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June 29, 2012 Reference No. 001431

Mr. Gregory P. Sutton
New York State Department of Environmental Conservation
270 Michigan Avenue
Region 9
Buffalo, NY 14203-2999

Dear Mr. Sutton:

Re: 2011 Annual Periodic Review Report
102nd Street Landfill Site, Niagara Falls, New York

Per the requirements of the Consent Decree and the Operations and Maintenance (O&M) Manual, Glenn Springs Holdings, Inc. (GSH) is submitting the 2011 Annual Periodic Review Report for the 102nd Street Landfill Site.

Please contact me at 231-670-6809 or email at Joseph_Branch@oxy.com should you have any questions or concerns.

GLENN SPRINGS HOLDINGS, INC.

Joseph Branch
Project Manager
231-670-6809

JB/adh/14
Encl.

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C. Richards, Olin
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S. Radon, NYSDEC (email)
B. Sadowski, NYSDEC (email)

CONESTOGA-ROVERS
& ASSOCIATES

2011 ANNUAL PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

GLENN SPRINGS HOLDINGS, INC.
NIAGARA FALLS, NEW YORK

Prepared For:

Glenn Springs Holdings, Inc.

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EXECUTIVE SUMMARY

The following report describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2011 at the 102nd Street Landfill Site (Site) located in Niagara Falls, New York. The Site covers approximately 22.1 acres and consists of two separate properties owned by Occidental Chemical Corporation (OCC) (15.6 acres) and Olin Corporation (Olin) (6.5 acres). Both OCC's and Olin's responsibilities at the Site are currently performed by Conestoga-Rovers & Associates (CRA), under the direct supervision of Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC.

During 2011, the Remedial Action (RA) system components at the Site performed as designed. The leachate collection system removed 309,391 gallons of Aqueous Phase Liquid (APL) from the Site. Water level monitoring showed that an inward gradient continues to be maintained at nine of the ten well pairs. Only one well pair (PCM-07R/PZ-07) on the north side of the Site indicated an outward gradient for each of the four monitoring events. However, analytical results indicate no Site parameters were observed above the survey levels (Site estimated quantification values from Table 3.1 of the Site OM&M Manual, 2011) outside of the slurry wall at PCM-07R. Piezometers PZ-06, PZ-08, and PZ-09 were dry during several of the quarterly water level monitoring events in 2011; however, when the bottom of well elevation was used to calculate the gradient, the three well pairs demonstrated an inward gradient.

In 2011, 977 gallons of Non-Aqueous Phase Liquid (NAPL) was recovered from the Site NAPL Recovery (NR) Wells. No NAPL was shipped off Site during 2011. The recovered NAPL is currently being accumulated on Site in two 2,500-gallon accumulation tanks and will be sent to an off-Site incinerator (Clean Harbors, Deer Park, Texas) for final destruction.

The 2011 data indicate that there has been no significant change in chemical and hydrogeological conditions at the Site. The forcemain system continues to pump sufficient leachate from the landfill to maintain a depressed water table inside the slurry wall. The slurry wall is functioning as designed, preventing off-Site migration and influx of groundwater.

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1.0 INTRODUCTION

The following report describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2011 at the 102nd Street Landfill Site (Site) located in Niagara Falls, New York (Figure 1.1). Both Occidental Chemical Corporation's (OCC's) and Olin Corporation's (Olin's) responsibilities at the Site are currently performed by Conestoga-Rovers & Associates (CRA), under the direct supervision of Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC.

The Site covers approximately 22.1 acres and consists of two separate properties owned by OCC (15.6 acres) and Olin (6.5 acres). The Site is bordered by the Niagara River to the south, Buffalo Avenue to the north, Griffon Park to the west, and privately owned land to the east. A perimeter fence restricts Site access. Authorized vehicular traffic access is provided from Buffalo Avenue by locked fence gates.

Remedial construction at the Site was completed in 1999, and groundwater pumping began in March 1999. The groundwater collection system at the Site is shown on Figure 1.2.

Final responses to the comments for the Final Closure Report for the Site were submitted to the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) (collectively, the "Agencies") on September 22, 2000. The Certificate of Completion for the Site was accepted by the Agencies on March 13, 2002, signifying that all remedial work had been completed. Subsequently, the formal initiation of the OM&M for the Site occurred in April 2002. This report is the eleventh annual report for the Site.

The Remedial Action (RA) system components at the Site that have associated OM&M activities are as follows:

- Landfill cap
- Perimeter slurry wall
- Aqueous Phase Liquid (APL) collection and discharge system
- Non-Aqueous Phase Liquid (NAPL) recovery system
- Post-RA system performance monitoring
- Perimeter fence

This report describes the OM&M activities conducted and presents the data collected at the Site between January 1, 2011 and December 31, 2011. The completed Institutional and Engineering Control Certification (ICEC) Form is included as Appendix A.

2.0 SITE MONITORING PROGRAMS

The Site monitoring program was established to monitor the effectiveness of the RA system components and includes:

- Quarterly groundwater level measurements
- Semiannual groundwater quality monitoring
- Quarterly NAPL presence monitoring
- Accelerated NAPL Recovery Program (ANRP)

2.1 HYDRAULIC MONITORING PROGRAM

Hydraulic monitoring at the Site consists of the measurement of water levels in monitoring wells and piezometers to determine groundwater elevations. This monitoring includes ten piezometers (PZ-01 through PZ-10) inside the slurry wall and ten corresponding monitoring wells (PCM-01 through PCM-10) outside the slurry wall. The measurements are used to evaluate Site performance toward establishment of depressed water table within the slurry wall by comparing the water levels in well pairs (one inside the slurry wall and one outside the slurry wall) and demonstrating an "inward gradient" at each well pair. The established well pairs are listed in Table 2.1, and the locations of the monitoring wells, piezometers, and slurry walls are shown on Figure 1.2.

Water level measurements in the piezometers and monitoring wells were measured quarterly in 2011, in accordance with the OM&M manual. The 2011 water level measurements have been converted to elevations and are presented in Table 2.2. The elevations for each of the well pairings and the gradients achieved for the quarterly events throughout the year are presented in Table 2.3.

Water level data have been converted to elevations and are listed on the Annual Report Forms (Appendix B). Data for 2002 through 2011 have also been graphed to show groundwater elevation trends (Appendix C). The quarterly groundwater elevations are presented on Figures 2.1 through 2.4.

2.2 GROUNDWATER QUALITY MONITORING PROGRAM

The groundwater quality monitoring program consists of ten overburden monitoring wells (PCM-01 through PCM-10) and three bedrock wells (PCBM-01 through PCBM-03). These wells were sampled quarterly for the first 2 years following the initiation of the OM&M in 2002, and then scheduled for semiannual sampling for 8 years thereafter. Semiannual sampling will continue through 2011. In 2012, sampling frequency will decrease to annually in accordance with the OM&M Plan. The next groundwater quality event will take place in October 2012.

Groundwater quality monitoring was performed semiannually in April and October 2011. Table 2.4 presents the results of these groundwater monitoring events. Historic groundwater monitoring results are presented in Appendix D.

Concentrations present in the groundwater have been graphed for select wells (PCM-03, PCM-04, and PCM-05) to evaluate concentration trends to determine if any of the levels are increasing. These graphs are presented in Appendix E. The well locations and parameters presented were selected based on the historical detection of compounds. Those well locations and parameters not included in Appendix E are typically non-detect with the occasional low level detection and, therefore, do not present any useful data with regard to a discussion of historical analytical trends at the Site.

2.3 NAPL PRESENCE MONITORING PROGRAM

The NAPL presence monitoring program consists of eight NR wells (NR-01 through NR-05, NR-07, NR-08, and NR-10). NAPL presence monitoring began in these wells in April 2002, immediately after the USEPA approved the Certificate of Completion. In accordance with the OM&M manual, NAPL presence was checked each month for the first 3 months. The monthly monitoring ended in June 2002. Since June 2002, the NAPL presence monitoring has been completed quarterly. If, during the quarterly monitoring, more than 3 gallons of NAPL (6 inches deep in the 12-inch diameter well) are present in a NAPL recovery (NR) well, the NAPL will be removed. NAPL removal will occur from April through October, during the warmer months of the year.

In December 2003, GSH submitted the "NAPL Extraction Program Work Plan for Accelerated Recovery" to determine the production capability and possible accelerated extraction of NAPL at NR-02 (known to have a quick recharge rate). As a result of the pumping tests conducted as per the Work Plan, the ANRP was implemented in 2004. This program involved the continuous removal of NAPL from NR-02 through the use of

a low-flow, automated pump installed in the NR-02 well with daily measurements, while the remaining NR wells were monitored quarterly and NAPL removed as necessary, as per the OM&M.

On June 23, 2010 CRA, on behalf of GSH, submitted a memorandum documenting modifications to the ANRP at the Site. The memo summarized March 10, 2011 discussions with Mr. Brian Sadowski of NYSDEC regarding a reduction in frequency of NAPL removal at NR-02 and the addition of NR-03 to the ANRP. Quarterly NAPL presence and removal data in 2010 indicated that NAPL presence in the vicinity of NR-02 may be diminishing, either due to a decrease in NAPL in the area of NR-02 indicating a successful implementation of the recovery program, or possibly a result of creating a "de-NAPLed" (absence of NAPL) area around NR-02 due to the long-term pumping at this location and a decreased recharge rate of the NAPL. Due to the reduction in NAPL removed from NR-02, it was proposed to reduce the frequency of monitoring at NR-02 from continuous to weekly. Due to historic amounts of NAPL removed from NR-03 and quarterly NAPL measurements during 2010 which indicated that there may be sufficient NAPL present at that well location such that additional NAPL removal would be beneficial, it was proposed to add NR-03 to the ANRP on a temporary basis. Mr. Sadowski agreed to the modification to the program, effective immediately, with the addition of NR-03 and with the stipulation that NR-02 would be checked, and NAPL removed as necessary, no less than on a weekly frequency. The modification was further discussed and confirmed during the May 27, 2010 NYSDEC annual 102nd Street Landfill Site inspection. The addition of NR-03 to the ANRP was originally to be on a continuous basis. Monitoring and continuous removal of NAPL from NR-03 (in addition to weekly removal from NR-02) began in May 2010. A low NAPL recharge rate at NR-03 resulted in the pumping frequency at this NR well being reduced from continuous to twice weekly (NAPL checks and pumping as necessary), and subsequently from twice weekly to its current weekly frequency. The high recharge rate in NR-02 resulted in an increase in NAPL check and pumping frequency from weekly to its current twice-weekly frequency.

Results of the 2011 NAPL presence monitoring are presented on the Annual Report Forms presented in Appendix B.

3.0 SITE MONITORING RESULTS

3.1 HYDRAULIC MONITORING RESULTS

The 2011 quarterly groundwater elevations are shown on Figures 2.1 through 2.4. Where groundwater was present, inward gradients towards the landfill were demonstrated at all wells pairs with the exception of well pair 7 (PCM-07R/PZ-07); an inward gradient was not present during the quarterly events for well pair 7, as shown in Table 2.3.

PZ-06, PZ-08, and PZ-09 were dry for a portion of the quarterly events. The inward gradients at the well pairs during those times were calculated using the bottom of well elevation with the rationale that if the well was dry, the water level would have to be below the bottom of the well. The water level elevation in the wells outside the slurry wall was higher than the elevation of the bottom of the dry wells inside the slurry wall; therefore, regardless of dry conditions at PZ-06, PZ-08, and PZ-09, inward gradients were maintained at these three well pairs in 2011.

An evaluation of PCM-07 in 2006 demonstrated that the well was not monitoring the same hydrogeological interval as PZ-07. As part of the RA for the Site, the well pairs at the Site were installed such that they monitor the same hydrogeological intervals in order to demonstrate inward gradients. However, the relative overlap of the screens in PCM-07 and PZ-07 was only 0.83 foot, which is insufficient for monitoring the hydrology between the two wells. Therefore, in October 2007 PCM-07 was abandoned and replaced with PCM-07R. PZ-07 is screened from 564.8 feet above mean sea level (AMSL) to 569.8 feet AMSL. PCM-07R is screened from 564.12 feet AMSL to 569.12 feet AMSL. The relative overlap of the well screens is now 4.6 feet, which will insure an accurate calculation of inward hydraulic gradients. However, even with the replacement of PCM-07, the calculations in Table 2.3 demonstrate that an inward gradient is not being maintained at this well pair. A further evaluation of the hydraulic conditions at this well pair is presented below.

Well pairs 6, 7, 8, 9, and 10 are located along the northern side of the Site, and as shown on Figures 2.1 through 2.4, exhibit groundwater elevations ranging from 563.61 feet AMSL to 572.27 feet AMSL. The remaining wells on the Site (well pairs 1, 2, 3, 4, 5, NR-01, NR-05, NR-07, NR-08, NR-10, and Wet Wells 1 through 4) to the south of well pairs 6, 7, 8, 9, and 10 exhibit groundwater elevations ranging from 559.61 feet AMSL to 567.03 feet AMSL. Although well pair 7 exhibits a potential outward groundwater gradient, Figures 2.1 through 2.4 demonstrate that a north-to-south groundwater gradient towards the APL collection trench (located on the south side of the Site along

the Niagara River) exists across the Site, and, therefore, contaminant flow would be southwards toward the APL collection trench. Analytical results from the groundwater collected from wells PCM-7R through PCM-10 (located outside the slurry wall) demonstrates that there are no contaminants present at these locations at concentrations exceeding the Site groundwater survey levels (Site estimated quantification levels (parameter detection limits) from Table 3.1 of the Site OM&M Manual, 2010).

3.2 2011/2012 HYDRAULIC EVALUATION

In their August 17, 2011 "2010 Annual Periodic Review Report" letter, the EPA expressed the following concern: "*The performance records for 2008, 2009, and 2010 indicate that two piezometers (PZ-06 and PZ-09), and well PCM-06 have been dry when water-level measurements are attempted. For some of the years, wells remained dry for all quarters. This observation may indicate that the bottom of the screens are either set too high relative to the water levels that persist at the Site or that the piezometers and well may not be in good hydraulic communication with the formation. Therefore, it is recommended that PZ-06 and PZ-09, and well PCM-06 are tested to ensure that they are in hydraulic communication with the material in which they are screened and are functioning properly.*"

In 2011 and 2012, an evaluation of overburden monitoring well and piezometer hydraulic conditions was conducted. The evaluation consisted of the following:

- All overburden monitoring wells and piezometers were hydraulically tested by adding a slug of potable water to the well and monitoring the water levels to determine if the wells were in hydraulic communication with the geologic media in which the wells are screened.
- Overburden monitoring well and piezometer installation depths were compared to 2012 sounded depths to determine whether infilling of the well screens had occurred.
- Current water levels were compared to the bottom of well elevations for overburden monitoring wells and piezometers that demonstrated a lack of groundwater presence during quarterly water level measurements.

3.2.1 HYDRAULIC RESPONSE TESTING

Hydraulic response testing of the monitoring wells and piezometers was conducted in April 2012 in the form of a falling head test. A volume of water greater than the void

space of the sandpack was added to each location, and the response time for the elevated water level to return to baseline (original water level) was monitored through the use of a data logger. All wells responded to the falling head testing with 12 of the 20 locations returning to 100 percent of baseline (original water level) within 2 hours; one location returning to 100 percent of baseline within 8 hours; three locations returning to 100 percent of baseline within 24 hours; and two locations returning to 30 percent to 50 percent of baseline within 24 hours. One location, PZ-06, was dry during testing and when the slug of water was added, the water immediately drained out of the piezometer screen into the surrounding material and the piezometer remained dry.

3.2.2 COMPARISON OF INSTALLATION AND FIELD MEASURED WELL DEPTHS

With the exception of PCM-04 and PCM-05, all overburden monitoring wells and piezometers are currently open to within 1 foot of their installed depths. No sounded depth could be measured at PCM-04 and PCM-05 due to the presence of the pumps in the wells, which could not be removed for sounding purposes. The inability to remove the pumps at these locations may be due to the well casings being bent below ground surface.

3.2.3 WATER LEVEL COMPARISON

The EPA comment above noted that piezometers PZ-06 and PZ-09 and monitoring well PCM-06 were dry when water level measurements were attempted. During 2011, groundwater was present in PCM-06 during all four quarterly groundwater measurement events. During the first, third, and fourth quarter 2011 groundwater monitoring events, PZ-06 was dry. Water levels in the piezometer nearest to PZ-06 (PZ-07) demonstrated that water levels in PZ-07 at those times were higher than the bottom screen elevation (bottom of well) of PZ-06. This indicates that the installed screen depth of PZ-06 remains within the current water table. PZ-09 was dry during all four quarterly groundwater measurement events in 2011. Water levels in the PZ wells nearest to PZ-09 (PZ-08 and PZ-10) demonstrated that water levels at those times were lower than the bottom screen elevation of PZ-09. This may indicate that current Site water levels inside the slurry wall in this area have been reduced through pumping to the extent that the installed screen depth of PZ-09 is no longer within the current water table.

3.2.4 HYDRAULIC EVALUATION RESULTS

The data above indicate the following:

- All of the overburden monitoring wells and piezometers are in hydraulic communication with the materials in which they are screened. However, PCM-07R is installed in stiff clay, which may account for the reduced hydraulic responsiveness. Comparison of the geology of PCM-07R to adjacent wells PCM-06, PCM-08, and PCM-09 demonstrates that these wells are all installed in clay; however, PCM-06, PCM-08, and PCM-09 have varying degrees of sand and gravel within the clay unit which increases hydraulic responsiveness at these wells.
- All overburden monitoring wells and piezometer screen are open to at least 90 percent of their screened interval.
- 2011 water level measurements indicate that PCM-06 is in hydraulic communication with the surrounding materials, as water was present during each event.
- 2011 water levels in PZ-07, adjacent to PZ-06, indicate that the screen of PZ-06 is set within the water table inside of the slurry wall in that area, which would indicate that groundwater should be present in PZ-06; however, during the first, third, and fourth quarters of 2011, groundwater was not present in the piezometer during the water level events. Hydraulic response testing of PZ-06 indicates that the water level at this location is actually below the bottom of the piezometer screen (water added to the piezometer immediately drained into the surrounding media), indicating that there may be a depression in the water table in the area of PZ-06. Therefore, it is proposed to reinstall PZ-06 and PCM-06 to a bottom of screen elevation of at least 555 feet AMSL, based on water levels in the surrounding areas and bottom of well elevations in the piezometers directly adjacent to PZ-06 (PZ-05 and PZ-07). PCM-06 is proposed for reinstallation with PZ-06 to ensure that these wells remain installed and screened at comparable depths for the purposes of demonstrating an "inward gradient" at this location.
- 2011 water level measurements indicate that due to pumping, the installed screen at PZ-09 is no longer within the water table inside the slurry wall in this area. It is proposed to reinstall PZ-09 and PCM-09 to a bottom of screen elevation of at least 560 feet AMSL, based on water levels in the surrounding areas and bottom of well elevations in the piezometers directly adjacent to PZ-09 (PZ-08 and PZ-10). PCM-09 is proposed for reinstallation with PZ-09 to ensure that these wells remain installed and screened at comparable depths for the purposes of demonstrating an "inward gradient" at this location.

3.5 GROUNDWATER QUALITY MONITORING RESULTS

Overburden Monitoring Wells

In 2011, groundwater samples were obtained from nine of ten monitoring wells included in the semiannual analytical program. The exception was well PCM-06, which did not yield sufficient volume for collection of a sample in either April or October 2011. Historically, PCM-06 has not yielded sufficient volume for sampling (no samples collected from 2005 through 2008) and has been generally consistently dry during hydraulic monitoring events. However, groundwater samples were obtained for both sampling events in 2009 and for one of the two sampling events in 2010.

Survey levels were exceeded in three of the nine overburden monitoring wells sampled in 2011. Wells PCM-03, PCM-04, and PCM-05 demonstrated exceedances of volatile organic compounds (VOCs) (benzene, chlorobenzene, and dichlorobenzene) and semi-volatile organic compounds (SVOCs) (dichlorophenol and chlorophenol). PCM-04 also demonstrated an exceedance of mercury. These exceedances at these locations are consistent with historic concentrations at these wells (see Appendix D).

In both the NYSDEC "Site Management (SM) Periodic Review Report (PRR) Response Letter" for the 2010 PRR (August 3, 2011) and the EPA "2010 Annual Periodic Review Report" (August 17, 2011, NYSDEC and EPA expressed a concern about the continued concentrations of Site-related contaminants in wells PCM-03, PCM-04, and PCM-05. Both Agencies requested that GSH investigate the presence of concentrations at these locations. An evaluation is currently being conducted, and the results will be submitted in a separate letter to the EPA and NYSDEC.

Bedrock Monitoring Wells

Survey levels were exceeded in one of the three bedrock monitoring wells that were sampled for groundwater quality in 2011 (PCBM-03). PCBM-03 demonstrated an exceedance of 2-chlorophenol with an estimated concentration of 17 micrograms per liter (µg/L). However, a review of historical data for this well in Appendix D indicates that the result may be an anomaly. The data in Appendix D demonstrates that there have been no detections of SVOCs at this location since December 2002. Also, the sample was diluted at the lab and that dilution may have affected the estimated detection of 2-chlorophenol. At this time, PCBM-03 will continue to be monitored and

evaluated as per the OM&M requirements for any increasing trend in chemistry which may indicate that chemistry in this area is changing.

3.6 NAPL PRESENCE MONITORING RESULTS

NAPL presence monitoring of the eight NR wells (NR-01, NR-02, NR-03, NR-04, NR-05, NR-07, NR-08, and NR-10) began in April 2002 immediately after USEPA approved the Certificate of Completion. In accordance with the OM&M manual, NAPL presence was checked each month for the first 3 months (ending in 2002) and has been checked quarterly thereafter. Results of these monitoring events are presented in the Annual Report Forms presented in Appendix B.

NAPL was present in six of the eight NR wells in 2011. Thickness of the NAPL ranged from 0.05 foot (NR-04) to 1.91 feet (NR-02). With the exception of the deviations discussed in Section 4.2.2, between April 1 and October 31, 2011, NAPL was removed when it was present at quantities more than 3 gallons or at a thickness greater than 6 inches. Nine-hundred seventy-seven (977) gallons of NAPL were removed from the NR wells at the Site in 2011.

4.0 OPERATION OF 102ND STREET LANDFILL SYSTEMS

4.1 APL COLLECTION AND DISCHARGE SYSTEM OPERATION

The individual APL pumps in the APL collection wet wells operated throughout 2011 on level control. All well pumps were set to start up at an elevation of 562.0 feet AMSL (1 foot below the average Niagara River water level) and shut down when elevations in the wells reached 561.8 feet AMSL.

A total of 309,391 gallons of APL were removed from the Site and pumped to the Love Canal Treatment Facility (LCTF). There, the APL was treated and discharged to the City of Niagara Falls Sanitary Sewer System, under the Niagara Falls Water Board Significant Industrial User (SIU) Permit #44. A total of approximately 8.4 million gallons of APL has been recovered from the Site since pumping was initiated in March 1999.

Wet Wells 1 through 4 collect APL at the Site. In 2011, Wet Well 1 collected 5,555 gallons of APL (1.8 percent of the total for the Site), Wet Well 2 collected 288,905 gallons of APL (93.4 percent), Wet Well 3 collected 0 gallons of APL, and Wet Well 4 collected 14,931 gallons of APL (4.8 percent).

4.2 NAPL RECOVERY

Nine hundred seventy-seven (977) gallons of NAPL were removed from the NR wells at the Site in 2011. The majority of the NAPL was pumped from NR-02. The NAPL is currently being stored in the NAPL accumulation tanks on Site and will be transported to Clean Harbors Facility in Deer Park, Texas for incineration when sufficient volume has been accumulated for bulk transport.

Table 4.2 shows the current and historical NAPL recoveries from the on-Site NR wells. Approximately 67,000 gallons of NAPL have been recovered at the Site to date.

4.2.1 NR-02 AND NR-03 NAPL RECOVERY

As discussed in Section 2.3, in 2010 a temporary change to the ANRP at the Site was proposed. Previous to June 2010, the ANRP consisted of continuous NR at well NR-02 and quarterly NAPL presence checks and recovery (if necessary) from NR-01, NR-03,

NR-04, NR-05, NR-07, NR-08, and NR-10 between April and October of each year. The June 2010 modification and the evaluations of data collected after the modification was implemented resulted in the current schedule of NAPL removal at NR-02 (twice weekly) and NR-03 (weekly).

As per the approved modification to the ANRP, pumping at NR-02 was conducted weekly during the second and third quarters of 2011. Though not required for the purpose of collecting additional NR data to evaluate the NR program, NAPL removal continued at NR-02 into the fourth quarter until cold weather made NAPL removal difficult. Table 4.1 presents a summary of NAPL removed from NR-02 during 2011. In 2011, NAPL was recovered from March through November from NR-02 for a total NR of 953 gallons. The removal of NAPL from NR-02 will continue to be evaluated, and options to maximize NAPL removal and optimize the pumping schedule at NR-02 are being considered, such as an increase in pumping frequency, the possibility of automating the pumping (by use of a float switch or timer), etc.

Weekly pumping from well NR-03 was attempted during the second quarter of 2011; however, a majority of the NAPL present in well NR-03 was found to be very viscous and not easily removed from the well using conventional pumping techniques. An inner casing and "jerk tube" pump was installed in June 2011 to allow for more effective NAPL removal. Weekly NAPL checks at well NR-03 resumed at the end of June 2011; however, due to the high viscosity of the NAPL and measurements of NAPL not in exceedances of 6 inches, only 7 gallons of NAPL were removed from NR-03 in 2011.

4.2.2 NAPL REMOVAL DEVIATIONS

The NAPL removal information presented in Appendix B indicates that NAPL was present during the NAPL presence check conducted during the second quarter of 2011 in NR-03 at a thickness of 0.70 foot and in NR-05 at a thickness of 0.53 foot. However, no NAPL was removed from these two wells in the second quarter of 2011 due to the NAPL viscosity.

4.2.3 ON-SITE STORAGE OF NAPL

NAPL removed from the NR wells previous to August 2010 was pumped into a 5,000-gallon tanker that was stored at the Site, adjacent to NR-02. In 2010, a decision was made to decommission the tanker and replace it with two double-walled skid-mounted steel tanks with internal secondary containment. Secondary containment is built into

the second wall of the tank which eliminates stormwater management. Since the tanks are skid mounted, no special foundation other than a gravel base is required, and the tanks can be easily relocated if necessary. The use of two 2,500-gallon tanks provides the greatest flexibility for pumping NAPL from multiple locations and provides a lower visual profile than one 5,000-gallon tank. The tanks were put into use at the Site in August 2010.

The tanks were installed at NR-02 and NR-03 due to the current pumping schedule and can be easily moved depending on the productivity of the two wells during pumping events. The 5,000-gallon tanker was decommissioned following the installation of the new tanks and appropriately decontaminated in September 2010. The tanker was removed from Site and sent for scrap in July 2011. The 2,500-gallon NAPL tanks are inspected as part of the 102nd Street daily inspections.

5.0 SITE MAINTENANCE AND INSPECTIONS

5.1 SITE INSPECTIONS

Daily inspections were conducted at the Site in 2011, as per the OM&M Manual. Copies of these inspection forms are available upon request.

The 2011 annual NYSDEC Site inspection was conducted on May 3, 2011 with representatives from NYSDEC, GSH, and CRA. The Site inspection reviews the RA System Components to ensure Site compliance. The inspection included a general walk around the Site and covered all portions of the landfill remediation including the APL Collection System, APL Discharge System, Landfill Cap, Bulkhead, and Storm Sewer.

In general, the NYSDEC commented that the Site looked well maintained and in very good order, with no evidence of erosion. The NYSDEC identified ground disturbance resulting from burrowing animals. The burrows were filled and any ground disturbance was repaired in May 2011, following the inspection.

5.2 MONITORING WELL/PIEZOMETER INSPECTIONS

The monitoring wells, piezometers, and wet wells are inspected on an annual basis. The 2011 annual well inspection and maintenance report, including details of maintenance required and any corrective action taken, is included as Appendix F.

Additionally, the physical condition of the wells is recorded, and any repairs needed are noted as part of the water level measurement and groundwater sampling procedures.

5.3 MAINTENANCE

Maintenance performed at the Site in 2011 included the following:

- Mowing the landfill vegetation to inhibit the growth of woody material
- Filling of holes found in the soil cover made by burrowing animals
- Maintenance (including scheduled preventative maintenance) of all pumps and on-Site control equipment to ensure proper function
- Removal and scrapping of 5,000-gallon NAPL storage tanker

- Cleaning of City of Niagara Falls storm sewer outfall
- Weekly NAPL checks and pumping of NR-02 and NR-03

5.4 SITE BEAUTIFICATION/WILDLIFE

In their August 17, 2011 "2010 Annual Periodic Review Report" letter, the EPA requested that explanation of the wildlife/beautification enhancements that have been performed at the Site to provide wildlife habitat and beneficial reuse. The Site is a Wildlife Habitat Council (WHC) listed site. This designation indicates that the 102nd Street Landfill Site has been identified as an area dedicated to the restoration and enhancement of wildlife habitat. The WHC is comprised of a group of corporations, conservation organizations, and individuals with the goal of bringing together conservation and business. They work with corporations and landowners to create tailored voluntary wildlife habitat enhancement.

