52.4%	51.1%	40.0%	32.1%	36.5%	36.5%	36.5%
CO ₂ %	28.5%	26.2%	27.5%		28.8%	28.5%	27.4%	28.8%	26.9%	24.9%	19.3%	24.6%	23.9%	24.6%
O ₂ %	0.0%	0.2%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Well Head No. 21														
CH ₄ %	30.7%	31.2%	42.9%		41.6%	44.4%	42.6%	46.4%	40.5%	28.4%	39.0%	30.2%	27.8%	20.0%
CO ₂ %	14.1%	15.3%	22.7%		22.3%	23.7%	22.3%	23.8%	21.7%	20.0%	24.6%	19.5%	17.1%	13.0%
O ₂ %	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%
Well Head No. 22														
CH ₄ %	38.9%	36.7%	39.9%		23.8%	32.7%	35.8%	42.0%	36.2%	25.0%	21.6%	21.7%	20.6%	20.4%
CO ₂ %	17.4%	17.2%	17.2%		14.5%	16.8%	17.0%	17.6%	17.3%	17.2%	14.5%	16.2%	14.3%	15.1%
O ₂ %	0.0%	0.0%	0.0%		1.7%	1.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.5%	2.3%	1.4%

Table 4

Gas Monitoring and Surface Gas Readings

Table 4A

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Table 4A

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Table 4
Surface Gas Readings
Pelham Bay Landfill
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Date	4/10/2008	10/20/2008
Location	Methane (ppm)	
SGM-1	0.3	0.9
SGM-2	0.8	0.7
SGM-3	0.0	0.5
SGM-4	0.8	1.6
SGM-5	0.0	0.6
SGM-6	0.5	1.7
SGM-7	0.0	0.2
SGM-8	0.2	0.3
SGM-9	0.0	0.1
SGM-10	0.0	0

Table 5A

Schedule A Parameters

Table 5A
Leachate Schedule A Parameters
Pelham Bay Landfill
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1,1 Dichloroethene	Acenaphthene	Aldrin
1,2 Dichloroethane	Acenaphthylene	b BHC
1,2 Dichloroethene	Anthracene	Chlordane
1,2 Dichloropropane	Benzo(a)anthracene	d BHC
111 Trichloroethane	Benzo(a)pyrene	Dieldrin
112 Trichloroethane	Benzo(b)fluoranthene	Endosulfan 1
1122Tetrachloroethane	Benzo(ghi)perylene	Endosulfan 2
2-Butanone	Benzo(k)fluoranthene	Endosulfan Sulfate
2-Hexanone	BenzylButylPhthalate	Endrin
4-Methyl-2-Pentanone	Bis(2-chloroethoxy)methane	Endrin Aldehyde
Acetone	Bis(2-chloroethyl)ether	Endrin Ketone
Benzene	Bis(2-chloroisopropyl)ether	Heptachlor
Bromodichloromethane	Bis(2-ethylhexyl)phthalate	Heptachlor Epoxide
Bromoform	Carbazole	Lindane
Bromomethane	Chrysene	Methoxychlor
c-1,3Dichloropropene	Di-n-Butyl Phthalate	p,p-DDD
Carbon disulfide	Di-n-octyl Phthalate	p,p-DDE
Carbon Tetrachloride	Dibenzo(a,h)anthracene	p,p-DDT
Chlorobenzene	Dibenzofuran	Toxaphene
Chlorodibromomethane	Diethyl Phthalate	Aroclor 1016
Chloroethane	Dimethyl Phthalate	Aroclor 1221
Chloroform	Fluoranthene	Aroclor 1232
Chloromethane	Fluorene	Aroclor 1242
Ethyl Benzene	Hexachlorobenzene	Aroclor 1248
m + p Xylene	Hexachlorobutadiene	Aroclor 1254
Methylene Chloride	Hexachlorocyclopentadiene	Aroclor 1260
o Xylene	Hexachloroethane	Aluminum as Al
Styrene	Indeno(1,2,3-cd)pyrene	Antimony as Sb
t-1,3Dichloropropene	Isophorone	Arsenic as As
Tetrachloroethene	N-Nitrosodi-n-propylamine	Barium as Ba
Toluene	N-Nitrosodiphenylamine	Beryllium as Be
Trichloroethene	Naphthalene(sv)	Cadmium as Cd
Vinyl Chloride	Nitrobenzene	Calcium as Ca
Xylene	Phenanthrene	Chromium as Cr
1,2 Dichlorobenzene(sv)	Pyrene	Cobalt as Co
1,3 Dichlorobenzene(sv)	2,4,5-Trichlorophenol	Copper as Cu
1,4 Dichlorobenzene(sv)	2,4,6-Trichlorophenol	Iron as Fe
124-Trichlorobenzene (sv)	2,4-Dichlorophenol	Lead as Pb
2,4-Dinitrotoluene	2,4-Dimethylphenol	Magnesium as Mg
2,6-Dinitrotoluene	2,4-Dinitrophenol	Manganese as Mn
2-Chloronaphthalene	2-Chlorophenol	Mercury as Hg
2-Methylnaphthalene	2-Methyl-4,6-dinitrophenol	Nickel as Ni
2-Nitroaniline	2-Methylphenol (o-cresol)	Potassium as K
3,3'-Dichlorobenzidine	2-Nitrophenol	Selenium as Se
3-Nitroaniline	4-Chloro-3-methylphenol	Silver as Ag
4-Bromophenyl phenyl ether	4-Methylphenol (p-cresol)	Sodium as Na
4-Chloroaniline	4-Nitrophenol	Thallium as Tl
4-Chlorophenyl phenyl ether	Pentachlorophenol (ms)	Vanadium as V
4-Nitroaniline	Phenol	Zinc as Zn
	a BHC	Cyanide as CN

Tables 5B

Groundwater Monitoring Wells Analytical Results

Table 5B
Groundwater Monitoring Wells
Metals and Cyanide Data Comparison
Pelham Bay Landfill Annual Report
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Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 104								Dissolved		
			Feb-06	May-06	Nov-06	Jul-07	Dissolved Jul-07	Dec-07	Dissolved Dec-07	Mar-08	Dissolved Mar-08	Sep-08	Dissolved Sep-08
Cyanide, Total	mg/l	.4	0.0357 N	0.0116	0.04	< 0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Aluminum (Al)	mg/l	2	< 0.0208 U	0.594	0.86	0.55	0.52	< 0.05	0.02	0.22	0.02	< 0.005	0.03
Antimony (Sb)	mg/l	.006	< 0.005 U	< 0.0054 U	< 0.01	0.011	0.031	< 0.025	0.005	< 0.005	< 0.005	< 0.005	< 0.01
Arsenic (As)	mg/l	.05	0.0378 N	< 0.0039 U	< 0.005	0.014	< 0.025	< 0.025	0.013	0.009	0.011	< 0.005	0.009
Barium (Ba)	mg/l	2	0.208 B	0.281 N	0.37	0.2	0.18	0.19	0.18	0.15	0.15	0.14	0.14
Beryllium (Be)	mg/l	.003	< 0.0008 U	< 0.00054 U	< 0.001	< 0.001	< 0.005	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (Cd)	mg/l	.01	< 0.0016 U	< 0.0011 U	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Calcium (Ca)	mg/l		283	203	300	250	290	310	310	300	310	280	290
Chromium (Cr)	mg/l	.1	0.0044 B	0.003 BN	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt (Co)	mg/l		< 0.0038 U	< 0.0018 U	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper (Cu)	mg/l	1	< 0.0024 U	0.0116	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	0.1	0.1
Iron (Fe)	mg/l	.6	0.0787 B	2.13 N	3.1	1.3	1.8	0.77	0.04	0.02	0.02	0.67	0.22
Lead (Pb)	mg/l	.05	0.0115	0.0077 B	0.019	0.007	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Magnesium (Mg)	mg/l	35	769 E	633	840	730	870	940	970	980	1000	870	930
Manganese (Mn)	mg/l	.6	< 0.0042 U	< 0.0069 U	0.02	0.06	0.08	< 0.05	0.05	< 0.01	< 0.01	< 0.01	0.05
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.001	< 0.001	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	< 0.0046 U	< 0.0019 U	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Potassium (K)	mg/l		695 E	346	450	390	470	550	510	660	700	490	520
Selenium (Se)	mg/l	.02	0.0458	< 0.005 UN	< 0.004	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Silver (Ag)	mg/l	.1	0.0032 B	< 0.0011 U	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Sodium (Na)	mg/l		9860 E	215	6700	5600	7600	8500	7400	7100	7400	6800	7200
Thallium (Tl)	mg/l	.0005	0.0074 B	0.0106 B	< 0.01	< 0.01	< 0.025	< 0.025	< 0.01	< 0.005	< 0.005	< 0.01	< 0.01
Vanadium (V)	mg/l		0.0046 B	0.0072 N	0.009	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc (Zn)	mg/l	5	< 0.005 U	0.0232 B	0.05	0.02	0.07	< 0.05	0.01	0.01	0.01	< 0.01	0.02

Table 5B
Groundwater Monitoring Wells
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Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 106					
			Aug-07	Aug-07	Dec-07	Dec-07	Mar-08	Mar-08
				DISSOLVED		DISSOLVED		DISSOLVED
Cyanide, Total	mg/l	.4	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aluminum (Al)	mg/l	2	0.05	< 0.05	< 0.05	0.03	< 0.01	< 0.01
Antimony (Sb)	mg/l	.006	0.0097	0.008	0.027	< 0.005	< 0.01	< 0.01
Arsenic (As)	mg/l	.05	0.012	0.009	< 0.025	0.014	< 0.005	0.067
Barium (Ba)	mg/l	2	0.094	0.095	0.088	0.091	0.11	0.11
Beryllium (Be)	mg/l	.003	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001
Cadmium (Cd)	mg/l	.01	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005
Calcium (Ca)	mg/l		290	310	290	300	250	270
Chromium (Cr)	mg/l	.1	0.014	0.013	< 0.025	< 0.025	0.016	< 0.005
Cobalt (Co)	mg/l		< 0.005	< 0.005	< 0.025	< 0.025	0.011	< 0.005
Copper (Cu)	mg/l	1	0.03	0.02	< 0.025	< 0.025	< 0.005	< 0.005
Iron (Fe)	mg/l	.6	0.75	0.36	0.44	< 0.05	0.08	0.1
Lead (Pb)	mg/l	.05	< 0.005	< 0.005	< 0.025	0.27	0.65	2
Magnesium (Mg)	mg/l	35	850	900	860	900	760	850
Manganese (Mn)	mg/l	.6	0.07	0.08	0.06	< 0.05	0.03	0.1
Mercury (Hg)	mg/l	.0014	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	0.02	0.02	< 0.05	< 0.05	< 0.01	< 0.01
Potassium (K)	mg/l		520	540	420	450	550	530
Selenium (Se)	mg/l	.02	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01
Silver (Ag)	mg/l	.1	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005
Sodium (Na)	mg/l	.0005	6700	7200	7900	8300	5900	7000
Thallium (Tl)	mg/l		< 0.1	< 0.1	< 0.025	< 0.025	< 0.005	< 0.01
Vanadium (V)	mg/l		0.007	0.006	< 0.025	< 0.025	0.017	< 0.005
Zinc (Zn)	mg/l	5	0.17	0.16	0.25	0.24	0.03	< 0.01

Table 5B
Groundwater Monitoring Wells
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Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 109										
			Feb-06	May-06	Nov-06	Jul-07	Jul-07	Dec-07	Dec-07	Mar-08	Mar-08	Dec-08	Dec-08
Cyanide, Total	mg/l	.4	< 0.01 UN	< 0.001 U	< 0.02	< 0.02	< 0.01	< 0.02	< 0.05	< 0.02	< 0.01	< 0.02	< 0.05
Aluminum (Al)	mg/l	2	0.0824 B	5.6	7.2	12	< 0.05	< 0.025	< 0.025	3.1	< 0.01	0.18	< 0.025
Antimony (Sb)	mg/l	.006	< 0.0025 U	< 0.0054 U	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025
Arsenic (As)	mg/l	.05	< 0.0031 UN	< 0.0039 U	< 0.005	0.008	0.009	< 0.025	< 0.025	0.009	0.009	< 0.025	< 0.025
Barium (Ba)	mg/l	2	0.0614 B	0.132 N	0.19	0.19	0.07	0.61	0.11	0.17	0.13	0.08	0.075
Beryllium (Be)	mg/l	.003	< 0.0004 U	< 0.00054 UN	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.001	< 0.001	< 0.005	< 0.005
Cadmium (Cd)	mg/l	.01	< 0.0008 U	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025
Calcium (Ca)	mg/l		110	96.5	130	66	69	100	100	140	150	90	88
Chromium (Cr)	mg/l	.1	0.0015 B	0.0214 N	0.024	0.043	< 0.005	< 0.025	< 0.025	0.013	< 0.005	< 0.025	< 0.025
Cobalt (Co)	mg/l		0.002 B	0.0111	0.011	0.016	< 0.005	0.072	< 0.025	0.008	< 0.005	< 0.025	< 0.025
Copper (Cu)	mg/l	1	0.0064 B	0.0177	0.02	0.03	< 0.01	0.12	< 0.05	0.02	< 0.01	< 0.05	< 0.05
Iron (Fe)	mg/l	.6	0.198	9.76 N	8.5	15	0.07	82	2.9	4.6	0.02	0.58	0.09
Lead (Pb)	mg/l	.05	0.0038	0.011	0.01	0.013	< 0.005	0.065	< 0.025	0.011	< 0.005	< 0.025	< 0.025
Magnesium (Mg)	mg/l	35	14.5 E	14.6	20	14	10	33	16	19	19	12	12
Manganese (Mn)	mg/l	.6	0.0397	0.0898	0.21	0.33	0.23	1.3	0.51	0.11	0.05	< 0.05	< 0.05
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0002	< 0.0003	< 0.0003	< 0.001	< 0.0003	0.00066	0.00029	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	0.0082 B	0.0496	0.05	0.08	0.01	0.31	< 0.05	0.03	< 0.01	< 0.05	< 0.05
Potassium (K)	mg/l		4.45 BE	4.21	11	9.3	4.2	21	5.1	9.6	8.7	< 5	< 5
Selenium (Se)	mg/l	.02	< 0.0039 U*	< 0.005 UN	< 0.004	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.05	< 0.05
Silver (Ag)	mg/l	.1	0.0019 B	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025
Sodium (Na)	mg/l		14.5 E	13	22	13	14	18	17	23	25	23	21
Thallium (Tl)	mg/l	.0005	< 0.0029 U	< 0.01 U	< 0.005	< 0.01	< 0.01	< 0.025	< 0.025	< 0.005	< 0.005	< 0.05	< 0.05
Vanadium (V)	mg/l		< 0.002 U	0.0153 N	0.016	0.032	< 0.005	0.12	< 0.025	0.011	< 0.005	< 0.025	< 0.025
Zinc (Zn)	mg/l	5	0.018 B	0.0374 B	0.04	0.05	0.02	0.22	< 0.05	0.03	0.01	< 0.05	< 0.05

