# Rolling Frito-Lay Sales, LP

## 202-218 Morgan Avenue BCP Site (BCP Site #C224133)

## Periodic Review Report

## November 6, 2013 - November 22, 2014

December 2014

# Executive Summary

The 202-218 Morgan Avenue Brownfield Cleanup Program (BCP) Site (BCP Site #224133) consists of approximately 2.85-acres of land located at 202-218 Morgan Avenue, Borough of Brooklyn, Kings County, New York. The Site owner is Rolling Frito-Lay Sales, LP (Frito-Lay). The Site soil and groundwater was historically found to be contaminated with metals, polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs), and Site soil vapor was found to be contaminated with volatile organic compounds (VOCs). The Site was remediated to industrial use cleanup standards and received a Certificate of Completion (COC) from the New York State Department of Environmental Conservation (NYSDEC) on November 6, 2013.

The Site is currently in the monitoring stage with groundwater samples being collected from on-Site and off-Site monitoring wells on an annual basis. In general, since post-remediation baseline samples were taken in June 2013 concentrations of acetone, arsenic (total), mercury (total), and polychlorinated biphenyls (PCBs) on-Site have increased; concentrations of methyl tert butyl ether (MTBE) and lead (total) have decreased; and concentrations of chloride, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, arsenic (dissolved), lead (dissolved), and mercury (dissolved) have remained fairly stable. Concentrations of detected compounds off-Site have remained fairly consistent since post-remediation baseline samples were taken in June 2013, with minor increases and decreases observed. Based on the limited number of post-remediation groundwater monitoring events, it is not possible to determine groundwater quality trends at this point in time.

The institutional controls and engineering controls for the Site remain in place and effective for protecting human health and the environment. The soil cover engineering controls remain in place; however, the vegetation needs to be monitored to ensure re-establishment occurs following the winter months. Groundwater monitoring has been completed in accordance with the Site Management Plan (SMP), which identified the need for annual groundwater sampling. There are no new buildings constructed on-Site, as a result, there is no need for inspection of a sub-slab depressurization system (SSDS) engineering control at this time. The institutional and engineering controls certification form as issued by the Department has been completed and included as Appendix A.

There is no need to revise the SMP or propose a change to the frequency of PRR submittals at this time. Groundwater will continue to be monitored and Site inspections will continue to the performed on an annual basis, in accordance with the SMP. Construction of future buildings will be evaluated to determine if mitigation of soil vapor intrusion is necessary. The requirements necessary to discontinue Site monitoring and Site Engineering and Institutional Controls have not been met at this time.

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# 1. Introduction

## 1.1 Purpose

This Periodic Review Report (PRR) is being submitted on behalf of Rolling Frito-Lay Sales, LP (Frito-Lay) for the 202-218 Morgan Avenue Brownfield Cleanup Program (BCP) Site (BCP Site No. C224133) located at 202-218 Morgan Avenue, Borough of Brooklyn, Kings County, New York (Figure 1). The purpose of this PRR, and attached documents, is to document that institutional and engineering controls, as described in the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP) and Environmental Easement (EE), are in place in accordance with 6NYCRR Part 375-3. The following elements are included in this report:

- A complete description of all institutional and/or engineering controls employed at the Site;
- An evaluation of the plans developed for implementation of the engineering and institutional controls, regarding the continued effectiveness of any institutional and/or engineering controls required by the decision document for the Site;
- A certification prepared by a professional engineer or qualified environmental professional that the institutional controls and/or engineering controls employed at the Site during the period are:
    - Unchanged from the previous certification, unless approved by the Department, consistent with the SMP;
    - In place and effective;
    - Performing as designed, and that nothing has occurred that would (1) impair the ability of the controls to protect public health and environment, or (2) constitute a violation or failure to comply with any operation and maintenance plan for such controls;
- The institutional and engineering controls certification form as issued by the Department has been completed and included as Appendix A; and
- Data tables and figures depicting results of annual groundwater monitoring activities conducted on- and off-Site.

## 1.2 Certification Period

NYSDEC requested that this Periodic Review Report (PRR) cover the period between November 6, 2013 and November 22, 2014. During this period, Frito-Lay performed regular inspections of the soil cover engineering control on-Site and GHD Consulting Services Inc. (GHD) performed annual groundwater monitoring and an annual visual inspection of engineering controls.

## 1.3 Scope and Limitations

This report: has been prepared by GHD for Rolling Frito-Lay Sales, LP and may only be used and relied on by Rolling Frito-Lay Sales, LP for the purpose agreed between GHD and Rolling Frito-Lay Sales, LP as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Rolling Frito-Lay Sales, LP arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report based in part on information provided by Rolling Frito-Lay Sales, LP and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the Site may be different from the Site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular Site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant Site features and conditions may have been identified in this report.

Site conditions (including the presence of hazardous substances and/or Site contamination) may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the Site conditions. GHD is also not responsible for updating this report if the Site conditions change without further authorization to do so by Rolling Frito-Lay Sales, LP.

# 2. Site Overview

## 2.1 Background

The Site is located in the Borough of Brooklyn, Kings County, New York and is identified as Block 2942 and Lots 105, 111, and 112 on the NYSDEC Institutional and Engineering Controls Certification Form. Information obtained from the New York City Finance Department online Tax Maps identifies the Site as Block 2942 and Lot 105, with no matching records for Lots 111 and 112. The Site is approximately 3.23-acres of land, of which approximately 2.85-acres were entered into the BCP. The Site is bound by an adjacent parcel to the north owned by Rolling Frito-Lay Sales, LP and used for distribution activities; English Kills to the east, the English Kills basin and an adjacent industrial parcel to the south; and Morgan Avenue to the west with commercial and industrial properties to the west (see Figure 2).

The Site is currently developed with an asphalt pavement parking area used for parking Frito-Lay delivery vehicles and employee vehicles. The portion of the Site not occupied by asphalt pavement consists of minor grass covered landscaping areas and rip-rap adjacent to English Kills and the English Kills basin.

The Remedial Investigation (RI), which was conducted under Brownfield Cleanup Agreement (BCA Index #A2-0622-0709) during 2009 and 2010, characterized the nature and extent of contamination at the Site. The results of the RI, as reported in the *Revised Remedial Investigation Report* (Gannett Fleming, P.C., July 2010) and the *Supplemental Remedial Investigation and Second Supplemental Remedial Investigation Report* (Gannett Fleming, P.C., April 2011) determined that contaminants of concern (COCs) are present in Site soil, groundwater, and soil vapor. It was determined that Site surface and subsurface soils contain arsenic, lead, mercury, polychlorinated biphenyls (PCBs), and semi-volatile organic compounds (SVOCs) at concentrations that exceed the Unrestricted Use Soil Cleanup Objectives (SCOs). Analytical results of Site groundwater samples identified arsenic, lead, and volatile organic compounds (VOCs) at concentrations that exceed the Technical and Operational Guidance Series (TOGS) Class GA groundwater standards and guidance values. VOCs were also detected in Site soil vapor samples.

A Remedial Work Plan (RWP) was prepared by Gannett Fleming, P.C. (August 2011). The remedial goals for the Site included:

- removing or eliminating significant threats to human health and the environment; and
- protecting human health and the environment during the contemplated future use of the Site, which was identified as industrial, heavy manufacturing, in accordance with the BCA and DER-10.

The proposed remedial approach was to remediate the Site to a Track 4 Restricted Use by meeting the Industrial Use SCOs. This remediation approach included excavation of soil/fill exceeding site-specific remedial action objectives (RAOs), excavation of soil/fill exceeding the Industrial Use SCOs, and engineering/institutional controls. Remedial activities were completed at the Site in February 2013. Soil/fill excavation included:

- the removal of approximately 16,513 tons of hazardous PCB soil (PCB concentrations in excess of 50 mg/kg);
- the removal of approximately 4,096 tons of non-hazardous PCB soil (PCB concentrations in excess of 10 mg/kg or 25 mg/kg, depending on the excavation area);

- the removal of approximately 619 tons of arsenic, lead, and mercury contaminated soil with concentrations exceeding the Protection of Groundwater and/or Industrial Use SCOs; and
- the placement of imported clean fill material back into the excavation areas.

Excavated soil/fill was transported for off-site disposal. The PCB excavated soils that were identified as hazardous were managed in accordance with TSCA regulations.

The selected remedy for groundwater remediation was natural attenuation, based on the fact that VOC daughter products were present in several on-Site groundwater monitoring wells, which suggests that degradation is occurring and can be expected to continue over time. Also, sensitive receptors were not identified downgradient of the Site and the Site and surrounding area is serviced by a municipal water supply system.

The engineering controls for the Site consist of maintaining the soil cover system and requiring the installation of a sub-slab depressurization system (SSDS) in any new buildings constructed on-Site, or in the Frito-Lay warehouse located on the adjoining property if it is expanded. The institutional controls include a Site groundwater use restriction, a Site use restriction restricting the use to industrial uses, and the requirement that a SSDS will be installed in any future buildings constructed on-Site.

An Environmental Easement (EE) for the Site was filed with the Kings County Clerk's Office on September 20, 2013. A Site Management Plan, which outlines Site restrictions and requirements of future maintenance and monitoring, was completed in September 2013. A Certificate of Completion (COC) allowing for industrial uses of the Site was received from the NYSDEC on November 6, 2013.

The reader of this PRR may refer to previous reports for more detail, as needed. These reports include:

- *Subsurface Investigation*, Gannett Fleming, P.C., 2003.
- *Phase I Environmental Site Assessment,* Gannett Fleming, P.C., 2006.
- *Surface Pile Characterization Work Plan,* Gannett Fleming, P.C., 2007.
- *Phase II Environmental Site Assessment,* Gannett Fleming, P.C., 2007.
- *Remedial Investigation,* Gannett Fleming, P.C., 2009.
- *Supplemental Remedial Investigation,* Gannett Fleming, P.C., 2010.
- *Second Supplemental Remedial Investigation,* Gannett Fleming, P.C., 2011.
- *Remedial Work Plan,* Gannett Fleming, P.C., 2011.
- *Site Management Plan,* Frito-Lay, Brooklyn, New York, NYSDEC Site Number: C224133, Gannett Fleming Engineers, P.C., September 2013.
- *Final Engineering Report,* Frito-Lay, Brooklyn, Kings County, New York, NYSDEC Site Number: C224133, Gannett Fleming Engineers, P.C., October 2013.
- 202-218 Morgan Avenue BCP Site Annual Post-Remediation Groundwater Monitoring Letter Report, GHD Consulting Services Inc., August 1, 2014.