Wildlife and beautification enhancements at the Site have included the following:

- Planting of a large proportion of lancer pea on the landfill cap to provide food for the waterfowl at the beginning of O&M activities at the Site
- Replanting the embayment area with water celery to enhance fish habitat
- Growth of native grasses and flowers on the landfill cap
- Installation of bluebird houses and bat boxes on the perimeter of the landfill cap
- Daily inspection of perimeter fencing and Site cover and removal, as necessary, of litter which enhances the aesthetics of the Site when viewed from the Niagara River, from Buffalo Avenue, and from Griffon Park
- Mowing on the landfill cap of only the space necessary to access the Site groundwater and NR wells, as not to disrupt wildlife habitat in the native growth.

6.0 CONCLUSIONS AND RECOMMENDATIONS

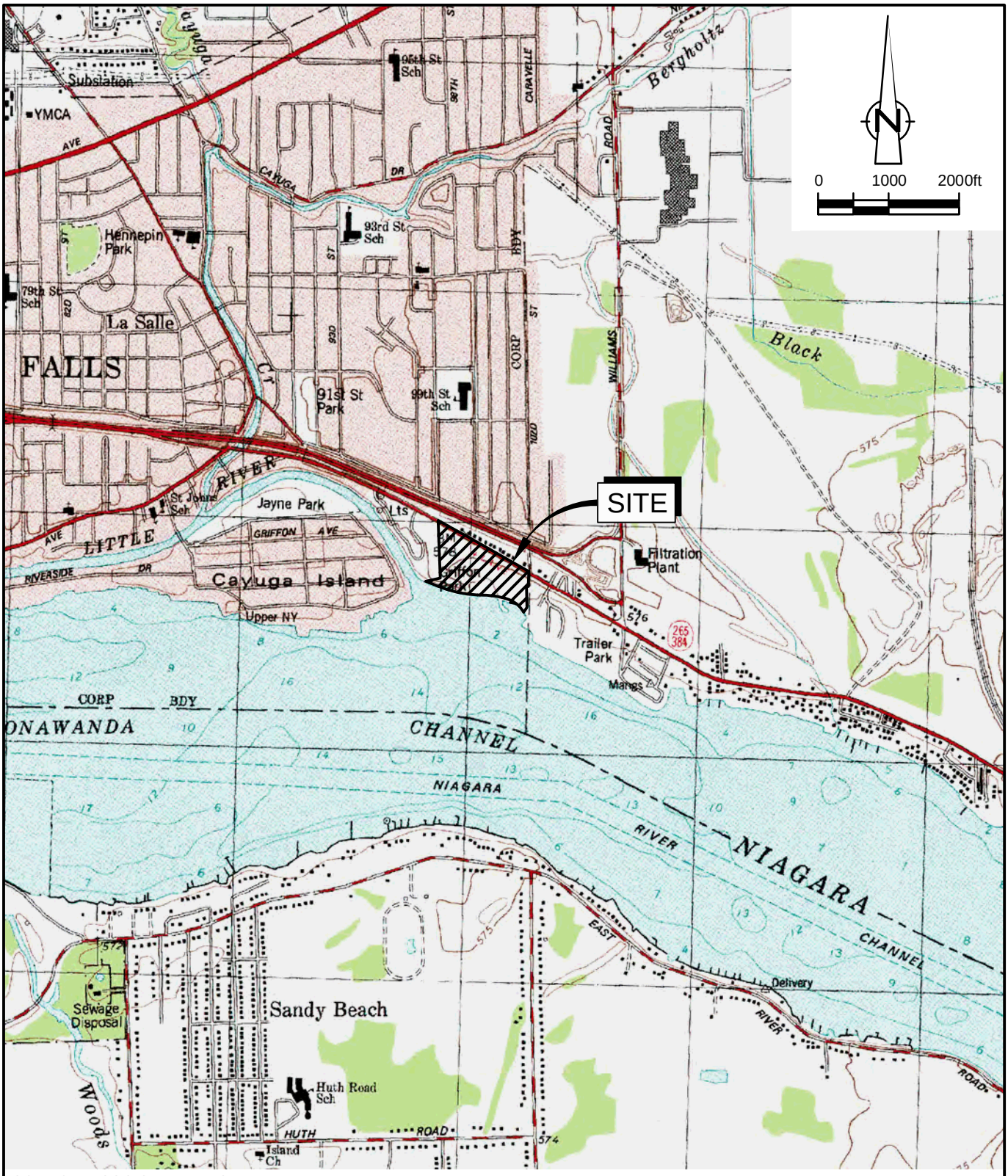
During 2011, the RA system components at the Site performed as designed. The leachate collection system removed 309,391 gallons of APL from the Site. Water level monitoring showed that an inward gradient continues to be maintained at nine of the ten well pairs. Only one well pair (PCM-07R/PZ-07) on the north side of the Site indicated an outward gradient during each of the four monitoring events. However, analytical results indicate no Site parameters were observed above the Survey levels outside of the slurry wall at PCM-07R.

In 2011, 977 gallons of NAPL was recovered from the Site NR wells. The recovered NAPL is currently being stored on Site in two 2,500-gallon accumulation tanks and will be shipped to an off-Site disposal facility (incinerator) (Clean Harbors, Deer Park, Texas) for final destruction.

The 2011 data indicate that there has been no significant change in chemical and hydrogeological conditions at the Site. The forcemain system continues to pump sufficient leachate from the landfill to maintain an inward gradient across the slurry wall. The slurry wall is functioning as designed, preventing off-Site migration and the influx of off-Site groundwater.

As a result of the hydraulic evaluation of the Site overburden monitoring wells and piezometers in Section 3.2, it is recommended that PZ-06/PCM-06 and PZ-09/PCM-09 be reinstalled to ensure that the wells are screened within the water table at their respective locations, and that each well pair is screened at corresponding depths for the purpose of demonstrating an inward gradient at these two well pair locations.

FIGURES



SOURCE: USGS QUADRANGLE MAP;
TONAWANDA WEST, NEW YORK, 1980

figure 1.1

SITE LOCATION
2011 PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

LASALLE EXPRESSWAY

DOUBLE-CONTAINED PIPE
BENEATH LASALLE EXPRESSWAY

CO-MH8

CO-MH9

BUFFALO AVENUE

PZ-10

PCM-10

PCM-09

PZ-09

PCM-08

PCBM-03

PZ-08

PCM-07R

PZ-07

BUFFALO AVENUE

TOWN OF WHEATFIELD
CITY OF NIAGARA FALLS

102ND STREET

PCM-06

PZ-06

0 75 150ft

CO-MH1

SAMPLE
MANHOLE

SAMPLE
SHED

PCM-01

PZ-01

CO-1

CO-MH2

NR-01

ACCESS ROAD

2,500 GALLON
SKID TANK

NR-02

NR-04

ACCESS ROAD

NR-10

NR-05

NR-07

APL COLLECTION
TRENCH

2,500 GALLON
SKID TANK

NR-03

NR-08

CO-7

APL COLLECTION
TRENCH

2'-2" HDPE FORCE MAINS

APL COLLECTION
TRENCH

PZ-04

CO-5

CO-MH6

WET WELL
WW-3

CO-6

CO-MH7

PZ-05

PCM-05

PCBM-02

PCM-02

PZ-02

CO-2

CO-MH3

CO-4

CO-MH5

PCM-04

LITTLE RIVER

CAYUGA ISLAND

2'-2" HDPE FORCE MAINS

CO-MH4

PZ-03

WET WELL
WW-2

CO-3

PCBM-01

PCM-03

WET WELL
WW-4

WET WELL
WW-1

APL COLLECTION
TRENCH

NIAGARA RIVER

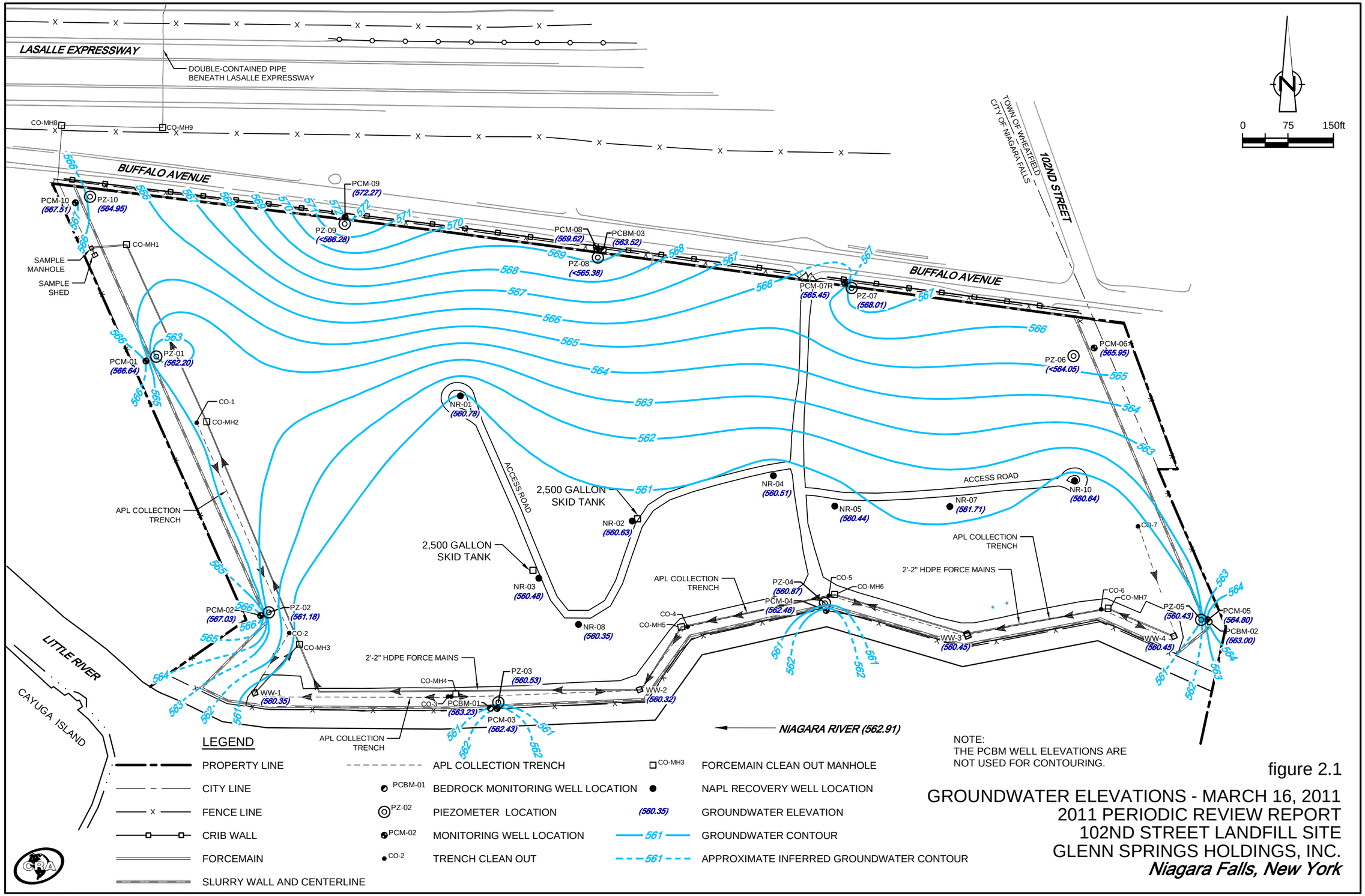
LEGEND

PROPERTY LINE	SLURRY WALL AND CENTERLINE	CO-2	TRENCH CLEAN OUT
CITY LINE	APL COLLECTION TRENCH	CO-MH3	FORCEMAIN CLEAN OUT MANHOLE
FENCE LINE	PZ-02	PIEZOMETER LOCATION		NAPL RECOVERY WELL LOCATION
CRIB WALL	PCM-02	MONITORING WELL LOCATION	PCBM-01	BEDROCK MONITORING WELL LOCATION
FORCEMAIN				

figure 1.2

SITE LAYOUT
2011 PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

01431-D23101(088)GN-WA001 JUN 21/2012



LEGEND

- PROPERTY LINE
- CITY LINE
- FENCE LINE
- CRIB WALL
- FORCEMAIN
- SLURRY WALL AND CENTERLINE
- APL COLLECTION TRENCH
- PCBM-01 BEDROCK MONITORING WELL LOCATION
- PZ-02 PIEZOMETER LOCATION
- PCM-02 MONITORING WELL LOCATION
- CO-2 TRENCH CLEAN OUT
- CO-MH3 FORCEMAIN CLEAN OUT MANHOLE
- NAPL RECOVERY WELL LOCATION
- (560.35) GROUNDWATER ELEVATION
- 561 GROUNDWATER CONTOUR
- 561 APPROXIMATE INFERRED GROUNDWATER CONTOUR

NOTE:
THE PCBM WELL ELEVATIONS ARE NOT USED FOR CONTOURING.

figure 2.1

GROUNDWATER ELEVATIONS - MARCH 16, 2011
2011 PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

01431-D23101(088)GN-WA002 JUN 21/2012

LASALLE EXPRESSWAY

DOUBLE-CONTAINED PIPE
BENEATH LASALLE EXPRESSWAY

BUFFALO AVENUE

102ND STREET

TOWN OF WHEATFIELD
CITY OF NIAGARA FALLS

0 75 150ft

CO-MH8 CO-MH9 CO-MH1 CO-MH2 CO-MH3 CO-MH4 CO-MH5 CO-MH6 CO-MH7

PCM-10 (566.83) PZ-10 (565.04)
PCM-09 (568.58) PZ-09 (<566.28)
PCM-08 (567.28) PCBM-03 (563.75) PZ-08 (564.89)
PCM-07R (565.53) PZ-07 (567.04)
PCM-06 (565.91) PZ-06 (563.61)
PCM-05 (563.43) PZ-05 (560.43)
PCBM-02 (563.58)
PCM-01 (566.00) PZ-01 (562.09)
PCM-02 (566.36) PZ-02 (561.13)
PCM-04 (563.41) PZ-04 (560.83)
PCM-03 (563.41) PCBM-01 (563.90) PZ-03 (560.50)

SAMPLE MANHOLE
SAMPLE SHED

NR-01 (560.74)
NR-02 (559.61)
NR-03 (560.46)
NR-04 (560.48)
NR-05 (560.45)
NR-07 (561.68)
NR-08 (560.31)
NR-10 (560.58)

2,500 GALLON SKID TANK
2,500 GALLON SKID TANK

ACCESS ROAD
ACCESS ROAD

APL COLLECTION TRENCH
APL COLLECTION TRENCH
APL COLLECTION TRENCH
APL COLLECTION TRENCH

2'-2" HDPE FORCE MAINS
2'-2" HDPE FORCE MAINS

WW-1 (560.32) WW-2 (560.30) WW-3 (560.55) WW-4 (560.58)

CO-1 CO-2 CO-3 CO-4 CO-5 CO-6 CO-7

LITTLE RIVER
CAYUGA ISLAND

NIAGARA RIVER (564.09)

NOTE:
THE PCBM WELL ELEVATIONS ARE
NOT USED FOR CONTOURING.

LEGEND

- PROPERTY LINE
- CITY LINE
- FENCE LINE
- CRIB WALL
- FORCEMAIN
- SLURRY WALL AND CENTERLINE
- APL COLLECTION TRENCH
- PCBM-01 BEDROCK MONITORING WELL LOCATION
- PZ-02 PIEZOMETER LOCATION
- PCM-02 MONITORING WELL LOCATION
- CO-2 TRENCH CLEAN OUT
- CO-MH3 FORCEMAIN CLEAN OUT MANHOLE
- NAPL RECOVERY WELL LOCATION
- (560.31) GROUNDWATER ELEVATION
- 562 GROUNDWATER CONTOUR
- 562 APPROXIMATE INFERRED GROUNDWATER CONTOUR

figure 2.2

GROUNDWATER ELEVATIONS - JUNE 17, 2011
2011 PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

01431-D23101(088)GN-WA003 JUN 21/2012

LASALLE EXPRESSWAY

DOUBLE-CONTAINED PIPE
BENEATH LASALLE EXPRESSWAY

CO-MH8

CO-MH9

BUFFALO AVENUE

PZ-10
(565.00)

PCM-10
(565.42)

PCM-09
(569.84)

PZ-09
(<566.28)

PCM-08
(569.37)

PCBM-03
(563.36)

PZ-08
(<565.38)

PCM-07R
(565.92)

PZ-07
(566.32)

BUFFALO AVENUE

TOWN OF WHEATFIELD
CITY OF NIAGARA FALLS

102ND STREET

0 75 150ft

SAMPLE
MANHOLE

SAMPLE
SHED

CO-MH1

PCM-01
(564.73)

PZ-01
(562.11)

CO-1

CO-MH2

APL COLLECTION
TRENCH

NR-01
(560.78)

ACCESS ROAD

2,500 GALLON
SKID TANK

NR-02
(560.63)

NR-04
(560.52)

NR-05
(560.50)

ACCESS ROAD

NR-10
(560.61)

NR-07
(561.70)

PCM-06
(566.79)

PZ-06
(<564.05)

APL COLLECTION
TRENCH

2'-2" HDPE FORCE MAINS

CO-7

2,500 GALLON
SKID TANK

NR-03
(560.53)

NR-08
(560.32)

APL COLLECTION
TRENCH

PZ-04
(560.92)

CO-5

CO-MH6

PCM-04
(563.43)

CO-4

CO-MH5

CO-6

CO-MH7

PZ-05
(560.50)

PCM-05
(562.69)

PCBM-02
(563.38)

WW-3
(560.55)

WW-4
(560.58)

PZ-02
(561.14)

PCM-02
(565.05)

CO-2

CO-MH3

LITTLE RIVER

CAYUGA ISLAND

2'-2" HDPE FORCE MAINS

CO-MH4

PZ-03
(560.50)

WW-1
(560.31)

CO-3

PCBM-01
(563.61)

PCM-03
(563.39)

WW-2
(560.30)

APL COLLECTION
TRENCH

NIAGARA RIVER (563.92)

LEGEND

- PROPERTY LINE
- CITY LINE
- FENCE LINE
- CRIB WALL
- FORCEMAIN
- SLURRY WALL AND CENTERLINE
- APL COLLECTION TRENCH
- PCBM-01 BEDROCK MONITORING WELL LOCATION
- PZ-02 PIEZOMETER LOCATION
- PCM-02 MONITORING WELL LOCATION
- CO-2 TRENCH CLEAN OUT
- CO-MH3 FORCEMAIN CLEAN OUT MANHOLE
- NAPL RECOVERY WELL LOCATION
- (560.32) GROUNDWATER ELEVATION
- 561 GROUNDWATER CONTOUR
- 561 APPROXIMATE INFERRED GROUNDWATER CONTOUR

NOTE:
THE PCBM WELL ELEVATIONS ARE
NOT USED FOR CONTOURING.

figure 2.3

GROUNDWATER ELEVATIONS - SEPTEMBER 27, 2011
2011 PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

01431-D23101(088)GN-WA004 JUN 21/2012

LASALLE EXPRESSWAY

DOUBLE-CONTAINED PIPE
BENEATH LASALLE EXPRESSWAY

CO-MH8

CO-MH9

BUFFALO AVENUE

PCM-10
(566.79)

PZ-10
(564.92)

PCM-09
(572.03)

PZ-09
(<566.28)

PCM-08
(569.76)

PCBM-03
(563.53)

PZ-08
(<565.38)

PCM-07R
(564.76)

PZ-07
(565.94)

BUFFALO AVENUE

TOWN OF WHEATFIELD
CITY OF NIAGARA FALLS

102ND STREET

PCM-06
(566.48)

PZ-06
(<564.05)

0 75 150ft

SAMPLE
MANHOLE

SAMPLE
SHED

CO-MH1

PZ-01
(562.02)

PCM-01
(565.50)

CO-1

CO-MH2

NR-01
(560.67)

ACCESS ROAD

2,500 GALLON
SKID TANK

NR-04
(560.46)

NR-02
(560.61)

NR-05
(560.45)

NR-07
(561.68)

NR-10
(560.49)

ACCESS ROAD

APL COLLECTION
TRENCH

2,500 GALLON
SKID TANK

NR-03
(560.48)

NR-08
(560.31)

CO-7

APL COLLECTION
TRENCH

2'-2" HDPE FORCE MAINS

APL COLLECTION
TRENCH

PZ-04
(560.80)

CO-5

CO-MH6

CO-6

CO-MH7

PZ-05
(560.38)

PCM-05
(564.12)

PCBM-02
(563.09)

CO-4

CO-MH5

PCM-04
(562.67)

WW-3
(560.47)

WW-4
(560.49)

PCM-02
(566.46)

PZ-02
(561.04)

CO-2

CO-MH3

LITTLE RIVER

CAYUGA ISLAND

2'-2" HDPE FORCE MAINS

CO-MH4

PZ-03
(560.61)

WW-1
(560.24)

CO-3

PCBM-01
(563.35)

PCM-03
(562.63)

WW-2
(560.19)

APL COLLECTION
TRENCH

NIAGARA RIVER (563.16)

LEGEND

PROPERTY LINE	APL COLLECTION TRENCH	CO-MH3	FORCEMAIN CLEAN OUT MANHOLE
CITY LINE	PCBM-01 BEDROCK MONITORING WELL LOCATION		NAPL RECOVERY WELL LOCATION
FENCE LINE	PZ-02 PIEZOMETER LOCATION	(560.31)	GROUNDWATER ELEVATION
CRIB WALL	PCM-02 MONITORING WELL LOCATION	561	GROUNDWATER CONTOUR
FORCEMAIN	CO-2 TRENCH CLEAN OUT	561	APPROXIMATE INFERRED GROUNDWATER CONTOUR
SLURRY WALL AND CENTERLINE			

NOTE:
THE PCBM WELL ELEVATIONS ARE
NOT USED FOR CONTOURING.

figure 2.4

GROUNDWATER ELEVATIONS - DECEMBER 6, 2011
2011 PERIODIC REVIEW REPORT
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

01431-D23101(088)GN-WA005 JUN 21/2012

TABLES

TABLE 2.1

HYDRAULIC GRADIENT WELL PAIRS
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

Pair	*Outside*	*Inside*	*Location*
1	PCM-01	PZ-01	West Side
2	PCM-02	PZ-02	Southwest Side
3	PCM-03	PZ-03	South Side
4	PCM-04	PZ-04	South Side
5	PCM-05	PZ-05	Southeast Side
6	PCM-06	PZ-06	Northeast Side
7	PCM-07R	PZ-07	North Side
8	PCM-08	PZ-08	North Side
9	PCM-09	PZ-09	North Side
10	PCM-10	PZ-10	Northwest Side

TABLE 2.2

QUARTERLY WATER LEVEL ELEVATIONS - 2011
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

Location	*Ref Elev.*	*March 16, 2011*	*June 17, 2011*	*September 27, 2011*	*December 6, 2011*
NR-1	595.96	560.78	560.74	560.78	560.67
NR-2	588.39	560.63	559.61	560.63	560.61
NR-3	593.09	560.48	560.46	560.53	560.48
NR-4	581.06	560.51	560.48	560.52	560.46
NR-5	580.33	560.44	560.45	560.50	560.45
NR-7	587.21	561.71	561.68	561.70	561.68
NR-8	590.72	560.35	560.31	560.32	560.31
NR-10	586.77	560.64	560.58	560.61	560.49
PCBM-1	576.19	563.23	563.90	563.61	563.35
PCBM-2	575.21	563.00	563.58	563.38	563.09
PCBM-3	579.34	563.52	563.75	563.36	563.53
PCM-01	577.02	566.64	566.00	564.73	565.50
PCM-02	576.22	567.03	566.36	565.05	566.46
PCM-03	576.14	562.43	563.41	563.39	562.63
PCM-04	574.90	562.46	563.41	563.43	562.67
PCM-05	575.21	564.80	563.43	562.69	564.12
PCM-06	579.26	565.95	565.91	566.79	566.48
PCM-07R	578.80	565.45	565.53	565.92	564.76
PCM-08	578.34	569.62	567.28	569.37	569.76
PCM-09	578.05	572.27	568.58	569.84	572.03
PCM-10	578.44	567.51	566.83	565.42	566.79
PZ-01	580.98	562.20	562.09	562.11	562.02
PZ-02	577.10	561.18	561.13	561.14	561.04
PZ-03	575.82	560.53	560.50	560.50	560.61
PZ-04	575.99	560.87	560.83	560.92	560.80
PZ-05	575.92	560.43	560.43	560.50	560.38
PZ-06	583.70	Dry	563.61	Dry	Dry
PZ-07	578.48	568.01	567.04	566.32	565.94
PZ-08	579.71	Dry	564.89	Dry	Dry
PZ-09	579.51	Dry	Dry	Dry	Dry
PZ-10	581.61	564.95	565.04	565.00	564.92
RIVERNPIER	567.02	562.91	564.09	563.92	563.16
WW-1	574.97	560.35	560.32	560.31	560.24
WW-2	574.43	560.32	560.30	560.30	560.19
WW-3	574.78	560.45	560.55	560.55	560.47
WW-4	575.20	560.45	560.58	560.58	560.49

Notes:
Dry - No water in well during time of measurement.

TABLE 2.3

WELL PAIR GRADIENTS - 2011
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

		Elevation (ft AMSL)						
	Pairs	*TOC*	*Bottom*	*March 16, 2011*	*June 17, 2011*	*September 27, 2011*	*December 6, 2011*	*Quarters Maintaining Inward Gradient*
Pair 1	PCM-01	577.02	549.05	566.64	566.00	564.73	565.50	
	PZ-01	580.98	549.64	562.20	562.09	562.11	562.02	
				-4.44	-3.91	-2.62	-3.48	4
Pair 2	PCM-02	576.22	547.90	567.03	566.36	565.05	566.46	
	PZ-02	577.10	548.43	561.18	561.13	561.14	561.04	
				-5.85	-5.23	-3.91	-5.42	4
Pair 3	PCM-03	576.14	545.15	562.43	563.41	563.39	562.63	
	PZ-03	575.82	545.63	560.53	560.50	560.50	560.61	
				-1.90	-2.91	-2.89	-2.02	4
Pair 4	PCM-04	574.90	545.74	562.46	563.41	563.43	562.67	
	PZ-04	575.99	545.63	560.87	560.83	560.92	560.80	
				-1.59	-2.58	-2.51	-1.87	4
Pair 5	PCM-05	575.21	550.00	564.80	563.43	562.69	564.12	
	PZ-05	575.92	550.50	560.43	560.43	560.50	560.38	
				-4.37	-3.00	-2.19	-3.74	4
Pair 6	PCM-06	579.26	566.50	565.95	565.91	566.79	566.48	
	PZ-06	583.70	564.05	Dry	563.61	Dry	Dry	
				NA	-2.30	NA	NA	1 / NA*
Pair 7	PCM-07R	578.80	557.63	565.45	565.53	565.92	564.76	
	PZ-07	578.48	564.80	568.01	567.04	566.32	565.94	
				2.56	1.51	0.40	1.18	0
Pair 8	PCM-08	578.34	564.43	569.62	567.28	569.37	569.76	
	PZ-08	579.71	565.38	Dry	564.89	Dry	Dry	
				NA	-2.39	NA	NA	1 / NA*
Pair 9	PCM-09	578.05	567.87	572.27	568.58	569.84	572.03	
	PZ-09	579.51	566.28	Dry	Dry	Dry	Dry	
				NA	NA	NA	NA	NA*
Pair 10	PCM-10	578.44	556.39	567.51	566.83	565.42	566.79	
	PZ-10	581.61	561.56	564.95	565.04	565.00	564.92	
				-2.56	-1.79	-0.42	-1.87	4

Notes:

ft AMSL	Feet above mean sea level.
-3.53	Negative number indicates an inward gradient.
Dry	No water in well during time of measurement.
NA	Gradient unable to be calculated due to dry well.
*	When the bottom elevation of the well is taken into account, all four quarters demonstrate inward gradients.