Table 5B
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Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 110									
			DISSOLVED			DISSOLVED			DISSOLVED		DISSOLVED	
			Nov-06	Jul-07	Jul-07	Feb-08	Feb-08	Mar-08	Mar-08	Sep-08	Sep-08	
Cyanide, Total	mg/l	4	< 0.02	< 0.02		< 0.02		< 0.02		< 0.02		
Aluminum (Al)	mg/l	2	0.17	0.04	0.04	0.08		0.1	0.02	< 0.1	< 0.1	
Antimony (Sb)	mg/l	.006	< 0.01	< 0.005	< 0.005	0.07	0.07	< 0.005	< 0.005	< 0.1	< 0.1	
Arsenic (As)	mg/l	.05	< 0.05	0.013	0.012	< 0.025	< 0.025	0.006	< 0.005	< 0.05	< 0.05	
Barium (Ba)	mg/l	2	0.082	0.062	0.06	0.1	0.11	0.041	0.043	0.053	0.057	
Beryllium (Be)	mg/l	.003	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.001	< 0.001	< 0.01	< 0.01	
Cadmium (Cd)	mg/l	.01	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.05	< 0.05	
Calcium (Ca)	mg/l		310	310	270	290	310	300	320	250	270	
Chromium (Cr)	mg/l	.1	0.13	< 0.005	< 0.005	< 0.025	< 0.025	0.005	< 0.005	< 0.05	< 0.05	
Cobalt (Co)	mg/l	1	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.05	< 0.05	
Copper (Cu)	mg/l	1	0.02	< 0.01	< 0.01	< 0.05	< 0.05	0.04	< 0.01	0.1	0.1	
Iron (Fe)	mg/l	.6	2	4.3	5.3	6.1	3.1	1.4	0.64	3.7	3.3	
Lead (Pb)	mg/l	.05	0.018	< 0.005	< 0.005	0.042	< 0.025	0.018	< 0.005	< 0.05	< 0.05	
Magnesium (Mg)	mg/l	35	850	880	760	560	820	860	930	750	810	
Manganese (Mn)	mg/l	.6	0.06	0.06	0.06	0.14	0.11	0.1	0.09	< 0.1	< 0.1	
Mercury (Hg)	mg/l	.0014	< 0.0002	< 0.0003	< 0.0003	< 0.001	< 0.001	< 0.0003	< 0.0003	< 0.0003	< 0.0003	
Nickel (Ni)	mg/l	.2	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	0.01	0.01	< 0.1	< 0.1	
Potassium (K)	mg/l		580	510	430	210	230	590	650	410	450	
Selenium (Se)	mg/l	.02	< 0.004	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.1	< 0.1	
Silver (Ag)	mg/l	.1	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.05	< 0.05	
Sodium (Na)	mg/l		6500	7300	5900	4700	5300	6700	7200	6100	6500	
Thallium (Tl)	mg/l	.0005	< 0.005	< 0.01	< 0.01	< 0.05	< 0.05	< 0.005	< 0.005	< 0.1	< 0.1	
Vanadium (V)	mg/l		0.007	0.005	0.005	< 0.025	< 0.025	0.008	0.007	< 0.05	< 0.05	
Zinc (Zn)	mg/l	5	0.01	0.05	0.04	0.17	0.12	0.2	0.02	< 0.1	< 0.1	

Table 5B
Groundwater Monitoring Wells
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Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 113													
			Feb-06	May-06	Nov-06	Jul-07	DISSOLVED		Dec-07	DISSOLVED		DISSOLVED				
Cyanide, Total	mg/l	4	< 0.01 UN	< 0.001 U	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.05	< 0.02	< 0.02	< 0.01	< 0.05	< 0.02	< 0.01
Aluminum (Al)	mg/l	2	0.0229 B	0.832	0.2	16	16	12	< 0.01	< 0.025	0.01	0.03	< 0.01	< 0.025	0.01	< 0.01
Antimony (Sb)	mg/l	.006	< 0.0025 U	< 0.0054 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.005	< 0.01	< 0.005	< 0.025	< 0.01	< 0.01
Arsenic (As)	mg/l	.05	< 0.0031 UN	0.007 B	< 0.005	0.01	0.005	< 0.025	0.12	< 0.025	0.011	0.006	0.011	< 0.025	0.006	< 0.005
Barium (Ba)	mg/l	2	0.0572 B	0.11 N	0.12	0.23	0.12	0.098	< 0.001	< 0.005	0.1	0.13	0.093	0.096	0.13	0.14
Beryllium (Be)	mg/l	.003	< 0.0004 U	< 0.00054 UN	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
Cadmium (Cd)	mg/l	.01	< 0.0008 U	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005
Calcium (Ca)	mg/l		75.4	99.7	110	92	92	75	92	77	98	120	97	77	120	130
Chromium (Cr)	mg/l	.1	0.0033 B	0.0055 BN	< 0.005	0.061	< 0.005	< 0.025	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005
Cobalt (Co)	mg/l		0.0069 B	0.0103	0.008	0.035	0.011	< 0.025	0.011	< 0.025	0.01	0.008	0.009	< 0.025	0.008	< 0.005
Copper (Cu)	mg/l	1	< 0.0012 U	< 0.0043 U	< 0.01	0.04	< 0.01	< 0.05	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01
Iron (Fe)	mg/l	.6	8.76	13.1 N	12	26	71	49	71	44	73	81	11	21	11	14
Lead (Pb)	mg/l	.05	0.0022 B	0.0046 B	< 0.005	0.028	< 0.005	< 0.025	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005
Magnesium (Mg)	mg/l	35	20.5 E	28.4	30	29	24	21	24	21	26	33	26	21	33	0.6
Manganese (Mn)	mg/l	.6	1.43	1.34	2	18	14	11	14	11	14	17	14	11	17	1.9
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0002	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.001	< 0.001	< 0.001	< 0.0003	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	0.0393 B	0.0563	0.05	0.23	0.06	0.06	0.06	0.06	0.04	0.04	0.04	0.06	0.04	< 0.01
Potassium (K)	mg/l		40	47.4	71	46	44	45	44	47	53	55	53	47	55	62
Selenium (Se)	mg/l	.02	< 0.0039 U*	< 0.005 UN	< 0.004	< 0.01	< 0.01	< 0.05	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01
Silver (Ag)	mg/l	.1	0.0026 B	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005
Sodium (Na)	mg/l		145 E	109	140	140	150	170	150	170	150	160	160	170	160	18
Thallium (Tl)	mg/l	.0005	< 0.0029 U	< 0.01 U	< 0.005	< 0.01	< 0.005	< 0.025	< 0.005	< 0.025	0.0067	< 0.005	< 0.005	< 0.025	< 0.01	< 0.01
Vanadium (V)	mg/l		< 0.002 U	0.0049 BN	< 0.005	0.036	< 0.005	< 0.025	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.005
Zinc (Zn)	mg/l	5	0.01 B	0.0176 B	.02	0.08	0.01	< 0.05	0.01	< 0.05	0.01	0.02	0.01	< 0.05	0.02	0.02

Table 5B
Groundwater Monitoring Wells
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Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 114								DISSOLVED	Sep-08	Sep-08	DISSOLVED	Sep-08	
			Feb-06	May-06	Nov-06	Aug-07	Aug-07	Dec-07	Dec-07	Mar-08						Mar-08
Cyanide, Total	mg/l	4	< 0.01 UN	< 0.001 U	< 0.02	< 0.02	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.01	< 0.02	< 0.01	< 0.02	< 0.02
Aluminum (Al)	mg/l	2	0.235	3.42	7.7	0.5	< 0.05	< 0.005	9.2	< 0.005	0.11	< 0.005	< 0.05	< 0.01	< 0.05	< 0.05
Antimony (Sb)	mg/l	.006	< 0.0025 U	< 0.0054 U	< 0.005	< 0.005	< 0.005	< 0.005	0.012	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.025
Arsenic (As)	mg/l	.05	< 0.0031 UN	< 0.0039 U	< 0.005	0.009	0.007	0.007	0.01	0.006	0.006	0.006	< 0.005	< 0.005	< 0.005	< 0.025
Barium (Ba)	mg/l	2	0.0508 B	0.0702 N	0.11	0.091	0.092	0.092	0.15	0.086	0.083	0.086	0.064	0.064	0.059	0.06
Beryllium (Be)	mg/l	.003	< 0.0004 U	< 0.00054 UN	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.005	< 0.005
Cadmium (Cd)	mg/l	.01	< 0.0008 U	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.025
Calcium (Ca)	mg/l		161	130	130	150	160	160	200	200	140	200	150	150	110	110
Chromium (Cr)	mg/l	.1	0.0019 B	0.0104 N	0.024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025
Cobalt (Co)	mg/l		< 0.0019 U	0.0026 B	0.006	< 0.005	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025
Copper (Cu)	mg/l	1	0.0113 B	0.0214	0.04	0.01	0.01	0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05
Iron (Fe)	mg/l	.6	0.282	4.38 N	9.6	0.59	0.12	0.12	9.8	< 0.005	0.1	< 0.005	< 0.01	< 0.01	0.08	< 0.05
Lead (Pb)	mg/l	.05	0.0058	0.012	0.024	< 0.005	< 0.005	< 0.005	0.056	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025
Magnesium (Mg)	mg/l	35	18.8 E	18.6	20	22	23	23	25	23	16	23	17	17	15	15
Manganese (Mn)	mg/l	.6	0.0089 B	0.0471	0.26	0.21	0.23	0.23	0.1	< 0.01	0.01	< 0.01	< 0.05	0.01	< 0.05	< 0.05
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0002	< 0.0003	< 0.0003	< 0.0003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.003	< 0.0003	< 0.001	< 0.001
Nickel (Ni)	mg/l	2	< 0.0023 U	0.0156	0.03	< 0.01	< 0.01	< 0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05
Potassium (K)	mg/l	.02	11.3 E	10	15	23	24	24	17	15	9.9	15	8.9	12	12	12
Selenium (Se)	mg/l		< 0.0039 U*	< 0.005 UN	< 0.004	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.05	< 0.05
Silver (Ag)	mg/l	.1	0.0022 B	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025
Sodium (Na)	mg/l		26 E	19.3	16	57	58	58	27	25	20	25	20	20	20	20
Thallium (Tl)	mg/l	.0005	0.0036 B	< 0.01 U	< 0.005	< 0.005	< 0.05	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.05
Vanadium (V)	mg/l		< 0.002 U	0.0085 N	0.02	< 0.005	< 0.005	< 0.005	0.023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025
Zinc (Zn)	mg/l	5	0.0089 B	0.0388 B	0.07	0.02	0.01	0.01	0.09	0.01	0.02	< 0.01	< 0.05	0.01	< 0.05	< 0.05

Table 5B
Groundwater Monitoring Wells
Metals and Cyanide Data Comparison
Pelham Bay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 119									
			Feb-06	May-06	Nov-06	Jul-07	Jul-07	Feb-08	Feb-08	Mar-08	Mar-08	Sep-08
Cyanide, Total	mg/l	.4	< 0.01 UN	< 0.001 U	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aluminum (Al)	mg/l	2	< 0.0208 U	< 0.092 U	0.05	0.04	0.49	< 0.1	0.04	0.01	0.06	< 0.05
Antimony (Sb)	mg/l	.006	< 0.005 U	< 0.0054 U	< 0.01	0.006	< 0.02	< 0.2	< 0.005	< 0.005	< 0.025	< 0.025
Arsenic (As)	mg/l	.05	0.0077 BN	< 0.0039 U	< 0.05	0.009	0.015	0.05	< 0.005	0.006	< 0.025	< 0.025
Barium (Ba)	mg/l	2	0.0779 B	0.0531 N	0.088	0.066	0.17	0.086	0.065	0.065	0.078	0.073
Beryllium (Be)	mg/l	.003	< 0.0008 U	< 0.00054 UN	< 0.001	< 0.001	< 0.001	< 0.01	< 0.001	< 0.001	< 0.005	< 0.005
Cadmium (Cd)	mg/l	.01	< 0.0018 U	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.05	< 0.005	< 0.005	< 0.025	< 0.025
Calcium (Ca)	mg/l		342	228	350	380	340	330	340	330	300	310
Chromium (Cr)	mg/l	.1	0.008 B	0.0022 BN	< 0.005	< 0.005	< 0.005	< 0.05	< 0.005	< 0.005	< 0.025	< 0.025
Cobalt (Co)	mg/l		< 0.0038 U	< 0.0018 U	< 0.005	< 0.005	< 0.005	< 0.05	< 0.005	< 0.005	< 0.025	< 0.025
Copper (Cu)	mg/l	1	0.0114 B	< 0.0043 U	0.06	< 0.01	< 0.02	< 0.1	< 0.01	< 0.01	< 0.025	< 0.025
Iron (Fe)	mg/l	.6	9.26	212 N	2.1	2.3	6.2	2.7	1.9	0.89	0.07	0.08
Lead (Pb)	mg/l	.05	0.0146	< 0.003 U	< 0.005	< 0.005	0.005	< 0.05	< 0.005	< 0.005	< 0.025	< 0.025
Magnesium (Mg)	mg/l	35	794 E	832	880	1000	870	810	910	870	730	810
Manganese (Mn)	mg/l	.6	0.539	0.404	0.5	0.32	0.34	0.64	0.41	0.46	0.36	0.36
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0002	< 0.0003	< 0.0003	0.00028	< 0.0003	< 0.0003	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	< 0.0046 U	< 0.0019 U	< 0.01	< 0.01	< 0.01	< 0.1	< 0.01	< 0.01	< 0.05	< 0.05
Potassium (K)	mg/l		676 E	340	340	580	500	58	590	550	470	470
Selenium (Se)	mg/l	.02	< 0.0078 U*	< 0.005 UN	< 0.004	< 0.01	< 0.01	< 0.2	< 0.01	< 0.01	< 0.05	< 0.05
Silver (Ag)	mg/l	.1	0.0027 B	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.05	< 0.005	< 0.005	< 0.025	< 0.025
Sodium (Na)	mg/l		10500 E	219	2500	8500	7200	850	6900	6600	6600	6600
Thallium (Tl)	mg/l	.0005	0.0058 B	0.0101 B	< 0.005	< 0.01	< 0.01	< 0.2	< 0.005	< 0.005	< 0.05	< 0.05
Vanadium (V)	mg/l		0.0085 B	0.0064 N	< 0.005	< 0.005	0.008	< 0.05	< 0.005	< 0.005	< 0.025	< 0.025
Zinc (Zn)	mg/l	5	< 0.005 U	0.0165 B	0.04	0.02	0.03	< 0.1	0.04	0.03	0.06	0.07