# 3. Institutional and Engineering Controls

Based on identified soil, groundwater, and soil vapor contamination, and the Site's past and present use, institutional and engineering controls are utilized at the Site to limit exposure risks. These institutional and engineering controls are described below.

## 3.1 Institutional Controls

The institutional controls (ICs) for this Site are outlined in the NYSDEC-approved SMP (Gannett Fleming Engineers, P.C., September 2013) and adherence to these ICs is required by the Environmental Easement. The ICs for the Site include the following:

- the property may only be used for industrial uses provided that the long-term engineering and institutional controls included in the NYSDEC-approved SMP are employed;
- the property may not be used for a higher level of use, such as, unrestricted, residential, restricted residential, and/or commercial use without additional remediation and amendment of the EE, as approved by the NYSDEC;
- all future activities on the property that will disturb remaining contamination must be conducted in accordance with the NYSDEC-approved SMP;
- the use of groundwater underlying the property is prohibited without treatment rendering it safe for intended use and prior approval by NYSDEC;
- the potential for soil vapor intrusion must be evaluated for any buildings developed on Site and any potential impacts that are identified must be monitored and mitigated;
- vegetable gardens and farming on the property are prohibited; and
- the Site owner or remedial party will submit to the NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the property are unchanged from the previous certification or that any changed to the controls were approved by the NYSDEC; and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such property any time in order to evaluate the continued maintenance or any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow, and will be made by an expert that the NYSDEC finds acceptable.

### 3.1.1 Site Use

The Site use has not changed since the NYSDEC issued the Certificate of Completion and is currently used for industrial uses (parking or Frito-Lay company and employee vehicles).

### 3.1.2 Groundwater

Groundwater is not being used at the Site.

Monitored natural attenuation groundwater monitoring was conducted as outlined in the NYSDEC-approved SMP during this PRR reporting period (May 2014). Laboratory analytical results were tabulated and submitted to the NYSDEC (GHD, August 1, 2014) and to the NYSDEC's EQuIS

Database. Results of groundwater monitoring did not warrant revision of the monitoring schedule or analytical list.

### 3.1.3 Excavations

No excavations have occurred on-Site during this PRR's certification period.

## 3.2 Engineering Controls

The engineering controls (ECs) for this Site are outlined in the NYSDEC-approved SMP (Gannett Fleming Engineers, P.C., September 2013), and include the following:

### 3.2.1 Asphalt and Soil (Engineered) Cover Systems

Direct contact with soil/fill at the Site is mitigated by a soil cover system in place over the entirety of the Site. This soil cover system is comprised of a minimum of 6 inches of asphalt pavement or a minimum of 1-foot of clean soil/fill maintained as mowed lawn. The location of the soil cover system is depicted in Figure 3.

The soil cover system was in place for the duration of the certification period and no maintenance was required to amend the soil cover system. It was noted that the vegetation had not begun to regrow at the time of the annual Site inspection (April 9, 2014) and that future Site inspections should confirm that vegetation is re-established in these areas.

Additional information can be found in the Institutional and Engineering Controls Certification Form (Appendix A) and the Annual Inspection Form (Appendix B).

### 3.2.2 Chain Linked Fence

To prevent unauthorized access to the Site, a 10-foot high chain linked fence was installed along the eastern, western, and southern boundaries. Access to the Site from the northern boundary is controlled by the adjacent property, which is also owned by Frito-Lay.

The chain linked fence was in good condition at the time of the annual Site inspection (April 9, 2014) and appeared to be effective in limiting unauthorized access to the Site.

### 3.2.3 Sub-Slab Depressurization System

A sub-slab depressurization system (SSDS) will be required to be installed in any new buildings constructed on-Site or in new buildings if constructed on the adjacent property owned by Frito-Lay.

At the time of the annual Site inspection (April 9, 2014) no new buildings had been constructed on-Site and the adjacent warehouse had not been expanded. Therefore, no SSDS evaluation or monitoring is required at this time.

# 4. Operations and Monitoring

The NYSDEC-approved SMP (Gannett Fleming Engineers, P.C., September 2013) requires annual groundwater monitoring and reporting. The annual monitoring is intended to assess the performance of the remedy and overall reduction in contamination on-Site. The annual groundwater monitoring was completed in accordance with the SMP (Figures 4, 5, 6, and 7 and Tables 1, 2, and 3). The laboratory sample results were transmitted to the NYSDEC on August 1, 2014 and were successfully uploaded into the NYSDEC's EQuIS Database on August 25, 2014 (Appendix C).

In general, since post-remediation baseline samples were taken in June 2013 concentrations of acetone, arsenic (total), mercury (total), and polychlorinated biphenyls (PCBs) on-Site have increased; concentrations of methyl tert butyl ether (MTBE) and lead (total) have decreased; and concentrations of chloride, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, arsenic (dissolved), lead (dissolved), and mercury (dissolved) have remained fairly stable. Concentrations of detected compounds off-Site have remained fairly consistent since post-remediation baseline samples were taken in June 2013, with minor increases and decreases observed.

Table 3 summarizes post-remediation baseline concentrations compared to current concentrations.

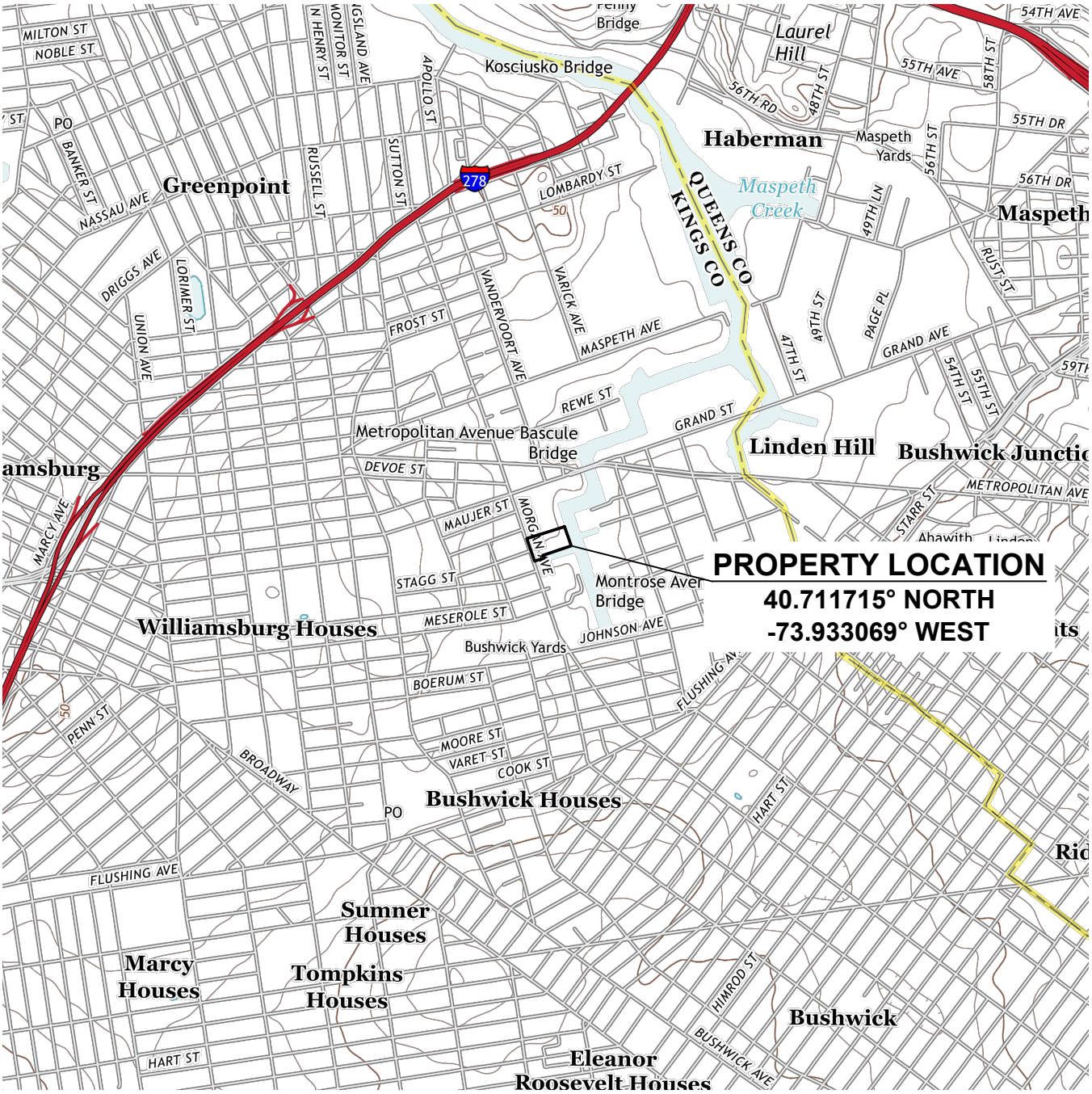
At this time there is not sufficient data to determine trends in groundwater concentrations. As future sampling events occur, it will become possible to establish trends in groundwater quality and to determine if monitored natural attenuation is sufficient for remediating the Site, or if further action may be required.

Based on the groundwater data received to date, the qualitative exposure assessment assumptions regarding on-Site and off-Site contamination have not changed and are still valid.

# 5. Recommendations

Based on a review of the annual groundwater data, it is recommended that the ICs and ECs currently in place for the Site remain in place in order to ensure the continued effectiveness and protectiveness of the remedy. Groundwater monitoring should continue to be conducted on an annual basis as identified in the SMP. The effectiveness of the remedy should continue to be evaluated through these annual groundwater monitoring results. Annual Site inspections should be continued to ensure that the soil cover engineering controls are in place and functioning as intended.