TABLE 2.4

ANALYTICAL RESULTS SUMMARY - 2011
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

				Sample Location:	*PCBM-01*		*PCBM-02*		*PCBM-03*			
				Sample ID:	*PCBM-01-0411*	*PCBM-01-1011*	*PCBM-02-0411*	*PCBM-02-1011*	*PCBM-03-0411*	*PCM-12-0411*	*PCBM-03-1011*	*PCM-12-1011*
				Sample Date:	*4/13/2011*	*10/19/2011*	*4/13/2011*	*10/18/2011*	*4/14/2011*	*4/14/2011 (Duplicate)*	*10/19/2011*	*10/19/2011 (Duplicate)*
Parameters	*NYSDEC Class GA GW Criteria*	*Survey Level*	*Units*									
Volatile Organic Compounds												
1,2,3-Trichlorobenzene	5	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	5	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	1	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-volatile Organic Compounds												
1,2,4,5-Tetrachlorobenzene	5	10	µg/L		9.4 U	9.5 U	9.5 U	9.6 U	9.5 U	9.5 U	48 U	9.6 U
2,4,5-Trichlorophenol	1	50	µg/L		9.4 U	9.5 U	9.5 U	9.6 U	9.5 U	9.5 U	48 U	9.6 U
2,4-Dichlorophenol	1	10	µg/L		9.4 U	9.5 U	9.5 U	9.6 U	9.5 U	9.5 U	48 U	9.6 U
2,5-Dichlorophenol	1	10	µg/L		9.4 U	9.5 UJ	9.5 U	9.6 U	9.5 U	9.5 U	48 U	9.6 U
2-Chlorophenol	1	10	µg/L		9.4 U	9.5 U	9.5 U	9.6 U	9.5 U	9.5 U	17 J	9.6 U
4-Chlorophenol	1	10	µg/L		9.4 U	9.5 U	9.5 U	9.6 U	9.5 U	9.5 U	48 U	9.6 U
Phenol	1	10	µg/L		9.4 U	9.5 U	9.5 U	9.6 U	9.5 U	9.5 U	48 U	9.6 U
Metals												
Arsenic	25	50	µg/L		10.0 U	10 U	10.0 U	10 U	10.0 U	10.0 U	3.9 J	10 U
Mercury	0.7	0.10	µg/L		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides												
alpha-BHC	0.01	10	µg/L		0.048 U	0.048 U	0.047 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U
beta-BHC	0.04	10	µg/L		0.048 U	0.048 U	0.047 U	0.047 U	0.048 U	0.048 U	0.054	0.048 U
delta-BHC	0.04	10	µg/L		0.048 U	0.055	0.047 UJ	0.047 U	0.048 U	0.048 U	0.52	0.048 U
gamma-BHC (Lindane)	0.05	10	µg/L		0.048 U	0.048 U	0.047 UJ	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U

Notes:
µg/L Micrograms per liter.
J Estimated concentration.
U Not present at or above the associated value.
UJ Estimated reporting limit.
Exceedance of NYSDEC Class GA GW Criteria and/or Survey Level.

TABLE 2.4

ANALYTICAL RESULTS SUMMARY - 2011
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

				Sample Location:	*PCM-01*		*PCM-02*		*PCM-03*	
				Sample ID:	*PCM-01-0411*	*PCM-01-1011*	*PCM-02-0411*	*PCM-02-1011*	*PCM-03-0411*	*PCM-03-1011*
				Sample Date:	*4/14/2011*	*10/19/2011*	*4/15/2011*	*10/19/2011*	*4/13/2011*	*10/19/2011*
Parameters	*NYSDEC Class GA GW Criteria*	*Survey Level*	*Units*							
Volatile Organic Compounds										
1,2,3-Trichlorobenzene	5	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	120 U	130 U
1,2,4-Trichlorobenzene	5	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	120 U	130 U
1,2-Dichlorobenzene	3	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	61 J	46 J
1,4-Dichlorobenzene	3	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	310	220
2-Chlorotoluene	5	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	120 U	130 U
Benzene	1	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	62 J	34 J
Chlorobenzene	5	5	µg/L		1.0 U	1.0 U	1.0 U	0.16 J	3400	3000
Semi-volatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	5	10	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2,4,5-Trichlorophenol	1	50	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2,4-Dichlorophenol	1	10	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2,5-Dichlorophenol	1	10	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	13	9.6 U
2-Chlorophenol	1	10	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	9.0 J	9.6 U
4-Chlorophenol	1	10	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	16	9.6 U
Phenol	1	10	µg/L		9.5 U	9.6 U	9.5 U	9.7 U	0.91 J	9.6 U
Metals										
Arsenic	25	50	µg/L		10.0 U	2.9 J	10.0 U	2.8 J	10.0 U	10 U
Mercury	0.7	0.10	µg/L		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides										
alpha-BHC	0.01	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U
beta-BHC	0.04	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.059	0.048 U
delta-BHC	0.04	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.075	0.048 U
gamma-BHC (Lindane)	0.05	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U

Notes:
µg/L Micrograms per liter.
J Estimated concentration.
U Not present at or above the associated value.
UJ Estimated reporting limit.
Exceedance of NYSDEC Class GA GW Criteria and/or Survey Level.

TABLE 2.4

ANALYTICAL RESULTS SUMMARY - 2011
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

				Sample Location:	*PCM-04*		*PCM-05*		*PCM-07R*	
				Sample ID:	*PCM-04-0411*	*PCM-04-1011*	*PCM-05-0411*	*PCM-05-1011*	*PCM-07R-0411*	*PCM-07R-1011*
				Sample Date:	*4/13/2011*	*10/19/2011*	*4/13/2011*	*10/18/2011*	*4/14/2011*	*10/18/2011*
Parameters	*NYSDEC Class GA GW Criteria*	*Survey Level*	*Units*							
Volatile Organic Compounds										
1,2,3-Trichlorobenzene	5	10	µg/L		500 U	500 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	10	µg/L		500 U	500 U	5.0 U	5.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	10	µg/L		500 U	500 U	5.0 U	5.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	10	µg/L		220 J	200 J	5.0 U	5.0 U	1.0 U	1.0 U
2-Chlorotoluene	5	5	µg/L		500 U	500 U	5.0 U	5.0 U	1.0 U	1.0 U
Benzene	1	5	µg/L		500 U	500 U	2.4 J	5.0 U	1.0 U	1.0 U
Chlorobenzene	5	5	µg/L		8400	8000	87	81	0.18 J	1.0 U
Semi-volatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	5	10	µg/L		9.5 U	48 U	9.5 U	9.7 U	9.6 U	9.7 U
2,4,5-Trichlorophenol	1	50	µg/L		9.5 U	48 U	9.5 U	9.7 U	9.6 U	9.7 U
2,4-Dichlorophenol	1	10	µg/L		0.90 J	48 U	9.5 U	9.7 U	9.6 U	9.7 U
2,5-Dichlorophenol	1	10	µg/L		9.5 U	48 U	9.5 U	9.7 U	9.6 U	9.7 U
2-Chlorophenol	1	10	µg/L		12	39 J	9.5 U	9.7 U	9.6 U	9.7 U
4-Chlorophenol	1	10	µg/L		28	48 U	1.7 J	2.8 J	9.6 U	9.7 U
Phenol	1	10	µg/L		9.5 U	48 U	9.5 U	9.7 U	9.6 U	9.7 U
Metals										
Arsenic	25	50	µg/L		10.0 U	10 U	10.0 U	10 U	10.0 U	10 U
Mercury	0.7	0.10	µg/L		0.11 J	0.064 J	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides										
alpha-BHC	0.01	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.033 J	0.048 U
beta-BHC	0.04	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U
delta-BHC	0.04	10	µg/L		0.13	0.09	0.048 U	0.048 U	0.032 J	0.057 J
gamma-BHC (Lindane)	0.05	10	µg/L		0.048 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U

Notes:
µg/L Micrograms per liter.
J Estimated concentration.
U Not present at or above the associated value.
UJ Estimated reporting limit.
Exceedance of NYSDEC Class GA GW Criteria and/or Survey Level.

TABLE 2.4

ANALYTICAL RESULTS SUMMARY - 2011
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

				Sample Location:	*PCM-08*		*PCM-09*		*PCM-10*	
				Sample ID:	*PCM-08-0411*	*PCM-08-1011*	*PCM-09-0411*	*PCM-09-1011*	*PCM-10-0411*	*PCM-10-1011*
				Sample Date:	*4/14/2011*	*10/19/2011*	*4/14/2011*	*10/18/2011*	*4/15/2011*	*10/18/2011*
Parameters	*NYSDEC Class GA GW Criteria*	*Survey Level*	*Units*							
Volatile Organic Compounds										
1,2,3-Trichlorobenzene	5	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	10	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	5	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	1	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	5	µg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-volatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	5	10	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2,4,5-Trichlorophenol	1	50	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2,4-Dichlorophenol	1	10	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2,5-Dichlorophenol	1	10	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
2-Chlorophenol	1	10	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
4-Chlorophenol	1	10	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
Phenol	1	10	µg/L		9.6 U	9.6 U	9.5 U	9.7 U	9.5 U	9.6 U
Metals										
Arsenic	25	50	µg/L		10.0 U	10 U	10.0 U	10 U	10.0 U	10 U
Mercury	0.7	0.10	µg/L		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides										
alpha-BHC	0.01	10	µg/L		0.048 U	0.048 U	0.048 U	0.047 U	0.047 U	0.048 U
beta-BHC	0.04	10	µg/L		0.048 U	0.048 U	0.048 U	0.047 U	0.047 U	0.045 J
delta-BHC	0.04	10	µg/L		0.048 U	0.048 U	0.048 U	0.047 U	0.047 U	0.048 U
gamma-BHC (Lindane)	0.05	10	µg/L		0.048 U	0.048 U	0.048 U	0.047 U	0.047 U	0.048 U

Notes:
µg/L Micrograms per liter.
J Estimated concentration.
U Not present at or above the associated value.
UJ Estimated reporting limit.
Exceedance of NYSDEC Class GA GW Criteria and/or Survey Level.

TABLE 4.1

2011 NAPL RECOVERY FROM NR-02
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

Date	*NAPL Removed (gallons)*
3/16/2011	30
4/20/2011	27
5/2/2011	9
5/20/2011	19
5/27/2011	19
6/3/2011	20
6/7/2011	20
6/10/2011	21
6/17/2011	11
6/21/2011	21
6/23/2011	38
6/29/2011	16
7/1/2011	22
7/5/2011	19
7/8/2011	22
7/11/2011	17
7/15/2011	11
7/19/2011	23
7/22/2011	17
7/26/2011	17
7/28/2011	12
8/1/2011	12
8/5/2011	12
8/8/2011	18
8/10/2011	18
8/15/2011	24
8/19/2011	12
8/22/2011	18
8/26/2011	18
8/29/2011	12
9/1/2011	18
9/6/2011	24
9/9/2011	18
9/12/2011	30
9/16/2011	12
9/23/2011	37
9/26/2011	18
9/27/2011	13
9/30/2011	24
10/3/2011	12
10/6/2011	25
10/10/2011	12
10/14/2011	19
10/17/2011	25
10/21/2011	12
10/28/2011	6
10/31/2011	27
11/4/2011	12
11/8/2011	25
12/6/2011	31
TOTAL	**953**

TABLE 4.2

NAPL RECOVERY (NR) WELLS CURRENT AND HISTORICAL NAPL RECOVERIES
GLENN SPRINGS HOLDINGS, INC.
102nd STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

	AMOUNT OF NAPL REMOVED IN GALLONS												
YEAR / **WELL**	*1999*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*Totals*
NR-1	-	55	0	60	0	0	30	85	44	46	7	11	338
NR-2	-	200	1,490	1,355	12,151	18,153	8,738	9,421	6,189	7,164	478	953	66,291
NR-3	-	40	0	0	0	0	10	42	22	12	0	7	133
NR-4	-	0	0	0	0	0	0	0	0	0	0	0	0
NR-5	-	40	0	20	0	0	10	36	21	15	0	3	145
NR-7	-	0	0	0	0	0	0	0	0	0	0	0	0
NR-8	-	0	0	5	0	0	8	43	22	16	0	4	98
NR-10	-	0	0	0	0	0	0	0	0	0	0	0	0
Total	--	**335**	**1,490**	**1,440**	**12,151**	**18,153**	**8,796**	**9,627**	**6,298**	**7,253**	**485**	**977**	**67,004**

Notes:
* 2006: 4th tanker shipped January 9, 2007 after first of the year.
* 2006: NAPL slightly heavier.
* 2006: Inspection to daily instead of 2x more down time .

APPENDIX A

INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM

New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 **Fax:** (518) 402-9577
Website: www.dec.ny.gov

Joe Martens
Commissioner

4/18/2012

Joseph Branch
Project Manager
OCC/Glenn Springs Holdings Inc.
7601 Old Channel Trail
P.O. Box 146
Montaque, MI 49437

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Hooker-102nd Street Landfill
Site No.: 932022
Site Address: 102nd Street, South of River Road
Niagara Falls, NY 14304

Dear Joseph Branch:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **July 01, 2012**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
http://www.dec.ny.gov/regulations/2586.html

The signed certification forms should be sent to Brian Sadowski, Project Manager, at the following address:

New York State Department of Environmental Conservation
270 Michigan Ave
Buffalo, NY 14203-2915

Phone number: 716-851-7220. E-mail: bpsadows@gw.dec.state.ny.us

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

cc: w/ enclosures

Occidental Chemical Corporation
Olin Corporation

ec: w/ enclosures

Brian Sadowski, Project Manager
Greg Sutton, Hazardous Waste Remediation Engineer, Region 9
Krista Anders, DOH

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 932022

Site Name Hooker-102nd Street Landfill

Site Address: 102nd Street, South of River Road Zip Code: 14304
City/Town: Niagara Falls
County: Niagara
Site Acreage: ~~16.5~~ 22.1

Reporting Period: ~~June 01, 2011 to June 01, 2012~~
January 1, 2011 to December 31, 2011

	YES	NO
1. Is the information above correct?	☐	☒
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 932022 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
161.18-1-34.2	Occidental Chemical Corporation	Landuse Restriction Monitoring Plan O&M Plan
161.19-3-1	Occidental Chemical Corporation	Landuse Restriction Monitoring Plan O&M Plan
161.19-3-2	Occidental Chemical Corporation	Landuse Restriction Monitoring Plan O&M Plan
174.07-1-1	Occidental Chemical Corporation	Landuse Restriction Monitoring Plan O&M Plan
174.07-1-2	Occidental Chemical Corporation	Landuse Restriction Monitoring Plan O&M Plan
174.07-1-3	Olin Corporation	Landuse Restriction Monitoring Plan O&M Plan

174.07-1-4 Olin Corporation

Landuse Restriction
Monitoring Plan
O&M Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
161.18-1-34.2	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers
161.19-3-1	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers
161.19-3-2	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers
174.07-1-1	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers
174.07-1-2	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers
174.07-1-3	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers
174.07-1-4	Cover System Fencing/Access Control Groundwater Containment Groundwater Treatment System Leachate Collection Subsurface Barriers

Control Description for Site No. 932022

Parcel: 161.18-1-34.2

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into two double walled skid mounted ~~poly~~ tanks with internal secondary containment and sent off site for proper disposal. OCC/Olin, or their representative has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 deed restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Parcel: 161.19-3-1

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into two double walled skid mounted ~~poly~~ tanks with internal secondary containment and sent off site for proper disposal. OCC/Olin, or their representative has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 deed restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Parcel: 161.19-3-2

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into two double walled skid mounted ~~poly~~ tanks with internal secondary containment and sent off site for proper disposal. OCC/Olin, or their representative has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 deed restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Parcel: 174.07-1-1

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into two double walled skid mounted ~~poly~~ tanks with internal secondary containment and sent off site for proper disposal. OCC/Olin, or their representative has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 Deed Restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Parcel: 174.07-1-2

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into two double walled skid mounted ~~poly~~ tanks with internal secondary containment and sent off site for proper disposal. OCC/Olin, or their representative has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 deed restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Engineering Control Details for Site No. 932022

Parcel: 174.07-1-3

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into ~~a waste tanker~~ two double walled tanks and sent off site for proper disposal. OCC/Olin has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 deed restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Parcel: 174.07-1-4

The engineering controls consist of a containment system for the landfill, including: perimeter fencing; NAPL recovery wells; a groundwater collection system; a perimeter sub-surface slurry wall; and a landfill cap. Groundwater collected from the containment system is pumped north for treatment at the Love Canal Leachate Treatment Facility. NAPL is pumped seasonally (April - Nov.) from select NAPL recovery wells into ~~a waste tanker~~ two double walled tanks and sent off site for proper disposal. OCC/Olin has performed the required O&M activities since 1999.

The Institutional Controls include a January 2000 deed restriction that prohibits the use of site groundwater or disturbance of landfill cover.

Box 5

Periodic Review Report (PRR) Certification Statements

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

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 932022

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Joseph Brenek at 7601 Old Channel Trail, Montague, MI 49437
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

6/6/2012
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

CIZA Infrastructure + Engineering Inc

I James Thornton (print name) at 285 Delaware Ave Buffalo, NY (print business address),

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

STATE OF NEW YORK
JAMES C. THORNTON
No. 60492
LICENSED PROFESSIONAL ENGINEER

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

Stamp (Required for PE)

6-29-12
Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

APPENDIX B

ANNUAL REPORT FORMS

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2011

MONITORING - Water Level Measurements

Month	*Day*	*Inspector*	*PCM-01*	*PZ-01*	*PCM-02*	*PZ-02*	*PCM-03*	*PZ-03*
1st Qtr.	3/16/2011	D. Tyran	566.64	562.20	567.03	561.18	562.43	560.53
2nd Qtr.	6/17/2011	D. Tyran	566.00	562.09	566.36	561.13	563.41	560.50
3rd Qtr.	9/27/2011	D. Tyran	564.73	562.11	565.05	561.14	563.39	560.50
4th Qtr.	12/6/2011	D. Tyran	565.50	562.02	566.46	561.04	562.63	560.61

Month	*Day*	*Inspector*	*PCM-04*	*PZ-04*	*PCM-05*	*PZ-05*	*PCM-06*	*PZ-06*
1st Qtr.	3/16/2011	D. Tyran	562.46	560.87	564.80	560.43	565.95	DRY
2nd Qtr.	6/17/2011	D. Tyran	563.41	560.83	563.43	560.43	565.91	563.61
3rd Qtr.	9/27/2011	D. Tyran	563.43	560.92	562.69	560.50	566.79	DRY
4th Qtr.	12/6/2011	D. Tyran	562.67	560.80	564.12	560.38	566.48	DRY

Month	*Day*	*Inspector*	*PCM-07R*	*PZ-07*	*PCM-08*	*PZ-08*	*PCM-09*	*PZ-09*
1st Qtr.	3/16/2011	D. Tyran	565.45	568.01	569.62	DRY	572.27	DRY
2nd Qtr.	6/17/2011	D. Tyran	565.53	567.04	567.28	564.89	568.58	DRY
3rd Qtr.	9/27/2011	D. Tyran	565.92	566.32	569.37	DRY	569.84	DRY
4th Qtr.	12/6/2011	D. Tyran	564.76	565.94	569.76	DRY	572.03	DRY

Month	*Day*	*Inspector*	*PCM-10*	*PZ-10*
1st Qtr.	3/16/2011	D. Tyran	567.51	564.95
2nd Qtr.	6/17/2011	D. Tyran	566.83	565.04
3rd Qtr.	9/27/2011	D. Tyran	565.42	565.00
4th Qtr.	12/6/2011	D. Tyran	566.79	564.92

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: **2011**

GROUNDWATER - Quality Monitoring

Quarter	*Date Sample Taken*	*Inspector*	*Comments*
1st			
2nd	4/13/10	D. Tyran	Semiannual sampling event.
3rd			
4th	10/18/10	D. Tyran	Semiannual sampling event.

Results of analyses are attached.

NAPL PRESENCE - Monitoring

			NR-01		*NR-02*		*NR-03*	
	Date	*Inspector*	*Depth of NAPL (ft)*	*Gallons Removed*	*Depth of NAPL (ft)*	*Gallons Removed*	*Depth of NAPL (ft)*	*Gallons Removed*
1st Quarter	3/16/2011	D. Tyran	1.05	6.25	1.77	30.00	0.61	0.00
2nd Quarter	6/17/2011	D. Tyran	0.42	0.00	1.91	10.50	0.70	0.00
3rd Quarter	9/27/2011	D. Tyran	1.07	4.25	1.72	13.00	0.35	0.00
4th Quarter	12/6/2011	D. Tyran	0.43	0.00	1.30	31.00	0.37	0.00

			NR-04		*NR-05*		*NR-07*	
	Date	*Inspector*	*Depth of NAPL (ft)*	*Gallons Removed*	*Depth of NAPL (ft)*	*Gallons Removed*	*Depth of NAPL (ft)*	*Gallons Removed*
1st Quarter	3/16/2011	D. Tyran	NO NAPL		0.56	0.00	NO NAPL	
2nd Quarter	6/17/2011	D. Tyran	NO NAPL		0.53	0.00	NO NAPL	
3rd Quarter	9/27/2011	D. Tyran	NO NAPL		0.51	2.50	NO NAPL	
4th Quarter	12/6/2011	D. Tyran	0.05	0.00	0.34	0.00	NO NAPL	

			NR-08		*NR-10*	
	Date	*Inspector*	*Depth of NAPL (ft)*	*Gallons Removed*	*Depth of NAPL (ft)*	*Gallons Removed*
1st Quarter	3/16/2011	D. Tyran	0.62	0.00	NO NAPL	
2nd Quarter	6/17/2011	D. Tyran	0.45	0.00	NO NAPL	
3rd Quarter	9/27/2011	D. Tyran	0.75	3.50	NO NAPL	
4th Quarter	12/6/2011	D. Tyran	0.33	0.00	NO NAPL	

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: **2011**

OPERATION

APL COLLECTION AND DISCHARGE SYSTEM

APL Flow for Previous Year (gallons)	*APL Flow for Current Year (gallons)*
389,884	309,391

NAPL REMOVAL SYSTEM

	NAPL Removed for Previous Year (gallons)	*NAPL Removed for Current Year (gallons)*
NR-01	7	11
NR-02	478	953
NR-03	0	7
NR-04	0	0
NR-05	0	3
NR-07	0	0
NR-08	0	4
NR-10	0	0
Total	485	977

Where was NAPL treated/disposed?

Facility No NAPL sent off Site for treatment or disposal in 2011. Date _____
Facility _____ Date _____
Facility _____ Date _____
Facility _____ Date _____
Facility _____ Date _____
Facility _____ Date _____

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: **2011**

INSPECTION AND MAINTENANCE

Scheduled inspections performed:

	Date	*Inspectors*
May	**3**	Brian Sadowski (NYSDEC); Joe Branch (GSH); Dennis Hoyt (CRA); Darrell Crockett (CRA)

Was maintenance required?

Yes	*No*
[x]	[ ]

What maintenance was required?	Date Performed
Fill animal burrows.	May 2011

Describe any maintenance activity that required an activity specific work plan and health and safety plan.

At this time no other concerns or issues conveyed.

Form Completed By:

Joseph Branch, Project Manager

NAME SIGNATURE DATE

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2011

Send completed copies of this form to the following for review:

Mr. Joseph Branch
Glenn Springs Holdings, Inc.
7601 Old Channel Trail
Montague, MI 49437

and

Mr. Curt Richards
Olin Corporation
3855 North Ocoee Street, Suite 200
Cleveland, TN 37312

After review is complete, send 5 copies to the following:

Chief-New York Remedial Branch
Emergency and Remedial Response Davison
U.S. Environmental Protection Agency - Region II
290 Broadway, 20th Floor
New York, NY 10007-1866
Attn: 102nd Street Landfill Superfund Site Manager

and

Mr. Brian Sadowski
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

and

Mr. Gregory P. Sutton
Regional Remediation Engineer
New York State Dept. of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

FORM 1

APPENDIX C

GRAPHS OF GROUNDWATER LEVEL ELEVATIONS 2002-2011

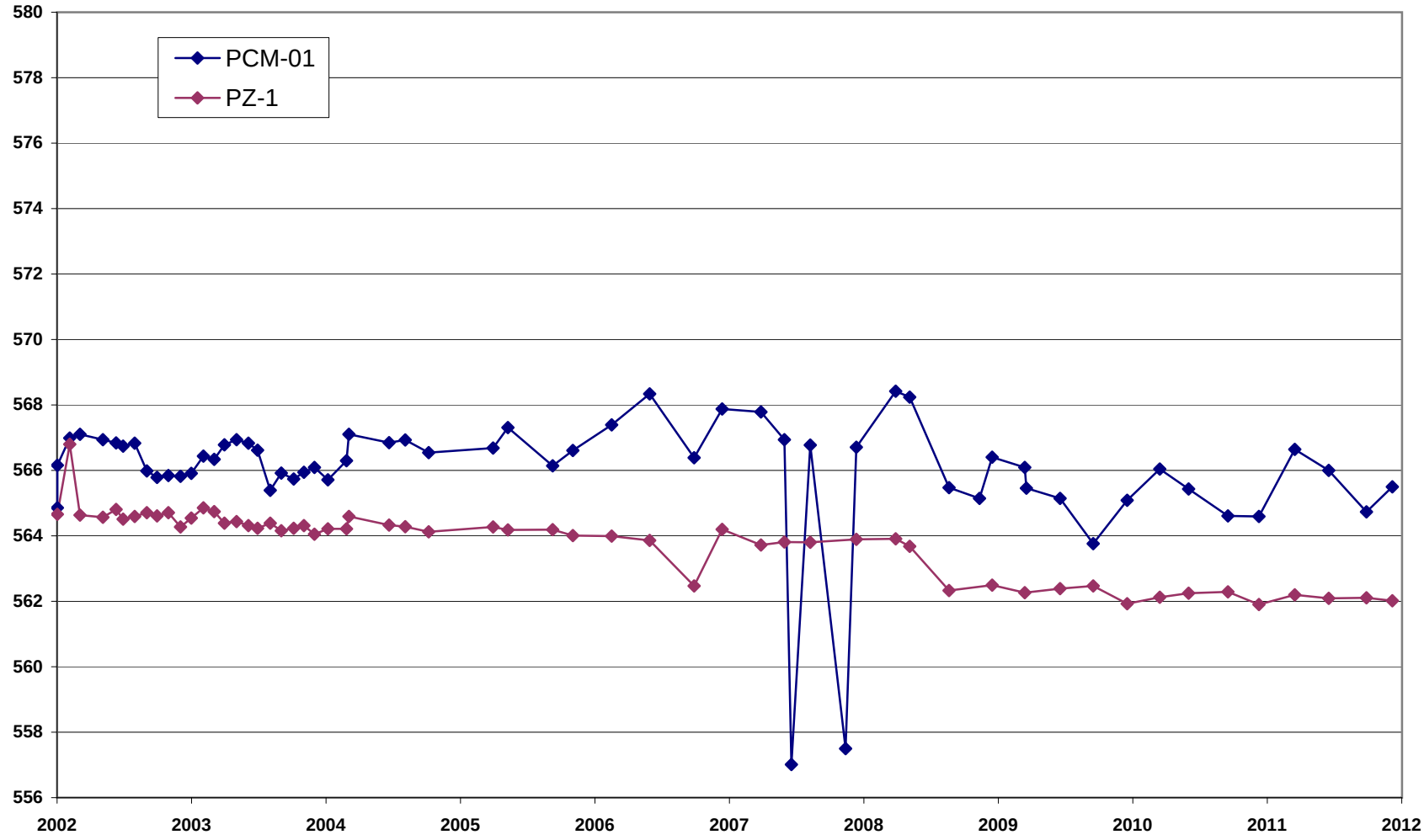


figure C.1
GROUNDWATER LEVELS WELL PAIR 1
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