Table 5B

Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 120							MW 120A			
			Feb-06	May-06	Nov-06	Jul-07	Dissolved	Dec-07	Dissolved	Sep-08	Dissolved	Mar-08	Dissolved
Cyanide, Total	mg/l	4	< 0.01 UN	< 0.001 U	< 0.02	< 0.02	0.02	< 0.05	< 0.02	0.06	< 0.05	< 0.02	< 0.02
Aluminum (Al)	mg/l	2	< 0.0208 U	< 0.092 U	0.04	0.05	0.02	< 0.029	< 0.05	< 0.025	< 0.05	0.03	0.03
Antimony (Sb)	mg/l	.006	< 0.005 U	< 0.0054 U	< 0.005	0.007	0.006	0.029	0.03	< 0.025	< 0.025	< 0.005	< 0.005
Arsenic (As)	mg/l	.05	0.0119 BN	0.006 B	< 0.1	0.014	0.017	0.045	0.033	< 0.025	< 0.025	0.011	0.015
Barium (Ba)	mg/l	2	0.106 B	0.0804 N	0.12	0.12	0.11	0.12	0.12	0.1	0.11	0.11	0.11
Beryllium (Be)	mg/l	.003	< 0.0008 U	< 0.00054 UN	< 0.001	0.001	< 0.001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.001	< 0.001
Cadmium (Cd)	mg/l	.01	< 0.0016 U	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005
Calcium (Ca)	mg/l	532	399	600	600	600	580	570	570	510	530	560	550
Chromium (Cr)	mg/l	.1	0.0031 B	< 0.0013 UN	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005
Cobalt (Co)	mg/l	1	< 0.0038 U	< 0.0018 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005
Copper (Cu)	mg/l	1	< 0.0024 U	< 0.0043 U	< 0.2	< 0.01	< 0.01	< 0.05	< 0.05	0.07	0.07	< 0.01	< 0.01
Iron (Fe)	mg/l	.6	1.76	1.3 N	2.4	3.5	2.1	3	2.9	1.3	1.3	2.2	2.3
Lead (Pb)	mg/l	.05	0.0269	< 0.003 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005
Magnesium (Mg)	mg/l	35	634 E	506	80	660	650	630	630	530	610	650	650
Manganese (Mn)	mg/l	.6	1.15	0.853	1.2	0.78	0.77	1	1	0.63	0.69	0.95	0.96
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0002	0.00038	0.00068	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	0.0051 B	0.0042 B	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
Potassium (K)	mg/l	.02	322 E	223	280	220	220	230	240	200	160	270	270
Selenium (Se)	mg/l	.1	< 0.0078 U*	< 0.005 UN	< 0.004	0.005	< 0.004	< 0.025	< 0.025	< 0.05	< 0.05	< 0.01	< 0.01
Silver (Ag)	mg/l	.0005	0.0084 B	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005
Sodium (Na)	mg/l	9230 E	216	6300	5900	5900	5900	7300	7500	6000	5400	6200	6200
Thallium (Tl)	mg/l	.0005	0.0138 B	< 0.01 U	< 0.005	< 0.01	< 0.01	< 0.025	< 0.025	< 0.05	< 0.05	< 0.005	< 0.005
Vanadium (V)	mg/l	5	< 0.004 U	0.0018 BN	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005
Zinc (Zn)	mg/l		< 0.005 U	< 0.011 U	0.02	0.01	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	0.02

Table 5B
Groundwater Monitoring Wells
Metals and Cyanide Data Comparison
Pelham Bay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 120B											
			Feb-06	May-06	Nov-06	Jul-07	DISSOLVED		Dec-07	DISSOLVED		Sep-08		
Cyanide, Total	mg/l	.4	< 0.01 UN	< 0.001 U	< 0.02	< 0.02								
Aluminum (Al)	mg/l	2	< 0.0208 U	< 0.092 U	0.11	0.04	0.03	< 0.05	< 0.05	0.07	0.02	< 0.02	0.06	< 0.05
Antimony (Sb)	mg/l	.006	< 0.005 U	< 0.0054 U	< 0.005	0.005	0.006	0.04	0.055	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025
Arsenic (As)	mg/l	.05	< 0.0062 UN	< 0.0039 U	< 0.05	0.014	0.011	0.026	0.029	0.012	0.01	< 0.025	< 0.025	< 0.025
Barium (Ba)	mg/l	2	0.312 B	0.233 N	0.33	0.2	0.2	0.2	0.19	0.2	0.2	0.2	0.2	0.2
Beryllium (Be)	mg/l	.003	< 0.0008 U	< 0.00054 UN	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.001	< 0.001	< 0.005	< 0.005	< 0.005
Cadmium (Cd)	mg/l	.01	< 0.0016 U	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025
Calcium (Ca)	mg/l		311	214	610	320	320	310	310	290	290	290	290	290
Chromium (Cr)	mg/l	.1	0.0157 B	0.01 N	0.013	0.006	0.006	< 0.025	< 0.025	0.007	0.007	< 0.025	< 0.025	< 0.025
Cobalt (Co)	mg/l		< 0.0038 U	< 0.0018 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025
Copper (Cu)	mg/l	1	< 0.0024 U	< 0.0043 U	< 0.01	0.05	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	0.07	0.07	0.07
Iron (Fe)	mg/l	.6	0.0724 B	0.144 BN	2.3	0.42	0.28	2.1	0.16	0.17	0.11	0.2	0.08	0.08
Lead (Pb)	mg/l	.05	0.0129	< 0.003 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025
Magnesium (Mg)	mg/l	35	725 E	593	680	650	660	650	650	810	810	820	820	820
Manganese (Mn)	mg/l	.6	0.359	0.284	0.3	0.22	0.22	0.11	0.1	0.18	0.17	0.24	0.23	0.23
Mercury (Hg)	mg/l	.0014	< 0.00016 U	< 0.00007 U	< 0.0002	0.00099	0.00039	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel (Ni)	mg/l	.2	0.0055 B	0.0022 B	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.05	< 0.05	< 0.05
Potassium (K)	mg/l		675 E	361	590	500	500	610	620	580	580	420	480	480
Selenium (Se)	mg/l	.02	< 0.0078 U*	< 0.005 UN	< 0.004	< 0.004	< 0.004	< 0.05	< 0.05	< 0.01	< 0.01	< 0.05	< 0.05	< 0.05
Silver (Ag)	mg/l	.1	0.0032 B	< 0.0011 U	< 0.005	< 0.005	< 0.005	< 0.025	< 0.025	< 0.005	< 0.005	< 0.025	< 0.025	< 0.025
Sodium (Na)	mg/l		9970 E	218	6300	6300	6300	8400	8500	6200	6200	6100	6700	6700
Thallium (Tl)	mg/l	.0005	< 0.0058 U	0.0155 B	< 0.005	< 0.01	< 0.01	< 0.025	< 0.025	< 0.005	< 0.005	< 0.05	< 0.05	< 0.05
Vanadium (V)	mg/l		0.0264 B	0.0216 N	0.015	0.016	0.016	< 0.025	< 0.025	0.017	0.017	< 0.025	< 0.025	< 0.025
Zinc (Zn)	mg/l	5	< 0.005 U	< 0.011 U	0.03	0.06	0.01	< 0.05	< 0.05	0.02	0.02	< 0.05	< 0.05	< 0.05

Table 5B
Groundwater Monitoring Wells
Metals and Cyanide Data Comparison
Pelham Bay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	Unit	NYS Ambient Groundwater Quality Standards for Class GA Waters	MW 122																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
			Feb-06	May-06	Nov-06	Jul-07	Jul-07	Dec-07	Dec-07	Mar-08	Mar-08	Sep-08	Sep-08																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Table 5B

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Table 5B

Groundwater Monitoring Wells
PCB and Pesticides Data Comparison
Pelham Bay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance Values	Unit	MW-109						MW-110							
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Jul-92	May-06	Nov-06	Jul-07	Feb-08	Mar-08	Sep-08
PCB																
Aroclor 1016		ug/l		< 1												
Aroclor 1221		ug/l		< 1												
Aroclor 1232		ug/l		< 1												
Aroclor 1242		ug/l		< 1												
Aroclor 1248		ug/l		< 1												
Aroclor 1254		ug/l		< 1												
Aroclor 1260		ug/l		< 1												
Pest																
4,4'-DDD	.3	ug/l		< 0.014 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.015 J		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	.2	ug/l		< 0.0088 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.011 J		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	.2	ug/l		< 0.01 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aldrin		ug/l		< 0.0058 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-BHC	.01	ug/l		< 0.011 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-Chlordane		ug/l		< 0.0055 U												
beta-BHC	.04	ug/l		< 0.013 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	JVR#		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
delta-BHC	.04	ug/l		< 0.0022 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	.004	ug/l		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I		ug/l		< 0.0035 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan II	-	ug/l		< 0.012 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan Sulfate		ug/l		< 0.014 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin		ug/l		< 0.025 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin Aldehyde	5	ug/l		< 0.028 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin ketone	5	ug/l		< 0.016 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
gamma-BHC (Lindane)	.05	ug/l		< 0.0052 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
gamma-Chlordane		ug/l		< 0.0061 U												
Heptachlor	.04	ug/l		< 0.0078 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	.03	ug/l		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	35	ug/l		< 0.041 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Technical Chlordane	.05	ug/l		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	.06	ug/l		< 0.21 U	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1	< 1

Table 5B

Groundwater Monitoring Wells
PCB and Pesticides Data Comparison
Pelham Bay Landfill Annual Report
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance Values	Unit	MW-113						MW-114							
			Jul-92	May-06	Nov-06	Jul-08	Dec-07	Mar-08	Sep-08	Aug-02	May-06	Nov-06	Aug-07	Dec-07	Mar-08	Sep-08
PCB																
Aroclor 1016		ug/l														
Aroclor 1221		ug/l														
Aroclor 1232		ug/l														
Aroclor 1242		ug/l														
Aroclor 1248		ug/l														
Aroclor 1254		ug/l														
Aroclor 1260		ug/l														
Pest																
4,4'-DDD	.3	ug/l		< 0.014 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	.2	ug/l		< 0.0088 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	.2	ug/l		< 0.01 U	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aldrin		ug/l		< 0.0058 U	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-BHC	.01	ug/l		< 0.011 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-Chlordane		ug/l		< 0.0055 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
beta-BHC	.04	ug/l		< 0.013 U							< 0.013 U					
delta-BHC	.04	ug/l		< 0.0022 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.0022 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
dieldrin	.004	ug/l		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I		ug/l	0.033 JV	< 0.0035 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.0035 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II		ug/l	0.053 JV	< 0.012 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.012 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan Sulfate		ug/l	BJVR#	< 0.014 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.014 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endrin		ug/l		< 0.025 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.025 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin Aldehyde	5	ug/l		< 0.028 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.028 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	5	ug/l		< 0.016 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.016 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
gamma-BHC (Lindane)	.05	ug/l		< 0.0052 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.0052 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
gamma-Chlordane		ug/l		0.016 J	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.016 J	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	.04	ug/l		< 0.0078 U							< 0.0078 U					
Heptachlor Epoxide	.03	ug/l		0.016 J	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.0094 J	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	.05	ug/l		< 0.041 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.041 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Technical Chlordane	.05	ug/l		< 0.21 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.21 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Toxaphene	.06	ug/l		< 0.21 U	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.21 U	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

Table 5B
Groundwater Monitoring Wells
PCB and Pesticides Data Comparison
Pelham Bay Landfill Annual Report
February 2008 thru March 2009
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance Values	Unit	MW-119							MW-120						
			Aug-02	May-06	Nov-06	Jul-07	Feb-08	Mar-08	Sep-08	Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
PCB																
Aroclor 1016		ug/l			< 1											
Aroclor 1221		ug/l			< 1											
Aroclor 1232		ug/l			< 1											
Aroclor 1242		ug/l			< 1											
Aroclor 1248		ug/l			< 1											
Aroclor 1254		ug/l			< 1											
Aroclor 1260		ug/l			< 1											
Pest																
4,4'-DDD	.3	ug/l	0.011 JV	< 0.016 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	R	< 0.016 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	.2	ug/l		< 0.0098 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0096 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	.2	ug/l		< 0.012 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.011 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aldrin		ug/l		< 0.0064 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0063 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-BHC	.01	ug/l		< 0.012 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.012 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-Chlordane		ug/l		< 0.0061 U							< 0.006 U					
beta-BHC	.04	ug/l		< 0.014 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.014 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
delta-BHC	.04	ug/l		< 0.0024 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	R	< 0.0024 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	.004	ug/l		< 0.0063 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0062 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I		ug/l		< 0.0039 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.0038 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan II		ug/l		< 0.014 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.013 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan Sulfate		ug/l		< 0.016 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		< 0.015 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin		ug/l		< 0.028 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.027 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin Aldehyde	5	ug/l		< 0.031 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		< 0.031 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin ketone	5	ug/l		< 0.018 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.018 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
gamma-BHC (Lindane)	.05	ug/l		< 0.0058 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
gamma-Chlordane		ug/l		< 0.0068 U							< 0.0066 U					
Heptachlor	.04	ug/l		< 0.0087 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0085 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	.03	ug/l		< 0.0063 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0062 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	35	ug/l		< 0.045 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.044 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Technical Chlordane	.05	ug/l		< 0.24 U	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		< 0.23 U	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	.06	ug/l		< 0.24 U	< 1	< 1	< 1	< 1	< 1		< 0.23 U	< 1	< 1	< 1	< 1	< 1

Table 5B

Groundwater Monitoring Wells
PCB and Pesticides Data Comparison
Pelham Bay Landfill Annual Report
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Contract 1140-PEL