# Figures





QUADRANGLE LOCATION

CONTOUR INTERVAL: 10 FEET

MAP TAKEN FROM: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLES:
BROOKLYN, NY (2013)
(U.S. GEOLOGICAL SURVEY WEBSITE)

0 1000 2000 3000 4000'

SCALE 1"=2000' AT ORIGINAL SIZE

N

Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)

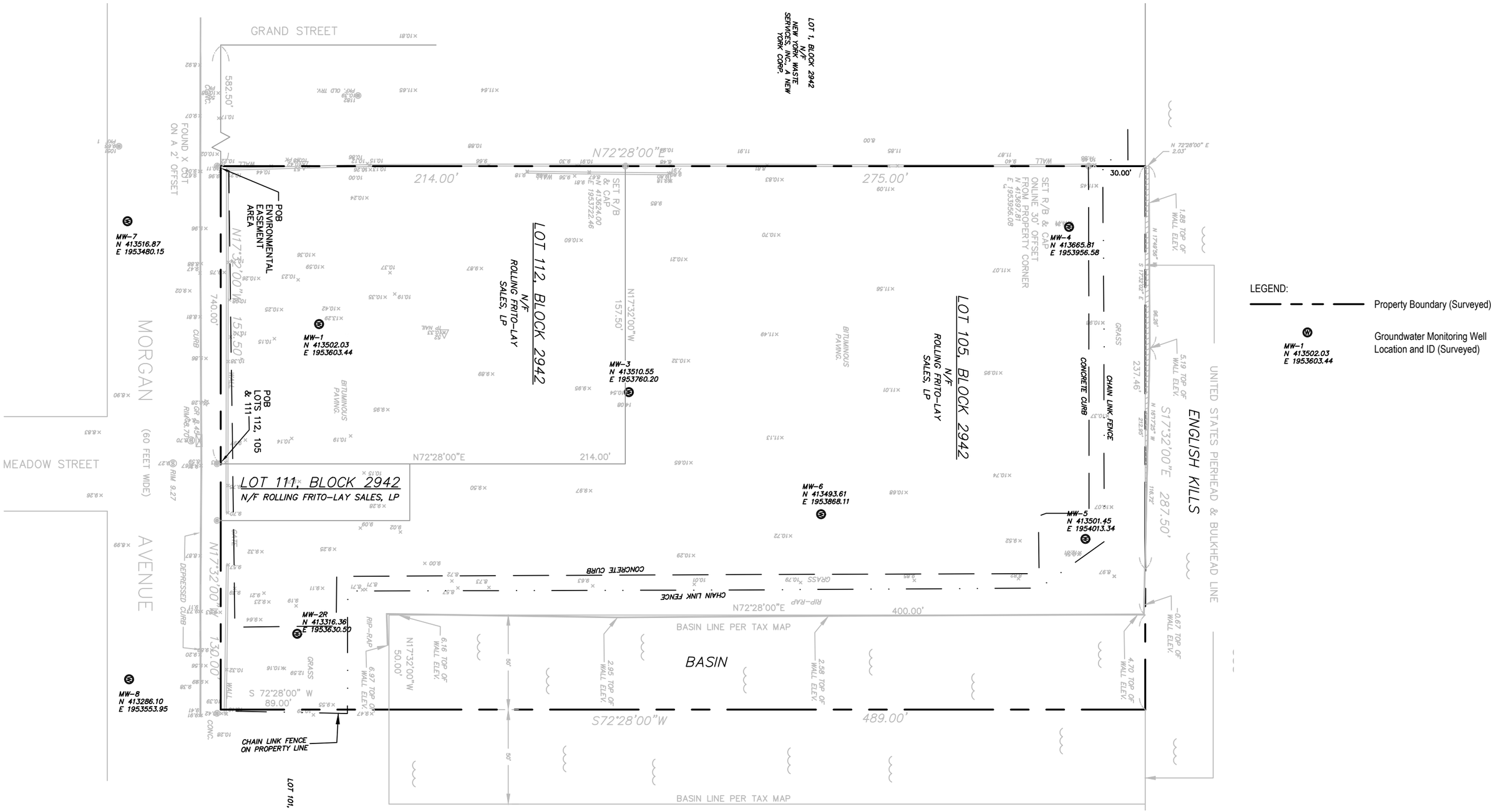
Job Number 86-16480
Revision A
Date 10.21.2014

Site Location Map

Figure 1

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:44 PM Cad File No: G:\B6\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 1.dwg




LEGEND:

Property Boundary (Surveyed)

MW-1
N 413502.03
E 1953603.44

Groundwater Monitoring Well Location and ID (Surveyed)

0 25 50 75 100'

SCALE 1"=50' AT ORIGINAL SIZE

N

NOTES:
1. Base map based on information from field surveys conducted by Pennoni Associates Inc. and PS&S that was provided by others.

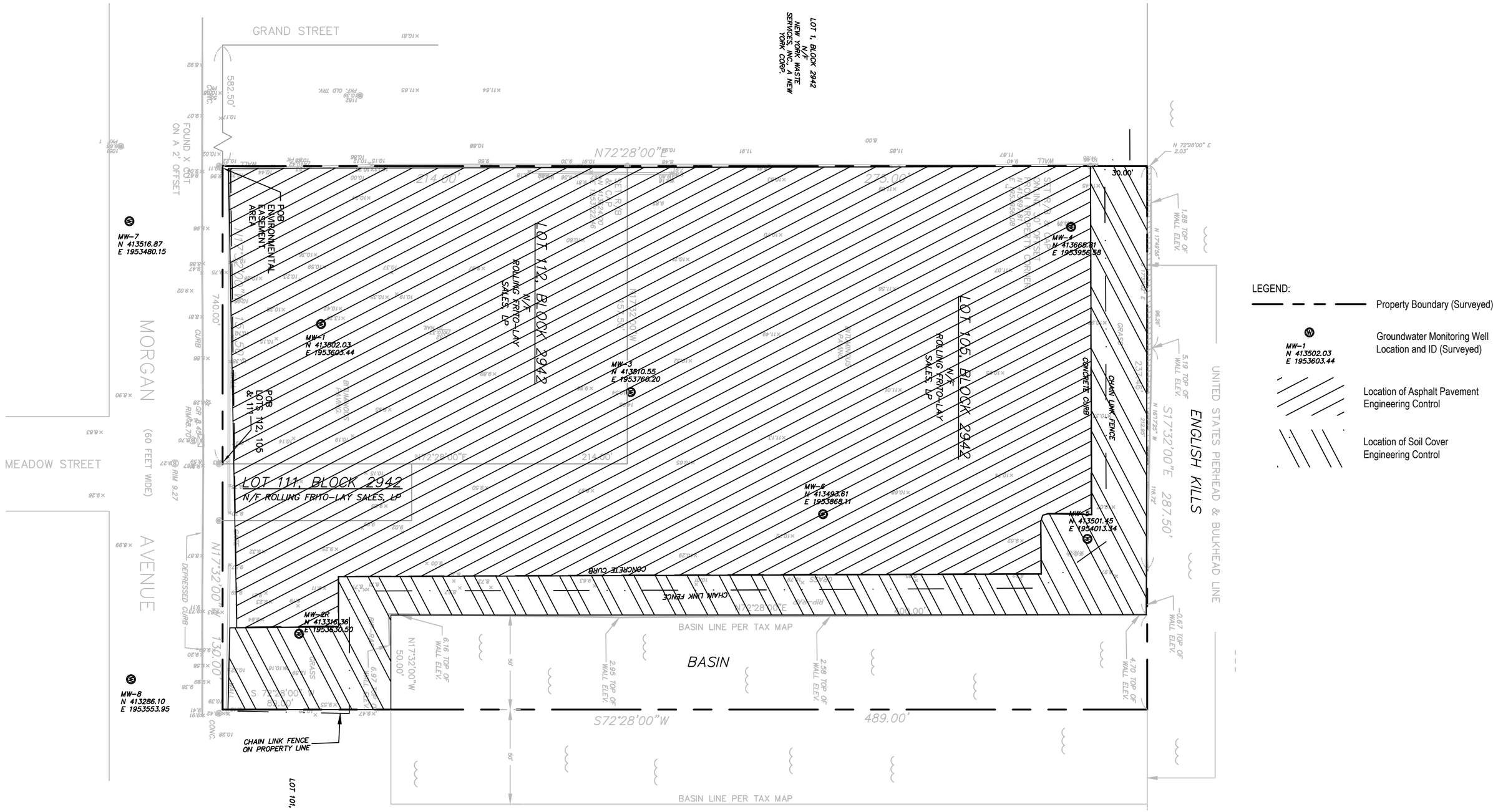
Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)
Site Layout

Job Number 86-16480
Revision A
Date 11.12.2014

Figure 2

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:44 PM Cad File No: G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 2 - Site Layout.dwg




LEGEND:

- Property Boundary (Surveyed)
- MW-1 N 413502.03 E 1953603.44 — Groundwater Monitoring Well Location and ID (Surveyed)
- Location of Asphalt Pavement Engineering Control
- Location of Soil Cover Engineering Control

0 25 50 75 100'

SCALE 1"=50' AT ORIGINAL SIZE

N

NOTES:
1. Base map based on information from field surveys conducted by Pennoni Associates Inc. and PS&S that was provided by others.