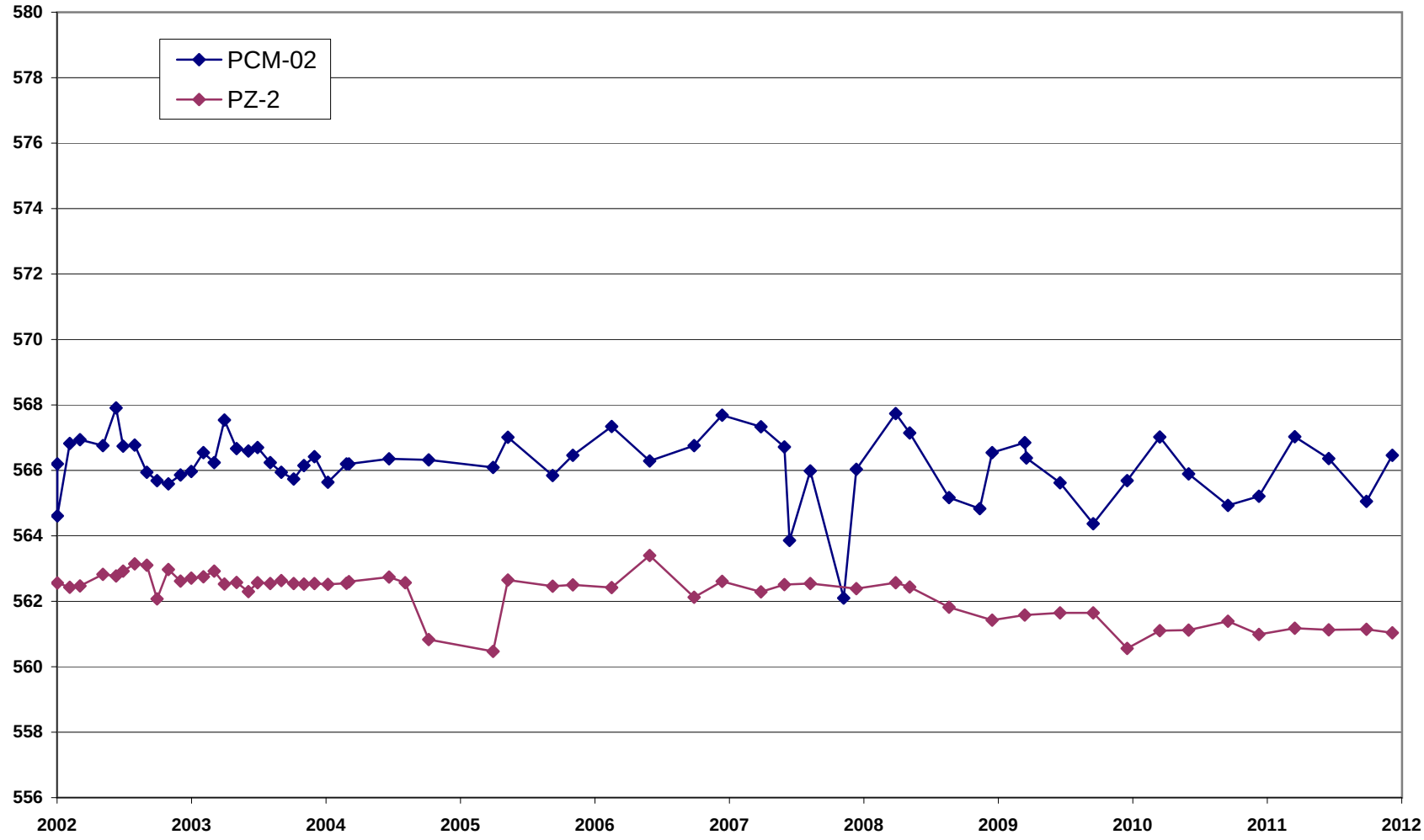


figure C.2
GROUNDWATER LEVELS WELL PAIR 2
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

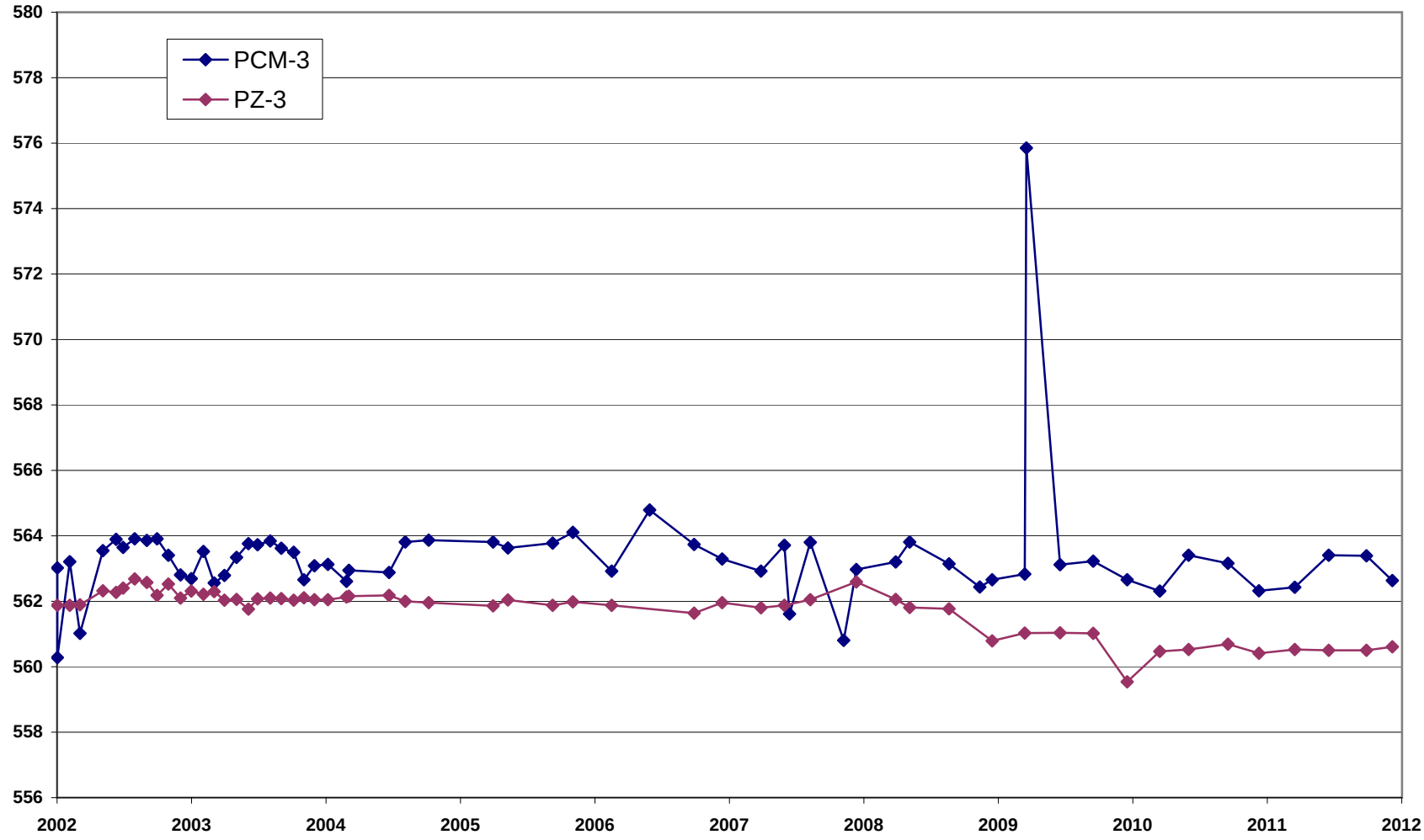


figure C.3
GROUNDWATER LEVELS WELL PAIR 3
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

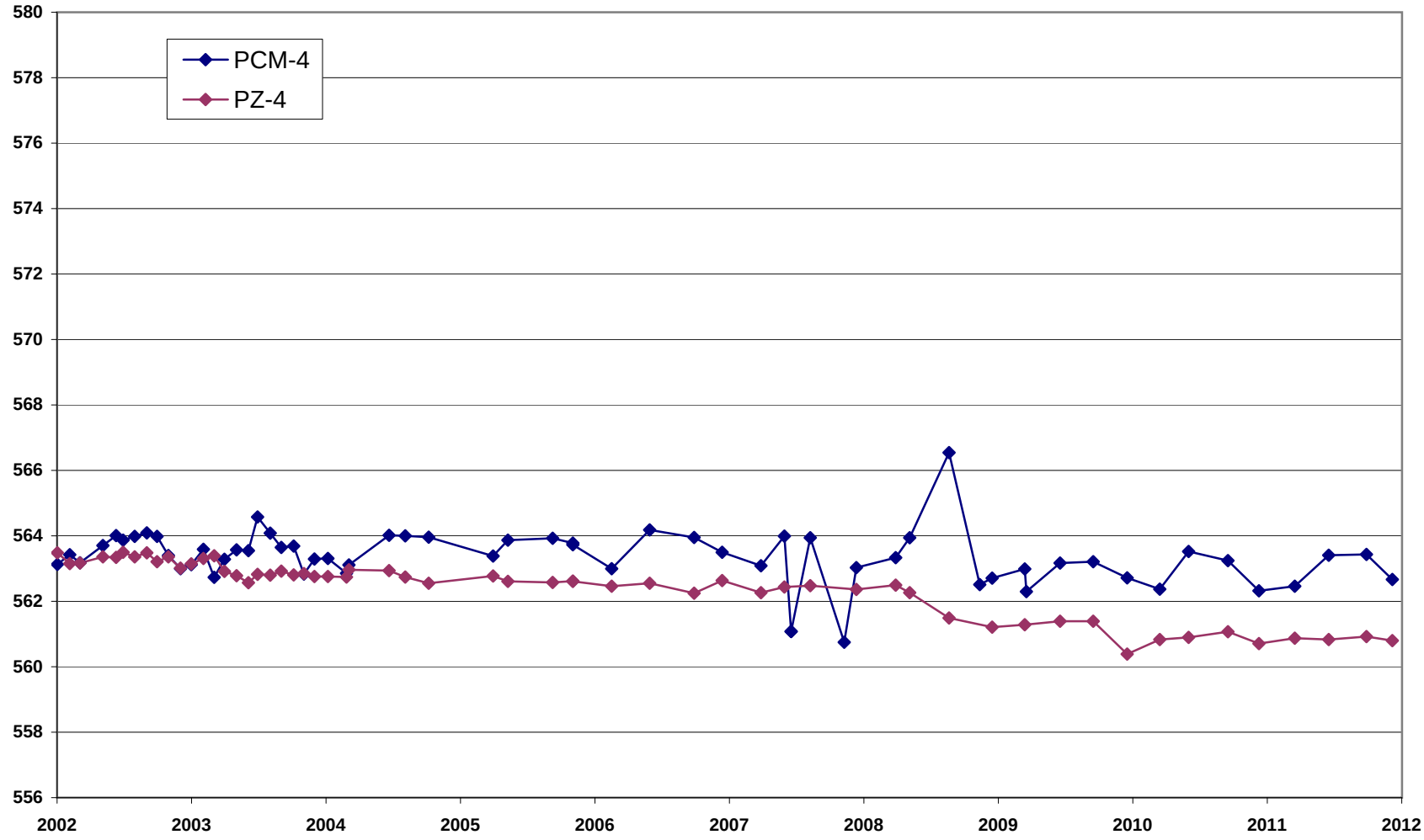


figure C.4
GROUNDWATER LEVELS WELL PAIR 4
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

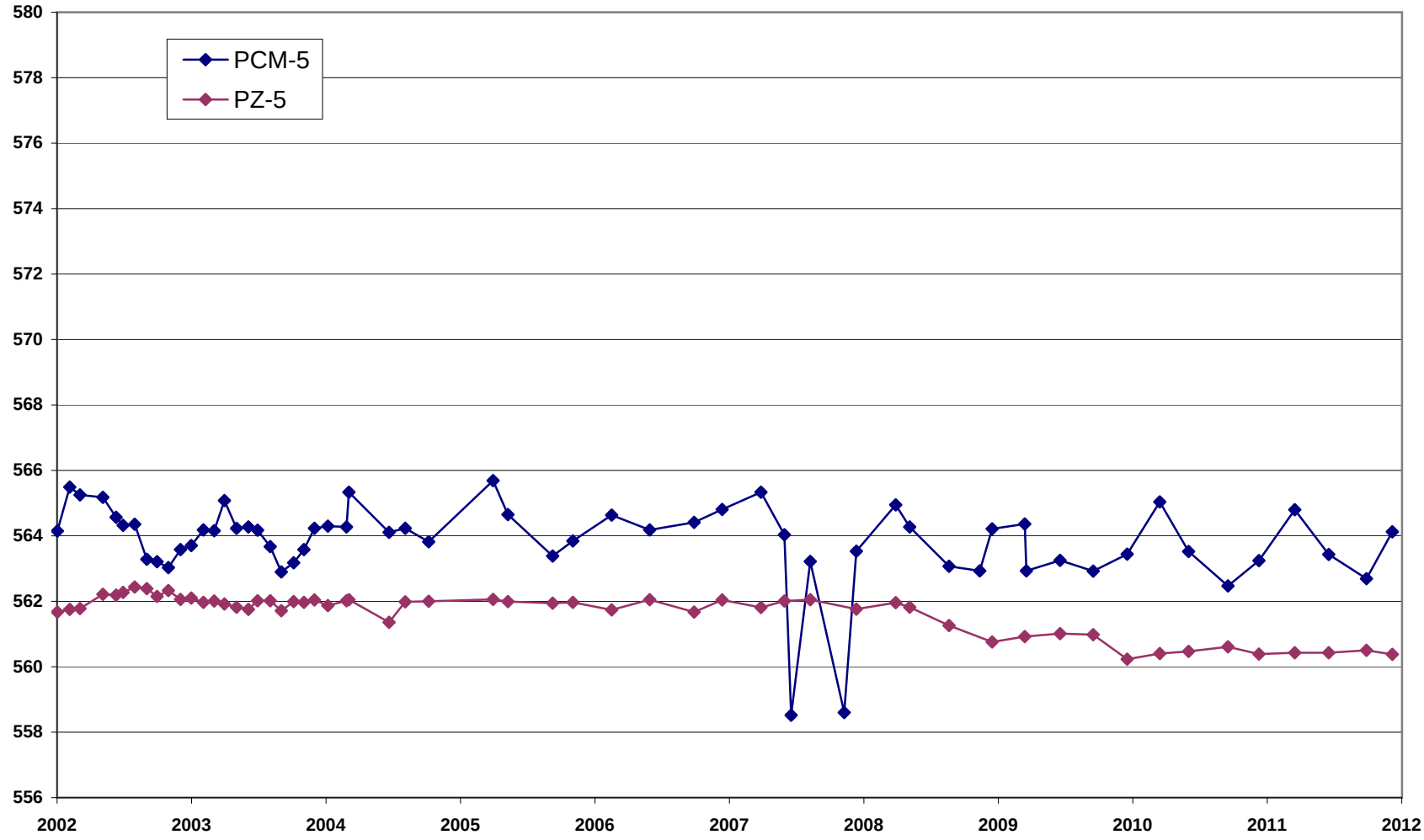


figure C.5
GROUNDWATER LEVELS WELL PAIR 5
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

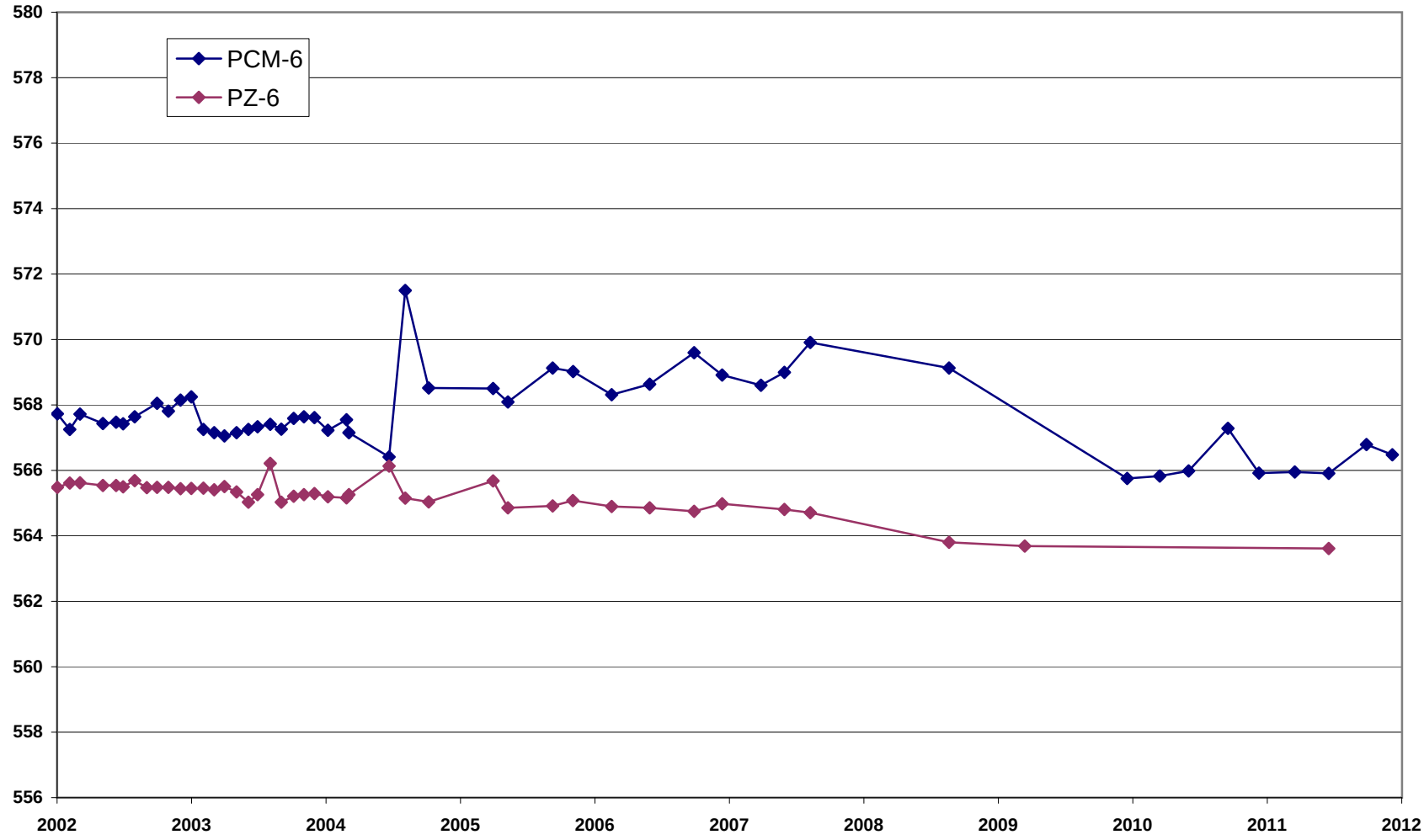


figure C.6
GROUNDWATER LEVELS WELL PAIR 6
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

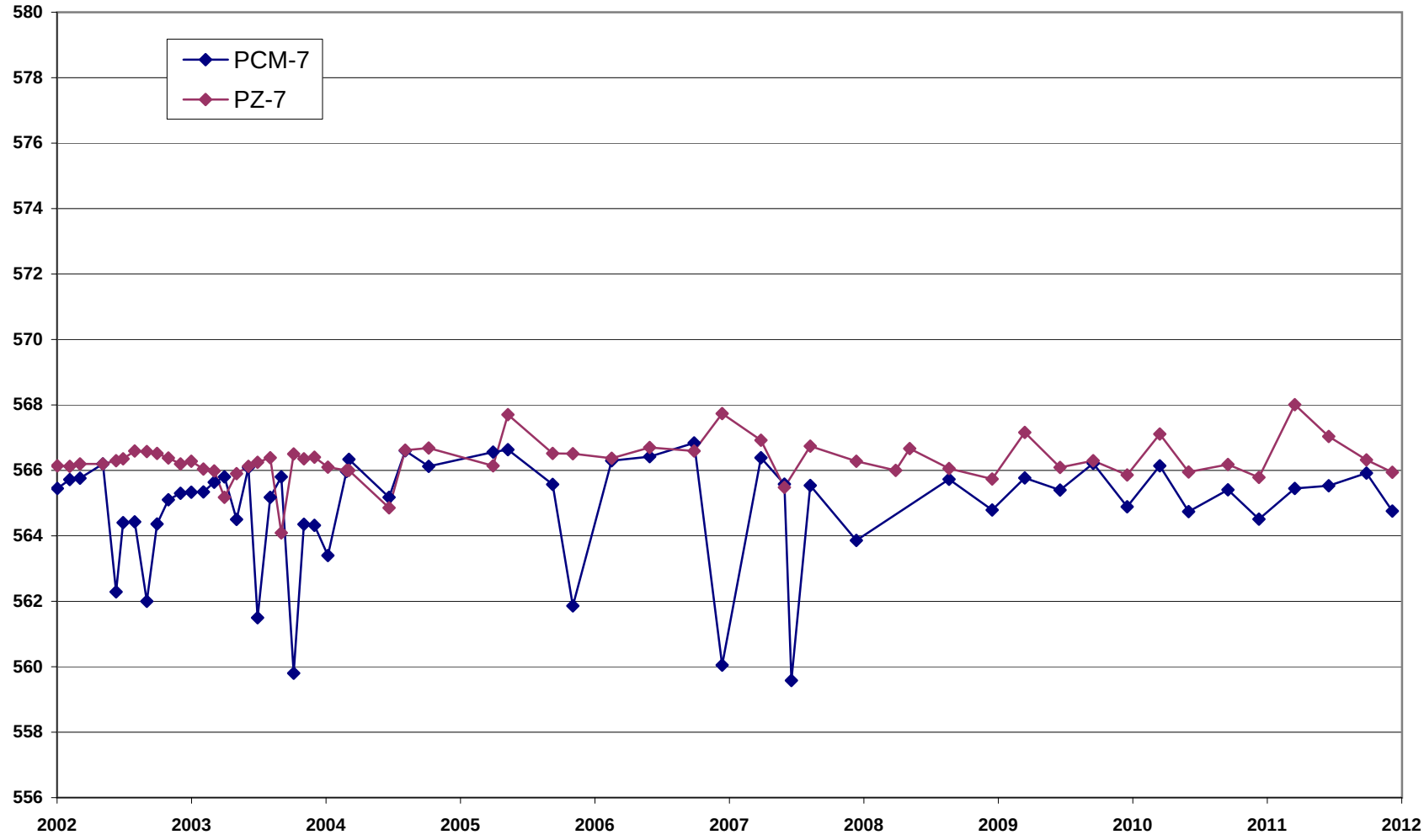


figure C.7
GROUNDWATER LEVELS WELL PAIR 7
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

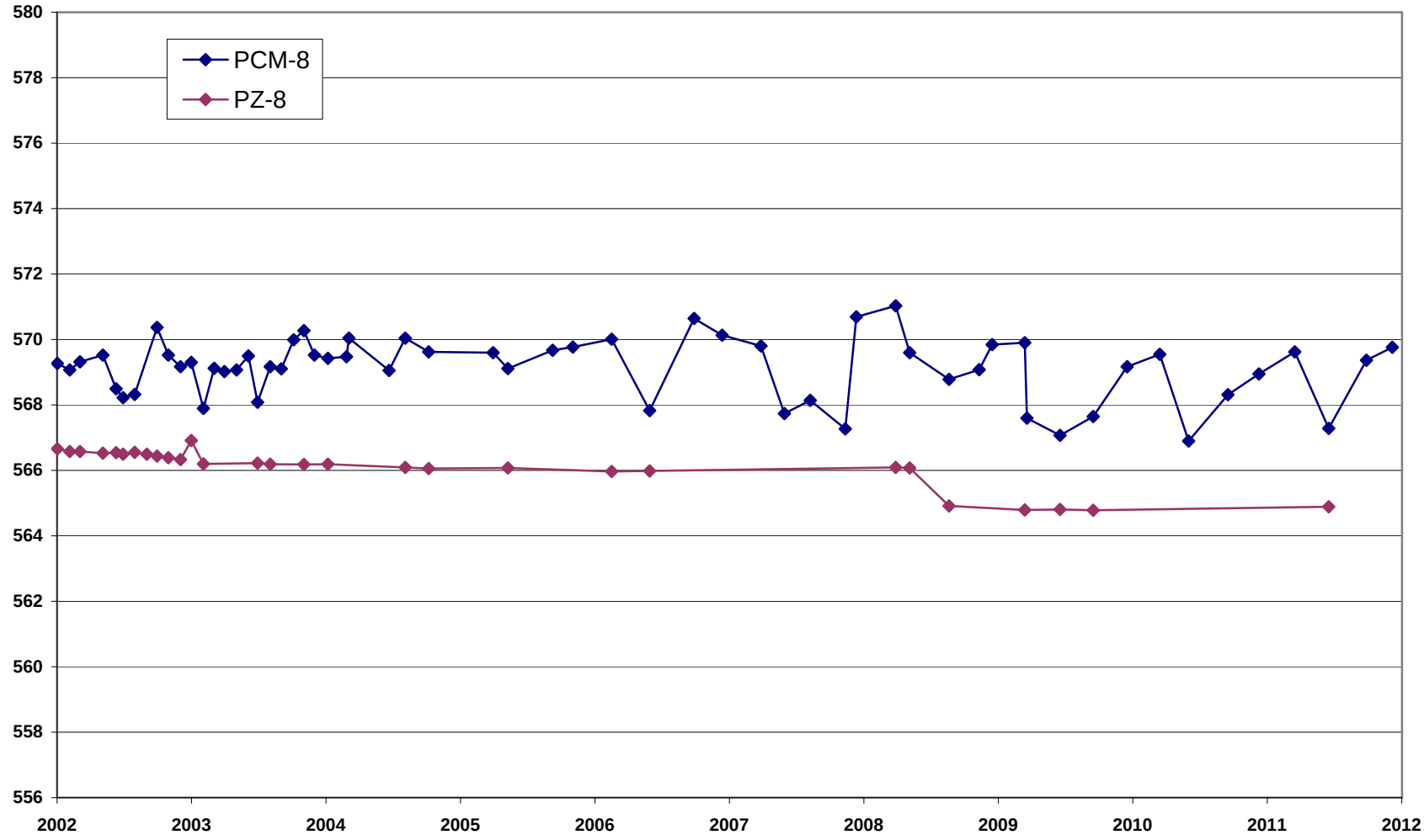


figure C.8
GROUNDWATER LEVELS WELL PAIR 8
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

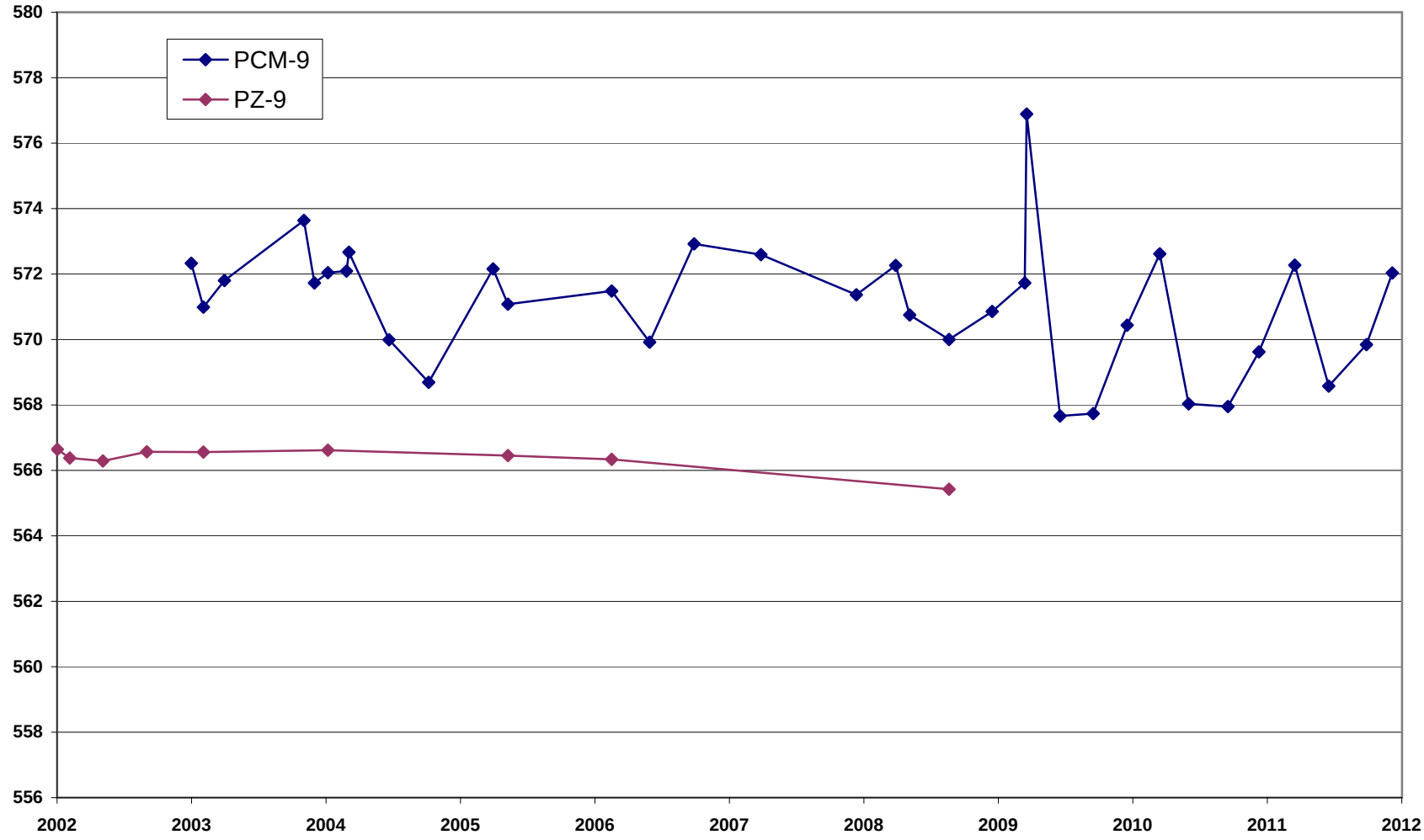


figure C.9
GROUNDWATER LEVELS WELL PAIR 9
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