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance Values	Unit	MW-120B						MW-122							
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
PCB																
Aroclor 1016		ug/l														
Aroclor 1221		ug/l														
Aroclor 1232		ug/l														
Aroclor 1242		ug/l														
Aroclor 1248		ug/l														
Aroclor 1254		ug/l														
Aroclor 1260		ug/l														
Pest																
4,4'-DDD	.3	ug/l		< 0.014 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.016 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	.2	ug/l	0.017 JV	< 0.0088 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.0096 U	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05
4,4'-DDT	.2	ug/l		< 0.01 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.011 U	< 0.1	< 0.05	< 0.05	< 0.05	< 0.1
Aldrin		ug/l		< 0.0058 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.0093 JV	0.0033 JM	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-BHC	.01	ug/l	0.011 JV	< 0.011 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.012 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
alpha-Chlordane		ug/l		< 0.0055 U							< 0.006 U		< 0.05	< 0.05	< 0.05	< 0.05
beta-BHC	.04	ug/l		< 0.013 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		0.024 JM	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
delta-BHC	.04	ug/l		< 0.0022 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		0.038 JM	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	.004	ug/l		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		0.019 J	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05
Endosulfan I		ug/l		< 0.0035 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.0038 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan II		ug/l		< 0.012 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.013 U	< 0.1	< 0.3	< 0.3	< 0.3	< 0.1
Endosulfan Sulfate		ug/l		< 0.014 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		< 0.015 U	< 0.3	< 0.05	< 0.05	< 0.05	< 0.3
Endrin		ug/l		< 0.025 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.027 U	< 0.05	< 0.3	< 0.3	< 0.3	< 0.05
Endrin Aldehyde	5	ug/l		< 0.028 U	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		< 0.031 U	< 0.3	< 0.1	< 0.1	< 0.1	< 0.3
Endrin ketone	5	ug/l		< 0.016 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.018 U	< 0.1	< 0.05	< 0.05	< 0.05	< 0.1
gamma-BHC (Lindane)	.05	ug/l		< 0.0052 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
gamma-Chlordane		ug/l		< 0.0061 U							0.0096 JM		< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	.04	ug/l		< 0.0078 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0085 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	.03	ug/l		< 0.0057 U	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.0062 U	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05
Methoxychlor	.35	ug/l		< 0.041 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.044 U	< 0.1	< 0.2	< 0.2	< 0.2	< 0.1
Technical Chlordane	.05	ug/l		< 0.21 U	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		< 0.044 U	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	.06	ug/l		< 0.21 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.23 U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Table 5B
Groundwater Monitoring Wells
SVOC Data Comparison
Pelham Bay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-104				MW-106				MW-109									
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Aug-07	Dec-07	Mar-08	Sep-08	Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
SVOC																				
1,2,4-Trichlorobenzene	5	ug/l	< 0.7 U	< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.7 U	< 2	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene as a SVOC	3	ug/l	< 0.7 U	< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.7 U	< 2	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene as a SVOC	3	ug/l	< 0.7 U	< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.7 U	< 2	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene as a SVOC	3	ug/l	< 0.5 U	< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5 U	< 2	< 1	< 1	< 1	< 1
2,2-oxybis (1-chloropropane)	5	ug/l	< 0.6 U	< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.6 U	< 2	< 1	< 1	< 1	< 1
2,4,5-Trichlorophenol	2*	ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	2*	ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
2,4-Dichlorophenol	2*	ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	2*	ug/l	< 0.7 U	< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.7 U	< 2	< 1	< 1	< 1	< 1
2,4-Dinitrophenol	2*	ug/l	< 5 U	< 5 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5 U	< 20	< 10	< 10	< 10	< 10
2,4-Dinitrotoluene	5	ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
2,6-Dinitrotoluene	5	ug/l	< 0.6 U	< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.6 U	< 2	< 1	< 1	< 1	< 1
2-Chloronaphthalene	10	ug/l	< 0.7 U	< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.7 U	< 2	< 1	< 1	< 1	< 1
2-Methylnaphthalene		ug/l	< 0.6 U	< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.6 U	< 2	< 1	< 1	< 1	< 1
2-Nitroaniline	5	ug/l	< 1 U	< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 U	< 2	< 1	< 1	< 1	< 1
2-Nitrophenol	2*	ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
3,3-Dichlorobenzidine	5	ug/l	< 1 U	< 1 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1 U	< 20	< 10	< 10	< 10	< 10
3-Nitroaniline	5	ug/l	< 0.7 U	< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.7 U	< 2	< 1	< 1	< 1	< 1
4,6-Dinitro-2-methylphenol		ug/l	< 4 U	< 4 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 4 U	< 20	< 10	< 10	< 10	< 10
4-Bromophenyl Phenyl Ether		ug/l	< 0.9 U	< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.9 U	< 2	< 1	< 1	< 1	< 1
4-chloro-3-methylphenol	5	ug/l	< 0.5 U	< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5 U	< 2	< 1	< 1	< 1	< 1
4-Chloroaniline		ug/l	< 0.4 U	< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.4 U	< 2	< 1	< 1	< 1	< 1
4-Chlorophenyl Phenyl Ether		ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
4-Methylphenol (m/p-cresol)	5	ug/l	< 0.3 U	< 0.3 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.3 U	< 2	< 1	< 1	< 1	< 1
4-Nitroaniline		ug/l	< 1 U	< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 U	< 2	< 1	< 1	< 1	< 1
4-Nitrophenol		ug/l	< 2 U	< 2 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2 U	< 20	< 10	< 10	< 10	< 10
Acenaphthene	20	ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
Acenaphthylene		ug/l	< 0.8 U	< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.8 U	< 2	< 1	< 1	< 1	< 1
Anthracene	50	ug/l	< 1 U	< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 U	< 2	< 1	< 1	< 1	< 1

Table 5B
Groundwater Monitoring Wells
SVOC Data Comparison
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Contract 1140-PEL

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-104					MW-106					MW-109							
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Aug-07	Dec-07	Mar-08	Sep-08	Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
Benzo(a)anthracene	0.002	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Benzo(a)pyrene	ND	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Benzo(b)fluoranthene	0.002	ug/l	<2U	<2U	<2U	<1	<1	<1	<1	<1	<1	<1	<1	<2U	<2	<1	<1	<1	<1	<1
Benzo(ghi)perylene		ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Benzo(k)fluoranthene	0.002	ug/l	<0.9U	<0.9U	<0.9U	<1	<1	<1	<1	<1	<1	<1	<1	<0.9U	<2	<1	<1	<1	<1	<1
Benzyl Alcohol		ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
bis(2-Chloroethoxy)methane	5	ug/l	<0.5U	<0.5U	<0.5U	<1	<1	<1	<1	<1	<1	<1	<1	<0.5U	<2	<1	<1	<1	<1	<1
bis(2-Ethylhexyl)phthalate	5	ug/l	<1U	6.8	1.7	<1	<1	2	<1	<1	<1	<1	<1	3J	3.8	5.7	<1	<1	<1	3.9
Butyl benzyl phthalate	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Carbazole		ug/l	<1U	<1U	3J	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Chrysene	0.002	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Dibenzo(a,h)anthracene		ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Dibenzofuran		ug/l	<0.8U	<0.8U	<0.8U	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1
Diethyl phthalate	50	ug/l	<0.8U	<0.8U	<0.8U	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1
Dimethyl Phthalate	50	ug/l	<0.6U	<0.6U	<0.6U	<1	<1	<1	<1	<1	<1	<1	<1	<0.6U	<2	<1	<1	<1	<1	<1
Di-n-butyl phthalate	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Di-n-octyl phthalate	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Fluoranthene	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Fluorene	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Hexachlorobenzene	0.04	ug/l	<0.8U	<0.8U	<0.8U	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1
Hexachlorobutadiene	0.5	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Hexachlorocyclopentadiene	5	ug/l	<2U	<2U	<2U	<10	<10	<10	<10	<10	<10	<10	<10	<2U	<20	<10	<10	<10	<10	<10
Hexachloroethane	5	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Indeno(1,2,3-cd)pyrene	0.002	ug/l	<0.7U	<0.7U	<0.7U	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1
Isophorone	50	ug/l	<0.7U	<0.7U	<0.7U	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1
Naphthalene	10	ug/l	<0.7U	<0.7U	<0.7U	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1
Nitrobenzene	0.4	ug/l	<0.7U	<0.7U	<0.7U	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1
n-Nitroso-di-n-propylamine		ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
N-Nitrosodiphenylamine	50	ug/l	<5U	<5U	<5U	<10	<10	<10	<10	<10	<10	<10	<10	<5U	<20	<10	<10	<10	<10	<10
Pentachlorophenol	2 *	ug/l	<0.7U	<0.7U	<0.7U	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1
Phenanthrene	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1
Pyrene	50	ug/l	<1U	<1U	<1U	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1

Table 5B
Groundwater Monitoring Wells
SVOC Data Comparison
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-110				MW-113				MW-114						
			Jul-92	May-06	Nov-06	Jul-07	Feb-08	Mar-08	Sep-08	Jul-92	May-06	Nov-06	Aug-07	Dec-07	Mar-08	Sep-08	
SVOC																	
1,2,4-Trichlorobenzene	5	ug/l															
1,2-Dichlorobenzene as a SVOC	3	ug/l															
1,3-Dichlorobenzene as a SVOC	3	ug/l															
1,4-Dichlorobenzene as a SVOC	3	ug/l															
2,2-oxybis (1-chloropropane)	5	ug/l															
2,4,5-Trichlorophenol	2*	ug/l															
2,4,6-Trichlorophenol	2*	ug/l															
2,4-Dichlorophenol	2*	ug/l															
2,4-Dimethylphenol	2*	ug/l															
2,4-Dinitrophenol	2*	ug/l															
2,4-Dinitrotoluene	5	ug/l															
2,6-Dinitrotoluene	5	ug/l															
2-Chloronaphthalene	10	ug/l															
2-Methylnaphthalene		ug/l															
2-Nitroaniline	5	ug/l															
2-Nitrophenol	2*	ug/l															
3,3-Dichlorobenzidine	5	ug/l															
3-Nitroaniline	5	ug/l															
4,6-Dinitro-2-methylphenol		ug/l															
4-Bromophenyl Phenyl Ether		ug/l															
4-chloro-3-methylphenol		ug/l															
4-Chloroaniline	5	ug/l															
4-Chlorophenyl Phenyl Ether		ug/l															
4-Methylphenol (m/p-cresol)		ug/l															
4-Nitroaniline	5	ug/l															
4-Nitrophenol		ug/l															
Acenaphthene	20	ug/l															
Acenaphthylene		ug/l															
Anthracene	50	ug/l															

Table 5B

[illegible]

Table 5B
Groundwater Monitoring Wells
SVOC Data Comparison
Pelham Bay Landfill Annual Report
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-119						MW-120						MW-120B															
			Aug-02		May-06		Nov-06		Jul-07		Feb-08		Mar-08		Sep-08		Jul-92		May-06		Nov-06		Jul-07		Dec-07		Mar-08		Sep-08	
SVOC																														
1,2,4-Trichlorobenzene	5	ug/l																												
1,2-Dichlorobenzene as a SVOC	3	ug/l																												
1,3-Dichlorobenzene as a SVOC	3	ug/l																												
1,4-Dichlorobenzene as a SVOC	3	ug/l																												
2,2-oxbis (1-chloropropane)	5	ug/l																												
2,4,5-Trichlorophenol	2*	ug/l																												
2,4,6-Trichlorophenol	2*	ug/l																												
2,4-Dichlorophenol	2*	ug/l																												
2,4-Dimethylphenol	2*	ug/l																												
2,4-Dinitrophenol	2*	ug/l																												
2,4-Dinitrotoluene	2*	ug/l																												
2,6-Dinitrotoluene	5	ug/l																												
2-Chloronaphthalene	5	ug/l																												
2-Methylnaphthalene	10	ug/l																												
2-Nitroaniline	5	ug/l																												
2-Nitrophenol	2*	ug/l																												
3,3-Dichlorobenzidine	5	ug/l																												
3-Nitroaniline	5	ug/l																												
4,6-Dinitro-2-methylphenol	5	ug/l																												
4-Bromophenyl Phenyl Ether		ug/l																												
4-chloro-3-methylphenol		ug/l																												
4-Chloroaniline	5	ug/l																												
4-Chlorophenyl Phenyl Ether		ug/l																												
4-Methylphenol (m/p-cresol)		ug/l																												
4-Nitroaniline	5	ug/l																												
4-Nitrophenol		ug/l																												
Acenaphthene		ug/l																												
Acenaphthylene	20	ug/l																												
Anthracene	50	ug/l																												

Table 5B

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	MW-119						MW-120						MW-120B						
		Aug-02	May-06	Nov-08	Jul-07	Feb-08	Mar-08	Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
		Unit																		
Benzo(a)anthracene	0.002	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
Benzo(a)pyrene	ND	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
Benzo(b)fluoranthene	0.002	<2U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.6U	<2	<1	<1	<1	<1	<1	<1
Benzo(ghi)perylene		<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Benzo(k)fluoranthene	0.002	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Benzyl Alcohol		<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
bis(2-Chloroethoxy)methane	5	<0.5U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
bis(2-Ethylhexyl)phthalate	5	<1U	<2	2.1	1.3	2.1	<1	<1	<1	<1	<1	<1	<1U	<2	3	<1	<1	<1	<1	1.7
Butyl benzyl phthalate	5	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
Carbazole	0.002	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2U	<2	<1	<1	<1	<1	<1	<1
Chrysene		<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Dibenzo(a,h)anthracene		<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1
Dibenzofuran		<0.9U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1
Diethyl phthalate	50	<0.9U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.9U	<2	<1	<1	<1	<1	<1	<1
Dimethyl Phthalate	50	<0.7U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
Di-n-butyl phthalate	50	<0.7U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
Di-n-octyl phthalate	50	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1
Fluoranthene	50	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Fluorene	50	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5U	<2	<1	<1	<1	<1	<1	<1
Hexachlorobenzene	0.04	<0.8U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene		<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Hexachlorocyclopentadiene	0.5	<0.9U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Hexachlorocyclopentadiene	5	<2U	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.8U	<2	<1	<1	<1	<1	<1	<10
Hexachloroethane	5	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<10
Indeno(1,2,3-cd)pyrene	0.002	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<10
Isophorone	50	<0.7U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1
Napthalene	10	<0.7U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1
Nitrobenzene	0.4	<0.9U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
n-Nitroso-di-n-propylamine		<0.8U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
N-Nitrosodiphenylamine		<0.8U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8U	<2	<1	<1	<1	<1	<1	<1
Pentachlorophenol	2 *	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1U	<2	<1	<1	<1	<1	<1	<1
Phenanthrene	50	<5U	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1U	<2	<1	<1	<1	<1	<1	<10
Pyrene	50	<0.7U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5U	<20	<1	<1	<1	<1	<1	<10
	50	<1U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.7U	<2	<1	<1	<1	<1	<1	<1