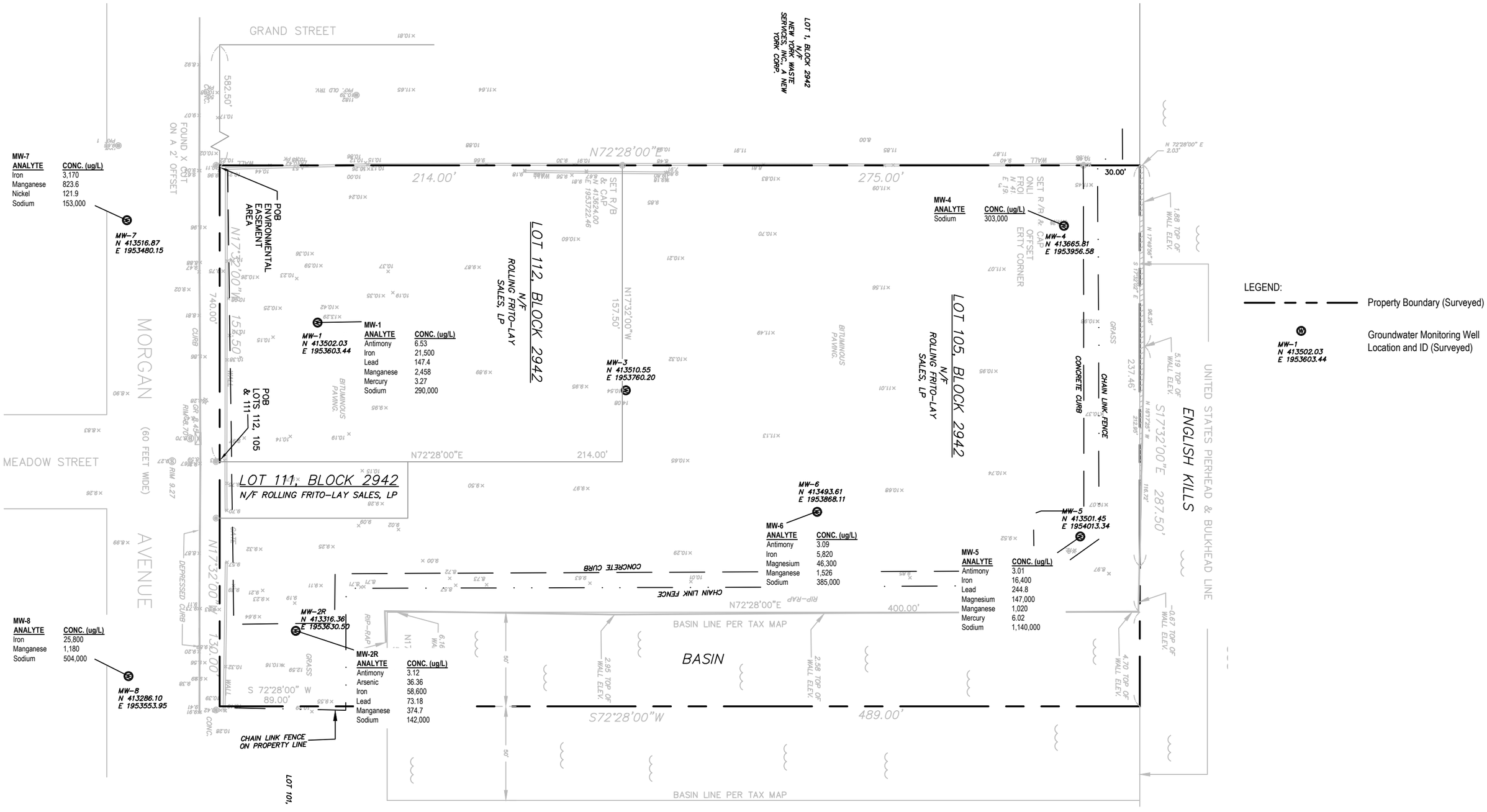
Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)
Engineering Controls

Job Number 86-16480
Revision A
Date 11.12.2014

# Figure 3

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:44 PM Cad File No: G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 3 - ECs.dwg




0 25 50 75 100'

SCALE 1"=50' AT ORIGINAL SIZE

N

NOTES:
1. Only analytes that exceed groundwater standards are shown here. For complete results, see tables in report.
2. Base map based on information from field surveys conducted by Pennoni Associates Inc. and PS&S that was provided by others.

Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)

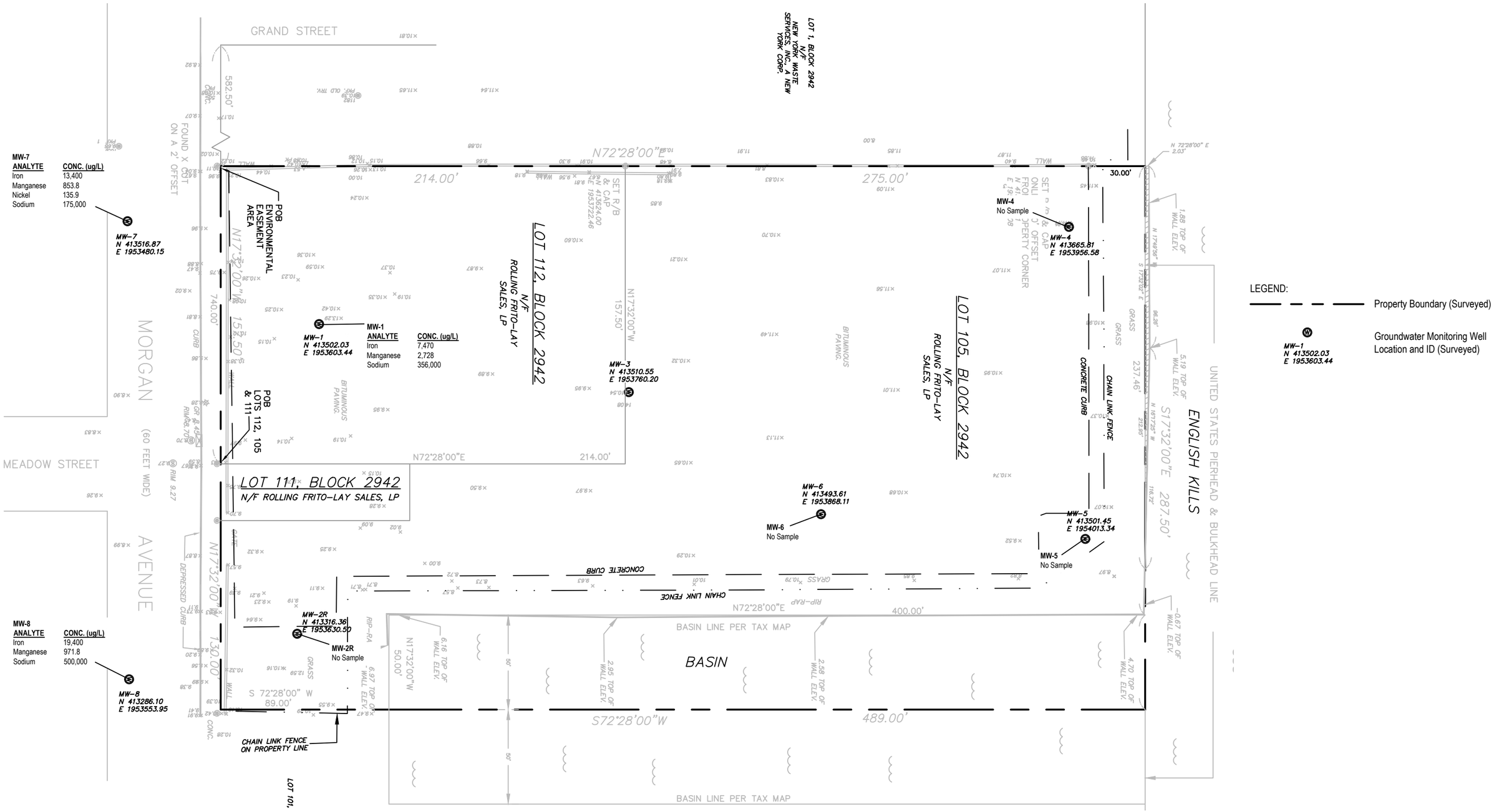
# Exceedances of Groundwater Standards - Total Metals

Job Number 86-16480
Revision A
Date 11.12.2014

# Figure 4

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:45 PM Cad File No: G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 4 - GW Exceedances Total Metals.dwg




0 25 50 75 100'

SCALE 1"=50' AT ORIGINAL SIZE

N

NOTES:
1. Only analytes that exceed groundwater standards are shown here. For complete results, see tables in report.
2. Base map based on information from field surveys conducted by Pennoni Associates Inc. and PS&S that was provided by others.

Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)

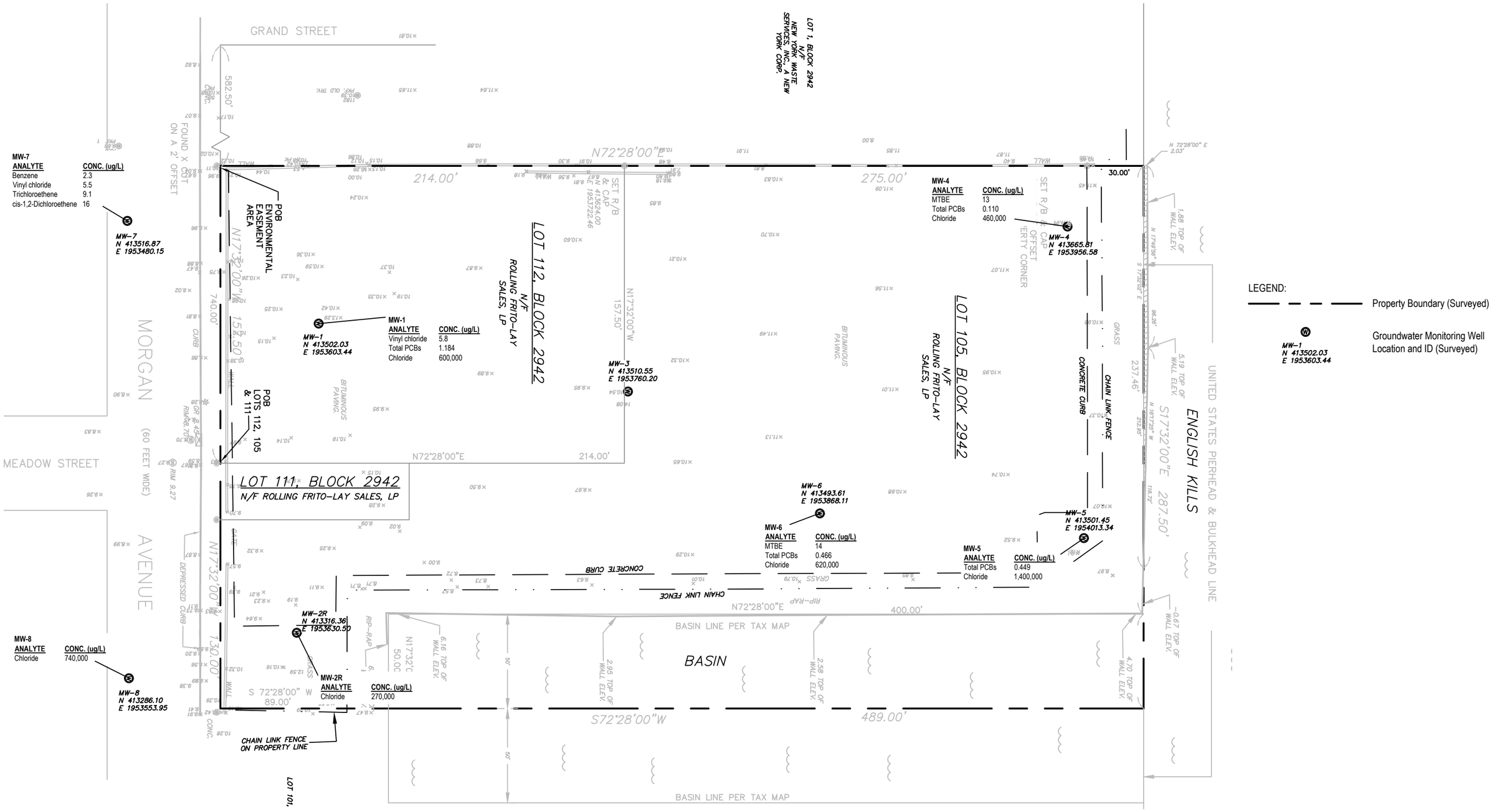
# Exceedances of Groundwater Standards - Dissolved Metals

Job Number 86-16480
Revision A
Date 11.12.2014

# Figure 5

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:45 PM Cad File No: G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 5 - GW Exceedances Dissolved Metals.dwg




0 25 50 75 100'

SCALE 1"=50' AT ORIGINAL SIZE

N

NOTES:
1. Only analytes that exceed groundwater standards are shown here. For complete results, see tables in report.
2. Base map based on information from field surveys conducted by Pennoni Associates Inc. and PS&S that was provided by others.

Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)

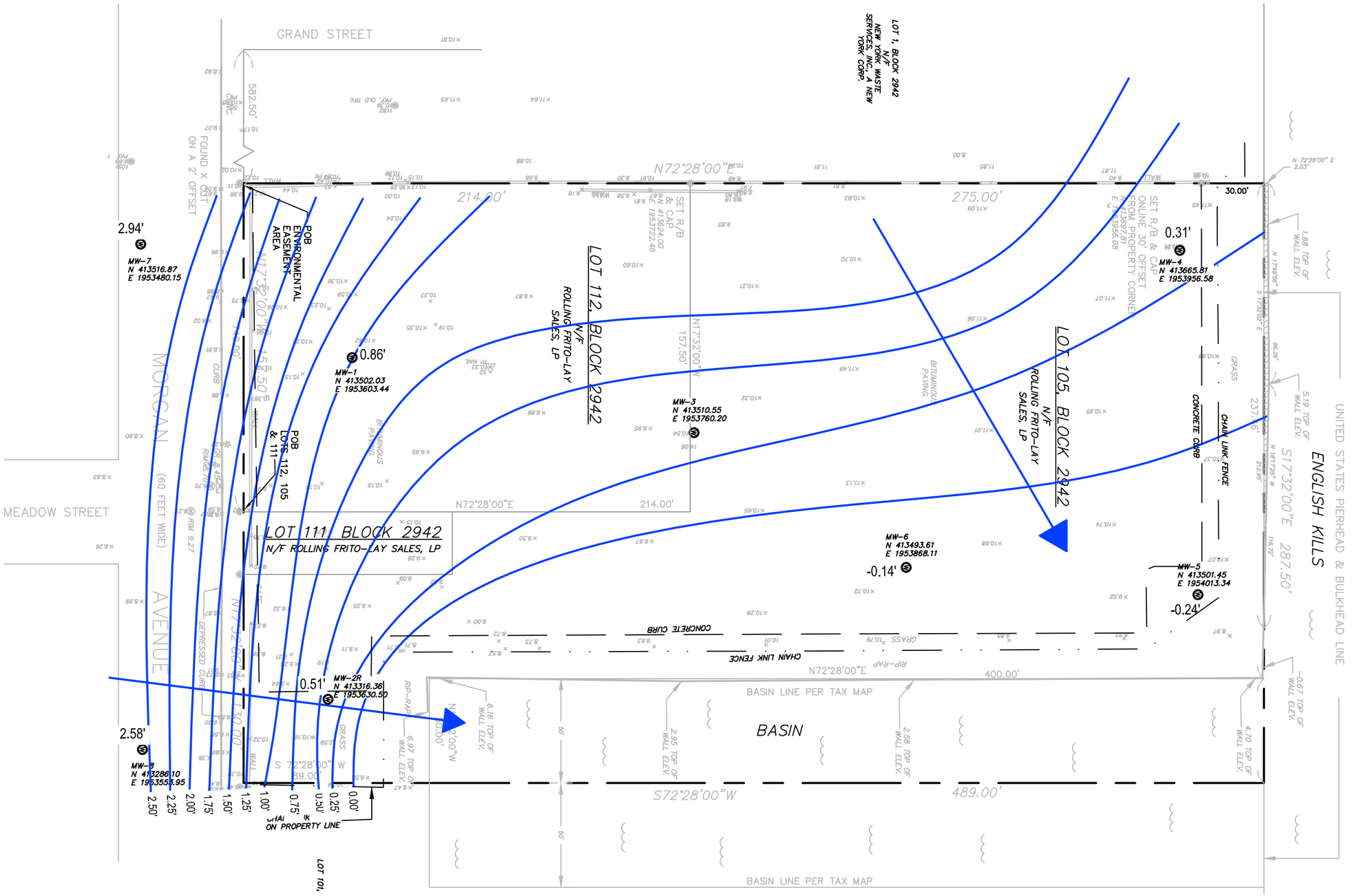
# Exceedances of Groundwater Standards - Other Analytes

Job Number 86-16480
Revision A
Date 11.12.2014

# Figure 6

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:45 PM Cad File No: G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 6 - GW Exceedances Other Analytes.dwg




0 25 50 75 100'

SCALE 1"=50' AT ORIGINAL SIZE

N

NOTES:
1. Base map based on information from field surveys conducted by Pennoni Associates Inc. and PS&S that was provided by others.

Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 6, 2013 to Nov. 22, 2014 - 202-218 Morgan Avenue BCP Site (#C224133)

# Groundwater Elevation and Presumed Flow Direction

Job Number 86-16480
Revision A
Date 11.12.2014

# Figure 7

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 2 December 2014 - 3:46 PM Cad File No: G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\Figures\Figure 7 - GW Elevation and Flow.dwg

# Tables

Table 1: (Page 1 of 1) Groundwater Elevation Data. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133.

| Monitoring Well I.D. | Date | Reference Point | Reference Elevation (feet) | DTW (feet) | DOW (feet) | Water Elevation (feet) | Well Volume (gal) |
|---|---|---|---|---|---|---|---|
| **MW-1** | 2009 | Top of PVC | 9.93 | - | - | 1.74 | - |
| | 2011 | | | - | - | 1.54 | - |
| | 5/14/2014 | | | 9.07 | 16.33 | 0.86 | 1.16 |
| **MW-2R** | 2009 | Top of PVC | 10.26 | - | - | 2.71 | - |
| | 2011 | | | - | - | 0.40 | - |
| | 5/14/2014 | | | 9.75 | 17.92 | 0.51 | 1.31 |
| **MW-4** | 2009 | Top of PVC | 10.22 | - | - | 2.04 | - |
| | 2011 | | | - | - | 0.54 | - |
| | 5/14/2014 | | | 9.91 | 16.48 | 0.31 | 1.05 |
| **MW-5** | 2009 | Top of PVC | 10.77 | - | - | 1.76 | - |
| | 2011 | | | - | - | -0.80 | - |
| | 5/14/2014 | | | 11.01 | 18.69 | -0.24 | 1.23 |
| **MW-6** | 2009 | Top of PVC | 10.22 | - | - | 1.11 | - |
| | 2011 | | | - | - | 0.80 | - |
| | 5/14/2014 | | | 10.36 | 17.05 | -0.14 | 1.07 |
| **MW-7** | 2009 | Top of PVC | 11.11 | - | - | 2.92 | - |
| | 2011 | | | - | - | 1.48 | - |
| | 5/14/2014 | | | 8.17 | 15.42 | 2.94 | 1.16 |
| **MW-8** | 2009 | Top of PVC | 11.43 | - | - | 2.50 | - |
| | 2011 | | | - | - | 2.32 | - |
| | 5/14/2014 | | | 8.85 | 14.45 | 2.58 | 0.90 |

DTW - depth to water

DOW - depth of well

DTW and DOW measurements taken prior to purging using a electronic water level meter

2009 and 2011 groundwater elevation information taken from the Site Management Plan prepared by Gannett Fleming (September 2013)

Reference elevations taken from as-built plan prepared by PS&S (August 21, 2013)

Table 2: (Page 1 of 1) Groundwater Field Parameter Data. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133.