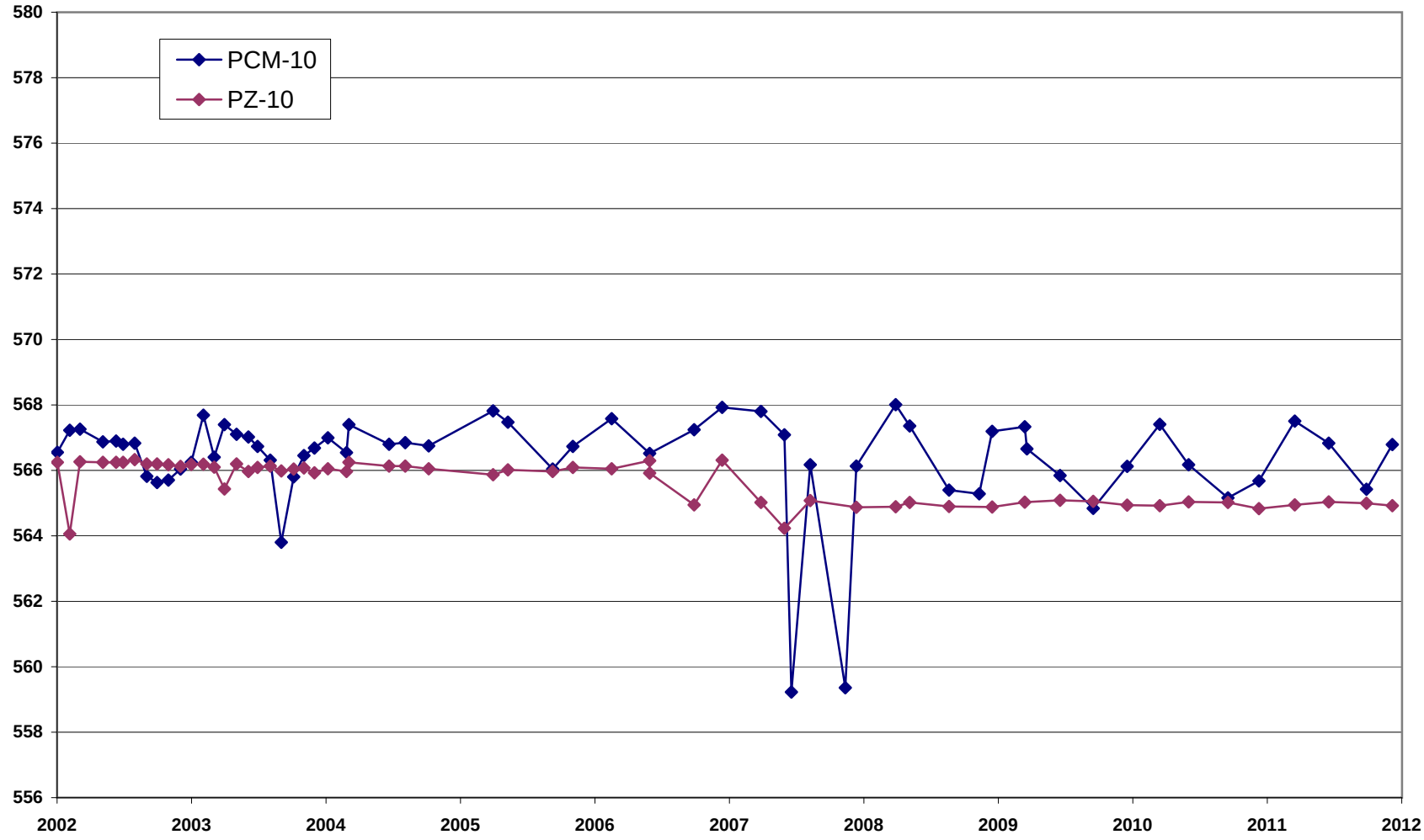


figure C.10
GROUNDWATER LEVELS WELL PAIR 10
102ND STREET LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC
Niagara Falls, New York

APPENDIX D

HISTORIC GROUNDWATER MONITORING RESULTS

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*
Sample ID:		*PCBM-01-502*	*PCBM-01-802*	*PCM-12-802*	*PCBM-01-1202*	*PCBM-01-303*	*PCBM-01-603*	*PCBM-01-903*	*PCBM-01-1203*	*PCBM-01-304*
Sample Date:		*5/31/2002*	*8/29/2002*	*8/29/2002 (Duplicate)*	*12/10/2002*	*3/31/2003*	*6/23/2003*	*9/29/2003*	*12/23/2003*	*3/11/2004*
Parameters	***Units***									
Volatile Organic Compounds										
1,2,3-Trichlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Benzene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	5.05 U	4.72 U	4.67 U	4.72 U	4.72 U	4.67 U
2,4,5-Trichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.43 U	9.43 U	9.35 U
2,4-Dichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.43 U	9.43 U	9.35 U
2,5-Dichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.43 U	9.43 U	9.35 U
2-Chlorophenol	µg/L	10.0 U	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.43 U	9.43 U	9.35 U
4-Chlorophenol	µg/L	10.0 U	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.43 U	9.43 U	9.35 U
Phenol	µg/L	10.0 U	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.43 U	9.43 U	9.35 U
Metals										
Arsenic	µg/L	50.0 U	8.35 J	10.0 U	10.0 U	27.7	10.0 U	10.0 U	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	-	-	-	-	-
Pesticides										
alpha-BHC	µg/L	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U	0.0467 U	0.0377 U	0.0374 U
beta-BHC	µg/L	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U	0.0467 U	0.0472 U	0.0467 U
delta-BHC	µg/L	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U	0.0467 U	0.0566 U	0.0561 U
gamma-BHC (lindane)	µg/L	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U	0.0467 U	0.0377 U	0.0374 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*
Sample ID:		*PCBM-01-1204*	*PCBM-01-605*	*PCM-12-605*	*PCBM-01-1005*	*PCBM-01-606*	*PCM-12-606*	*PCBM-01-1206*	*PCBM-01-607*
Sample Date:		*12/13/2004*	*6/21/2005*	*6/21/2005 (Duplicate)*	*10/18/2005*	*6/26/2006*	*6/26/2006 (Duplicate)*	*12/14/2006*	*6/14/2007*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	.5 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	.5 U
1,2-Dichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	.5 U
1,4-Dichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	.5 U
2-Chlorotoluene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.22 J	.5 U
Benzene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	.5 U
Chlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	.5 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.67 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	9.35 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	µg/L	9.35 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U
2,5-Dichlorophenol	µg/L	9.35 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	µg/L	9.35 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U
4-Chlorophenol	µg/L	9.35 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	µg/L	9.35 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 UJ
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10 U	10 U	10 U	10 U
Mercury	µg/L	-	-	-	-	-	-	-	.2 U
Pesticides									
alpha-BHC	µg/L	0.0377 U	0.013 U	0.013 U	0.063 UJ	.013 U	.013 U	.039 J	0.042 J
beta-BHC	µg/L	0.0472 U	0.025 U	0.025 U	0.13 J	.025 U	.025 U	.05 U	0.013 J
delta-BHC	µg/L	0.0566 U	0.013 U	0.013 U	0.013 U	.013 U	.013 U	.014 J	0.02 J
gamma-BHC (lindane)	µg/L	0.0377 U	0.013 U	0.013 U	0.013 U	.013 U	.013 U	.022 J	0.029 J

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-01*
Sample ID:		*PCBM-01-1107*	*PCBM-01-0508*	*PCBM-01-1108*	*PCBM-01-309*	*PCM-13-309*	*PCBM-011009*	*PCBM-01-310*	*PCM-12*	*PCBM-01-1010*
Sample Date:		*11/8/2007*	*5/21/2008*	*11/11/2008*	*3/18/2009*	*3/18/2009 (Duplicate)*	*10/21/2009*	*4/6/2010*	*4/6/2010 (Duplicate)*	*10/9/2010*
Parameters	***Units***									
Volatile Organic Compounds										
1,2,3-Trichlorobenzene	µg/L	2.5 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	2.5 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	2.5 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	2.5 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	2.5 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	2.5 U	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	0.98 J	2.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-volatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
2,5-Dichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
4-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
Phenol	µg/L	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	9.4 U	9.5 U	9.6 U
Metals										
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	10 U	10 U	10 U	10.0 U	10.0 U	10.0 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U	0.20 U
Pesticides										
alpha-BHC	µg/L	0.054	0.25 U	0.01 J	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U
beta-BHC	µg/L	0.013 J	0.56	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U
delta-BHC	µg/L	0.017 J	0.81	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U
gamma-BHC (lindane)	µg/L	0.033 J	0.25 U	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-01*	*PCBM-01*	*PCBM-01*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*
Sample ID:		*PCM-12-1010*	*PCBM-01-0411*	*PCBM-01-1011*	*PCBM-02-602*	*PCBM-02-802*	*PCBM-02-1202*	*PCBM-02-303*	*PCBM-02-603*
Sample Date:		*10/9/2010 (Duplicate)*	*4/13/2011*	*10/19/2011*	*6/4/2002*	*8/29/2002*	*12/12/2002*	*3/31/2003*	*6/26/2003*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.78 U	1.00 U	1.00 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	9.4 U	9.4 U	9.5 U	5.00 U	5.00 U	5.00 U	4.72 U	4.67 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.4 U	9.5 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U
2,4-Dichlorophenol	µg/L	9.4 U	9.4 U	9.5 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U
2,5-Dichlorophenol	µg/L	9.4 U	9.4 U	9.5 UJ	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U
2-Chlorophenol	µg/L	9.4 U	9.4 U	9.5 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U
4-Chlorophenol	µg/L	9.4 U	9.4 U	9.5 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U
Phenol	µg/L	9.4 U	9.4 U	9.5 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10 U	10.0 U	10.0 U	10.0 U	30.7	4.39 J
Mercury	µg/L	0.20 U	0.20 U	0.20 U	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.048 U	0.048 U	0.048 U	0.0510 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U
beta-BHC	µg/L	0.048 U	0.048 U	0.048 U	0.0510 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U
delta-BHC	µg/L	0.048 U	0.048 U	0.055	0.0510 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U
gamma-BHC (lindane)	µg/L	0.048 U	0.048 U	0.048 U	0.0510 U	0.0500 U	0.0500 U	0.0467 U	0.0467 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*
Sample ID:		*PCBM-02-903*	*PCBM-02-1203*	*PCBM-02-304*	*PCBM-02-1204*	*PCBM-02-605*	*PCBM-02-1005*	*PCBM-02-706*	*PCBM-02-1206*
Sample Date:		*9/30/2003*	*12/29/2003*	*3/15/2004*	*12/14/2004*	*6/22/2005*	*10/19/2005*	*7/5/2006*	*12/13/2006*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
1,4-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
2-Chlorotoluene	µg/L	1.00 U	0.513 J	0.285 J	1.00 U	0.50 U	0.50 U	.5 U	.5 U
Benzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
Chlorobenzene	µg/L	1.00 U	0.855 J	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.72 U	4.76 U	4.76 U	4.81 U	10 U	10.0 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	9.43 U	9.52 U	9.52 U	9.62 U	10 U	10.0 U	10 U	10 U
2,4-Dichlorophenol	µg/L	9.43 U	9.52 U	9.52 U	9.62 U	10 U	10.0 U	10 U	10 U
2,5-Dichlorophenol	µg/L	9.43 U	9.52 U	9.52 U	9.62 U	10 U	10 U	10 U	10 U
2-Chlorophenol	µg/L	9.43 U	9.52 U	9.52 U	9.62 U	10 U	10.0 U	10 U	10 U
4-Chlorophenol	µg/L	9.43 U	9.52 U	9.52 U	9.62 U	10 U	10 U	10 U	10 U
Phenol	µg/L	9.43 U	9.52 U	9.52 U	9.62 U	10 U	10.0 U	10 U	10 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	9.84 J	10.0 U	10.0 U	10.0 U	10 U	10 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0467 U	0.0374 U	0.0377 U	0.0400 U	0.013 U	0.013 U	.013 U	.05 U
beta-BHC	µg/L	0.0467 U	0.0467 U	0.0472 U	0.0500 U	0.025 U	0.025 U	.025 U	.05 U
delta-BHC	µg/L	0.0467 U	0.0561 U	0.0566 U	0.0600 U	0.013 U	0.013 U	.013 U	.05 U
gamma-BHC (lindane)	µg/L	0.0467 U	0.0374 U	0.0377 U	0.0400 U	0.013 U	0.013 U	.013 U	.05 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*
Sample ID:		*PCM-12-1206*	*PCBM-02-607*	*PCBM-02-1107*	*PCM-12-1107*	*PCBM-02-0508*	*PCBM-02-1108*	*PCBM-02-309*	*PCBM-021009*
Sample Date:		*12/13/2006*	*6/18/2007*	*11/9/2007*	*11/9/2007*	*5/22/2008*	*11/11/2008*	*3/18/2009*	*10/21/2009*
		(Duplicate)			*(Duplicate)*				
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	.5 U	6.3 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	.5 U	6.3 U	0.18 J	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	.5 U	6.3 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	.5 U	6.3 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	.5 U	6.3 U	1.2 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Benzene	µg/L	.5 U	6.3 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Chlorobenzene	µg/L	.5 U	6.3 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U
2,4-Dichlorophenol	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U
2,5-Dichlorophenol	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U
2-Chlorophenol	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U
4-Chlorophenol	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U
Phenol	µg/L	10 U	10 U	5.0 U	5.0 U	5.0 UJ	5.0 U	10 U	10 U
Metals									
Arsenic	µg/L	10 U	10 U	10.0 U	10.0 U	10.0 U	10.0 U	10 U	3.3 J
Mercury	µg/L	-	.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	.05 U	.05 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
beta-BHC	µg/L	.05 U	.05 U	0.050 U	0.050 U	0.050 U	0.031 J	0.050 U	0.050 U
delta-BHC	µg/L	.05 U	.05 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U
gamma-BHC (lindane)	µg/L	.05 U	.05 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-02*	*PCBM-03*	*PCBM-03*	*PCBM-03*
Sample ID:		*PCM-121009*	*PCBM-02-310*	*PCBM-02-1010*	*PCBM-02-0411*	*PCBM-02-1011*	*PCBM-03-502*	*PCBM-03-802*	*PCBM-03-1202*
Sample Date:		*10/21/2009*	*4/6/2010*	*10/9/2010*	*4/13/2011*	*10/18/2011*	*6/3/2002*	*8/30/2002*	*12/13/2002*
		(Duplicate)							
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.08 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U	5.00 U	1.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	5.00 U	5.00 U	5.00 U
2,4,5-Trichlorophenol	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	10.0 U	10.0 U	10.0 U
2,4-Dichlorophenol	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	10.0 U	10.0 U	10.0 U
2,5-Dichlorophenol	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	10.0 U	10.0 U	10.0 U
2-Chlorophenol	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	10.0 U	10.0 U	10.0 U
4-Chlorophenol	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	10.0 U	10.0 U	10.0 U
Phenol	µg/L	10 U	9.4 U	9.5 U	9.5 U	9.6 U	10.0 U	9.86 J	10.0 U
Metals									
Arsenic	µg/L	2.0 J	10.0 U	10.0 U	10.0 U	10 U	50.0 U	9.20 J	10.0 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	-	-	-
Pesticides									
alpha-BHC	µg/L	0.050 U	0.048 U	0.048 U	0.047 U	0.047 U	0.0500 U	0.0500 U	0.0500 U
beta-BHC	µg/L	0.050 U	0.048 U	0.048 U	0.047 U	0.047 U	0.0500 U	0.0500 U	0.0500 U
delta-BHC	µg/L	0.050 U	0.048 U	0.048 U	0.047 UJ	0.047 U	0.0500 U	0.0500 U	0.0500 U
gamma-BHC (lindane)	µg/L	0.050 U	0.048 U	0.048 U	0.047 UJ	0.047 U	0.0500 U	0.0500 U	0.0500 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*
Sample ID:		*PCBM-03-303*	*PCBM-03-603*	*PCBM-03-1003*	*PCBM-03-1203*	*PCM-12-1203*	*PCBM-03-304*	*PCM-12-304*	*PCBM-03-1204*
Sample Date:		*4/1/2003*	*6/24/2003*	*10/1/2003*	*12/30/2003*	*12/30/2003 (Duplicate)*	*4/14/2004*	*4/14/2004 (Duplicate)*	*12/15/2004*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.24 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	1.00 U	1.00 U	3.54 U	1.00 U	0.398 J	1.00 U	1.00 U	1.00 U
Benzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.67 U	4.67 U	4.67 U	4.67 U	4.67 U	4.67 U	5.05 U	5.05 U
2,4,5-Trichlorophenol	µg/L	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	10.1 U	10.1 U
2,4-Dichlorophenol	µg/L	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	10.1 U	10.1 U
2,5-Dichlorophenol	µg/L	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	10.1 U	10.1 U
2-Chlorophenol	µg/L	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	10.1 U	10.1 U
4-Chlorophenol	µg/L	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	10.1 U	10.1 U
Phenol	µg/L	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	9.35 U	10.1 U	10.1 U
Metals									
Arsenic	µg/L	31.1	10.0 U	10.0 U	10.0 U	10.0 U	9.39 J	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0476 U	0.0467 U	0.0467 U	0.0374 U	0.0374 U	0.0374 UJ	0.0374 UJ	0.0400 U
beta-BHC	µg/L	0.0476 U	0.0467 U	0.0467 U	0.0467 U	0.0467 U	0.0467 UJ	0.0467 UJ	0.0500 U
delta-BHC	µg/L	0.0476 U	0.0467 U	0.0467 U	0.0561 U	0.0561 U	0.0561 UJ	0.0561 UJ	0.0600 U
gamma-BHC (lindane)	µg/L	0.0590	0.0467 U	0.0467 U	0.0374 U	0.0374 U	0.0374 UJ	0.0374 UJ	0.0400 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*
Sample ID:		*PCBM-03-605*	*PCBM-03-1005*	*PCBM-03-706*	*PCBM-03-1206*	*PCBM-03-607*	*PCBM-03-1107*	*PCBM-03-0508*	*PCBM-03-1108*
Sample Date:		*6/27/2005*	*10/31/2005*	*7/6/2006*	*12/12/2006*	*6/19/2007*	*11/12/2007*	*5/23/2008*	*11/10/2008*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	2.5 U	0.50 U
1,2,4-Trichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	2.5 U	0.50 U
1,2-Dichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	2.5 U	0.50 U
1,4-Dichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	2.5 U	0.50 U
2-Chlorotoluene	µg/L	0.26 J	0.50 U	.37 J	.5 U	.5 U	0.50 U	2.5 U	0.10 J
Benzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	2.5 U	0.50 U
Chlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	2.5 U	0.50 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
4-Chlorophenol	µg/L	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Phenol	µg/L	10 U	10.0 U	10 U	10 U	10 UJ	5.0 U	5.0 U	5.0 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10 U	10 U	10 U	10.0 U	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	.2 U	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.019	R	.013 U	.05 U	.05 U	0.050 U	0.050 U	0.050 U
beta-BHC	µg/L	0.025 U	R	.016 J	.05 U	.05 U	0.050 U	0.050 U	0.050 U
delta-BHC	µg/L	0.013 U	R	.013 U	.05 U	.05 U	0.050 UJ	0.050 U	0.050 U
gamma-BHC (lindane)	µg/L	0.012 J	R	.013 U	.05 U	.05 U	0.050 U	0.050 U	0.050 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*	*PCBM-03*
Sample ID:		*PCBM-03-309*	*PCBM-031009*	*PCBM-03-310*	*PCBM-03-1010*	*PCBM-03-0411*	*PCM-12-0411*	*PCBM-03-1011*	*PCM-12-1011*
Sample Date:		*3/18/2009*	*10/21/2009*	*4/6/2010*	*10/9/2010*	*4/14/2011*	*4/14/2011 (Duplicate)*	*10/19/2011*	*10/19/2011 (Duplicate)*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	48 U	9.6 U
2,4,5-Trichlorophenol	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	48 U	9.6 U
2,4-Dichlorophenol	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	48 U	9.6 U
2,5-Dichlorophenol	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	48 U	9.6 U
2-Chlorophenol	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	17 J	9.6 U
4-Chlorophenol	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	48 U	9.6 U
Phenol	µg/L	10 U	10 U	9.4 U	9.4 U	9.5 U	9.5 U	48 U	9.6 U
Metals									
Arsenic	µg/L	10 U	3.4 J	10.0 U	10.0 U	10.0 U	10.0 U	3.9 J	10 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.050 U	0.050 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
beta-BHC	µg/L	0.050 U	0.050 U	0.16	0.048 U	0.048 U	0.048 U	0.054	0.048 U
delta-BHC	µg/L	0.050 U	0.050 U	0.047 U	0.048 U	0.048 U	0.048 U	0.52	0.048 U
gamma-BHC (lindane)	µg/L	0.050 U	0.050 U	0.047 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*
Sample ID:		*PCM-01-502*	*PCM-01-802*	*PCM-01-1202*	*PCM-01-303*	*PCM-01-603*	*PCM-01-1003*	*PCM-01-1203*	*PCM-01-304*
Sample Date:		*6/3/2002*	*8/29/2002*	*12/18/2002*	*4/1/2003*	*6/27/2003*	*10/1/2003*	*12/31/2003*	*4/13/2004*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.751 J	0.332 J
Benzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	4.67 U	4.67 U	4.67 U	4.72 U	5.05 U
2,4,5-Trichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.35 U	9.35 U	9.35 U	9.43 U	10.1 U
2,4-Dichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.35 U	9.35 U	9.35 U	9.43 U	10.1 U
2,5-Dichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.35 U	9.35 U	9.35 U	9.43 U	10.1 U
2-Chlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.35 U	9.35 U	9.35 U	9.43 U	10.1 U
4-Chlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.35 U	9.35 U	9.35 U	9.43 U	10.1 U
Phenol	µg/L	10.0 U	10.0 U	10.0 U	9.35 U	9.35 U	9.35 U	9.43 U	10.1 U
Metals									
Arsenic	µg/L	50.0 U	100 U	20.0 U	20.0 U	7.45 J	10.0 U	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0146 J	0.0500 U	0.0500 U	0.0623	0.0467 U	0.0467 U	0.0374 U	0.0551 J
beta-BHC	µg/L	0.141	0.0500 U	0.0500 U	0.0472 U	0.0467 U	0.0467 U	0.0467 U	0.0505 UJ
delta-BHC	µg/L	0.864	0.0500 U	0.0500 U	0.0613	0.0467 U	0.0467 U	0.0561 U	0.0669 J
gamma-BHC (lindane)	µg/L	0.0103 J	0.0500 U	0.0500 U	0.0472 U	0.0467 U	0.0467 U	0.0374 U	0.0404 UJ

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*
Sample ID:		*PCM-01-1204*	*PCM-01-605*	*PCM-01-1005*	*PCM-01-706*	*PCM-01-1206*	*PCM-01-607*	*PCM-01-1107*	*PCM-01-0508*
Sample Date:		*12/16/2004*	*6/23/2005*	*10/27/2005*	*7/7/2006*	*12/12/2006*	*6/19/2007*	*11/13/2007*	*5/27/2008*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 UJ	0.50 UJ
1,2,4-Trichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 UJ	0.50 UJ
1,2-Dichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 UJ	0.50 UJ
1,4-Dichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.12 J	.5 U	.5 U	0.50 UJ	0.50 UJ
2-Chlorotoluene	µg/L	1.00 U	0.50 U	0.19 J	.5 U	.5 U	.5 U	0.50 UJ	0.50 UJ
Benzene	µg/L	1.00 U	0.50 U	0.17 J	.5 U	.5 U	.5 U	0.50 UJ	0.50 UJ
Chlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 UJ	0.50 UJ
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.05 U	10 U	10.5 U	10 U	10 U	10 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	10.1 U	10 U	10.5 U	10 U	10 U	10 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	10.1 U	10 U	10.5 U	10 U	10 U	10 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	10.1 U	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	10.1 U	10 U	10.5 U	10 U	10 U	10 U	5.0 U	5.0 U
4-Chlorophenol	µg/L	10.1 U	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U
Phenol	µg/L	10.1 U	10 U	10.5 U	10 U	10 U	10 UJ	5.0 U	5.0 U
Metals									
Arsenic	µg/L	10.0 U	5.6 J	2.6 J	10 U	10 U	10 U	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	-	.2 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.0404 UJ	0.051 J	R	.013 U	.05 UJ	.05 UJ	0.050 UJ	0.050 UJ
beta-BHC	µg/L	0.0505 UJ	0.025 UJ	R	.025 U	.05 UJ	.05 UJ	0.050 UJ	0.050 UJ
delta-BHC	µg/L	0.0606 UJ	0.012 J	R	.013 U	.05 UJ	.05 UJ	0.050 UJ	0.050 UJ
gamma-BHC (lindane)	µg/L	0.0404 UJ	0.024 J	R	.013 U	.05 UJ	.05 UJ	0.050 UJ	0.050 UJ

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-01*	*PCM-02*
Sample ID:		*PCM-01-1108*	*PCM-01-309*	*PCM-011009*	*PCM-01-310*	*PCM-01-1010*	*PCM-01-0411*	*PCM-01-1011*	*PCM-02-502*
Sample Date:		*11/10/2008*	*3/18/2009*	*10/21/2009*	*4/13/2010*	*10/11/2010*	*4/14/2011*	*10/19/2011*	*6/3/2002*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
1,2,4-Trichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
1,2-Dichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
1,4-Dichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
2-Chlorotoluene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
Benzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
Chlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	5.00 U
2,4,5-Trichlorophenol	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	10.0 U
2,4-Dichlorophenol	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	10.0 U
2,5-Dichlorophenol	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	10.0 U
2-Chlorophenol	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	10.0 U
4-Chlorophenol	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	10.0 U
Phenol	µg/L	5.0 U	10 U	10 U	9.6 U	9.4 U	9.5 U	9.6 U	10.0 U
Metals									
Arsenic	µg/L	10.0 UJ	10 U	3.8 J	7.1 J	6.6 J	10.0 U	2.9 J	10.0 U
Mercury	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.060 J	0.20 U	0.20 U	-
Pesticides									
alpha-BHC	µg/L	0.050 UJ	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.047 U	0.0500 U
beta-BHC	µg/L	0.050 UJ	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.047 U	0.0500 U
delta-BHC	µg/L	0.050 UJ	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.047 U	0.0500 U
gamma-BHC (lindane)	µg/L	0.050 UJ	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.047 U	0.0500 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*
Sample ID:		*PCM-12-502*	*PCM-02-802*	*PCM-02-1202*	*PCM-02-303*	*PCM-02-603*	*PCM-02-1003*	*PCM-02-1203*	*PCM-02-1204*
Sample Date:		*6/3/2002*	*8/28/2002*	*12/17/2002*	*3/31/2003*	*6/26/2003*	*10/2/2003*	*12/30/2003*	*12/16/2004*
		(Duplicate)							
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	0.246 J	1.00 U	0.221 J	1.00 U
2-Chlorotoluene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.639 J	1.00 U
Benzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	5.00 U	5.00 U	1.00 U	1.00 U	0.178 J	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.00 U	5.00 U	5.00 U	4.72 U	4.67 U	4.67 U	4.72 U	5.05 U
2,4,5-Trichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.35 U	9.43 U	10.1 U
2,4-Dichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.35 U	9.43 U	10.1 U
2,5-Dichlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.35 U	9.43 U	10.1 U
2-Chlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.35 U	9.43 U	10.1 U
4-Chlorophenol	µg/L	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.35 U	9.43 U	10.1 U
Phenol	µg/L	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.35 U	9.43 U	10.1 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	12.1 U	14.4	10.0 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0500 U	0.0500 U	0.0505 U	0.0660	0.0467 U	0.0541 U	0.0374 U	0.0404 UJ
beta-BHC	µg/L	0.00720 J	0.0500 U	0.0505 U	0.0472 U	0.0467 U	0.0748 J	0.0467 U	0.0505 UJ
delta-BHC	µg/L	0.0384 J	0.0500 U	0.0505 U	0.0783	0.0467 U	0.0991 J	0.0561 U	0.0606 UJ
gamma-BHC (lindane)	µg/L	0.0500 U	0.0500 U	0.0505 U	0.0472 U	0.0467 U	0.0467 U	0.0374 U	0.0404 UJ