Table 5B
Groundwater Monitoring Wells
SVOC Data Comparison
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-122						
			Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
SVOC									
1,2,4-Trichlorobenzene	5	ug/l		< 0.7 U	< 2	< 10	< 1	< 1	< 1
1,2-Dichlorobenzene as a SVOC	3	ug/l		< 0.7 U	< 2	< 10	< 1	< 1	< 1
1,3-Dichlorobenzene as a SVOC	3	ug/l		1 J	< 2	< 10	< 1	< 1	< 1
1,4-Dichlorobenzene as a SVOC	3	ug/l		5 J	< 2	< 10	< 1	< 1	< 1
2,2-oxybis (1-chloropropane)	5	ug/l		< 0.6 U	< 2	< 10	< 1	< 1	< 1
2,4,5-Trichlorophenol	2*	ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
2,4,6-Trichlorophenol	2*	ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
2,4-Dichlorophenol	2*	ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
2,4-Dimethylphenol	2*	ug/l		< 0.7 U	< 2	< 10	< 1	< 1	< 1
2,4-Dinitrophenol	2*	ug/l		< 0.7 U	< 2	< 10	< 1	< 1	< 1
2,6-Dinitrophenol	5	ug/l		< 0.8 U	< 20	< 100	< 10	< 10	< 10
2,6-Dinitrotoluene	5	ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
2-Chloronaphthalene	10	ug/l		< 0.7 U	< 2	< 10	< 1	< 1	< 1
2-Methylnaphthalene		ug/l		< 0.6 U	< 2	< 10	< 1	< 1	< 1
2-Nitroaniline	5	ug/l		< 1 U	< 2	< 10	< 1	< 1	< 1
2-Nitrophenol	2*	ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
3,3-Dichlorobenzidine	5	ug/l		< 1 U	< 20	< 100	< 10	< 10	< 10
3-Nitroaniline	5	ug/l		< 0.7 U	< 2	< 10	< 1	< 1	< 1
4,6-Dinitro-2-methylphenol		ug/l		< 4 U	< 20	< 100	< 10	< 10	< 10
4-Bromophenyl Phenyl Ether		ug/l		< 0.9 U	< 2	< 10	< 1	< 1	< 1
4-chloro-3-methylphenol		ug/l		< 0.5 U	< 2	< 10	< 1	< 1	< 1
4-Chloroaniline	5	ug/l		< 0.4 U	< 2	< 10	< 1	< 1	< 1
4-Chlorophenyl Phenyl Ether		ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
4-Methylphenol (m/p-cresol)		ug/l		< 0.3 U	< 2	< 10	< 1	< 1	< 1
4-Nitroaniline	5	ug/l		< 1 U	< 2	< 10	< 1	< 1	< 1
4-Nitrophenol		ug/l		< 2 U	< 20	< 100	< 10	< 10	< 10
Acenaphthene	20	ug/l		3 J	< 2	< 10	1.7	3.9	1.7
Acenaphthylene		ug/l		< 0.8 U	< 2	< 10	< 1	< 1	< 1
Anthracene	50	ug/l		7 JH	< 2	< 10	< 1	< 1	< 1

Table 5B
Groundwater Monitoring Wells
SVOC Data Comparison
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-122						
			Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
Benzo(a)anthracene	0.002	ug/l		<1 U	<2	<10	<1	<1	<1
Benzo(a)pyrene	ND	ug/l		<1 U	<2	<10	<1	<1	<1
Benzo(b)fluoranthene	0.002	ug/l		<2 U	<2	<10	<1	<1	<1
Benzo(ghi)perylene		ug/l		<1 U	<2	<10	<1	<1	<1
Benzo(k)fluoranthene	0.002	ug/l		<0.9 U	<2	<10	<1	<1	<1
Benzyl Alcohol		ug/l		<1 U	<1 U	<10	<1	<1	<1
bis(2-Chloroethoxy)methane	5	ug/l		<0.5 U	<2	<10	<1	<1	<1
bis(2-Ethylhexyl)phthalate	5	ug/l		<1 U	3.3	<10	<1	<1	<1
Butyl benzyl phthalate	50	ug/l		<1 U	<2	<10	<1	<1	<1
Carbazole		ug/l		3 J	<2	<10	<1	2.3	<1
Chrysene	0.002	ug/l		<1 U	<2	<10	<1	<1	<1
Dibenzo(a,h)anthracene		ug/l		<1 U	<2	<10	<1	<1	<1
Dibenzofuran		ug/l		<0.8 U	<2	<10	<1	<1	<1
Diethyl phthalate	50	ug/l		<0.8 U	<2	<10	<1	<1	<1
Dimethyl Phthalate	50	ug/l		<0.6 U	<2	<10	<1	<1	<1
Di-n-butyl phthalate	50	ug/l		<1 U	<2	<10	<1	<1	<1
Di-n-octyl phthalate	50	ug/l		<1 U	<2	<10	<1	<1	<1
Fluoranthene	50	ug/l		<1 U	<2	<10	<1	<1	<1
Fluorene	50	ug/l		<1 U	<2	<10	<1	<1	<1
Hexachlorobenzene	0.04	ug/l		<0.8 UH	<2	<10	<1	<1	<1
Hexachlorobutadiene	0.5	ug/l		<1 U	<2	<10	<1	<1	<1
Hexachlorocyclopentadiene	5	ug/l		<0.8 U	<2	<10	<1	<1	<1
Hexachloroethane	5	ug/l		<2 U	<20	<100	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.002	ug/l		<1 U	<2	<10	<1	<1	<1
Isophorone	50	ug/l		<1 U	<2	<10	<1	<1	<1
Naphthalene	10	ug/l		<0.7 U	<2	<10	<1	<1	<1
Nitrobenzene	0.4	ug/l		0.9 J	<2	<10	<1	1.3	<1
n-Nitroso-di-n-propylamine		ug/l		<0.3 U	<2	<10	<1	<1	<1
N-Nitrosodiphenylamine	50	ug/l		<0.7 U	<2	<10	<1	<1	<1
Pentachlorophenol	2*	ug/l		<1 U	<2	<10	<1	<1	<1
Phenanthrene	50	ug/l		<5 U	<20	<100	<10	<10	<10
Pyrene	50	ug/l		<0.7 U	<2	<10	<1	<1	<1
		ug/l		<1 U	<2	<10	<1	<1	<1

Table 5B
Groundwater Monitoring Wells
VOC Data Comparison
PelhamBay Landfill Annual Report
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-104					MW-106																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Aug-07	Dec-07	Mar-08	Sep-08																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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Table 5B
Groundwater Monitoring Wells
VOC Data Comparison
PelhamBay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-109						MW-110							
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-28	Jul-92	May-06	Nov-06	Jul-07	Feb-08	Mar-08	Sep-08
VOC																
1,1,1-Trichloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	1	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	5	ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene as a VOC	3	ug/l														
1,2-Dichloroethane	0.6	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethene (total)	5 **	ug/l														
1,2-Dichloropropane	1	ug/l		< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene as a VOC	3	ug/l														
1,4-Dichlorobenzene as a VOC	3	ug/l														
2-Butanone (MEK)	50	ug/l		< 1.2 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloroethylvinylether		ug/l														
2-Chlorophenol		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Hexanone	50	ug/l		< 0.8 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylphenol (o-cresol)		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
4-methyl-2-pentanone (MIBK)		ug/l		< 0.7 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	50	ug/l		1.5 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	13	< 10	< 10	< 10	< 10
Benzene	1	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bis(2-chloroethyl)ether	1	ug/l		< 0.9 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	50	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	50	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromomethane	5	ug/l		< 1.2 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
C-10H14 isomer		ug/l														
C4H8O Isomer		ug/l														
Carbon Disulfide	60	ug/l		< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	5	ug/l		< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	7	ug/l		< 0.7 U	< 1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloromethane	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene		ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	50	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	5	ug/l		< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
m + p Xylene	5 ***	ug/l		< 1 U	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methylene Chloride	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MTBE	10	ug/l														
o Xylene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Phenol	2 *	ug/l		< 0.4 U	< 2	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 1
Silanol, trimethyl		ug/l														
Styrene	930	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	5	ug/l		< 0.3 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Acetate		ug/l														
Vinyl Chloride	2	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Xylenes (Total)	5 ***	ug/l		< 1 U	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3

W e i l d r y n o s a m p l e o b t a i n e d

JBR#

5

2 J

BJR#

Table 5B
Groundwater Monitoring Wells
VOC Data Comparison
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-113						MW-114							
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Jul-02	May-06	Nov-06	Aug-07	Dec-07	Mar-08	Sep-08
VOC																
1,1,1-Trichloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	1	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	5	ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene as a VOC	3	ug/l														
1,2-Dichloroethane	0.6	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethene (total)	5**	ug/l														
1,2-Dichloropropane	1	ug/l		< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene as a VOC	3	ug/l														
1,4-Dichlorobenzene as a VOC	3	ug/l														
2-Butanone (MEK)	50	ug/l		< 1.2 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloroethylvinylether		ug/l														
2-Chlorophenol		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Hexanone	50	ug/l		< 0.8 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylphenol (o-cresol)		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
4-methyl-2-pentanone (MIBK)		ug/l		< 0.7 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	50	ug/l	1 J	4.4 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	1	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bis(2-chloroethyl)ether	1	ug/l		< 0.9 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	50	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	50	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromomethane	5	ug/l		< 1.2 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
C10H14 isomer		ug/l														
C4H8O isomer		ug/l														
Carbon Disulfide	60	ug/l		< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	5	ug/l		< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	5	ug/l	19	< 0.4 U	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	7	ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloromethane	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene		ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	50	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	5	ug/l		< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
m + p Xylene	5***	ug/l		< 1 U	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methylene Chloride	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MTBE	10	ug/l														
o Xylene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Phenol	2*	ug/l														
Silanol, trimethyl		ug/l														
Styrene	930	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	5	ug/l		< 0.3 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene		ug/l														
Trichloroethene	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Acetate		ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Xylenes (Total)	5***	ug/l		< 1 U	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3

Table 5B
Groundwater Monitoring Wells
VOC Data Comparison
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Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-119					MW-120								
			Aug-02	May-06	Nov-06	Jul-07	Feb-08	Mar-08	Sep-08	Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
VOC																
1,1,1-Trichloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,1,2,2-Tetrachloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,1,2-Trichloroethane	1	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,1-Dichloroethane	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,1-Dichloroethane	5	ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,2-Dichlorobenzene as a VOC	3	ug/l														
1,2-Dichloroethane	0.6	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,2-Dichloroethane (total)	5 **	ug/l														
1,2-Dichloropropane	1	ug/l		< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
1,3-Dichlorobenzene as a VOC	3	ug/l														
1,4-Dichlorobenzene as a VOC	3	ug/l														
2-Butanone (MEK)	50	ug/l														
2-Chloroethylvinylether		ug/l		< 1.2 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10
2-Chlorophenol		ug/l														
2-Hexanone	50	ug/l		< 0.7 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Methylphenol (o-cresol)		ug/l		< 0.8 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10
4-methyl-2-pentanone (MIBK)		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	50	ug/l		< 0.7 U	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10
Acetone		ug/l		1.8 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10
Benzene	1	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Bis(2-chloroethoxy)ether	1	ug/l		< 0.9 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Bromodichloromethane	50	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Bromoform	50	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Bromomethane	5	ug/l		< 1.2 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
C10H14 isomer		ug/l														
C4H8O isomer		ug/l														
Carbon Disulfide	60	ug/l		< 0.9 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Carbon Tetrachloride	5	ug/l		< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Chlorobenzene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Chloroethane	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Chloroform	7	ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Chloromethane	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
cis-1,2-Dichloroethene	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
cis-1,3-Dichloropropene	50	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Dibromochloromethane	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Ethylbenzene	5	ug/l		< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
m + p Xylene	5 ***	ug/l		< 1 U	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2
Methylene Chloride	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
MTBE	10	ug/l														
o Xylene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Phenol	2 *	ug/l		< 0.4 U	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Silanol, trimethyl		ug/l														
Styrene	930	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Tetrachloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Toluene	5	ug/l		0.31 J	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
trans-1,2-Dichloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
trans-1,3-Dichloropropene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Trichloroethene	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Vinyl Acetate		ug/l		< 0.7 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Vinyl Chloride	2	ug/l		< 0.8 U	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1
Xylenes (Total)	5 ***	ug/l		< 1 U	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 15	< 3

Table 5B
Groundwater Monitoring Wells
VOC Data Comparison
PelhamBay Landfill Annual Report
February 2008 thru March 2009
Contract 1140-PEL