| Well I.D. | Date | Time | Temp ( °C ) | Conductivity (mS/cm) | Salinity (%) | Dissolved Oxygen (%) | pH (units) | ORP (mV) | Turbidity (NTU) | Amount Purged (gal) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 5/14/2014 | 16:20 | 16.23 | 2.187 | 1.12 | 1.07 | 6.90 | -111.3 | 15.1 | 3.50 | Purged 3.50 gallons, water tinted black, petroleum like sheen, sulfur odor |
| | | 16:24 | 15.00 | 2.554 | 1.33 | 0.21 | 6.80 | -108.8 | 528.5 | | |
| | | 16:28 | 14.54 | 2.683 | 1.40 | 0.12 | 6.77 | -111.8 | 392.3 | | |
| | | 16:32 | 14.51 | 2.722 | 1.42 | 0.10 | 6.76 | -116.5 | 243.5 | | |
| | | 16:36 | 14.48 | 2.724 | 1.42 | 0.08 | 6.77 | -120.7 | 127.1 | | |
| | | 16:40 | 14.43 | 2.734 | 1.43 | 0.05 | 6.78 | -126.4 | 189.5 | | |
| | | 16:44 | 14.43 | 2.731 | 1.42 | 0.04 | 6.78 | -125.8 | 94.1 | | |
| MW-2R | 5/14/2014 | 13:25 | 17.15 | 1.762 | 0.88 | 1.26 | 7.53 | -134.3 | 892.4 | 5.00 | Purged 5.00 gallons, water clear, slight petroleum like sheen, slight sulfur odor |
| | | 13:29 | 15.09 | 1.534 | 0.78 | 0.20 | 7.00 | -123.7 | 703.5 | | |
| | | 13:33 | 14.59 | 1.532 | 0.78 | 0.11 | 6.94 | -118.2 | 604.9 | | |
| | | 13:37 | 14.56 | 1.543 | 0.78 | 0.30 | 6.98 | -113.1 | 138.8 | | |
| | | 13:41 | 14.61 | 1.553 | 0.79 | 0.12 | 6.97 | -114.5 | 160.1 | | |
| | | 13:45 | 14.53 | 1.569 | 0.80 | 0.07 | 6.99 | -119.6 | 136.6 | | |
| | | 13:49 | 14.49 | 1.583 | 0.80 | 0.04 | 6.99 | -121.0 | 38.3 | | |
| | | 13:53 | 14.40 | 1.607 | 0.82 | 0.03 | 6.99 | -121.4 | 15.1 | | |
| | | 13:57 | 14.38 | 1.609 | 0.82 | 0.03 | 7.00 | -121.3 | 8.4 | | |
| MW-4 | 5/14/2014 | 10:24 | 14.38 | 3.230 | 1.70 | 10.72 | 9.21 | 2.7 | 2.5 | 3.50 | Purged 3.50 gallons, water clear, no sheen, no odor |
| | | 10:28 | 13.67 | 3.174 | 1.67 | 0.06 | 10.31 | -235.9 | 127.8 | | |
| | | 10:32 | 13.66 | 3.192 | 1.68 | 0.01 | 10.74 | -247.4 | 29.1 | | |
| | | 10:36 | 13.62 | 3.164 | 1.66 | -0.04 | 11.19 | -262.1 | 8.3 | | |
| | | 10:40 | 13.67 | 3.126 | 1.64 | -0.05 | 11.29 | -263.7 | 4.7 | | |
| | | 10:44 | 13.67 | 3.080 | 1.62 | -0.06 | 11.34 | -269.2 | 3.3 | | |
| | | 10:48 | 13.69 | 3.013 | 1.58 | -0.06 | 11.33 | -271.8 | 1.9 | | |
| MW-5 | 5/14/2014 | 11:20 | 15.76 | 8.314 | 4.66 | 1.48 | 8.47 | -112.4 | 191.4 | 4.00 | Purged 4.00 gallons, water clear, no sheen, no odor |
| | | 11:24 | 13.73 | 8.224 | 4.60 | 0.29 | 7.26 | -132.2 | 56.3 | | |
| | | 11:28 | 13.55 | 8.207 | 4.58 | 0.16 | 7.10 | -155.3 | 14.6 | | |
| | | 11:32 | 13.27 | 8.271 | 4.62 | 0.08 | 7.05 | -159.1 | 8.6 | | |
| | | 11:36 | 13.38 | 8.280 | 4.63 | 0.04 | 7.03 | -158.2 | 4.3 | | |
| | | 11:40 | 13.07 | 8.328 | 4.66 | 0.01 | 7.02 | -157.7 | 2.6 | | |
| | | 11:44 | 13.09 | 8.331 | 4.66 | 0.00 | 7.02 | -156.4 | 1.7 | | |
| | | 11:48 | 13.08 | 8.336 | 4.66 | 0.00 | 7.01 | -155.0 | 1.0 | | |
| MW-6 | 5/14/2014 | 12:28 | 17.08 | 4.457 | 2.38 | 0.93 | 7.56 | -236.4 | 165.7 | 3.50 | Purged 3.50 gallons, water clear, no sheen, sulfur odor |
| | | 12:32 | 15.81 | 4.174 | 2.23 | 0.14 | 7.29 | -297.1 | 10.3 | | |
| | | 12:36 | 15.73 | 3.954 | 2.10 | 0.07 | 7.30 | -296.6 | 2.9 | | |
| | | 12:40 | 15.57 | 3.861 | 2.05 | 0.04 | 7.33 | -298.4 | 1.4 | | |
| | | 12:44 | 15.56 | 3.798 | 2.02 | 0.03 | 7.34 | -298.4 | 0.6 | | |
| | | 12:48 | 15.45 | 3.751 | 1.99 | 0.01 | 7.33 | -294.5 | 0.1 | | |
| | | 12:52 | 15.50 | 3.734 | 1.98 | 0.01 | 7.31 | -296.0 | 1.1 | | |
| MW-7 | 5/14/2014 | 14:38 | 14.73 | 1.390 | 0.70 | 0.85 | 7.54 | -116.7 | 885.7 | 3.50 | Purged 3.50 gallons, water cloudy, rusty orange color, no sheen, no odor |
| | | 14:42 | 14.68 | 1.312 | 0.66 | 0.27 | 7.22 | -109.0 | 513.7 | | |
| | | 14:46 | 13.91 | 1.331 | 0.67 | 0.13 | 7.19 | -107.8 | 447.2 | | |
| | | 14:50 | 13.88 | 1.362 | 0.69 | 0.12 | 7.20 | -109.1 | 879.7 | | |
| | | 14:54 | 13.73 | 1.407 | 0.71 | 0.07 | 7.22 | -112.8 | 313.0 | | |
| | | 14:58 | 13.74 | 1.442 | 0.73 | 0.05 | 7.24 | -116.4 | 240.5 | | |
| | | 15:02 | 13.71 | 1.480 | 0.75 | 0.04 | 7.26 | -119.3 | 226.4 | | |
| MW-8 | 5/14/2014 | 15:29 | 13.85 | 3.506 | 1.85 | 1.01 | 6.83 | -68.5 | 194.1 | 2.75 | Purged 2.75 gallons, water cloudy, rusty orange color, no sheen, no odor |
| | | 15:33 | 12.91 | 3.470 | 1.83 | 0.30 | 6.68 | -63.6 | 160.3 | | |
| | | 15:37 | 12.88 | 3.397 | 1.79 | 0.24 | 6.65 | -63.7 | 132.0 | | |
| | | 15:41 | 12.64 | 3.427 | 1.81 | 0.20 | 6.64 | -67.9 | 103.8 | | |
| | | 15:45 | 12.55 | 3.515 | 1.86 | 0.11 | 6.66 | -82.8 | 315.6 | | |
| | | 15:49 | 12.51 | 3.534 | 1.87 | 0.04 | 6.68 | -92.1 | 287.0 | | |

Field parameters collected during purging using a YSI 6920 with flow thru cell and GeoPump2 peristaltic pump