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*
Sample ID:		*PCM-02-605*	*PCM-02-1005*	*PCM-02-706*	*PCM-02-1206*	*PCM-02-607*	*PCM-02-1107*	*PCM-02-0508*	*PCM-02-1108*
Sample Date:		*6/23/2005*	*10/27/2005*	*7/7/2006*	*12/12/2006*	*6/14/2007*	*11/8/2007*	*5/27/2008*	*11/11/2008*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U	0.50 U
1,2-Dichlorobenzene	µg/L	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene	µg/L	0.50 U	0.50 U	.26 J	.2 J	0.27 J	0.33 J	0.50 U	0.20 J
2-Chlorotoluene	µg/L	0.27 J	0.15 J	.5 U	.5 U	.5 U	0.85 U	0.50 U	0.50 U
Benzene	µg/L	0.20 J	0.16 J	.15 J	.5 U	0.14 J	0.19 J	0.50 U	0.13 J
Chlorobenzene	µg/L	0.50 U	0.16 J	.22 J	.19 J	.5 U	0.50 U	0.21 J	0.19 J
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
4-Chlorophenol	µg/L	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Phenol	µg/L	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Metals									
Arsenic	µg/L	7.2 J	10.0 U	10 U	10 U	10 U	11.2	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	.2 U	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.019 J	R	.0047 J	.05 UJ	.05 UJ	0.050 U	0.050 UJ	0.050 U
beta-BHC	µg/L	0.025 UJ	0.0074 J	.025 U	.05 UJ	.05 UJ	0.01 J	0.050 UJ	0.050 U
delta-BHC	µg/L	0.013 UJ	R	.008 J	.05 UJ	.05 UJ	0.050 U	0.050 UJ	0.050 U
gamma-BHC (lindane)	µg/L	0.0064 J	R	.013 U	.05 UJ	.05 UJ	0.050 U	0.050 UJ	0.050 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-02*	*PCM-03*	*PCM-03*
Sample ID:		*PCM-02-309*	*PCM-021009*	*PCM-02-310*	*PCM-02-1010*	*PCM-02-0411*	*PCM-02-1011*	*PCM-03-502*	*PCM-03-802*
Sample Date:		*3/18/2009*	*10/23/2009*	*4/13/2010*	*10/11/2010*	*4/15/2011*	*10/19/2011*	*5/31/2002*	*8/28/2002*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	125 U	100 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	125 U	100 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	71.1 J	63.4 J
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	217	199
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	125 U	100 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	0.12 J	1.0 U	1.0 U	82.6 J	82.4 J
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	0.16 J	3600	3810
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	5.00 U	5.00 UJ
2,4,5-Trichlorophenol	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	10.0 U	10.0 U
2,4-Dichlorophenol	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	17.1	10.0 U
2,5-Dichlorophenol	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	10.0 U	10.0 U
2-Chlorophenol	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	42.7	4.51 J
4-Chlorophenol	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	84.7	15.4
Phenol	µg/L	10 U	10 U	9.7 U	9.5 U	9.5 U	9.7 U	5.10 J	10.0 U
Metals									
Arsenic	µg/L	10 U	10 U	4.6 J	2.7 J	10.0 U	2.8 J	10.0 U	10.0 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	-	-
Pesticides									
alpha-BHC	µg/L	0.050 U	0.050 U	0.048 U	0.045 J	0.048 U	0.048 U	0.0500 U	0.0500 U
beta-BHC	µg/L	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.048 U	0.0500 U	0.0820
delta-BHC	µg/L	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.048 U	0.0500 U	0.679
gamma-BHC (lindane)	µg/L	0.050 U	0.050 U	0.048 U	0.047 U	0.048 U	0.048 U	0.0500 U	0.0500 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*
Sample ID:		*PCM-03-1202*	*PCM-12-1202*	*PCM-03-303*	*PCM-12-303*	*PCM-03-603*	*PCM-03-903*	*PCM-03-1203*	*PCM-03-304*
Sample Date:		*12/12/2002*	*12/12/2002 (Duplicate)*	*3/28/2003*	*3/28/2003 (Duplicate)*	*6/18/2003*	*9/29/2003*	*12/23/2003*	*3/11/2004*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	10.0 U	10.0 U	1.00 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	10.0 U	10.0 U	1.00 U	20.0 U	1.00 U	1.00 U	0.412 J	1.00 U
1,2-Dichlorobenzene	µg/L	86.9	84.7	99.8	79.0	95.4	99.9	117	77.6
1,4-Dichlorobenzene	µg/L	291	281	280	273	267	252	250	207
2-Chlorotoluene	µg/L	9.36 U	9.91 U	11.4	20.0 U	8.93	10.4 U	12.5	8.24
Benzene	µg/L	133	131	131	105	107	94.2	141	99.8
Chlorobenzene	µg/L	3590	3790	3860	3830	3540	3640	3550	3010
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.00 U	5.00 U	4.72 U	4.72 U	4.72 U	4.72 U	4.76 U	4.72 U
2,4,5-Trichlorophenol	µg/L	10.0 U	10.0 U	9.43 U	9.43 U	9.43 U	9.43 U	9.52 U	9.43 U
2,4-Dichlorophenol	µg/L	3.20 J	10.0 U	15.3	7.25 J	15.2 J	10.8	22.6	25.6
2,5-Dichlorophenol	µg/L	10.0 U	10.0 U	9.43 U	9.43 U	9.43 U	9.43 U	9.52 U	9.43 U
2-Chlorophenol	µg/L	5.40 J	4.20 J	12.8	7.40 J	27.4 J	10.9	34.2	28.0
4-Chlorophenol	µg/L	10.0 U	10.0 U	28.9	17.0	53.5 J	21.9	70.6	59.1
Phenol	µg/L	10.0 U	10.0 U	9.43 U	9.43 U	3.79 J	9.43 U	4.32 J	4.84 J
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	20.0 U	10.0 U	7.34 J	8.61 J	10.0 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0505 U	0.0501 U	0.0688	0.0685	0.0469 U	0.0509 U	0.0377 U	0.0374 UJ
beta-BHC	µg/L	0.107	0.0870	0.133	0.130	3.75 J	0.0467 U	0.126	0.0467 UJ
delta-BHC	µg/L	0.666 J	0.353 J	1.28	1.25	1.13 J	0.848	1.16	0.933 J
gamma-BHC (lindane)	µg/L	0.0505 U	0.0500 U	0.0472 U	0.0472 U	0.0469 U	0.0467 U	0.0377 U	0.0374 UJ

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*
Sample ID:		*PCM-03-1204*	*PCM-03-605*	*PCM-03-1005*	*PCM-03-606*	*PCM-03-1206*	*PCM-03-607*	*PCM-03-1107*	*PCM-03-0508*
Sample Date:		*12/13/2004*	*6/21/2005*	*10/18/2005*	*6/26/2006*	*12/14/2006*	*6/14/2007*	*11/8/2007*	*5/21/2008*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	0.50 U	36 J	25 U	25 U	250 U	130 U	130 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	0.22 J	41 J	25 U	25 U	250 U	130 U	51 J
1,2-Dichlorobenzene	µg/L	72.4	73 J	87 J	11 J	66	68 J	67 J	130 U
1,4-Dichlorobenzene	µg/L	181	280	300	47	260	300	310	440
2-Chlorotoluene	µg/L	8.10	9.5 J	28 J	25 U	8.5 J	250 U	130 U	130 U
Benzene	µg/L	72.8	73 J	61 J	8.9 J	47	70 J	48 J	47 J
Chlorobenzene	µg/L	2890	4100	4000	680	2700	3900	4000	4300
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.67 U	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	9.35 U	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	9.35 U	11	6.62 J	3.5 J	8 J	15	16	28
2,5-Dichlorophenol	µg/L	17.1	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	21.0	21	11.4	8.3 J	12	20	19	37
4-Chlorophenol	µg/L	41.8	60	20	10 U	26	44	5.0 U	77
Phenol	µg/L	9.35 U	0.56 J	0.628 J	10 U	10 U	10 U	0.72 J	5.0 U
Metals									
Arsenic	µg/L	10.0 U	10.0 UJ	10.0 U	10 U	10 U	10 UJ	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	-	.2 UJ	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.0377 U	0.026 J	0.025 U	.019	.25 U	.5 U	0.25 U	0.25 U
beta-BHC	µg/L	0.236 U	0.34 J	0.28	.29	.25 U	0.08 J	0.076 J	0.48
delta-BHC	µg/L	1.12 U	0.25 J	0.44	.65	.73	0.75	0.6 J	0.6
gamma-BHC (lindane)	µg/L	0.0377 U	0.013 UJ	0.013 U	.013 U	.25 U	.5 U	0.25 U	0.25 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*	*PCM-03*
Sample ID:		*PCM-12-0508*	*PCM-03-1108*	*PCM-03-309 031809*	*PCM-031009*	*PCM-03-310*	*PCM-03-1010*	*PCM-03-0411*	*PCM-03-1011*
Sample Date:		*5/21/2008*	*11/11/2008*	*3/18/2009*	*10/23/2009*	*4/6/2010*	*10/9/2010*	*4/13/2011*	*10/19/2011*
		(Duplicate)							
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	130 U	130 U	1.0 U	1.0 U	250 U	200 U	120 U	130 U
1,2,4-Trichlorobenzene	µg/L	130 U	130 U	1.0 U	1.0 U	250 U	200 U	120 U	130 U
1,2-Dichlorobenzene	µg/L	130 U	87 J	97	90	100 J	66 J	61 J	46 J
1,4-Dichlorobenzene	µg/L	430	380	440	500	510	340	310	220
2-Chlorotoluene	µg/L	130 U	130 U	12 U	1.0 U	120 J	200 U	120 U	130 U
Benzene	µg/L	51 J	73 J	84	73	76 J	50 J	62 J	34 J
Chlorobenzene	µg/L	4300	4000	4300	4900	5000	3500	3400	3000
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.0 U	5.0 U	10 U	10 U	9.4 U	9.6 U	9.5 U	9.6 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	10 U	10 U	9.4 U	9.6 U	9.5 U	9.6 U
2,4-Dichlorophenol	µg/L	26	12	28	11 J	6.0 J	18	9.5 U	9.6 U
2,5-Dichlorophenol	µg/L	7.5	22	6.1 J	3.9 J	9.4 U	9.6 U	13	9.6 U
2-Chlorophenol	µg/L	35	13	41	16	5.9 J	14	9.0 J	9.6 U
4-Chlorophenol	µg/L	67	29	93	71	9.0 J	31	16	9.6 U
Phenol	µg/L	1.1 J	0.58 J	4.2 J	1.3 J	9.4 U	1.7 J	0.91 J	9.6 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10 U	10 U	5.7 J	10.0 U	10.0 U	10 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.95	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.25 U	1.0 U	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U	0.048 U
beta-BHC	µg/L	0.46	5.6	0.072	0.12	0.060	0.046 J	0.059	0.048 U
delta-BHC	µg/L	0.68	1.1	2.0	1.5	1.0	0.59	0.075	0.048 U
gamma-BHC (lindane)	µg/L	0.25 U	1.0 U	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U	0.048 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*
Sample ID:		*PCM-04-602*	*PCM-04-802*	*PCM-04-1202*	*PCM-04-303*	*PCM-04-603*	*PCM-12-603*	*PCM-04-903*	*PCM-04-1203*
Sample Date:		*6/4/2002*	*8/30/2002*	*12/10/2002*	*3/28/2003*	*6/23/2003*	*6/23/2003 (Duplicate)*	*9/30/2003*	*12/29/2003*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	5.00 U	5.00 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	5.00 U	5.00 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	66.9	52.5	27.2	53.4	50.0	48.7	41.7 J	31.1
1,4-Dichlorobenzene	µg/L	261	272	154	269	259	266	267 J	240
2-Chlorotoluene	µg/L	5.00 U	5.00 U	20.0 U	2.73	1.57 U	1.61 U	3.25 U	3.17
Benzene	µg/L	228 J	218	143	225	204	202	185 J	161
Chlorobenzene	µg/L	6080	6290	4210	6210	6870	6760	7010 J	6470
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	5.00 U	5.00 U	5.05 U	4.72 U	4.67 U	4.67 U	4.72 U	4.76 U
2,4,5-Trichlorophenol	µg/L	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.35 U	9.43 U	9.52 U
2,4-Dichlorophenol	µg/L	6.19 J	4.69 J	10.1 U	6.48 J	4.15 J	3.79 J	4.20 J	9.52 U
2,5-Dichlorophenol	µg/L	10.0 U	10.0 U	10.1 U	9.43 U	9.35 U	9.35 U	9.43 U	9.52 U
2-Chlorophenol	µg/L	19.3	18.8	12.4 J	23.5	20.4	20.1	18.0	11.4
4-Chlorophenol	µg/L	48.6	37.3	32.6 J	45.2	38.0	38.4	35.4	27.9
Phenol	µg/L	3.60 J	10.0 U	10.1 U	3.91 J	9.35 U	9.35 U	9.43 U	9.52 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	20.0 U	10.0 U	10.0 U	12.8	7.61 J
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0500 U	0.0500 U	0.0505 U	0.0642	0.0467 U	0.0467 U	0.0479 U	0.0374 U
beta-BHC	µg/L	0.0500 U	0.0500 U	0.0505 U	0.0361 J	0.0467 U	0.0467 U	0.0467 U	0.0467 U
delta-BHC	µg/L	0.0500 U	0.0500 U	0.0505 U	0.0472 U	0.0467 U	0.0467 U	1.38	0.895
gamma-BHC (lindane)	µg/L	0.0500 U	0.0500 U	0.0505 U	0.0472 U	0.0467 U	0.0467 U	0.0467 U	0.0374 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*
Sample ID:		*PCM-04-304*	*PCM-04-1204*	*PCM-04-605*	*PCM-04-1005*	*PCM-12-1005*	*PCM-04-606*	*PCM-04-1206*	*PCM-04-607*
Sample Date:		*3/12/2004*	*12/15/2004*	*6/22/2005*	*10/19/2005*	*10/19/2005 (Duplicate)*	*6/26/2006*	*12/14/2006*	*6/18/2007*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	250 U	13 U	13 U	250 U	250 U	310 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	250 U	13 U	13 U	250 U	250 U	310 U
1,2-Dichlorobenzene	µg/L	45.9	1.00 U	250 U	20	21	250 U	250 U	310 U
1,4-Dichlorobenzene	µg/L	229	245	300	250	260	330	260	330
2-Chlorotoluene	µg/L	2.45	2.13 U	250 U	13 U	13 U	250 U	250 U	310 U
Benzene	µg/L	195	178	140 J	85	86	69 J	65 J	110 J
Chlorobenzene	µg/L	6330 J	7220	8600	6600	8000	10000	7100	10000
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.67 U	5.05 U	10 U	10.0 U	10.0 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	9.35 U	10.1 U	10 U	10.0 U	10.0 U	10 U	10 U	10 U
2,4-Dichlorophenol	µg/L	4.69 J	10.1 U	3.0 J	1.38 J	1.36 J	4.3 J	1.4 J	10 U
2,5-Dichlorophenol	µg/L	9.35 U	10.1 U	10 U	10 U	10 U	10 U	1.5 J	10 U
2-Chlorophenol	µg/L	28.1	13.9	20	15.6	15.0	14	14	14
4-Chlorophenol	µg/L	55.3	28.3	32	42	32	34	28	26
Phenol	µg/L	5.67 J	10.1 U	10 U	10.0 U	10.0 U	10 U	10 U	10 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10 U	10 U	10 U
Mercury	µg/L	-	-	-	-	-	-	-	0.10 J
Pesticides									
alpha-BHC	µg/L	0.0374 UJ	0.0400 U	0.013 U	0.013 U	0.013 U	.013 U	.05 UJ	0.0081 J
beta-BHC	µg/L	0.0467 UJ	0.0500 U	0.025 U	0.025 U	0.025 U	.025 U	.05 UJ	0.14 J
delta-BHC	µg/L	0.0561 UJ	1.40 U	0.05	0.035	0.035	.032	.057 J	.05 UJ
gamma-BHC (lindane)	µg/L	0.0374 UJ	0.0400 U	0.013 U	0.013 U	0.013 U	.013 U	.05 UJ	.05 UJ

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*	*PCM-04*
Sample ID:		*PCM-12-607*	*PCM-04-1107*	*PCM-04-0508*	*PCM-04-1108*	*PCM-04-309*	*PCM-041009*	*PCM-04-310*	*PCM-04-1010*
Sample Date:		*6/18/2007*	*11/9/2007*	*5/21/2008*	*11/11/2008*	*3/18/2009*	*10/23/2009*	*4/6/2010*	*10/9/2010*
		(Duplicate)							
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	310 U	210 U	500 U	360 U	1.0 U	1.0 U	500 U	500 U
1,2,4-Trichlorobenzene	µg/L	310 U	210 U	500 U	360 U	1.0 U	1.0 U	500 U	500 U
1,2-Dichlorobenzene	µg/L	310 U	210 U	500 U	360 U	1.0 U	18 J	500 U	500 U
1,4-Dichlorobenzene	µg/L	320	300	400 J	400	290	300	380 J	210 J
2-Chlorotoluene	µg/L	310 U	210 U	500 U	360 U	2.1 U	1.0 U	500 U	500 U
Benzene	µg/L	100 J	48 J	500 U	360 U	41 J	25 J	500 U	500 U
Chlorobenzene	µg/L	11000	8600	12000	11000	10000	10000	12000	7700
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	5.0 U	5.0 U	5.0 U	10 U	10 U	9.4 U	9.5 U
2,4,5-Trichlorophenol	µg/L	10 U	5.0 U	5.0 U	5.0 U	10 U	10 U	9.4 U	9.5 U
2,4-Dichlorophenol	µg/L	10 U	1.2 J	1.6 J	0.88 J	1.8 J	10 U	1.1 J	0.98 J
2,5-Dichlorophenol	µg/L	10 U	5.0 U	2.0 J	5.0 U	1.9 J	1.4 J	9.4 U	9.5 U
2-Chlorophenol	µg/L	15	5.0 U	5.0 U	10	34	24	14	14
4-Chlorophenol	µg/L	26	25	35	30	66	49	24	27
Phenol	µg/L	10 U	5.0 U	5.0 U	5.0 U	2.4 J	7.2 J	9.4 U	9.5 U
Metals									
Arsenic	µg/L	10 U	10.0 U	10.0 U	10.0 U	10 U	10 U	3.2 J	10.0 U
Mercury	µg/L	.2 U	0.11 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.060 J
Pesticides									
alpha-BHC	µg/L	.05 U	0.050 U	0.050 U	0.25 U	0.050 U	0.050 U	0.048 U	0.048 U
beta-BHC	µg/L	0.16	0.050 U	0.050 U	0.25 U	0.050 U	0.050 U	0.048 U	0.048 U
delta-BHC	µg/L	.05 U	0.025 J	0.12	1.1	1.2	0.050 U	0.10	0.13 J
gamma-BHC (lindane)	µg/L	.05 U	0.050 U	0.050 U	0.25 U	0.050 U	0.050 U	0.048 U	0.048 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-04*	*PCM-04*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*
Sample ID:		*PCM-04-0411*	*PCM-04-1011*	*PCM-05-602*	*PCM-05-802*	*PCM-05-1202*	*PCM-05-303*	*PCM-05-603*	*PCM-05-903*
Sample Date:		*4/13/2011*	*10/19/2011*	*6/4/2002*	*8/29/2002*	*12/12/2002*	*3/28/2003*	*6/24/2003*	*9/30/2003*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	500 U	500 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	500 U	500 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	500 U	500 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	220 J	200 J	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	500 U	500 U	5.00 U	5.00 U	2.00 U	1.00 U	1.00 U	1.13 U
Benzene	µg/L	500 U	500 U	5.91	2.79 J	1.23	3.79	4.44	1.39
Chlorobenzene	µg/L	8400	8000	96.8	69.9	47.8	56.2	76.2	49.7
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	9.5 U	48 U	5.00 U	5.00 U	5.00 U	4.72 U	4.67 U	4.72 U
2,4,5-Trichlorophenol	µg/L	9.5 U	48 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.43 U
2,4-Dichlorophenol	µg/L	0.90 J	48 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.43 U
2,5-Dichlorophenol	µg/L	9.5 U	48 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.43 U
2-Chlorophenol	µg/L	12	39 J	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.43 U
4-Chlorophenol	µg/L	28	48 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.43 U
Phenol	µg/L	9.5 U	48 U	10.0 U	10.0 U	10.0 U	9.43 U	9.35 U	9.43 U
Metals									
Arsenic	µg/L	10.0 U	10 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	15.4
Mercury	µg/L	0.11 J	0.064 J	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.048 U	0.047 U	0.0500 U	0.0500 U	0.0505 U	0.0613	0.0472 U	0.0511 U
beta-BHC	µg/L	0.048 U	0.047 U	0.0500 U	0.0500 U	0.0505 U	0.0472 U	0.0472 U	0.0467 U
delta-BHC	µg/L	0.13	0.090	0.0500 U	0.0500 U	0.0505 U	0.0472 U	0.0472 U	0.0467 U
gamma-BHC (lindane)	µg/L	0.048 U	0.047 U	0.0500 U	0.0500 U	0.0505 U	0.0472 U	0.0472 U	0.0467 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*
Sample ID:		*PCM-12-903*	*PCM-05-1203*	*PCM-05-304*	*PCM-05-1204*	*PCM-05-605*	*PCM-05-1005*	*PCM-05-706*	*PCM-05-1206*
Sample Date:		*9/30/2003 (Duplicate)*	*12/29/2003*	*3/15/2004*	*12/14/2004*	*6/20/2005*	*10/20/2005*	*7/5/2006*	*12/13/2006*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	4.2 U	3.1 U	13 U	.5 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	4.2 U	3.1 U	13 U	.5 U
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	4.2 U	3.1 U	13 U	.5 U
1,4-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	4.2 U	3.1 U	13 U	.79 J
2-Chlorotoluene	µg/L	1.01 U	1.00 U	0.288 J	1.00 U	4.2 U	3.1 U	13 U	.5 U
Benzene	µg/L	1.22	0.690 J	1.71	5.68	7.0	3.1 U	13 U	3.4
Chlorobenzene	µg/L	45.3	49.6	56.1	94.9	120	77	87	91
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.72 U	4.81 U	4.76 U	4.67 U	10 U	10.0 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	9.43 U	9.62 U	9.52 U	9.35 U	10 U	10.0 U	10 U	10 U
2,4-Dichlorophenol	µg/L	9.43 U	9.62 U	9.52 U	9.35 U	10 U	10.0 U	10 U	10 U
2,5-Dichlorophenol	µg/L	9.43 U	9.62 U	9.52 U	9.35 U	10 U	10 U	10 U	10 U
2-Chlorophenol	µg/L	9.43 U	9.62 U	9.52 U	9.35 U	10 U	10.0 U	10 U	10 U
4-Chlorophenol	µg/L	9.43 U	9.62 U	9.52 U	9.35 U	10 U	10 U	1.4 J	10 U
Phenol	µg/L	9.43 U	9.62 U	9.52 U	9.35 U	10 U	10.0 U	10 U	10 U
Metals									
Arsenic	µg/L	18.5	7.09 J	8.71 J	10.0 U	10.0 UJ	10.0 U	10 UJ	10 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0471 U	0.0374 U	0.0374 U	0.0377 U	0.022	0.013 U	.013 U	.05 U
beta-BHC	µg/L	0.0467 U	0.0467 U	0.0467 U	0.0472 U	0.025 U	0.025 U	.025 U	.05 U
delta-BHC	µg/L	0.0467 U	0.0561 U	0.0561 U	0.0566 U	0.011 J	0.025	.013 U	.05 U
gamma-BHC (lindane)	µg/L	0.0467 U	0.0374 U	0.0374 U	0.0377 U	0.015	0.013 U	.013 U	.05 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*	*PCM-05*
Sample ID:		*PCM-05-607*	*PCM-05-1107*	*PCM-05-0508*	*PCM-05-1108*	*PCM-05-309*	*PCM-051009*	*PCM-05-310*	*PCM-05-1010*
Sample Date:		*6/18/2007*	*11/9/2007*	*5/22/2008*	*11/11/2008*	*3/18/2009*	*10/23/2009*	*4/16/2010*	*10/9/2010*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	.5 U	1.8 U	2.5 U	3.6 U	1.0 U	1.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	.5 U	1.8 U	2.5 U	3.6 U	1.0 U	1.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	.5 U	1.8 U	2.5 U	3.6 U	1.0 U	1.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	.5 U	1.8 U	2.5 U	3.6 U	1.0 U	1.0 U	5.0 U	5.0 U
2-Chlorotoluene	µg/L	.5 U	1.8 U	2.5 U	3.6 U	1.0 U	1.0 U	5.0 U	5.0 U
Benzene	µg/L	4.9	0.68 J	2.2 J	5.5	9.2	4.5	4.3 J	1.8 J
Chlorobenzene	µg/L	100	61	72	110	190	150	130	100
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	5.0 U	5.0 UJ	R	10 U	10 U	9.4 U	9.5 U
2,4,5-Trichlorophenol	µg/L	10 U	R	5.0 UJ	R	10 U	10 U	9.4 U	9.5 U
2,4-Dichlorophenol	µg/L	10 U	R	5.0 UJ	R	10 U	10 U	9.4 U	9.5 U
2,5-Dichlorophenol	µg/L	10 U	R	5.0 UJ	R	10 U	10 U	9.4 U	9.5 U
2-Chlorophenol	µg/L	10 U	R	5.0 UJ	R	0.78 J	10 U	9.4 U	9.5 U
4-Chlorophenol	µg/L	10 U	R	5.0 UJ	R	2.9 J	10 U	1.5 J	9.5 U
Phenol	µg/L	10 U	R	5.0 UJ	R	10 U	10 U	9.4 U	9.5 U
Metals									
Arsenic	µg/L	10 U	10.0 U	10.0 U	10.0 U	10 U	10 U	10.0 U	6.7 J
Mercury	µg/L	.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	.05 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U
beta-BHC	µg/L	.05 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U
delta-BHC	µg/L	.05 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U
gamma-BHC (lindane)	µg/L	.05 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.048 U	0.048 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-05*	*PCM-05*	*PCM-06*	*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*
Sample ID:		*PCM-05-0411*	*PCM-05-1011*	*PCM-06-1010*	*PCM-07-502*	*PCM-07-802*	*PCM-07-1202*	*PCM-07-303*	*PCM-07-603*
Sample Date:		*4/13/2011*	*10/18/2011*	*10/11/2010*	*6/3/2002*	*8/29/2002*	*12/18/2002*	*4/3/2003*	*6/27/2003*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	5.0 U	5.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	5.0 U	5.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	5.0 U	5.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	5.0 U	5.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
Benzene	µg/L	2.4 J	5.0 U	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	87	81	1.0 U	5.00 U	5.00 U	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	9.5 U	9.7 U	-	5.00 U	5.00 U	5.00 U	5.81 U	4.67 U
2,4,5-Trichlorophenol	µg/L	9.5 U	9.7 U	-	10.0 U	10.0 U	10.0 U	11.6 U	9.35 U
2,4-Dichlorophenol	µg/L	9.5 U	9.7 U	-	10.0 U	10.0 U	10.0 U	11.6 U	9.35 U
2,5-Dichlorophenol	µg/L	9.5 U	9.7 U	-	10.0 U	10.0 U	10.0 U	11.6 U	9.35 U
2-Chlorophenol	µg/L	9.5 U	9.7 U	-	10.0 U	10.0 U	10.0 U	11.6 U	9.35 U
4-Chlorophenol	µg/L	1.7 J	2.8 J	-	10.0 U	10.0 U	10.0 U	11.6 U	9.35 U
Phenol	µg/L	9.5 U	9.7 U	-	10.0 U	10.0 U	10.0 U	11.6 U	9.35 U
Metals									
Arsenic	µg/L	10.0 U	10 U	-	10.0 U	10.0 U	10.0 U	10.0 U	4.61 J
Mercury	µg/L	0.20 U	0.20 U	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.048 U	0.048 U	-	0.0500 U	0.0500 U	0.0510 U	0.0642	0.0467 U
beta-BHC	µg/L	0.048 U	0.048 U	-	0.0500 U	0.0500 U	0.0510 U	0.0472 U	0.0467 U
delta-BHC	µg/L	0.048 U	0.048 U	-	0.0500 U	0.0500 U	0.0510 U	0.0472 U	0.0467 U
gamma-BHC (lindane)	µg/L	0.048 U	0.048 U	-	0.00810 J	0.0500 U	0.0510 U	0.0575	0.0467 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*	*PCM-07*
Sample ID:		*PCM-07-1003*	*PCM-07-1203*	*PCM-07-304*	*PCM-07-1204*	*PCM-07-605*	*PCM-07-1005*	*PCM-07-706*	*PCM-07-1206*
Sample Date:		*10/6/2003*	*12/31/2003*	*4/14/2004*	*12/21/2004*	*6/23/2005*	*10/31/2005*	*7/5/2006*	*12/13/2006*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
1,4-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
2-Chlorotoluene	µg/L	2.32 U	0.490 J	1.00 U	1.00 U	0.32 J	0.50 U	.5 U	.5 U
Benzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
Chlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.50 U	0.50 U	.5 U	.5 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.67 U	4.67 U	5.05 U	4.72 U	10 U	10.0 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	9.35 U	9.35 U	10.1 U	9.43 U	10 U	10.0 U	10 U	10 U
2,4-Dichlorophenol	µg/L	9.35 U	9.35 U	10.1 U	9.43 U	10 U	10.0 U	10 U	10 U
2,5-Dichlorophenol	µg/L	9.35 U	9.35 U	10.1 U	9.43 U	10 U	10 U	10 U	10 U
2-Chlorophenol	µg/L	9.35 U	9.35 U	10.1 U	9.43 U	10 U	10.0 U	10 U	10 U
4-Chlorophenol	µg/L	9.35 U	9.35 U	10.1 U	9.43 U	10 U	10 U	10 U	10 U
Phenol	µg/L	3.49 J	9.35 U	10.1 U	9.43 U	10 U	10.0 U	10 U	10 U
Metals									
Arsenic	µg/L	25.4	19.8	9.55 J	10.0 U	10.0 U	10.0 U	10 U	10 U
Mercury	µg/L	-	-	-	-	-	-	-	-
Pesticides									
alpha-BHC	µg/L	0.0467 U	0.0374 U	0.0404 U	0.0377 UJ	0.055	R	.013 U	.05 U
beta-BHC	µg/L	0.0467 U	0.0467 U	0.0505 U	0.0472 UJ	0.025 U	R	.025 U	.05 U
delta-BHC	µg/L	0.0561 U	0.0664	0.0606 U	0.0566 UJ	0.013 U	R	.013 U	.05 U
gamma-BHC (lindane)	µg/L	0.0374 U	0.0374 U	0.0404 U	0.0377 UJ	0.024	R	.013 U	.05 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-07*	*PCM-07R*	*PCM-07R*	*PCM-07R*	*PCM-07R*	*PCM-07R*	*PCM-07R*	*PCM-07R*
Sample ID:		*PCM-07-607*	*PCM-7R-1108*	*PCM-7R-309*	*PCM-071009*	*PCM-07R-310*	*PCM-07R-1010*	*PCM-07R-0411*	*PCM-07R-1011*
Sample Date:		*6/19/2007*	*11/12/2008*	*3/19/2009*	*10/23/2009*	*4/16/2010*	*10/11/2010*	*4/14/2011*	*10/18/2011*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	.5 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	.5 U	0.79	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	.5 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	10 U	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
2,4,5-Trichlorophenol	µg/L	10 U	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
2,4-Dichlorophenol	µg/L	10 U	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
2,5-Dichlorophenol	µg/L	10 U	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
2-Chlorophenol	µg/L	10 U	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
4-Chlorophenol	µg/L	10 U	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
Phenol	µg/L	10 UJ	5.0 U	10 U	10 U	9.6 U	9.6 U	9.6 U	9.7 U
Metals									
Arsenic	µg/L	10 U	10.0 U	10 U	1.8 J	10.0 U	-	10.0 U	10 U
Mercury	µg/L	.2 U	0.20 U	0.20 U	0.20 U	0.20 U	-	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.013 J	0.11	0.052	0.060	0.048 U	0.053 J	0.033 J	0.048 U
beta-BHC	µg/L	.05 U	0.19	0.050 U	0.050 U	0.048 U	0.048 U	0.048 U	0.048 U
delta-BHC	µg/L	0.011 J	0.062	0.038 J	0.050 U	0.048 U	0.048 U	0.032 J	0.057 J
gamma-BHC (lindane)	µg/L	.05 U	0.11	0.051	0.028 J	0.048 U	0.048 U	0.048 U	0.048 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-08*	*PCM-08*	*PCM-08*	*PCM-08*	*PCM-08*	*PCM-08*	*PCM-08*	*PCM-08*
Sample ID:		*PCM-08-602*	*PCM-08-1202*	*PCM-08-1107*	*PCM-08-0508*	*PCM-08-1108*	*PCM-08-309*	*PCM-081009*	*PCM-08-310*
Sample Date:		*6/4/2002*	*12/13/2002*	*11/12/2007*	*5/23/2008*	*11/10/2008*	*3/19/2009*	*10/21/2009*	*4/6/2010*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	5.00 U	1.00 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.00 U	1.00 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	5.00 U	1.00 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	5.00 U	1.00 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	5.00 U	1.47 U	0.50 U	0.50 U	2.8	1.0 U	1.0 U	1.0 U
Benzene	µg/L	5.00 U	1.00 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	5.00 U	1.00 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	-	5.00 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	-	10.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
2,4-Dichlorophenol	µg/L	-	10.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
2,5-Dichlorophenol	µg/L	-	10.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
2-Chlorophenol	µg/L	-	10.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
4-Chlorophenol	µg/L	-	10.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
Phenol	µg/L	-	10.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10 U	10 U	10.0 U
Mercury	µg/L	-	-	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	-	0.0500 U	0.050 U	0.050 U	0.014 J	0.050 U	0.050 U	0.047 U
beta-BHC	µg/L	-	0.0500 U	0.050 U	0.050 U	0.072	0.050 U	0.050 U	1.0
delta-BHC	µg/L	-	0.0500 U	0.0073 J	0.050 U	0.050 U	0.050 U	0.050 U	0.047 U
gamma-BHC (lindane)	µg/L	-	0.0500 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.047 U