Compounds of Concern	NYSDEC Ambient Water Quality Standards and Guidance	Unit	MW-120B						MW-122							
			Jul-92	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08	Aug-02	May-06	Nov-06	Jul-07	Dec-07	Mar-08	Sep-08
VOC																
1,1,1-Trichloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 5	< 1		< 0.4 U	< 1	< 1	< 10	< 5	< 5
1,1,2,2-Tetrachloroethane	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 5	< 1		< 0.4 U	< 1	< 1	< 10	< 5	< 5
1,1,2-Trichloroethane	1	ug/l		< 0.6 U	< 1	< 1	< 1	< 5	< 1		< 0.6 U	< 1	< 1	< 10	< 5	< 5
1,1-Dichloroethane	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 5	< 1		< 0.6 U	< 1	< 1	< 10	< 5	< 5
1,1-Dichloroethane	5	ug/l		< 0.7 U	< 1	< 1	< 1	< 5	< 1		< 0.7 U	< 1	< 1	< 10	< 5	< 5
1,2-Dichlorobenzene as a VOC	3	ug/l		< 0.6 U	< 1	< 1	< 1	< 5	< 1		< 0.6 U	< 1	< 1	< 10	< 5	< 5
1,2-Dichloroethane	0.6	ug/l		< 0.6 U	< 1	< 1	< 1	< 5	< 1		< 0.6 U	< 1	< 1	< 10	< 5	< 5
1,2-Dichloroethene (total)	5 **	ug/l		< 0.9 U	< 1	< 1	< 1	< 5	< 1		< 0.9 U	< 1	< 1	< 10	< 5	< 5
1,2-Dichloropropane	1	ug/l		< 0.9 U	< 1	< 1	< 1	< 5	< 1		< 0.9 U	< 1	< 1	< 10	< 5	< 5
1,3-Dichlorobenzene as a VOC	3	ug/l		< 0.9 U	< 1	< 1	< 1	< 5	< 1		< 0.9 U	< 1	< 1	< 10	< 5	< 5
1,4-Dichlorobenzene as a VOC	3	ug/l		< 0.9 U	< 1	< 1	< 1	< 5	< 1		< 0.9 U	< 1	< 1	< 10	< 5	< 5
2-Butanone (MEK)	50	ug/l		< 1.2 U	< 10	< 10	< 10	< 50	< 10		2.4 J	< 10	< 10	< 100	< 50	< 50
2-Chloroethyvinylether		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1		< 0.6 U	< 2	< 10	< 1	< 1	< 1
2-Chlorophenol	50	ug/l		< 0.8 U	< 10	< 10	< 10	< 50	< 10		< 0.8 U	< 10	< 10	< 100	< 50	< 50
2-Hexanone		ug/l		< 0.6 U	< 2	< 1	< 1	< 1	< 1		< 0.6 U	< 2	< 10	< 1	< 1	< 1
2-Methylphenol (o-cresol)		ug/l		< 0.7 U	< 10	< 10	< 10	< 50	< 10		< 0.7 U	< 10	< 10	< 100	< 50	< 50
4-methyl-2-pentanone (MIBK)		ug/l		< 0.7 U	< 10	< 10	< 10	< 50	< 10		< 0.7 U	< 10	< 10	< 100	< 50	< 50
Acetone	50	ug/l		5.1 JB	< 10	< 10	< 10	< 50	< 10		15 B	< 10	13	< 100	< 50	< 50
Benzene	1	ug/l		< 0.4 U	< 1	< 1	< 1	< 5	< 1		5.7	6	5	< 10	6	6
Bis(2-chloroethy)ether	1	ug/l		< 0.9 U	< 2	< 1	< 1	< 5	< 1		< 0.9 U	< 2	< 10	< 1	< 1	< 1
Bromodichloromethane	50	ug/l		< 0.4 U	< 1	< 1	< 1	< 5	< 1		< 0.4 U	< 1	< 1	< 10	< 5	< 5
Bromoform	50	ug/l		< 0.8 U	< 1	< 1	< 1	< 5	< 1		< 0.8 U	< 1	< 1	< 10	< 5	< 5
Bromomethane	5	ug/l		< 1.2 U	< 1	< 1	< 1	< 5	< 1		< 1.2 U	< 1	< 1	< 10	< 5	< 5
C10H14 isomer		ug/l														
C4H8O Isomer		ug/l														
Carbon Disulfide	60	ug/l		1.2 J	< 1	< 1	< 1	< 5	< 1		< 0.9 U	< 1	< 1	< 10	< 5	< 5
Carbon Tetrachloride	5	ug/l		< 1 U	< 1	< 1	< 1	< 5	< 1		< 1 U	< 1	< 1	< 10	< 5	< 5
Chlorobenzene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 5	< 1		< 0.4 U	< 1	< 1	< 10	< 5	< 5
Chloroethane	5	ug/l		< 0.8 U	< 1	< 1	< 1	< 5	< 1		< 0.8 U	< 1	< 1	< 10	< 5	< 5
Chloroform	7	ug/l		< 0.7 U	< 1	< 1	< 1	< 5	< 1		< 0.7 U	< 1	< 1	< 10	< 5	< 5
Chloromethane	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 5	< 1		< 0.5 U	< 1	< 1	< 10	< 5	< 5
cis-1,2-Dichloroethene	5	ug/l		< 0.6 U	< 1	< 1	< 1	< 5	< 1		< 0.6 U	< 1	< 1	< 10	< 5	< 5
cis-1,3-Dichloropropene		ug/l		< 0.5 U	< 1	< 1	< 1	< 5	< 1		< 0.5 U	< 1	< 1	< 10	< 5	< 5
Dibromochloromethane	50	ug/l		< 0.5 U	< 1	< 1	< 1	< 5	< 1		< 0.5 U	< 1	< 1	< 10	< 5	< 5
Ethylbenzene	5	ug/l		< 1 U	< 1	< 1	< 1	< 5	< 1		< 1 U	< 1	< 1	< 10	< 5	< 5
m + p Xylene	5 ***	ug/l		< 2	< 2	< 2	< 2	< 10	< 2		5 J	< 2	< 2	< 20	< 10	< 10
Methylene Chloride	5	ug/l		< 0.4 UB	< 1	< 1	< 1	< 5	< 1		BJR#	< 1	< 1	< 10	< 5	< 5
MTBE	10	ug/l		< 0.4 UB	< 1	< 1	< 1	< 5	< 1		< 0.4 UB	< 1	< 1	< 10	< 5	< 5
o Xylene	5	ug/l		< 0.4 U	< 1	< 1	< 1	< 5	< 1		< 0.4 U	< 1	< 1	< 10	< 5	< 5
Phenol	2 *	ug/l		< 0.4 U	< 2	< 1	< 1	< 1	< 1		< 0.4 U	< 2	< 10	< 1	< 1	< 1
Silanol, trimethyl		ug/l														
Styrene	930	ug/l		< 0.5 U	< 1	< 1	< 1	< 5	< 1		< 0.5 U	< 1	< 1	< 10	< 5	< 5
Tetrachloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 5	< 1		< 0.5 U	< 1	< 1	< 10	< 5	< 5
Toluene	5	ug/l		< 0.3 U	< 1	< 1	< 1	< 5	< 1		3.4 J	4	3	< 10	< 5	< 5
trans-1,2-Dichloroethene	5	ug/l		< 0.5 U	< 1	< 1	< 1	< 5	< 1		< 0.5 U	< 1	< 1	< 10	< 5	< 5
trans-1,3-Dichloropropene		ug/l		< 0.8 U	< 1	< 1	< 1	< 5	< 1		< 0.8 U	< 1	< 1	< 10	< 5	< 5
Trichloroethene	5	ug/l		< 0.7 U	< 1	< 1	< 1	< 5	< 1		< 0.7 U	< 1	< 1	< 10	< 5	< 5
Vinyl Acetate		ug/l		< 0.8 U	< 1	< 1	< 1	< 5	< 1		< 0.8 U	< 1	< 1	< 10	< 5	< 5
Vinyl Chloride	2	ug/l		< 0.8 U	< 1	< 1	< 1	< 5	< 1		0.81 J	< 1	< 1	< 10	< 5	< 5
Xylenes (Total)	5 ***	ug/l		< 1 U	< 3	< 3	< 3	< 15	< 3		2.6 J	< 3	< 3	< 30	< 15	< 15

Table 5B
Groundwater Monitoring Wells
Analytical Methods, Data Qualifiers and Footnotes

All Concentrations are in ug/l

U: Analyte was not detected at or above the reporting limit

E: Indicates an estimated value because of the presence of interference

B: (inorganics)result is less than the CRDL/RL but greater than or equal to the IDL/MDL

N: MS, MSD : Spike recovery exceeds the upper or lower control limits

ND: Compound not detected

B: (organics) Compound was found in blanks

J: (inorganics)result is less than the RL but greater than or equal to the method detection limit.

J: (organics)Result is an estimated value below the reporting limit or a tentatively un-identified compound

IDL: Instrument detection limit

MDL: method detection limit

RL: reporting limit

R: rejected

NS: No standard available

N/A: Not Applicable

* Guidance Value

Concentration detected at levels above the NYSDEC Ambient Water Quality Standards and Guidance Values are shaded gray.

<u>Analytical Methods</u>	<u>May-06</u>	<u>Nov-06</u>
VOC	SW846 8260B	EPA 8260
SVOC	SW846 8270C	EPA 8270
PCB	EPA 608	EPA 608
Pesticides	SW846 8081A	EPA 609
Metals	SW846 6010B	EPA 200.7
Mercury	SW846 7470A	EPA 200.8
Cyanide	SM18 4500CNG	EPA 335.3

Tables 5C

Groundwater Elevation Measurements

Table 5C
Groundwater Elevation Measurements
Pelham Bay Landfill
Annual Report March 2008 through February 2009
Contract 1140-PEL

Date 9/3/2008

Time 8:00 am low tide

Measurer JM

Well Number	Top of Well Elevation	Depth to Groundwater (ft)	Groundwater Table Elev.
MW - 104	19.132	17.64	1.492
MW - 106	18.388	dry	no access
MW - 109	23.952	21.18	2.772
MW - 110	20.013	dry	dry
MW - 113	14.442	13.54	0.902
MW - 114	14.66	12.24	2.42
MW - 115	24.807	21.76	3.047
MW - 115B	24.876	21.66	3.216
MW - 117 *	8.077	6.44	1.637
MW - 117B *	Can't locate		Can't locate
MW - 118	19.113	dry	dry
MW - 119	20.421	24.16	-3.739
MW - 120	18.838	23.26	-4.422
MW - 120B	19.296	23.26	-3.964
MW - 121	15.621		well abandoned
MW - 122	17.575	20.82	-3.245
MW - 124 *	Can't locate		Can't locate
MW - 124B *	Can't locate		Can't locate
MW - 126 (PZ-5)	abandoned		well abandoned
PZ-A	11.951	6.72	5.231
PZ-B *	14.254	8.42	5.834
PZ-C	11.374	6.62	4.754
PZ-D *	12.411	6.65	5.761
PZ-E	9.545	7.24	2.305
PZ-F	9.645	7.64	2.005

* MW -117, MW-117B, MW-124, MW-124B, PZ-B & PZ-D

are located outside landfill on Pelham park side

PZ-A, PZ-C, and PZ-E are piezometer wells upstream of slurry wall

PZ-B, PZ-D, and PZ-F are piezometer wells downstream of slurry wall

Table 5C
Groundwater Elevation Measurements
Pelham Bay Landfill
Annual Report March 2008 through February 2009
Contract 1140-PEL

Date 9/3/2008

Time 2:00 pm high tide

GROUNDWATER ELEVATION			
Well Number	Top of Well Elevation	Depth to Groundwater (ft)	Groundwater Table Elev.
MW - 104	19.132	17.03	2.102
MW - 106	18.388	16.40	1.988
MW - 109	23.952	20.59	3.362
MW - 110	20.013	17.65	2.363
MW - 113	14.442	13.33	1.112
MW - 114	14.66	12.2	2.46
MW - 115	24.807	21.55	3.257
MW - 115B	24.876	21.58	3.296
MW - 117 *	8.077	5.8	2.277
MW - 117B *	Can't locate		Can't locate
MW - 118	19.113	16.24	2.873
MW - 119	20.421	17.56	2.861
MW - 120	18.838	19.08	-0.242
MW - 120B	19.296	17.44	1.856
MW - 121	15.621		well abandoned
MW - 122	17.575	15.90	1.675
MW - 124 *	Can't locate		Can't locate
MW - 124B *	Can't locate		Can't locate
MW - 126 (PZ-5)	abandoned		well abandoned
PZ-A	11.951	6.74	flooded
PZ-B *	14.254	8.46	5.794
PZ-C	11.374	7.64	3.734
PZ-D *	12.411	6.70	5.711
PZ-E	9.545	7.32	2.225
PZ-F	9.645	7.45	2.195

* MW -117, MW-117B, MW-124, MW-124B, PZ-B & PZ-D

are located outside landfill on Pelham park side

PZ-A, PZ-C, and PZ-E are piezometer wells upstream of slurry wall

PZ-B, PZ-D, and PZ-F are piezometer wells downstream of slurry wall

*** ALL ELEVATIONS REFER TO BRONX HIGHWAY DATUM, WHICH IS 2.608 FEET ABOVE MEAN SEA LEVEL AT SANDY HOOK, NEW JERSEY AS ESTABLISHED BY U.S. COAST AND GEODETIC SURVEY.**

Table 5C
Groundwater Elevation Measurements
Pelham Bay Landfill
Annual Report March 2008 through February 2009
Contract 1140-PEL

Date 3/20/2008

Time 6:30am low tide

Measurer RH/JM

Well Number	Top of Well Elevation	Depth to Groundwater (ft)	Groundwater Table Elev.
MW – 104	19.132	17	2.132
MW – 106	18.388	Well Cap Stuck	Well Cap Stuck
MW – 109	23.952	17.2	6.752
MW – 110	20.013	18.14	1.873
MW – 113	14.442	12.96	1.482
MW – 114	14.66	10.38	4.28
MW – 115	24.807	20.4	4.407
MW – 115B	24.876	20.6	4.276
MW – 117 *	8.077	5.14	2.937
MW – 117B *	Can't locate		Can't locate
MW – 118	19.113	16.12	2.993
MW – 119	20.421	17.50	2.921
MW – 120	18.838	19.30	-0.462
MW – 120B	19.296	17.72	1.576
MW – 121	15.621		well abandoned
MW – 122	17.575	15.92	1.655
MW – 124 *	Can't locate		Can't locate
MW – 124B *	Can't locate		Can't locate
MW – 126 (PZ-5)	Abandoned		well abandoned
PZ-A	11.951	6.28	5.671
PZ-B *	14.254	7.64	6.614
PZ-C	11.374	5.40	5.974
PZ-D *	12.411		12.411
PZ-E	9.545	4.94	4.605
PZ-F	9.645	6.74	2.905

* MW -117, MW-117B, MW-124, MW-124B, PZ-B & PZ-D

are located outside landfill on Pelham park side

PZ-A, PZ-C, and PZ-E are piezometer wells upstream of slurry wall

PZ-B, PZ-D, and PZ-F are piezometer wells downstream of slurry wall

Table 5C
Groundwater Elevation Measurements
Pelham Bay Landfill
Annual Report March 2008 through February 2009
Contract 1140-PEL

Date 3/20/2008

Time 12:00 pm high tide

GROUNDWATER ELEVATION			
Well Number	Top of Well Elevation	Depth to Groundwater (ft)	Groundwater Table Elev.
MW – 104	19.132	17.98	1.152
MW – 106	18.388	17.08	1.308
MW – 109	23.952	15.04	8.912
MW – 110	20.013	17.32	2.693
MW – 113	14.442	12.08	2.362
MW – 114	14.66	9.23	5.43
MW – 115	24.807	19.26	5.547
MW – 115B	24.876	19.28	5.596
MW – 117 *	8.077	4.8	3.277
MW – 117B *	Can't locate		Can't locate
MW – 118	19.113	18.28	0.833
MW – 119	20.421	21.18	-0.759
MW – 120	18.838	17.28	1.558
MW – 120B	19.296	18.18	1.116
MW – 121	15.621		well abandoned
MW – 122	17.575	18.84	-1.265
MW – 124 *	Can't locate		Can't locate
MW – 124B *	Can't locate		Can't locate
MW – 126 (PZ-5)	abandoned		well abandoned
PZ-A	11.951	flooded	flooded
PZ-B *	14.254	7.20	7.054
PZ-C	11.374	4.88	6.494
PZ-D *	12.411	6.08	6.331
PZ-E	9.545	5.66	3.885
PZ-F	9.645	6.26	3.385

* MW -117, MW-117B, MW-124, MW-124B, PZ-B & PZ-D

are located outside landfill on Pelham park side

PZ-A, PZ-C, and PZ-E are piezometer wells upstream of slurry wall

PZ-B, PZ-D, and PZ-F are piezometer wells downstream of slurry wall

*** ALL ELEVATIONS REFER TO BRONX HIGHWAY DATUM, WHICH IS 2.608 FEET ABOVE MEAN SEA LEVEL AT SANDY HOOK, NEW JERSEY AS ESTABLISHED BY U.S. COAST AND GEODETIC SURVEY.**