Table 3: (Page 1 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-1 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **VOCs by EPA Method 8260B** | | | R.L. | | | R.L. | |
| Methylene chloride | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethane | 5 | U | 1 | | U | 2.5 | |
| Chloroform | 7 | U | 1 | | U | 2.5 | |
| Carbon tetrachloride | 5 | U | 1 | | U | 0.5 | |
| 1,2-Dichloropropane | 1 | U | 1 | | U | 1 | |
| Dibromochloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| 1,1,2-Trichloroethane | 1 | U | 1 | | U | 1.5 | |
| Tetrachloroethene | 5 | U | 1 | | U | 0.5 | |
| Chlorobenzene | 5 | 1 | | | 0.72 | J | |
| Trichlorofluoromethane | 5 | UJ | 1 | | U | 2.5 | |
| 1,2-Dichloroethane | 0.6 | U | 0.5 | | U | 0.5 | |
| 1,1,1-Trichloroethane | 5 | U | 1 | | U | 2.5 | |
| Bromodichloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| trans-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| cis-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| Bromoform | 50 (G) | UJ | 1 | | U | 2 | |
| 1,1,2,2-Tetrachloroethane | 5 | U | 1 | | U | 0.5 | |
| Benzene | 1 | U | 0.5 | | U | 0.5 | |
| Toluene | 5 | U | 1 | | U | 2.5 | |
| Ethylbenzene | 5 | U | 1 | | U | 2.5 | |
| Chloromethane | - | U | 1 | | U | 2.5 | |
| Bromomethane | 5 | U | 1 | | U | 2.5 | |
| Vinyl chloride | 2 | **3.4** | | | **5.8** | | |
| Chloroethane | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethene | 5 | U | 1 | | U | 0.5 | |
| trans-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Trichloroethene | 5 | UJ | 1 | | 0.17 | J | |
| 1,2-Dichlorobenzene | 3 | UJ | 1 | | U | 2.5 | |
| 1,3-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| 1,4-Dichlorobenzene | 3 | UJ | 1 | | U | 2.5 | |
| Methyl tert butyl ether | 10 (G) | 1.5 | | | 4.6 | | |
| p/m-Xylene | 5 | - | | | U | 2.5 | |
| o-Xylene | 5 | - | | | U | 2.5 | |
| cis-1,2-Dichloroethene | 5 | U | 1 | | 2.1 | J | |
| Styrene | 5 | U | 1 | | U | 2.5 | |
| Dichlorodifluoromethane | 5 | U | 1 | | U | 5 | |
| Acetone | 50 (G) | U | 10 | | 2.7 | J | |
| Carbon disulfide | 60 (G) | U | 1 | | U | 5 | |
| 2-Butanone | 50 (G) | U | 1 | | U | 5 | |
| 4-Methyl-2-pentanone | - | U | 1 | | U | 5 | |
| 2-Hexanone | 50 (G) | U | 1 | | U | 5 | |
| Bromochloromethane | 5 | - | | | U | 2.5 | |
| 1,2-Dibromoethane | 5 | U | 1 | | U | 2 | |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | 1 | | U | 2.5 | |
| Isopropylbenzene | 5 | UJ | 1 | | U | 2.5 | |
| 1,2,3-Trichlorobenzene | 5 | - | | | U | 2.5 | |
| 1,2,4-Trichlorobenzene | 5 | UJ | 1 | | U | 2.5 | |
| Methyl Acetate | - | - | | | U | 2 | |
| Cyclohexane | - | U | 1 | | U | 10 | |
| 1,4-Dioxane | - | - | | | U | 250 | |
| Freon-113 | 5 | U | 1 | | U | 2.5 | |
| Methyl cyclohexane | - | U | 1 | | U | 10 | |
| Total Xylenes | 5 | UJ | 1 | | - | | |
| Total VOCs | | 5.9 | | | 16.09 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 2 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-2R | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **VOCs by EPA Method 8260B** | | | R.L. | | | R.L. | |
| Methylene chloride | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethane | 5 | U | 1 | | U | 2.5 | |
| Chloroform | 7 | U | 1 | | U | 2.5 | |
| Carbon tetrachloride | 5 | U | 1 | | U | 0.5 | |
| 1,2-Dichloropropane | 1 | U | 1 | | U | 1 | |
| Dibromochloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| 1,1,2-Trichloroethane | 1 | U | 1 | | U | 1.5 | |
| Tetrachloroethene | 5 | U | 1 | | U | 0.5 | |
| Chlorobenzene | 5 | 1 | | | U | 2.5 | |
| Trichlorofluoromethane | 5 | UJ | 1 | | U | 2.5 | |
| 1,2-Dichloroethane | 0.6 | U | 0.5 | | U | 0.5 | |
| 1,1,1-Trichloroethane | 5 | U | 1 | | U | 2.5 | |
| Bromodichloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| trans-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| cis-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| Bromoform | 50 (G) | UJ | 1 | | U | 2 | |
| 1,1,2,2-Tetrachloroethane | 5 | U | 1 | | U | 0.5 | |
| Benzene | 1 | U | 0.5 | | U | 0.5 | |
| Toluene | 5 | U | 1 | | U | 2.5 | |
| Ethylbenzene | 5 | U | 1 | | U | 2.5 | |
| Chloromethane | - | U | 1 | | U | 2.5 | |
| Bromomethane | 5 | U | 1 | | U | 2.5 | |
| Vinyl chloride | 2 | **4.7** | | | U | 1 | |
| Chloroethane | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethene | 5 | U | 1 | | U | 0.5 | |
| trans-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Trichloroethene | 5 | UJ | 1 | | U | 0.5 | |
| 1,2-Dichlorobenzene | 3 | UJ | 1 | | U | 2.5 | |
| 1,3-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| 1,4-Dichlorobenzene | 3 | UJ | 1 | | U | 2.5 | |
| Methyl tert butyl ether | 10 (G) | 1.6 | | 1.6 | J | | |
| p/m-Xylene | 5 | - | | | U | 2.5 | |
| o-Xylene | 5 | - | | | U | 2.5 | |
| cis-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Styrene | 5 | U | 1 | | U | 2.5 | |
| Dichlorodifluoromethane | 5 | U | 1 | | U | 5 | |
| Acetone | 50 (G) | U | 10 | 2.3 | J | | |
| Carbon disulfide | 60 (G) | U | 1 | | U | 5 | |
| 2-Butanone | 50 (G) | U | 1 | | U | 5 | |
| 4-Methyl-2-pentanone | - | U | 1 | | U | 5 | |
| 2-Hexanone | 50 (G) | U | 1 | | U | 5 | |
| Bromochloromethane | 5 | - | | | U | 2.5 | |
| 1,2-Dibromoethane | 5 | U | 1 | | U | 2 | |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | 1 | | U | 2.5 | |
| Isopropylbenzene | 5 | UJ | 1 | | U | 2.5 | |
| 1,2,3-Trichlorobenzene | 5 | - | | | U | 2.5 | |
| 1,2,4-Trichlorobenzene | 5 | UJ | 1 | | U | 2.5 | |
| Methyl Acetate | - | - | | | U | 2 | |
| Cyclohexane | - | U | 1 | | U | 10 | |
| 1,4-Dioxane | - | - | | | U | 250 | |
| Freon-113 | 5 | U | 1 | | U | 2.5 | |
| Methyl cyclohexane | - | U | 1 | | U | 10 | |
| Total Xylenes | 5 | UJ | 1 | - | | | |
| Total VOCs | | 7.3 | | 3.9 | | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 3 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | |
|---|---|---|---|---|---|
| | | MW-4 | | | |
| Date Sampled | | June-13 | | 5/14/2014 | |
| **VOCs by EPA Method 8260B** | | | R.L. | | R.L. |
| Methylene chloride | 5 | U | 1 | U | 2.5 |
| 1,1-Dichloroethane | 5 | U | 1 | U | 2.5 |
| Chloroform | 7 | U | 1 | U | 2.5 |
| Carbon tetrachloride | 5 | U | 1 | U | 0.5 |
| 1,2-Dichloropropane | 1 | U | 1 | U | 1 |
| Dibromochloromethane | 50 (G) | U | 1 | U | 0.5 |
| 1,1,2-Trichloroethane | 1 | U | 1 | U | 1.5 |
| Tetrachloroethene | 5 | U | 1 | U | 0.5 |
| Chlorobenzene | 5 | U | 1 | U | 2.5 |
| Trichlorofluoromethane | 5 | UJ | 1 | U | 2.5 |
| 1,2-Dichloroethane | 0.6 | U | 0.5 | U | 0.5 |
| 1,1,1-Trichloroethane | 5 | U | 1 | U | 2.5 |
| Bromodichloromethane | 50 (G) | U | 1 | U | 0.5 |
| trans-1,3-Dichloropropene | 0.4 | U | 1 | U | 0.5 |
| cis-1,3-Dichloropropene | 0.4 | U | 1 | U | 0.5 |
| Bromoform | 50 (G) | UJ | 1 | U | 2 |
| 1,1,2,2-Tetrachloroethane | 5 | U | 1 | U | 0.5 |
| Benzene | 1 | U | 0.5 | U | 0.5 |
| Toluene | 5 | U | 1 | U | 2.5 |
| Ethylbenzene | 5 | U | 1 | U | 2.5 |
| Chloromethane | - | U | 1 | U | 2.5 |
| Bromomethane | 5 | UJ | 1 | U | 2.5 |
| Vinyl chloride | 2 | U | 1 | U | 1 |
| Chloroethane | 5 | U | 1 | U | 2.5 |
| 1,1-Dichloroethene | 5 | U | 1 | U | 0.5 |
| trans-1,2-Dichloroethene | 5 | U | 1 | U | 2.5 |
| Trichloroethene | 5 | U | 1 | U | 0.5 |
| 1,2-Dichlorobenzene | 3 | U | 1 | U | 2.5 |
| 1,3-Dichlorobenzene | 3 | U | 1 | U | 2.5 |
| 1,4-Dichlorobenzene | 3 | U | 1 | U | 2.5 |
| Methyl tert butyl ether | 10 (G) | **34** | | **13** | |
| p/m-Xylene | 5 | - | | U | 2.5 |
| o-Xylene | 5 | - | | U | 2.5 |
| cis-1,2-Dichloroethene | 5 | U | 1 | U | 2.5 |
| Styrene | 5 | U | 1 | U | 2.5 |
| Dichlorodifluoromethane | 5 | UJ | 1 | U | 5 |
| Acetone | 50 (G) | 43 | | 5 | |
| Carbon disulfide | 60 (G) | U | 1 | U | 5 |
| 2-Butanone | 50 (G) | U | 1 | U | 5 |
| 4-Methyl-2-pentanone | - | U | 1 | U | 5 |
| 2-Hexanone | 50 (G) | U | 1 | U | 5 |
| Bromochloromethane | 5 | - | | U | 2.5 |
| 1,2-Dibromoethane | 5 | U | 1 | U | 2 |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | 1 | U | 2.5 |
| Isopropylbenzene | 5 | U | 1 | U | 2.5 |
| 1,2,3-Trichlorobenzene | 5 | - | | U | 2.5 |
| 1,2,4-Trichlorobenzene | 5 | UJ | 1 | U | 2.5 |
| Methyl Acetate | - | - | | U | 2 |
| Cyclohexane | - | U | 1 | U | 10 |
| 1,4-Dioxane | - | - | | U | 250 |
| Freon-113 | 5 | U | 1 | U | 2.5 |
| Methyl cyclohexane | - | U | 1 | U | 10 |
| Total Xylenes | 5 | U | 1 | - | |
| Total VOCs | | 77 | | 18 | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 4 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-5 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **VOCs by EPA Method 8260B** | | | R.L. | | | R.L. | |
| Methylene chloride | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethane | 5 | U | 1 | | U | 2.5 | |
| Chloroform | 7 | U | 1 | | U | 2.5 | |
| Carbon tetrachloride | 5 | U | 1 | | U | 0.5 | |
| 1,2-Dichloropropane | 1 | U | 1 | | U | 1 | |
| Dibromochloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| 1,1,2-Trichloroethane | 1 | U | 1 | | U | 1.5 | |
| Tetrachloroethene | 5 | U | 1 | | U | 0.5 | |
| Chlorobenzene | 5 | U | 1 | | U | 2.5 | |
| Trichlorofluoromethane | 5 | UJ | 1 | | U | 2.5 | |
| 1,2-Dichloroethane | 0.6 | U | 0.5 | | U | 0.5 | |
| 1,1,1-Trichloroethane | 5 | U | 1 | | U | 2.5 | |
| Bromodichloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| trans-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| cis-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| Bromoform | 50 (G) | UJ | 1 | | U | 2 | |
| 1,1,2,2-Tetrachloroethane | 5 | U | 1 | | U | 0.5 | |
| Benzene | 1 | U | 0.5 | | U | 0.5 | |
| Toluene | 5 | U | 1 | | U | 2.5 | |
| Ethylbenzene | 5 | U | 1 | | U | 2.5 | |
| Chloromethane | - | U | 1 | | U | 2.5 | |
| Bromomethane | 5 | UJ | 1 | | U | 2.5 | |
| Vinyl chloride | 2 | U | 1 | | U | 1 | |
| Chloroethane | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethene | 5 | U | 1 | | U | 0.5 | |
| trans-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Trichloroethene | 5 | U | 1 | | U | 0.5 | |
| 1,2-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| 1,3-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| 1,4-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| Methyl tert butyl ether | 10 (G) | **16** | | | 9.3 | | |
| p/m-Xylene | 5 | - | | | U | 2.5 | |
| o-Xylene | 5 | - | | | U | 2.5 | |
| cis-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Styrene | 5 | U | 1 | | U | 2.5 | |
| Dichlorodifluoromethane | 5 | UJ | 1 | | U | 5 | |
| Acetone | 50 (G) | U | 10 | | 2.2 | J | |
| Carbon disulfide | 60 (G) | U | 1 | | U | 5 | |
| 2-Butanone | 50 (G) | U | 1 | | U | 5 | |
| 4-Methyl-2-pentanone | - | U | 1 | | U | 5 | |
| 2-Hexanone | 50 (G) | U | 1 | | U | 5 | |
| Bromochloromethane | 5 | - | | | U | 2.5 | |
| 1,2-Dibromoethane | 5 | U | 1 | | U | 2 | |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | 1 | | U | 2.5 | |
| Isopropylbenzene | 5 | U | 1 | | U | 2.5 | |
| 1,2,3-Trichlorobenzene | 5 | - | | | U | 2.5 | |
| 1,2,4-Trichlorobenzene | 5 | UJ | 1 | | U | 2.5 | |
| Methyl Acetate | - | - | | | U | 2 | |
| Cyclohexane | - | U | 1 | | U | 10 | |
| 1,4-Dioxane | - | - | | | U | 250 | |
| Freon-113 | 5 | U | 1 | | U | 2.5 | |
| Methyl cyclohexane | - | U | 1 | | U | 10 | |
| Total Xylenes | 5 | U | 1 | | - | | |
| Total VOCs | | 16 | | | 11.5 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 5 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-6 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **VOCs by EPA Method 8260B** | | | R.L. | | | R.L. | |
| Methylene chloride | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethane | 5 | U | 1 | | U | 2.5 | |
| Chloroform | 7 | U | 1 | | U | 2.5 | |
| Carbon tetrachloride | 5 | U | 1 | | U | 0.5 | |
| 1,2-Dichloropropane | 1 | U | 1 | | U | 1 | |
| Dibromochloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| 1,1,2-Trichloroethane | 1 | U | 1 | | U | 1.5 | |
| Tetrachloroethene | 5 | U | 1 | | U | 0.5 | |
| Chlorobenzene | 5 | U | 1 | | U | 2.5 | |
| Trichlorofluoromethane | 5 | UJ | 1 | | U | 2.5 | |
| 1,2-Dichloroethane | 0.6 | U | 0.5 | | U | 0.5 | |
| 1,1,1-Trichloroethane | 5 | U | 1 | | U | 2.5 | |
| Bromodichloromethane | 50 (G) | U | 1 | | U | 0.5 | |
| trans-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| cis-1,3-Dichloropropene | 0.4 | U | 1 | | U | 0.5 | |
| Bromoform | 50 (G) | UJ | 1 | | U | 2 | |
| 1,1,2,2-Tetrachloroethane | 5 | U | 1 | | U | 0.5 | |
| Benzene | 1 | **1.1** | | | U | 0.5 | |
| Toluene | 5 | 4.4 | | | U | 2.5 | |
| Ethylbenzene | 5 | 1.3 | | | U | 2.5 | |
| Chloromethane | - | U | 1 | | U | 2.5 | |
| Bromomethane | 5 | UJ | 1 | | U | 2.5 | |
| Vinyl chloride | 2 | U | 1 | | U | 1 | |
| Chloroethane | 5 | U | 1 | | U | 2.5 | |
| 1,1-Dichloroethene | 5 | U | 1 | | U | 0.5 | |
| trans-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Trichloroethene | 5 | U | 1 | | U | 0.5 | |
| 1,2-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| 1,3-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| 1,4-Dichlorobenzene | 3 | U | 1 | | U | 2.5 | |
| Methyl tert butyl ether | 10 (G) | **16** | | | **14** | | |
| p/m-Xylene | 5 | - | | | U | 2.5 | |
| o-Xylene | 5 | - | | | U | 2.5 | |
| cis-1,2-Dichloroethene | 5 | U | 1 | | U | 2.5 | |
| Styrene | 5 | U | 1 | | U | 2.5 | |
| Dichlorodifluoromethane | 5 | UJ | 1 | | U | 5 | |
| Acetone | 50 (G) | 12 | | | 3.7 | J | |
| Carbon disulfide | 60 (G) | U | 1 | | U | 5 | |
| 2-Butanone | 50 (G) | U | 1 | | U | 5 | |
| 4-Methyl-2-pentanone | - | U | 1 | | U | 5 | |
| 2-Hexanone | 50 (G) | U | 1 | | U | 5 | |
| Bromochloromethane | 5 | - | | | U | 2.5 | |
| 1,2-Dibromoethane | 5 | U | 1 | | U | 2 | |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | 1 | | U | 2.5 | |
| Isopropylbenzene | 5 | U | 1 | | U | 2.5 | |
| 1,2,3-Trichlorobenzene | 5 | - | | | U | 2.5 | |
| 1,2,4-Trichlorobenzene | 5 | UJ | 1 | | U | 2.5 | |
| Methyl Acetate | - | - | | | U | 2 | |
| Cyclohexane | - | U | 1 | | U | 10 | |
| 1,4-Dioxane | - | - | | | U | 250 | |
| Freon-113 | 5 | U | 1 | | U | 2.5 | |
| Methyl cyclohexane | - | U | 1 | | U | 10 | |
| Total Xylenes | 5 | **5.2** | | | - | | |
| Total VOCs | | 34.8 | | | 17.7 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 6 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-7 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **VOCs by EPA Method 8260B** | | | | R.L. | | | R.L. |
| Methylene chloride | 5 | | U | 1 | | U | 2.5 |
| 1,1-Dichloroethane | 5 | | U | 1 | 0.75 | J | |
| Chloroform | 7 | | U | 1 | | U | 2.5 |
| Carbon tetrachloride | 5 | | U | 1 | | U | 0.5 |
| 1,2-Dichloropropane | 1 | | U | 1 | | U | 1 |
| Dibromochloromethane | 50 (G) | | U | 1 | | U | 0.5 |
| 1,1,2-Trichloroethane | 1 | | U | 1 | | U | 1.5 |
| Tetrachloroethene | 5 | | U | 1 | 2.2 | | |
| Chlorobenzene | 5 | 1 | | | | U | 2.5 |
| Trichlorofluoromethane | 5 | | UJ | 1 | | U | 2.5 |
| 1,2-Dichloroethane | 0.6 | | U | 0.5 | | U | 0.5 |
| 1,1,1-Trichloroethane | 5 | | U | 1 | | U | 2.5 |
| Bromodichloromethane | 50 (G) | | U | 1 | | U | 0.5 |
| trans-1,3-Dichloropropene | 0.4 | | U | 1 | | U | 0.5 |
| cis-1,3-Dichloropropene | 0.4 | | U | 1 | | U | 0.5 |
| Bromoform | 50 (G) | | UJ | 1 | | U | 2 |
| 1,1,2,2-Tetrachloroethane | 5 | | U | 1 | | U | 0.5 |
| Benzene | 1 | **3.2** | | | **2.3** | | |
| Toluene | 5 | | U | 1 | | U | 2.5 |
| Ethylbenzene | 5 | | U | 1 | | U | 2.5 |
| Chloromethane | - | | U | 1 | | U | 2.5 |
| Bromomethane | 5 | | U | 1 | | U | 2.5 |
| Vinyl chloride | 2 | **2.7** | | | **5.5** | | |
| Chloroethane | 5 | | U | 1 | | U | 2.5 |
| 1,1-Dichloroethene | 5 | | U | 1 | | U | 0.5 |
| trans-1,2-Dichloroethene | 5 | | U | 1 | | U | 2.5 |
| Trichloroethene | 5 | 1.4 | J | | **9.1** | | |
| 1,2-Dichlorobenzene | 3 | | UJ | 1 | | U | 2.5 |
| 1,3-Dichlorobenzene | 3 | | U | 1 | | U | 2.5 |
| 1,4-Dichlorobenzene | 3 | | UJ | 1 | | U | 2.5 |
| Methyl tert butyl ether | 10 (G) | | U | 0.5 | | U | 2.5 |
| p/m-Xylene | 5 | - | | | | U | 2.5 |
| o-Xylene | 5 | - | | | | U | 2.5 |
| cis-1,2-Dichloroethene | 5 | 1.2 | | | **16** | | |
| Styrene | 5 | | U | 1 | | U | 2.5 |
| Dichlorodifluoromethane | 5 | | U | 1 | | U | 5 |
| Acetone | 50 (G) | | U | 10 | 1.6 | J | |
| Carbon disulfide | 60 (G) | | U | 1 | | U | 5 |
| 2-Butanone | 50 (G) | | U | 1 | | U | 5 |
| 4-Methyl-2-pentanone | - | | U | 1 | | U | 5 |
| 2-Hexanone | 50 (G) | | U | 1 | | U | 5 |
| Bromochloromethane | 5 | - | | | | U | 2.5 |
| 1,2-Dibromoethane | 5 | | U | 1 | | U | 2 |
| 1,2-Dibromo-3-chloropropane | 0.04 | | UJ | 1 | | U | 2.5 |
| Isopropylbenzene | 5 | | UJ | 1 | | U | 2.5 |
| 1,2,3-Trichlorobenzene | 5 | - | | | | U | 2.5 |
| 1,2,4-Trichlorobenzene | 5 | | UJ | 1 | | U | 2.5 |
| Methyl Acetate | - | - | | | | U | 2 |
| Cyclohexane | - | | U | 1 | | U | 10 |
| 1,4-Dioxane | - | - | | | | U | 250 |
| Freon-113 | 5 | | U | 1 | | U | 2.5 |
| Methyl cyclohexane | - | | U | 1 | | U | 10 |
| Total Xylenes | 5 | | UJ | 1 | - | | |
| Total VOCs | | 9.5 | | | 37.45 | | |