TABLE D.1

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-08*	*PCM-08*	*PCM-08*	*PCM-09*	*PCM-09*	*PCM-09*	*PCM-09*	*PCM-10*
Sample ID:		*PCM-08-1010*	*PCM-08-0411*	*PCM-08-1011*	*PCM-09-309*	*PCM-09-310*	*PCM-09-0411*	*PCM-09-1011*	*PCM-10-602*
Sample Date:		*10/11/2010*	*4/14/2011*	*10/19/2011*	*3/19/2009*	*4/6/2010*	*4/14/2011*	*10/18/2011*	*6/4/2002*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.00 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	5.00 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	10.0 U
2,4-Dichlorophenol	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	10.0 U
2,5-Dichlorophenol	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	10.0 U
2-Chlorophenol	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	10.0 U
4-Chlorophenol	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	10.0 U
Phenol	µg/L	9.4 U	9.6 U	9.6 U	10 U	9.5 U	9.5 U	9.7 U	10.0 U
Metals									
Arsenic	µg/L	10.0 U	10.0 U	10 U	10 U	10.0 U	10.0 U	10 U	10.0 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	-
Pesticides									
alpha-BHC	µg/L	0.048 U	0.048 U	0.048 U	0.050 U	0.048 U	0.048 U	0.047 U	0.0500 U
beta-BHC	µg/L	0.048 U	0.048 U	0.048 U	0.050 U	0.25	0.048 U	0.047 U	0.0662
delta-BHC	µg/L	0.048 U	0.048 U	0.048 U	0.050 U	0.048 U	0.048 U	0.047 U	0.0500 U
gamma-BHC (lindane)	µg/L	0.048 U	0.048 U	0.048 U	0.050 U	0.048 U	0.048 U	0.047 U	0.0500 U

HISTORIC GROUNDWATER MONITORING RESULTS
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET LANDFILL SITE

Sample Location:		*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*
Sample ID:		*PCM-10-802*	*PCM-10-1202*	*PCM-10-303*	*PCM-10-603*	*PCM-10-1003*	*PCM-10-1203*
Sample Date:		*8/29/2002*	*12/18/2002*	*4/2/2003*	*6/24/2003*	*10/2/2003*	*12/31/2003*
Parameters	***Units***						
Volatile Organic Compounds							
1,2,3-Trichlorobenzene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.16 U	0.805 J
Benzene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Semi-volatile Organic Compounds							
1,2,4,5-Tetrachlorobenzene	µg/L	5.00 U	5.00 U	4.95 U	4.67 U	4.67 U	4.67 U
2,4,5-Trichlorophenol	µg/L	10.0 U	10.0 U	9.90 U	9.35 U	9.35 U	9.35 U
2,4-Dichlorophenol	µg/L	10.0 U	10.0 U	9.90 U	9.35 U	9.35 U	9.35 U
2,5-Dichlorophenol	µg/L	10.0 U	10.0 U	9.90 U	9.35 U	9.35 U	9.35 U
2-Chlorophenol	µg/L	10.0 U	10.0 U	9.90 U	9.35 U	9.35 U	9.35 U
4-Chlorophenol	µg/L	10.0 U	10.0 U	9.90 U	9.35 U	9.35 U	9.35 U
Phenol	µg/L	10.0 U	10.0 U	9.90 U	9.35 U	9.35 U	9.35 U
Metals							
Arsenic	µg/L	10.0 U	20.0 U	8.98 J	5.48 J	10.0 U	23.5
Mercury	µg/L	-	-	-	-	-	-
Pesticides							
alpha-BHC	µg/L	0.0500 U	0.0500 U	0.0791	0.0472 U	0.0837 U	0.0374 U
beta-BHC	µg/L	0.0500 U	0.0677	0.122	0.138	0.126	0.0467 U
delta-BHC	µg/L	0.0500 U	0.0500 U	0.0640	0.0472 U	0.0467 U	0.0561 U
gamma-BHC (lindane)	µg/L	0.0500 U	0.0500 U	0.0594	0.0472 U	0.0467 U	0.0374 U

TABLE D.1

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SUMMARY
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET

Sample Location:		*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*
Sample ID:		*PCM-10-304*	*PCM-10-605*	*PCM-10-1005*	*PCM-10-706*	*PCM-10-1206*	*PCM-10-607*	*PCM-10-1107*	*PCM-10-0508*
Sample Date:		*4/13/2004*	*6/23/2005*	*10/31/2005*	*7/6/2006*	*12/12/2006*	*6/19/2007*	*11/12/2007*	*5/23/2008*
Parameters	***Units***								
Volatile Organic Compounds									
1,2,3-Trichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U
1,2-Dichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U
1,4-Dichlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U
2-Chlorotoluene	µg/L	1.00 U	0.17 J	0.11 J	.5 U	.5 U	0.53 U	0.50 U	0.50 U
Benzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U
Chlorobenzene	µg/L	1.00 U	0.50 U	0.50 U	.5 U	.5 U	.5 U	0.50 U	0.50 U
Semi-volatile Organic Compounds									
1,2,4,5-Tetrachlorobenzene	µg/L	4.67 U	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	µg/L	9.35 U	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U
2,4-Dichlorophenol	µg/L	9.35 U	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U
2,5-Dichlorophenol	µg/L	9.35 U	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U
2-Chlorophenol	µg/L	9.35 U	10 U	10.0 U	10 U	10 U	10 U	5.0 U	5.0 U
4-Chlorophenol	µg/L	9.35 U	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U
Phenol	µg/L	9.35 U	10 U	10.0 U	10 U	10 U	10 UJ	5.0 U	5.0 U
Metals									
Arsenic	µg/L	16.1	10.0 U	10.0 U	10 U	10 U	10 U	10.0 U	10.0 U
Mercury	µg/L	-	-	-	-	-	.2 U	0.20 U	0.20 U
Pesticides									
alpha-BHC	µg/L	0.0662	0.038	R	.026	.03 J	0.014 J	0.0054 J	0.019 J
beta-BHC	µg/L	0.0725	0.078	0.062 J	.06	.06 U	0.022 J	0.02 J	0.058 U
delta-BHC	µg/L	0.0676	0.0062 J	R	.0062 J	.05 U	0.0089 J	0.050 UJ	0.050 U
gamma-BHC (lindane)	µg/L	0.0404 U	0.0092 J	R	.013 U	.05 U	.05 U	0.050 U	0.050 U

ANALYTICAL RESULTS SUMMARY
GROUNDWATER SUMMARY
GLENN SPRINGS HOLDINGS, INC.
1O2ND STREET

Sample Location:		*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*	*PCM-10*
Sample ID:		*PCM-101108*	*PCM-10-309*	*PCM-101009*	*PCM-10-310*	*PCM-10-1010*	*PCM-10-0411*	*PCM-10-1011*
Sample Date:		*11/10/2008*	*3/19/2009*	*10/21/2009*	*4/13/2010*	*10/11/2010*	*4/15/2011*	*10/18/2011*
Parameters	***Units***							
Volatile Organic Compounds								
1,2,3-Trichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-volatile Organic Compounds								
1,2,4,5-Tetrachlorobenzene	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
2,4,5-Trichlorophenol	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
2,4-Dichlorophenol	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
2,5-Dichlorophenol	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
2-Chlorophenol	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
4-Chlorophenol	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
Phenol	µg/L	5.0 U	10 U	10 U	9.7 U	9.5 U	9.5 U	9.6 U
Metals								
Arsenic	µg/L	10.0 U	10 U	2.9 J	10.0 U	10.0 U	10.0 U	10 U
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Pesticides								
alpha-BHC	µg/L	0.064 J	0.050 U	0.040 J	0.048 U	0.055 J	0.047 U	0.048 U
beta-BHC	µg/L	0.19 J	0.050 U	0.13	0.048 U	0.048 U	0.047 U	0.045 J
delta-BHC	µg/L	0.016 J	0.050 U	0.050 U	0.048 U	0.048 U	0.047 U	0.048 U
gamma-BHC (lindane)	µg/L	0.050 UJ	0.050 U	0.050 U	0.048 U	0.048 U	0.047 U	0.048 U

Notes:
µg/L - Micrograms per liter.
U - Non-detect at associated value.
"-" - Data not available.
J - Estimated at associated value.
R - Data rejected.