Table 6

Leachate Schedule A Analytical Results

Table 6 Pelham Bay Landfill Leachate A

Compound of Concern	February 14, 2008 Results		September 4, 2008 Results	
1,1 Dichloroethane	< 1	ug/L	< 1	ug/L
1,1 Dichloroethene	< 1	ug/L	< 1	ug/L
1,2 Dichloroethane	< 1	ug/L	< 1	ug/L
1,2 Dichloroethene	< 2	ug/L	< 2	ug/L
1,2 Dichloropropane	< 1	ug/L	< 1	ug/L
111 Trichloroethane	< 1	ug/L	< 1	ug/L
112 Trichloroethane	< 1	ug/L	< 1	ug/L
1122Tetrachloroethane	< 1	ug/L	< 1	ug/L
2-Butanone	< 10	ug/L	< 10	ug/L
2-Hexanone	< 10	ug/L	< 10	ug/L
4-Methyl-2-Pentanone	< 10	ug/L	< 10	ug/L
Acetone	< 10	ug/L	< 10	ug/L
Benzene	< 1	ug/L	< 1	ug/L
Bromodichloromethane	< 1	ug/L	< 1	ug/L
Bromoform	< 1	ug/L	< 1	ug/L
Bromomethane	< 1	ug/L	< 1	ug/L
c-1,3Dichloropropene	< 1	ug/L	< 1	ug/L
Carbon disulfide	< 1	ug/L	< 1	ug/L
Carbon Tetrachloride	< 1	ug/L	< 1	ug/L
Chlorobenzene	< 1	ug/L	1	ug/L
Chlorodibromomethane	< 1	ug/L	< 1	ug/L
Chloroethane	< 1	ug/L	< 1	ug/L
Chloroform	< 1	ug/L	< 1	ug/L
Chloromethane	< 1	ug/L	< 1	ug/L
Ethyl Benzene	< 1	ug/L	< 1	ug/L
m + p Xylene	< 2	ug/L	< 2	ug/L
Methylene Chloride	< 1	ug/L	< 1	ug/L
o Xylene	< 1	ug/L	< 1	ug/L
Styrene	< 1	ug/L	< 1	ug/L
t-1,3Dichloropropene	< 1	ug/L	< 1	ug/L
Tetrachloroethene	< 1	ug/L	< 1	ug/L
Toluene	< 1	ug/L	< 1	ug/L
Trichloroethene	< 1	ug/L	< 1	ug/L
Vinyl Chloride	< 1	ug/L	< 1	ug/L
Xylene	< 3	ug/L	< 3	ug/L
1,2 Dichlorobenzene(sv)	< 1	ug/L	< 1	ug/L
1,3 Dichlorobenzene(sv)	< 1	ug/L	< 1	ug/L
1,4 Dichlorobenzene(sv)	< 1	ug/L	< 1	ug/L
124-Trichlorobenzene (sv)	< 1	ug/L	< 1	ug/L
2,4-Dinitrotoluene	< 1	ug/L	< 1	ug/L
2,6-Dinitrotoluene	< 1	ug/L	< 1	ug/L
2-Chloronaphthalene	< 1	ug/L	< 1	ug/L
2-Methylnaphthalene	< 1	ug/L	< 1	ug/L
2-Nitroaniline	< 1	ug/L	< 1	ug/L

Table 6 Pelham Bay Landfill Leachate A

Compound of Concern	February 14, 2008 Results		September 4, 2008 Results	
3,3'-Dichlorobenzidine	< 10	ug/L	< 10	ug/L
3-Nitroaniline	< 1	ug/L	< 1	ug/L
4-Bromophenyl phenyl ether	< 1	ug/L	< 1	ug/L
4-Chloroaniline	< 1	ug/L	< 1	ug/L
4-Chlorophenyl phenyl ether	< 1	ug/L	< 1	ug/L
4-Nitroaniline	< 1	ug/L	< 1	ug/L
Acenaphthene	< 1	ug/L	< 1	ug/L
Acenaphthylene	< 1	ug/L	< 1	ug/L
Anthracene	< 1	ug/L	< 1	ug/L
Benzo(a)anthracene	< 1	ug/L	< 1	ug/L
Benzo(a)pyrene	< 1	ug/L	< 1	ug/L
Benzo(b)fluoranthene	< 1	ug/L	< 1	ug/L
Benzo(ghi)perylene	< 1	ug/L	< 1	ug/L
Benzo(k)fluoranthene	< 1	ug/L	< 1	ug/L
BenzylButylPhthalate	< 1	ug/L	< 1	ug/L
Bis(2-chloroethoxy)methane	< 1	ug/L	< 1	ug/L
Bis(2-chloroethyl)ether	< 1	ug/L	< 1	ug/L
Bis(2-chloroisopropyl)ether	< 1	ug/L	< 1	ug/L
Bis(2-ethylhexyl)phthalate	< 1	ug/L	< 1	ug/L
Carbazole	< 1	ug/L	< 1	ug/L
Chrysene	< 1	ug/L	< 1	ug/L
Di-n-Butyl Phthalate	< 1	ug/L	< 1	ug/L
Di-n-octyl Phthalate	< 1	ug/L	< 1	ug/L
Dibenzo(a,h)anthracene	< 1	ug/L	< 1	ug/L
Dibenzofuran	< 1	ug/L	< 1	ug/L
Diethyl Phthalate	< 1	ug/L	< 1	ug/L
Dimethyl Phthalate	< 1	ug/L	< 1	ug/L
Fluoranthene	< 1	ug/L	< 1	ug/L
Fluorene	< 1	ug/L	< 1	ug/L
Hexachlorobenzene	< 1	ug/L	< 1	ug/L
Hexachlorobutadiene	< 1	ug/L	< 1	ug/L
Hexachlorocyclopentadiene	< 10	ug/L	< 10	ug/L
Hexachloroethane	< 1	ug/L	< 1	ug/L
Indeno(1,2,3-cd)pyrene	< 1	ug/L	< 1	ug/L
Isophorone	< 1	ug/L	< 1	ug/L
N-Nitrosodi-n-propylamine	< 1	ug/L	< 1	ug/L
N-Nitrosodiphenylamine	< 1	ug/L	< 1	ug/L
Naphthalene(sv)	< 1	ug/L	< 1	ug/L
Nitrobenzene	< 1	ug/L	< 1	ug/L
Phenanthrene	< 1	ug/L	< 1	ug/L
Pyrene	< 1	ug/L	< 1	ug/L
2,4,5-Trichlorophenol	< 1	ug/L	< 1	ug/L
2,4,6-Trichlorophenol	< 1	ug/L	< 1	ug/L
2,4-Dichlorophenol	< 1	ug/L	< 1	ug/L

Table 6 Pelham Bay Landfill Leachate A

Compound of Concern	February 14, 2008 Results		September 4, 2008 Results	
2,4-Dimethylphenol	< 1	ug/L	< 1	ug/L
2,4-Dinitrophenol	< 10	ug/L	< 10	ug/L
2-Chlorophenol	< 1	ug/L	< 1	ug/L
2-Methyl-4,6-dinitrophenol	< 10	ug/L	< 10	ug/L
2-Methylphenol (o-cresol)	< 1	ug/L	< 1	ug/L
2-Nitrophenol	< 1	ug/L	< 1	ug/L
4-Chloro-3-methylphenol	< 1	ug/L	< 1	ug/L
4-Methylphenol (p-cresol)	< 1	ug/L	< 1	ug/L
4-Nitrophenol	< 10	ug/L	< 10	ug/L
Pentachlorophenol (ms)	< 10	ug/L	< 10	ug/L
Phenol	< 1	ug/L	< 1	ug/L
a BHC	< 0.05	ug/L	< 0.05	ug/L
Aldrin	< 0.05	ug/L	< 0.05	ug/L
b BHC	< 0.05	ug/L	< 0.05	ug/L
Chlordane	< 0.2	ug/L	< 0.2	ug/L
d BHC	< 0.05	ug/L	< 0.05	ug/L
Dieldrin	< 0.05	ug/L	< 0.05	ug/L
Endosulfan 1	< 0.1	ug/L	< 0.1	ug/L
Endosulfan 2	< 0.1	ug/L	< 0.1	ug/L
Endosulfan Sulfate	< 0.3	ug/L	< 0.3	ug/L
Endrin	< 0.05	ug/L	< 0.05	ug/L
Endrin Aldehyde	< 0.3	ug/L	< 0.3	ug/L
Endrin Ketone	< 0.1	ug/L	< 0.1	ug/L
Heptachlor	< 0.05	ug/L	< 0.05	ug/L
Heptachlor Epoxide	< 0.05	ug/L	< 0.05	ug/L
Lindane	< 0.05	ug/L	< 0.05	ug/L
Methoxychlor	< 0.1	ug/L	< 0.1	ug/L
p,p-DDD	< 0.05	ug/L	< 0.05	ug/L
p,p-DDE	< 0.05	ug/L	< 0.05	ug/L
p,p-DDT	< 0.1	ug/L	< 0.1	ug/L
Toxaphene	< 1	ug/L	< 1	ug/L
Aroclor 1016	< 0.065	ug/L	< 0.065	ug/L
Aroclor 1221	< 0.065	ug/L	< 0.065	ug/L
Aroclor 1232	< 0.065	ug/L	< 0.065	ug/L
Aroclor 1242	< 0.065	ug/L	< 0.065	ug/L
Aroclor 1248	< 0.065	ug/L	< 0.065	ug/L
Aroclor 1254	< 0.065	ug/L	< 0.065	ug/L
Aroclor 1260	< 0.065	ug/L	< 0.065	ug/L
Aluminum as Al	0.12	mg/L	0.13	mg/L
Antimony as Sb	0.008	mg/L	0.01	mg/L
Arsenic as As	0.007	mg/L	0.01	mg/L
Barium as Ba	0.082	mg/L	0.18	mg/L
Beryllium as Be	< 0.001	mg/L	< 0.001	mg/L
Cadmium as Cd	< 0.005	mg/L	< 0.005	mg/L

Table 6 Pelham Bay Landfill Leachate A

Compound of Concern	February 14, 2008 Results	September 4, 2008 Results
Calcium as Ca	80 mg/L	52 mg/L
Chromium as Cr	< 0.005 mg/L	0.012 mg/L
Cobalt as Co	< 0.005 mg/L	< 0.005 mg/L
Copper as Cu	< 0.01 mg/L	0.02 mg/L
Iron as Fe	0.54 mg/L	1.2 mg/L
Lead as Pb	< 0.005 mg/L	< 0.005 mg/L
Magnesium as Mg	15 mg/L	47 mg/L
Manganese as Mn	0.13 mg/L	0.19 mg/L
Mercury as Hg	< 0.00025 mg/L	< 0.00025 mg/L
Nickel as Ni	< 0.01 mg/L	0.02 mg/L
Potassium as K	13 mg/L	74 mg/L
Selenium as Se	< 0.01 mg/L	< 0.01 mg/L
Silver as Ag	< 0.005 mg/L	< 0.005 mg/L
Sodium as Na	90 mg/L	500 mg/L
Thallium as Tl	< 0.005 mg/L	< 0.005 mg/L
Vanadium as V	< 0.005 mg/L	0.018 mg/L
Zinc as Zn	0.04 mg/L	0.07 mg/L
Cyanide as CN	< 0.02 mg/L	< 0.02 mg/L

Table 7

Leachate Schedule B Analytical Results

Table 7 Pelham Bay Landfill Leachate B

Compound of Concern	February 14, 2008 Results		September 4, 2008 Results	
Arsenic as As	0.007	mg/L	0.01	mg/L
Cadmium as Cd	< 0.005	mg/L	< 0.005	mg/L
Chromium as Cr	< 0.005	mg/L	0.012	mg/L
Copper as Cu	< 0.01	mg/L	0.02	mg/L
Lead as Pb	< 0.005	mg/L	< 0.005	mg/L
Mercury as Hg	< 0.00025	mg/L	< 0.00025	mg/L
Molybdenum as Mo		mg/L		mg/L
Nickel as Ni	< 0.01	mg/L	0.02	mg/L
Selenium as Se	< 0.01	mg/L	< 0.01	mg/L
Zinc as Zn	0.04	mg/L	0.07	mg/L
Ammonia as N	3	mg/L	64	mg/L
BOD5	3.4	mg/L	11	mg/L
Chloride as Cl	120	mg/L	850	mg/L
Chromium hex as Cr	< 0.02	mg/L	< 0.02	mg/L
CN amen.to chlorin.	< 0.02	mg/L	< 0.02	mg/L
COD	55	mg/L	140	mg/L
Nitrate as N	0.9	mg/L	2.2	mg/L
Non-polar Material		mg/L	0.28	mg/L
pH (lab) units	7.3		7.5	
Tot Suspended Solids	4	mg/L	9	mg/L
Tot. Kjeldahl N.	4	mg/L	69	mg/L

Table 8

Gas Condensate Analytical Results

Table 8
Pelham Bay Landfill
Gas Condensate
Sample Date October 29 2008

Compound of Concern	Result
1,1 Dichloroethene	< 5 ug/L
1,2 Dichloroethane	< 5 ug/L
1,4 Dichlorobenzene (v)	13 ug/L
Benzene	7 ug/L
Carbon Tetrachloride	< 5 ug/L
Chlorobenzene	11 ug/L
Chloroform	< 5 ug/L
Methyl Ethyl Ketone	840 ug/L
Tetrachloroethene	< 5 ug/L
Trichloroethene	< 5 ug/L
Vinyl Chloride	< 5 ug/L
2,4-Dinitrotoluene	< 10 ug/L
Hexachlorobenzene	< 10 ug/L
Hexachlorobutadiene	< 10 ug/L
Hexachloroethane	< 10 ug/L
Nitrobenzene	< 10 ug/L
Pyridine	< 100 ug/L
2,4,5-Trichlorophenol	< 10 ug/L
2,4,6-Trichlorophenol	< 10 ug/L
2-Methylphenol (o-cresol)	< 10 ug/L
3-Methylphenol (m-cresol)	23 ug/L
4-Methylphenol (p-cresol)	23 ug/L
Pentachlorophenol (ms)	< 100 ug/L
Chlordane	< 2 ug/L
Endrin	< 0.5 ug/L
Heptachlor	< 0.5 ug/L
Heptachlor Epoxide	< 0.5 ug/L
Lindane	< 0.5 ug/L
Methoxychlor	< 1 ug/L
Toxaphene	< 10 ug/L
2,4,5-TP	< 0.5 ug/L
2,4-D	< 1 ug/L
Arsenic as As	0.65 mg/L
Barium as Ba	0.3 mg/L
Cadmium as Cd	< 0.05 mg/L
Chromium as Cr	< 0.05 mg/L
Lead as Pb	< 0.05 mg/L
Mercury as Hg	< 0.001 mg/L
Selenium as Se	< 0.04 mg/L
Silver as Ag	< 0.05 mg/L
TCLP Extraction	
TCLP Extraction	
TCLP Zero Headspace Extract	

Table 9

Stormwater Monitoring Analytical Results

Table 9
Stormwater Discharge Analysis
Pelham Bay Landfill
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Compound of Concern	units	Stormwater Location Point 1		Stormwater Location 2	
		4/10/08	10/30/2008	4/10/08	10/30/2008
1,1 Dichloroethane	ug/L	< 1	< 1	< 1	< 1
1,1 Dichloroethene	ug/L	< 1	< 1	< 1	< 1
1,2 Dichloroethane	ug/L	< 1	< 1	< 1	< 1
1,2 Dichloroethene	ug/L	< 2	< 2	< 2	< 2
1,2 Dichloropropane	ug/L	< 1	< 1	< 1	< 1
111 Trichloroethane	ug/L	< 1	< 1	< 1	< 1
112 Trichloroethane	ug/L	< 1	< 1	< 1	< 1
1122Tetrachloroethane	ug/L	< 1	< 1	< 1	< 1
2-Butanone	ug/L	< 10	< 10	< 10	< 10
2-Hexanone	ug/L	< 10	< 10	< 10	< 10
4-Methyl-2-Pentanone	ug/L	< 10	< 10	< 10	< 10
Acetone	ug/L	< 10	< 10	< 10	< 10
Benzene	ug/L	< 1	< 1	< 1	< 1
Bromodichloromethane	ug/L	< 1	< 1	< 1	< 1
Bromoform	ug/L	< 1	< 1	< 1	< 1
Bromomethane	ug/L	< 1	< 1	< 1	< 1
c-1,3Dichloropropene	ug/L	< 1	< 1	< 1	< 1
Carbon disulfide	ug/L	< 1	< 1	< 1	< 1
Carbon Tetrachloride	ug/L	< 1	< 1	< 1	< 1
Chlorobenzene	ug/L	< 1	< 1	< 1	< 1
Chlorodibromomethane	ug/L	< 1	< 1	< 1	< 1
Chloroethane	ug/L	< 1	< 1	< 1	< 1
Chloroform	ug/L	< 1	< 1	< 1	< 1
Chloromethane	ug/L	< 1	< 1	< 1	< 1
Ethyl Benzene	ug/L	< 1	< 1	< 1	< 1
m + p Xylene	ug/L	< 2	< 2	< 2	< 2
Methylene Chloride	ug/L	< 1	< 1	< 1	< 1
o Xylene	ug/L	< 1	< 1	< 1	< 1
Styrene	ug/L	< 1	< 1	< 1	< 1
t-1,3Dichloropropene	ug/L	< 1	< 1	< 1	< 1
Tetrachloroethene	ug/L	< 1	< 1	< 1	< 1
Toluene	ug/L	< 1	< 1	< 1	< 1
Trichloroethene	ug/L	< 1	< 1	< 1	< 1
Vinyl Chloride	ug/L	< 1	< 1	< 1	< 1
Xylene	ug/L	< 3	< 3	< 3	< 3
1,2 Dichlorobenzene(sv)	ug/L	< 1	< 1	< 1	< 1
1,3 Dichlorobenzene(sv)	ug/L	< 1	< 1	< 1	< 1
1,4 Dichlorobenzene(sv)	ug/L	< 1	< 1	< 1	< 1
124-Trichlorobenzene (sv)	ug/L	< 1	< 1	< 1	< 1
2,4-Dinitrotoluene	ug/L	< 1	< 1	< 1	< 1
2,6-Dinitrotoluene	ug/L	< 1	< 1	< 1	< 1
2-Chloronaphthalene	ug/L	< 1	< 1	< 1	< 1
2-Methylnaphthalene	ug/L	< 1	< 1	< 1	< 1

Table 9
Stormwater Discharge Analysis
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Compound of Concern	units	Stormwater Location Point 1		Stormwater Location 2	
		4/10/08	10/30/2008	4/10/08	10/30/2008
2-Nitroaniline	ug/L	< 1	< 1	< 1	< 1
3,3'-Dichlorobenzidine	ug/L	< 10	< 10	< 10	< 10
3-Nitroaniline	ug/L	< 1	< 1	< 1	< 1
4-Bromophenyl phenyl ether	ug/L	< 1	< 1	< 1	< 1
4-Chloroaniline	ug/L	< 1	< 1	< 1	< 1
4-Chlorophenyl phenyl ether	ug/L	< 1	< 1	< 1	< 1
4-Nitroaniline	ug/L	< 1	< 1	< 1	< 1
Acenaphthene	ug/L	< 1	< 1	< 1	< 1
Acenaphthylene	ug/L	< 1	< 1	< 1	< 1
Anthracene	ug/L	< 1	< 1	< 1	< 1
Benzo(a)anthracene	ug/L	< 1	< 1	< 1	< 1
Benzo(a)pyrene	ug/L	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	ug/L	< 1	< 1	< 1	< 1
Benzo(ghi)perylene	ug/L	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	ug/L	< 1	< 1	< 1	< 1
BenzylButylPhthalate	ug/L	< 1	< 1	< 1	< 1
Bis(2-chloroethoxy)methane	ug/L	< 1	< 1	< 1	< 1
Bis(2-chloroethyl)ether	ug/L	< 1	< 1	< 1	< 1
Bis(2-chloroisopropyl)ether	ug/L	< 1	< 1	< 1	< 1
Bis(2-ethylhexyl)phthalate	ug/L	< 1	1.1	< 1	1.1
Carbazole	ug/L	< 1	< 1	< 1	< 1
Chrysene	ug/L	< 1	< 1	< 1	< 1
Di-n-Butyl Phthalate	ug/L	< 1	1	< 1	1
Di-n-octyl Phthalate	ug/L	< 1	< 1	< 1	< 1
Dibenzo(a,h)anthracene	ug/L	< 1	< 1	< 1	< 1
Dibenzofuran	ug/L	< 1	< 1	< 1	< 1
Diethyl Phthalate	ug/L	< 1	< 1	< 1	< 1
Dimethyl Phthalate	ug/L	< 1	< 1	< 1	< 1
Fluoranthene	ug/L	< 1	< 1	< 1	< 1
Fluorene	ug/L	< 1	< 1	< 1	< 1
Hexachlorobenzene	ug/L	< 1	< 1	< 1	< 1
Hexachlorobutadiene	ug/L	< 1	< 1	< 1	< 1
Hexachlorocyclopentadiene	ug/L	< 10	< 10	< 10	< 10
Hexachloroethane	ug/L	< 1	< 1	< 1	< 1
Indeno(1,2,3-cd)pyrene	ug/L	< 1	< 1	< 1	< 1
Isophorone	ug/L	< 1	< 1	< 1	< 1
N-Nitrosodi-n-propylamine	ug/L	< 1	< 1	< 1	< 1
N-Nitrosodiphenylamine	ug/L	< 1	< 1	< 1	< 1
Naphthalene(sv)	ug/L	< 1	< 1	< 1	< 1
Nitrobenzene	ug/L	< 1	< 1	< 1	< 1
Phenanthrene	ug/L	< 1	< 1	< 1	< 1
Pyrene	ug/L	< 1	1	< 1	< 1
2,4,5-Trichlorophenol	ug/L	< 1	< 1	< 1	< 1

Table 9
Stormwater Discharge Analysis
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Compound of Concern	units	Stormwater Location Point 1		Stormwater Location 2	
		4/10/08	10/30/2008	4/10/08	10/30/2008
2,4,6-Trichlorophenol	ug/L	< 1	< 1	< 1	< 1
2,4-Dichlorophenol	ug/L	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	ug/L	< 1	< 1	< 1	< 1
2,4-Dinitrophenol	ug/L	< 10	< 10	< 10	< 10
2-Chlorophenol	ug/L	< 1	< 1	< 1	< 1
2-Methyl-4,6-dinitrophenol	ug/L	< 10	< 10	< 10	< 10
2-Methylphenol (o-cresol)	ug/L	< 1	< 1	< 1	< 1
2-Nitrophenol	ug/L	< 1	< 1	< 1	< 1
4-Chloro-3-methylphenol	ug/L	< 1	< 1	< 1	< 1
4-Methylphenol (p-cresol)	ug/L	< 1	< 1	< 1	< 1
4-Nitrophenol	ug/L	< 10	< 10	< 10	< 10
Pentachlorophenol (ms)	ug/L	< 10	< 10	< 10	< 10
Phenol	ug/L	< 1	< 1	< 1	< 1
a BHC	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
b BHC	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Chlordane	ug/L	< 0.2	< 0.2	< 0.2	< 0.2
d BHC	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan 1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan 2	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan Sulfate	ug/L	< 0.3	< 0.3	< 0.3	< 0.3
Endrin	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Endrin Aldehyde	ug/L	< 0.3	< 0.3	< 0.3	< 0.3
Endrin Ketone	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Heptachlor	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor Epoxide	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Lindane	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
p,p-DDD	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
p,p-DDE	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
p,p-DDT	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
Toxaphene	ug/L	< 1	< 1	< 1	< 1
Aroclor 1016	ug/L	< 0.065	< 1	< 0.065	< 1
Aroclor 1221	ug/L	< 0.065	< 1	< 0.065	< 1
Aroclor 1232	ug/L	< 0.065	< 1	< 0.065	< 1
Aroclor 1242	ug/L	< 0.065	< 1	< 0.065	< 1
Aroclor 1248	ug/L	< 0.065	< 1	< 0.065	< 1
Aroclor 1254	ug/L	< 0.065	< 1	< 0.065	< 1
Aroclor 1260	ug/L	< 0.065	< 1	< 0.065	< 1
Aluminum as Al	mg/L	0.08	0.06	0.02	< 0.01
Antimony as Sb	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic as As	mg/L	0.007	< 0.005	0.008	< 0.005

Table 9
Stormwater Discharge Analysis
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Compound of Concern	units	Stormwater Location Point 1		Stormwater Location 2	
		4/10/08	10/30/2008	4/10/08	10/30/2008
Barium as Ba	mg/L	0.053	0.065	0.063	0.089
Beryllium as Be	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium as Cd	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Calcium as Ca	mg/L	120	130	120	130
Chromium as Cr	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt as Co	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Copper as Cu	mg/L	0.01	0.01	0.02	0.02
Iron as Fe	mg/L	0.48	0.19	0.37	0.05
Lead as Pb	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Magnesium as Mg	mg/L	16	13	15	14
Manganese as Mn	mg/L	0.07	0.09	0.02	0.12
Mercury as Hg	mg/L	< 0.00025	< 0.00025	< 0.00025	< 0.00025
Nickel as Ni	mg/L	< 0.01	< 0.01	0.12	< 0.01
Potassium as K	mg/L	11	11	11	12
Selenium as Se	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Silver as Ag	mg/L	< 0.005	< 0.005	< 0.01	< 0.01
Sodium as Na	mg/L	12	10	13	12
Thallium as Tl	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium as V	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc as Zn	mg/L	0.03	0.04	0.21	0.06
Cyanide as CN	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Ammonia as N	mg/L	0.4	< 0.05	< 0.05	< 0.05
Chloride as Cl	mg/L	9	16	13	17
Nitrate as N	mg/L	< 0.5	< 0.5	0.5	0.6
Sulfate as SO4	mg/L	92	85	80	88
Tot Dissolved Solids	mg/L	500	650	550	650

Table 10A

IPP Metals, CN and Non-Polar Material Analytical Results

Table 10A

IPP Metals CN, O&G Summary
Pelham Bay Landfill
Annual Report March 2008 through February 2009
Contract 1140-PEL

Sample Date	3/5/2008	4/11/2008	5/16/2008	6/20/2008	7/3/2008	8/14/2008	9/4/2008	10/24/2008	11/19/2008	12/17/2008	1/8/2009	2/9/2009
Metals												
Cadmium as Cd	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium as Cr	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper as Cu	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead as Pb	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury as Hg	mg/L	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025
Molybdenum as Mo	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Nickel as Ni	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Silver as Ag	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc as Zn	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium hex as Cr	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Cyanide												
CN amen.to chlorin.	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Cyanide as CN	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Non-Polar Material												
Non-polar Material	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Non-polar Material	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Non-polar Material	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

The certified laboratory may use their own analytical reporting form, and include additional information, however the reported pollutants must be in the above described order. Additionally the sampling point(s) referenced in the form must be identified exactly as it appears in your permit or directive.

Table 10B

IPP VOC Analytical Results

Table 10C

IPP SVOC Analytical Results

**IPP SVOC Summary
Pelham Bay Landfill
Annual Report March 2008 through
Contract 1140-PEL**

[illegible]

Table 10D

IPP PCB & Others Analytical Results

Table 10D

IPP PCB & Others Summary

Annual Report March 2008 through February 2009
Contract 1140-PEL

Date Sampled	3/5/2008	4/11/2008	5/16/2008	6/20/2008	7/3/2008	8/14/2008	9/4/2008	10/24/2008	11/19/2008	12/17/2008	1/8/2009	2/9/2009
Others												
Aroclor 1016	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Aroclor 1221	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Aroclor 1232	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Aroclor 1242	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Aroclor 1248	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Aroclor 1254	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Aroclor 1260	ug/L	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065	< 0.065
Carbonaceous BOD ₅	mg/L	0.455	0.455	0.455	0.455	0.455	0.455	0.455	0.455	0.455	0.455	0.455
Chloride as Cl	mg/L	4	3.2	5.8	6.3	7	8.2	9	3.1	4.2	5.1	4.4
Nitrate as N	mg/L	130	160	1200	380	410	770	770	170	160	240	390
Nitrogen, total as N	mg/L	1	2	1.4	2.3	4.4	2.5	2.3	2.5	1.8	1.5	2
Tot. Kjeldahl N.	mg/L	9.4	15	40	39	35	69	63	15	15	23	42
TSS	mg/L	8.4	13	39	37	30	66	61	12	13	21	40
TSS	mg/L	7	5	6	6	6	5	9	5	4	5	3
TSS	mg/L	5	< 2.5	6	6	13	6	5	< 2.5	4	5	3
TSS	mg/L	5	3	5	5	6	5	18	4	3	4	3