APPENDIX E

CONCENTRATION TREND GRAPHS

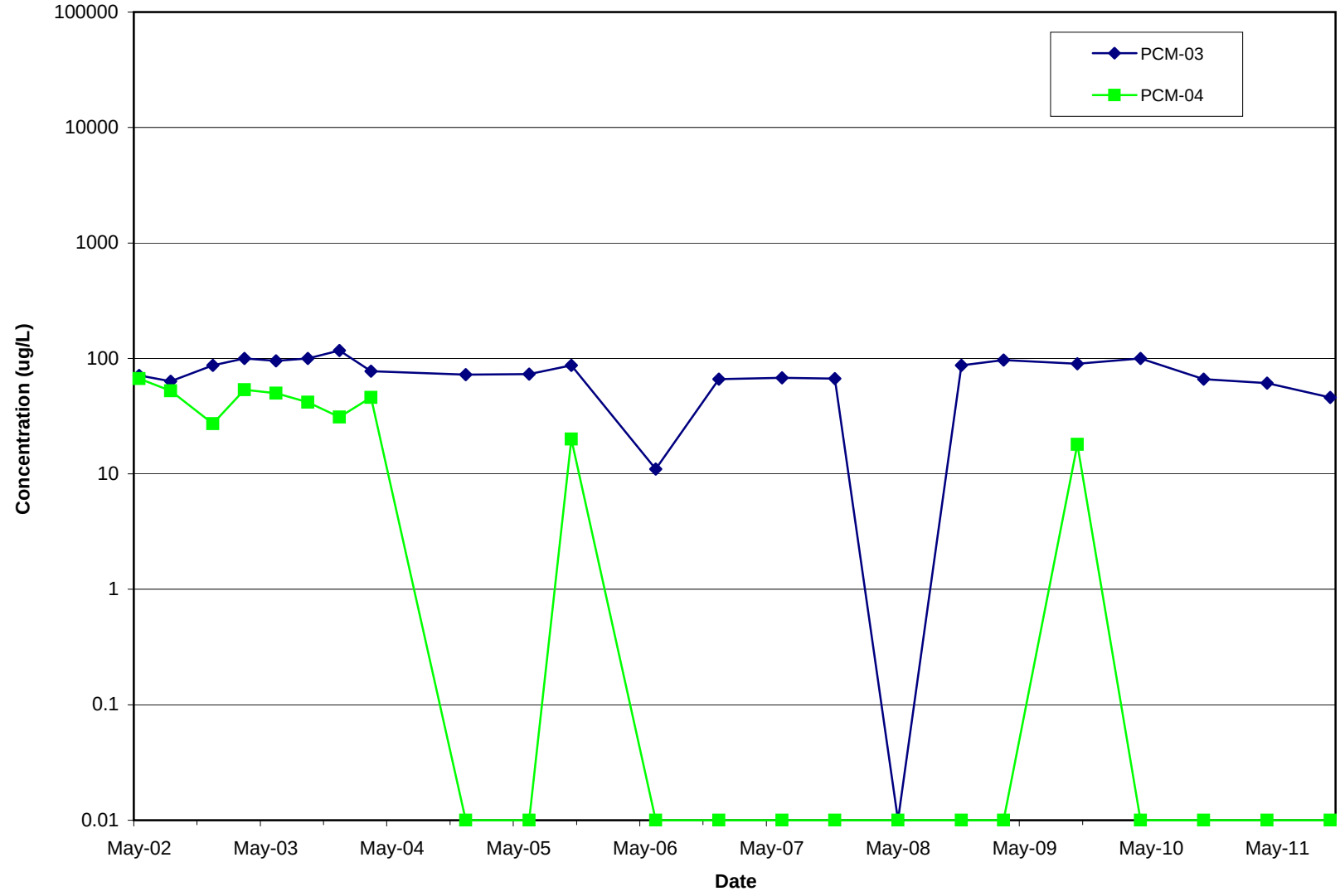


figure E.1
CONCENTRATION OF 1,2-DICHLOROBENZENE vs. TIME
102ND STREET LANDFILL

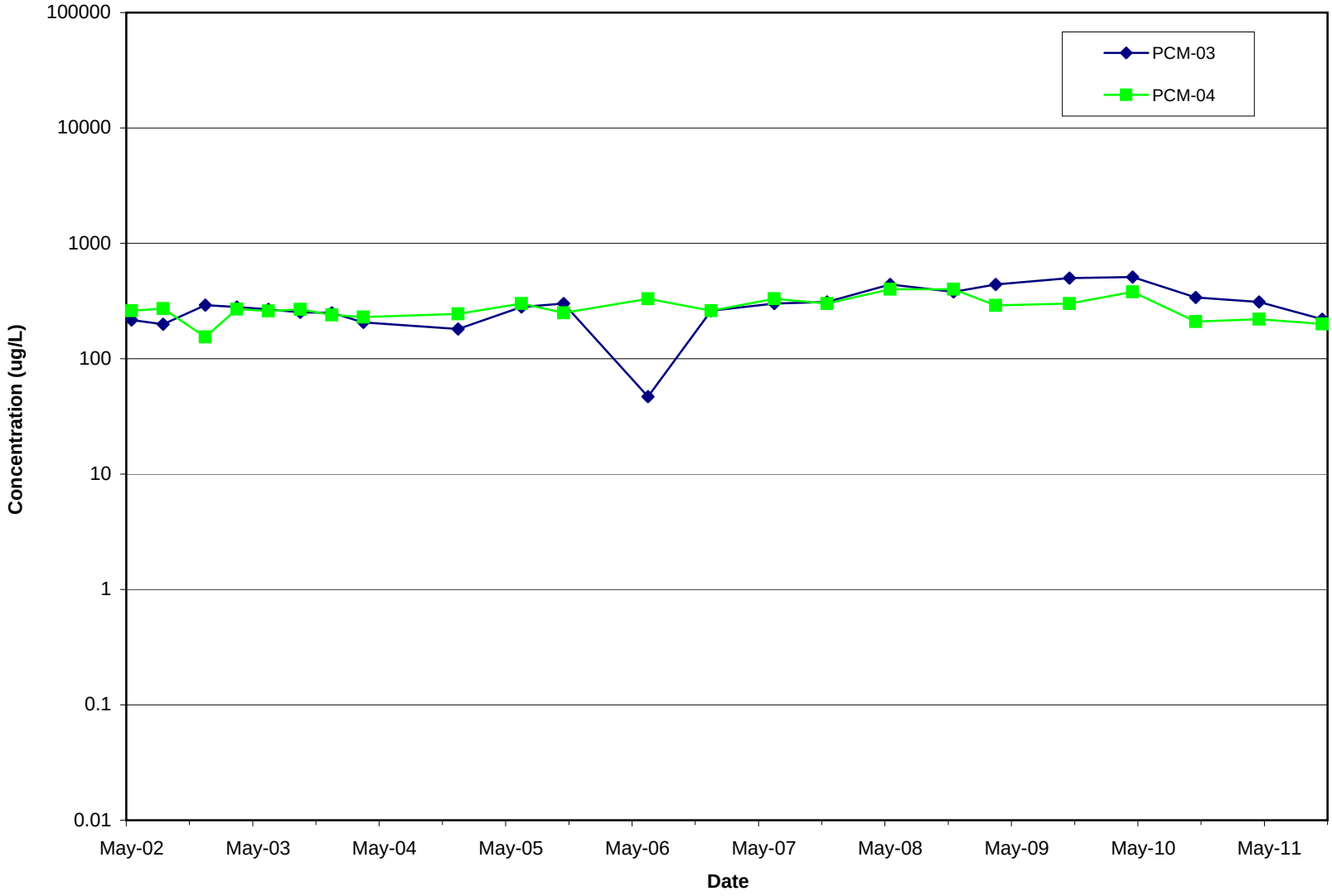


figure E.2
CONCENTRATION OF 1,4-DICHLOROBENZENE vs. TIME
102ND STREET LANDFILL

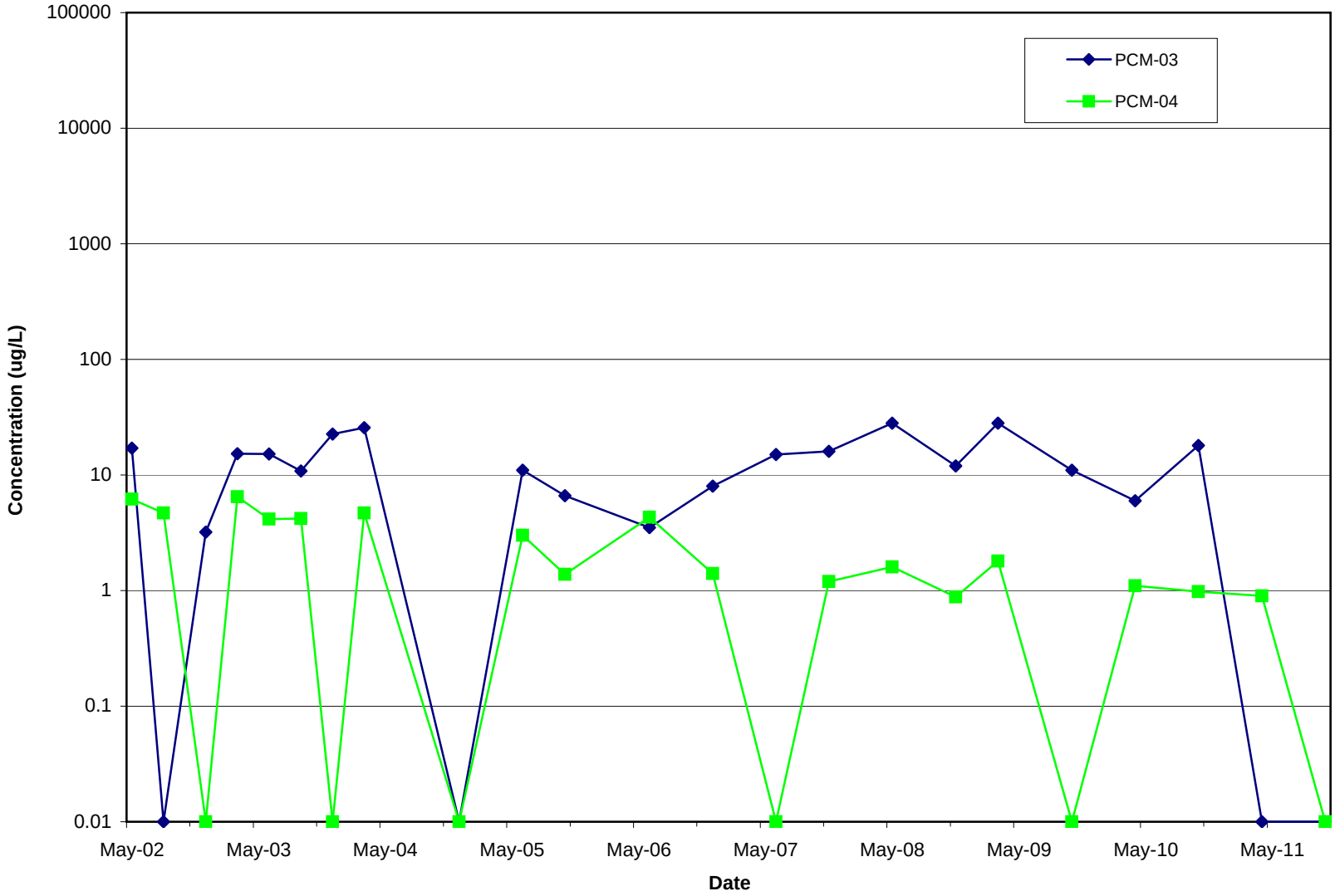


figure E.3
CONCENTRATION OF 2,4-DICHLOROPHENOL vs. TIME
102ND STREET LANDFILL

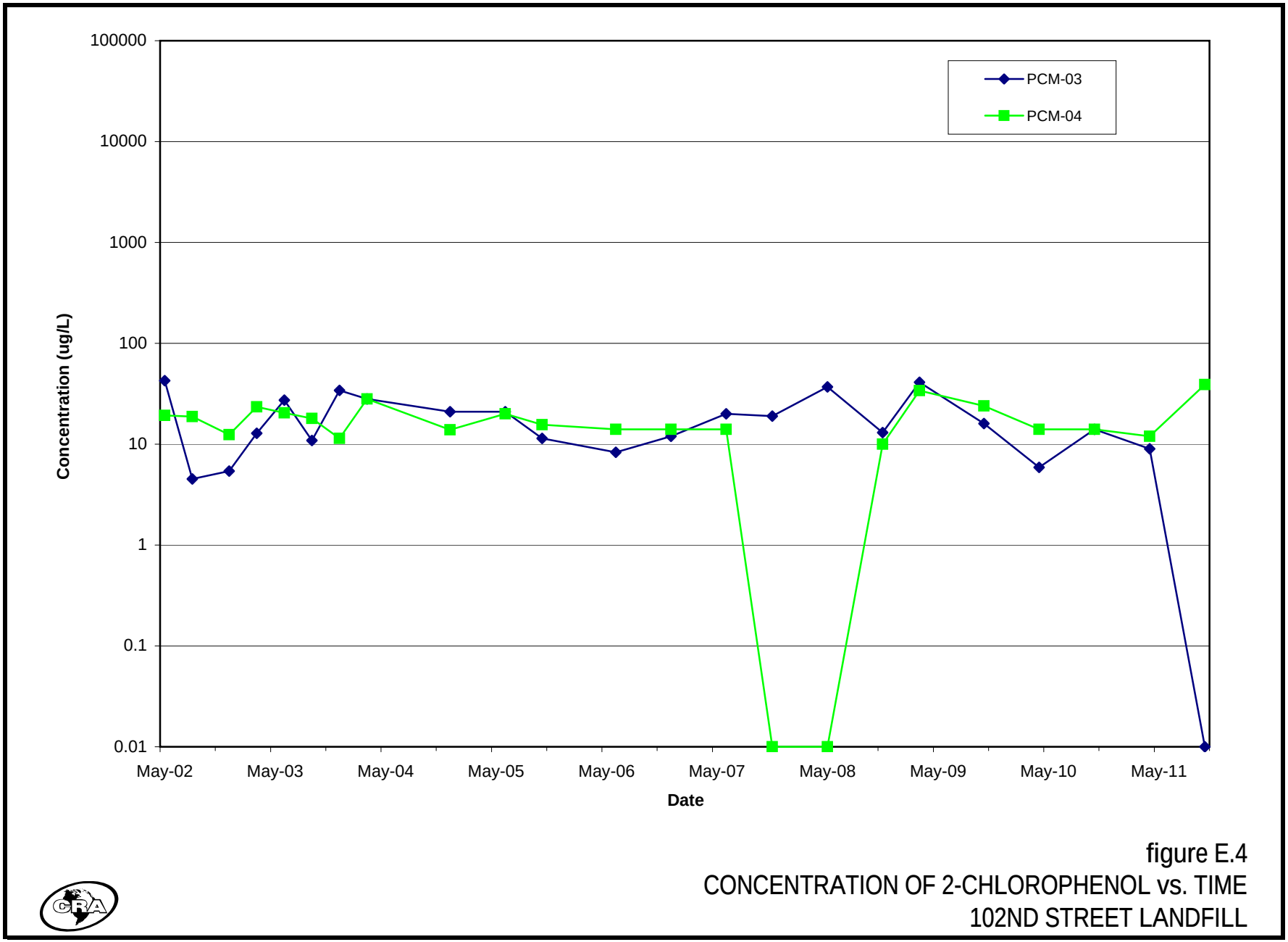


figure E.4
CONCENTRATION OF 2-CHLOROPHENOL vs. TIME
102ND STREET LANDFILL

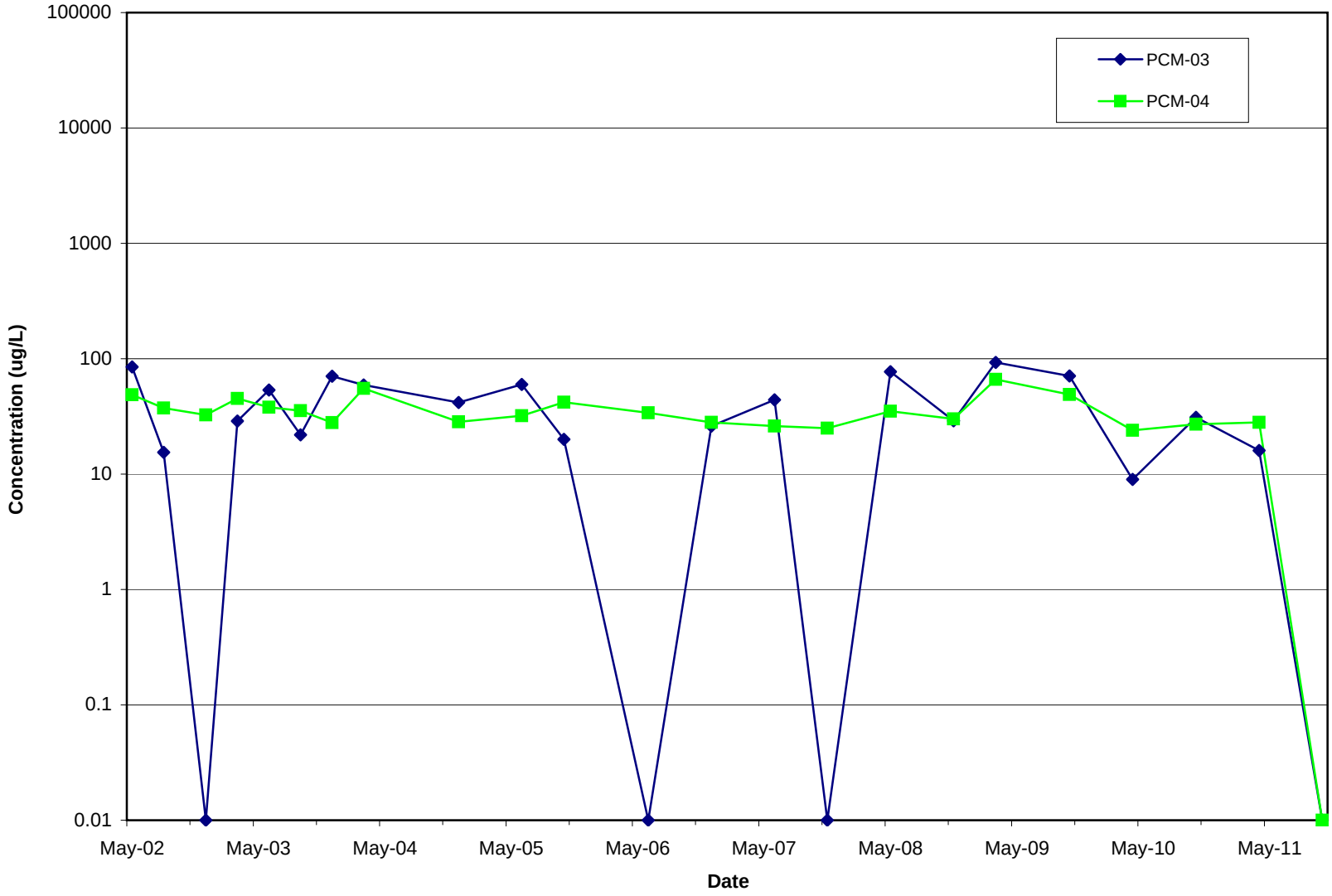


figure E.5
CONCENTRATION OF 4-CHLOROPHENOL vs. TIME
102ND STREET LANDFILL

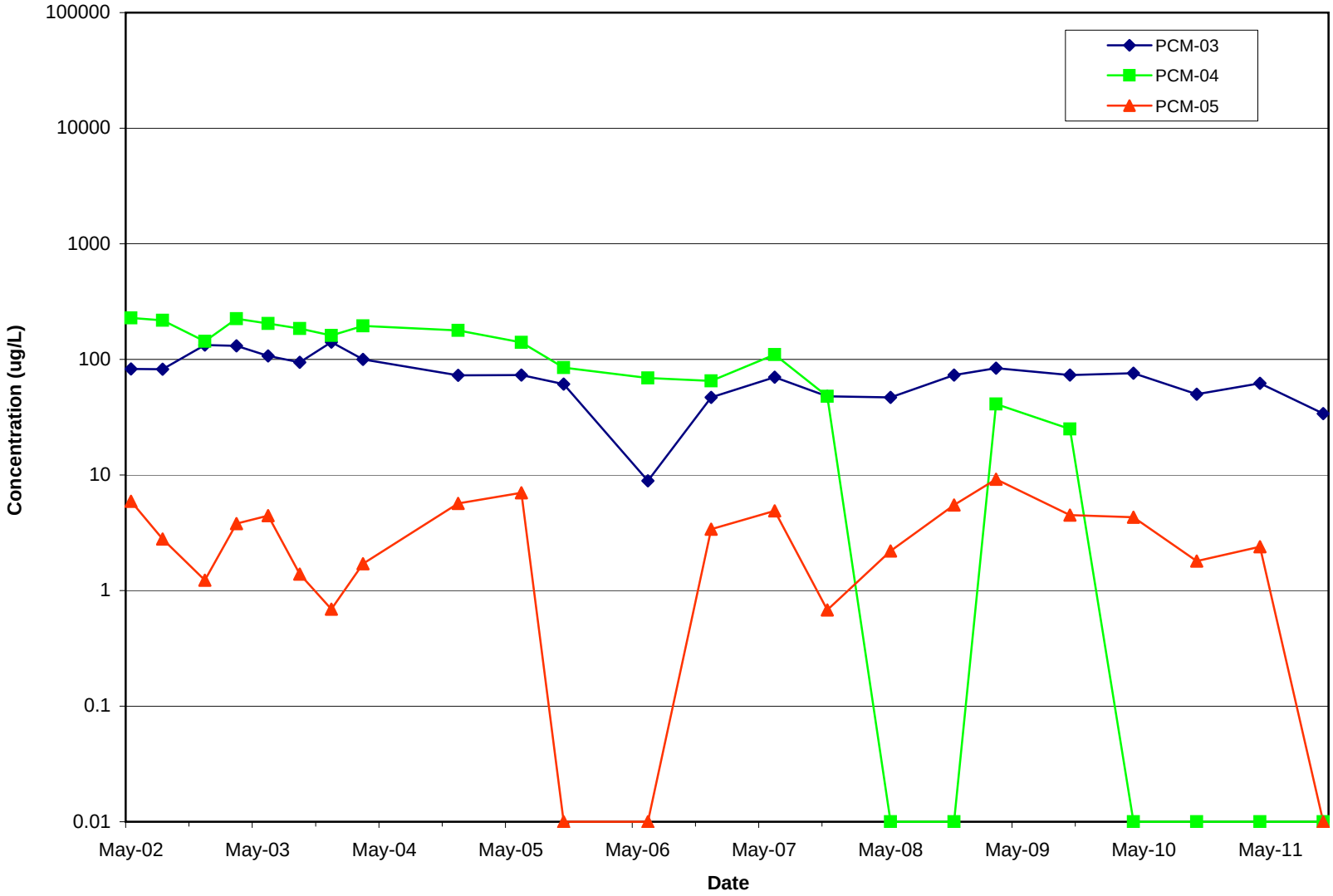


figure E.6
CONCENTRATION OF BENZENE vs. TIME
102ND STREET LANDFILL

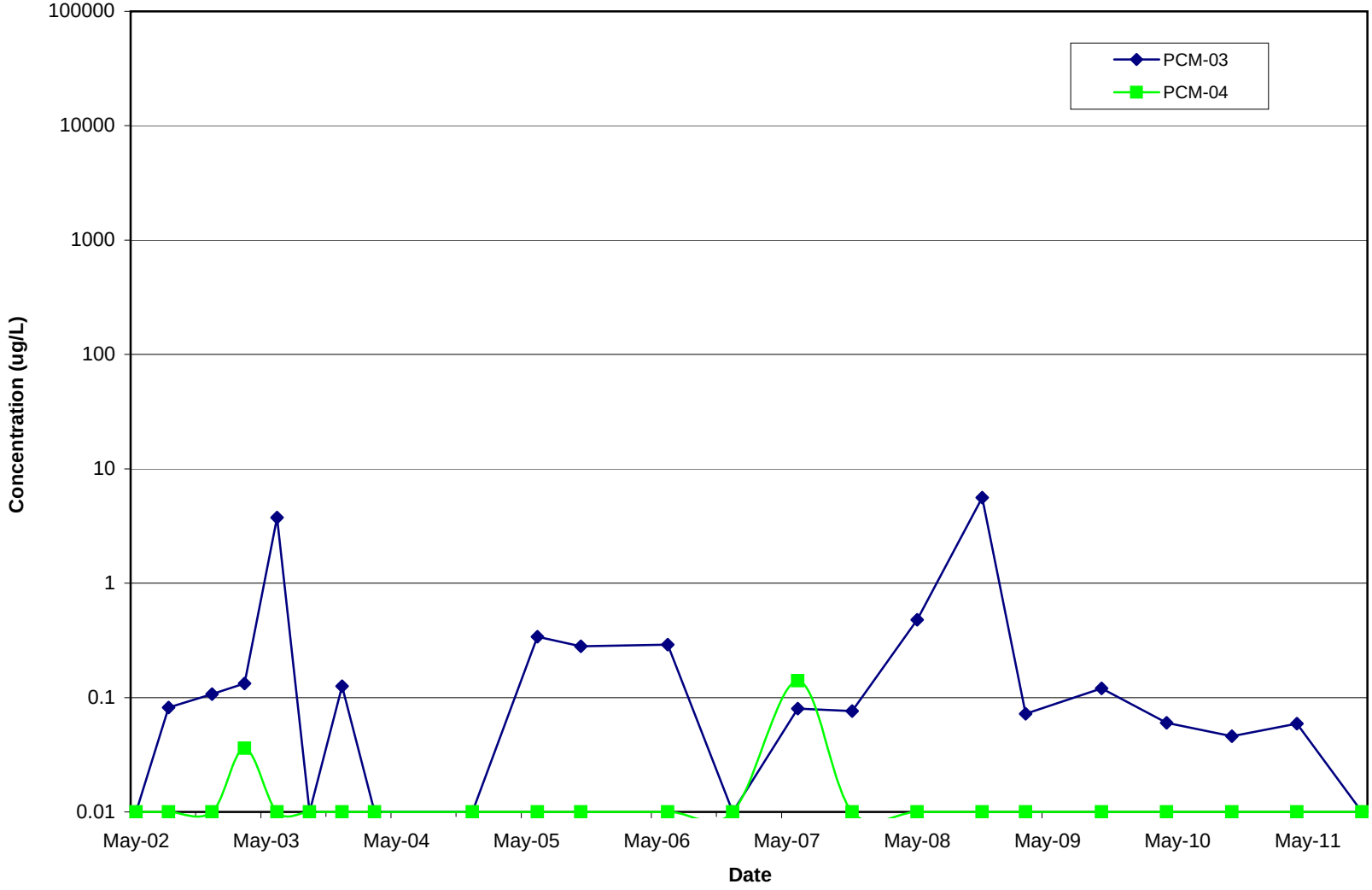


figure E.7
CONCENTRATION OF BETA-BHC vs. TIME
102ND STREET LANDFILL

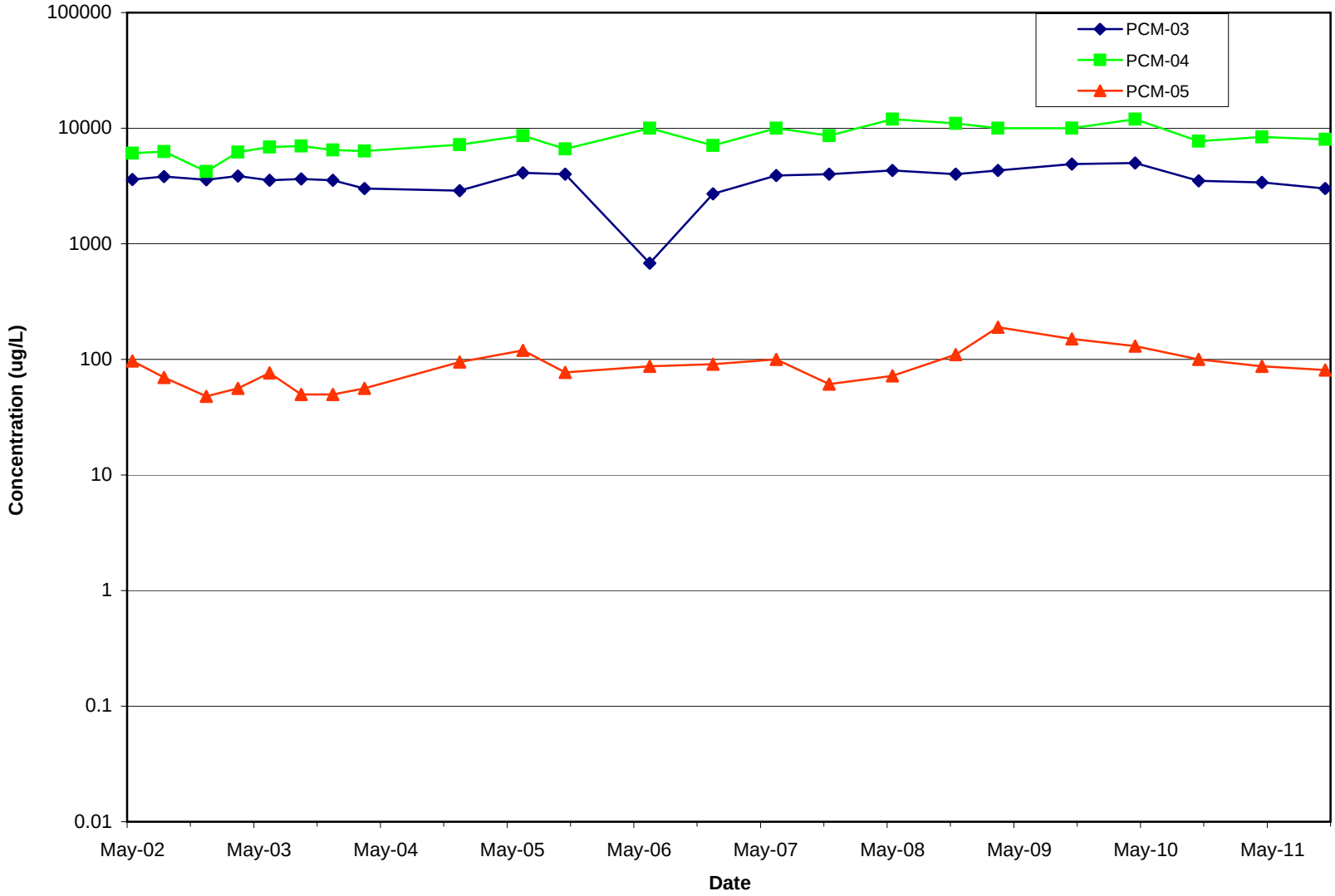


figure E.8
CONCENTRATION OF CHLOROBENZENE vs. TIME
102ND STREET LANDFILL

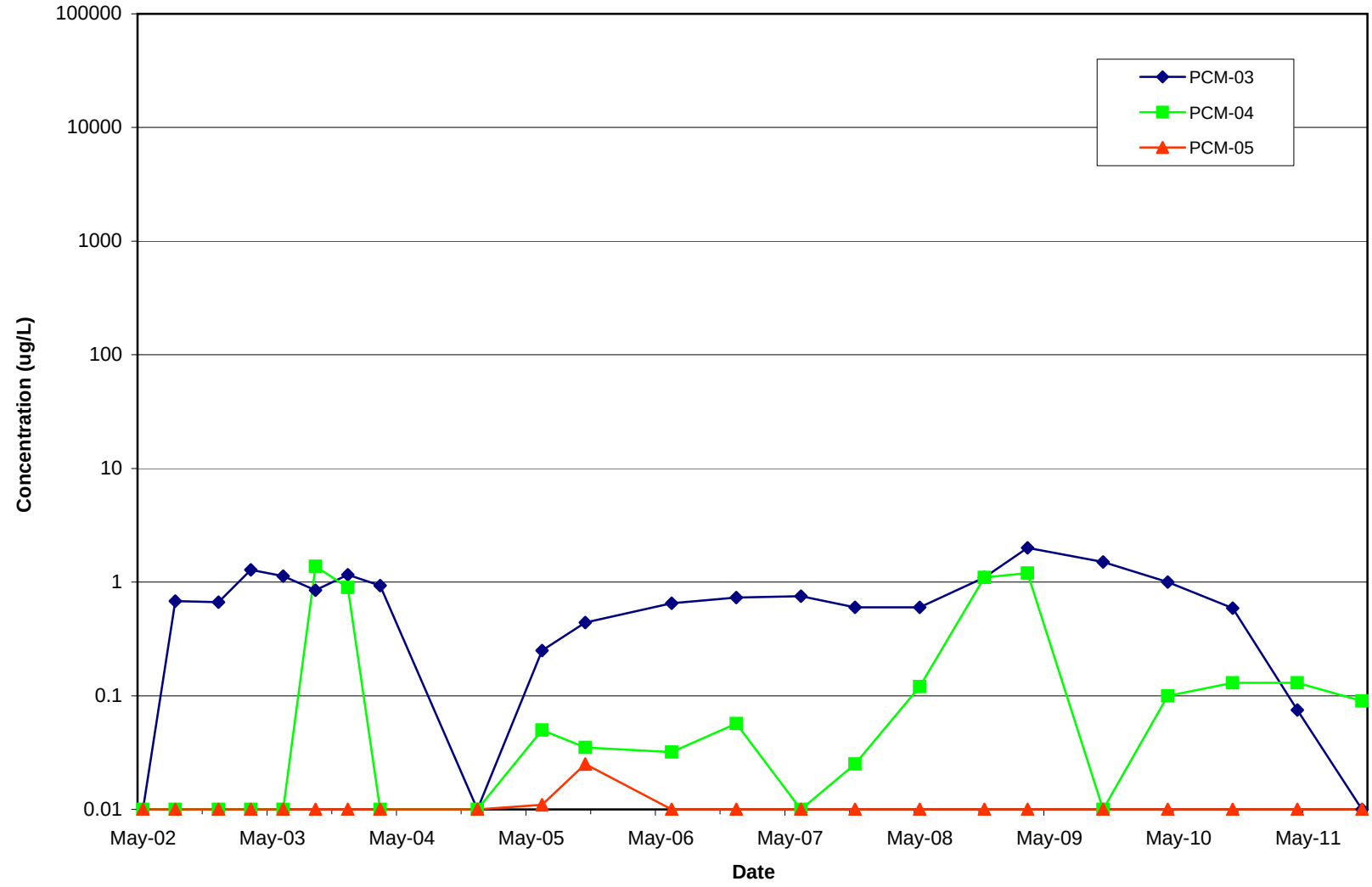


figure E.9
CONCENTRATION OF DELTA-BHC vs. TIME
102ND STREET LANDFILL

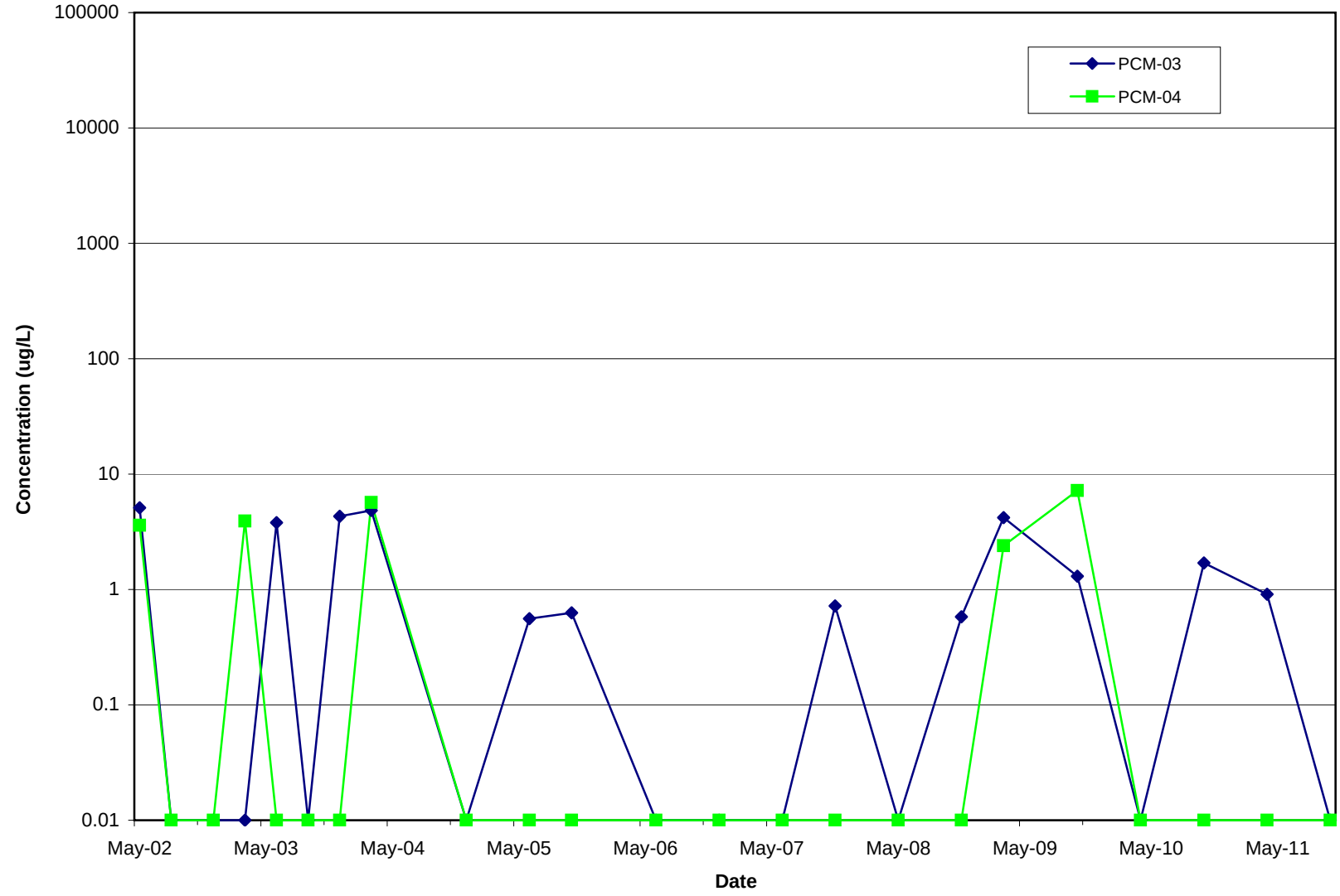


figure E.10
CONCENTRATION OF PHENOL vs. TIME
102ND STREET LANDFILL

APPENDIX F

2011 WELL INSPECTION FORM

TABLE 1

MONITORING WELL INSPECTION AND MAINTENANCE REPORT
102nd Street Landfill
NIAGARA FALLS, NEW YORK

PROJECT #53716-05-03

Well Number	Inspector Initials SG/OD	Inspection Date	Access	Installed Depth (BGS)	Sounded Depth (BGS)	Exterior ID visible	Interior ID visible	Condition of Well Casing	NA if Stick-up: Flushmount - surface water	Flushmount - water in curb box	Condition of Curb Box	Concrete Base	Gasket	Bolts	Lid	J-plug or slip cap	Locks (NA if inside plant)	NAPL Present	NAPL Thickness (ft)	Notes	List corrective actions required to repair deficiencies
PZ-01	SG	5/20/11	Y	32.57	32.72	Y	Y	G	NA					→	G	Y	Y	N			
PZ-02	SG	5/20/11	Y	29.49	29.48	Y	N	G	NA					→	G	Y	Y	N			
PZ-03	SG	5/20/11	Y	31.05	30.97	Y	N	B	NA					→	G	Y	Y	N		BENT	
PZ-04	SG	5/20/11	Y	31.33	31.30	Y	N	G	NA					→	G	Y	Y	N			
PZ-05	SG	5/20/11	Y	26.37	26.23	Y	N	B	NA					→	G	Y	Y	N		BENT SLIGHTLY	
PZ-06	SG	5/20/11	Y	20.61	20.16	Y	N	G	NA					→	G	Y	Y	N			
PZ-07	SG	5/20/11	Y	14.3	14.76	Y	N	G	NA					→	G	Y	Y	N			
PZ-08	SG	5/20/11	Y	15.61	15.05	Y	N	G	NA					→	G	Y	Y	N		HARD BOTTOM	
PZ-09	SG	5/20/11	Y	14.39	14.35	Y	N	B	NA					→	G	Y	Y	N		BENT	
PZ-10	SG	5/20/11	Y	20.09	20.96	Y	Y	G	NA					→	G	Y	Y	N		HARD BOTTOM	
PCM-01	SG	5/20/11	Y	29.19	30.19	Y	N	G	NA					→	G	Y	Y	N		HARD BOTTOM	
PCM-02	SG	5/20/11	Y	29.34	29.09	Y	N	G	NA					→	G	Y	Y	N			
PCM-03	SG	5/20/11	Y	31.66	32.32	Y	N	G	NA					→	G	Y	Y	N			
PCM-04	SG	5/20/11	Y	29.99		Y	N	G	NA					→	G	Y	Y	N		BLADDER PUMP STUCK IN WELL, MEASURED TO TOP OF PUMP 14.95	
PCM-05	SG	5/20/11	Y	25.93		Y	N	G	NA					→	G	Y	Y	N		BLADDER PUMP STUCK IN WELL, MEASURED TO TOP OF PUMP 16.62	
PCM-06	SG	5/20/11	Y	13.75	13.75	Y	N	G	NA					→	G	Y	Y	N			
PCM-07R	SG	5/20/11	Y	12.5	15.18	Y	N	G	NA					→	G	Y	Y	N			
PCM-08	SG	5/20/11	Y	14.89	15.10	Y	N	G	NA					→	G	Y	Y	N		HARD BOTTOM	
PCM-09	SG	5/20/11	Y	11.12	10.73	Y	N	G	NA					→	G	Y	Y	N		HARD BOTTOM	
PCM-10	SG	5/20/11	Y	22.47	23.74	Y	N	G	NA					→	G	Y	Y	N			
NR-01	SG	5/20/11	Y		51.32	Y	Y		NA					→	G	Y	Y	Y	1.05		
PCBM-3	SG	5/20/11	Y		58.8	Y	N	G	NA					→	G	Y	Y	N			
PCBM-1	SG	5/20/11	Y		56.98	Y	N	G	NA					→	G	Y	Y	N			
PCBM-2	SG	5/20/11	Y		57.02	Y	N	G	NA					→	G	X	Y	N			

TABLE 1

MONITORING WELL INSPECTION AND MAINTENANCE REPORT
102nd Street Landfill
NIAGARA FALLS, NEW YORK

Well Number	Inspector Initials (S G)	Inspection Date	Access	Installed Depth (BGS)	Sounded Depth (BGS)	Exterior ID visible	Interior ID visible	Condition of Well Casing	NA if Stick-up: Flushmount - surface water	Flushmount - water in curb box	Condition of Curb Box	Concrete Base	Gasket	Bolts	Lid	J-plug or slip cap	Locks (NA if inside plant)	NAPL Present	NAPL Thickness (ft)	Notes	List corrective actions required to repair deficiencies
NR-02	SG	5/20/11	Y		50.2	Y	Y	G	NA					→	G	Y	Y	Y	1.90'		
NR-03	SG	5/20/11	Y		50.26	Y	Y	G	NA					→	G	Y	Y	Y	.6		
NR-04	SG	5/20/11	Y		36.6	Y	Y	G	NA					→	G	Y	Y	N			
NR-05	SG	5/20/11	Y		41.9	Y	Y	G	NA					→	G	Y	Y	Y	.56		
NR-07	SG	5/20/11	Y		41.58	Y	Y	G	NA					→	G	Y	Y	N			
NR-08	SG	5/20/11	Y		52.11	Y	Y	G	NA					→	G	Y	Y	Y	.62		
NR-10	SG	5/20/11	Y		36.63	Y	Y	G	NA					→	G	Y	Y	N			