All values reported as ug/L (parts per billion)

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(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 7 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-8 | | | | |
| Date Sampled | | June-13 | | 5/14/2014 | | |
| **VOCs by EPA Method 8260B** | | | R.L. | | | R.L. |
| Methylene chloride | 5 | U | 1 | U | | 2.5 |
| 1,1-Dichloroethane | 5 | U | 1 | U | | 2.5 |
| Chloroform | 7 | U | 1 | U | | 2.5 |
| Carbon tetrachloride | 5 | U | 1 | U | | 0.5 |
| 1,2-Dichloropropane | 1 | U | 1 | U | | 1 |
| Dibromochloromethane | 50 (G) | U | 1 | U | | 0.5 |
| 1,1,2-Trichloroethane | 1 | U | 1 | U | | 1.5 |
| Tetrachloroethene | 5 | U | 1 | U | | 0.5 |
| Chlorobenzene | 5 | U | 1 | U | | 2.5 |
| Trichlorofluoromethane | 5 | UJ | 1 | U | | 2.5 |
| 1,2-Dichloroethane | 0.6 | U | 0.5 | U | | 0.5 |
| 1,1,1-Trichloroethane | 5 | UJ | 1 | U | | 2.5 |
| Bromodichloromethane | 50 (G) | U | 1 | U | | 0.5 |
| trans-1,3-Dichloropropene | 0.4 | U | 1 | U | | 0.5 |
| cis-1,3-Dichloropropene | 0.4 | U | 1 | U | | 0.5 |
| Bromoform | 50 (G) | U | 1 | U | | 2 |
| 1,1,2,2-Tetrachloroethane | 5 | UJ | 1 | U | | 0.5 |
| Benzene | 1 | U | 0.5 | U | | 0.5 |
| Toluene | 5 | U | 1 | U | | 2.5 |
| Ethylbenzene | 5 | U | 1 | U | | 2.5 |
| Chloromethane | - | U | 1 | U | | 2.5 |
| Bromomethane | 5 | U | 1 | U | | 2.5 |
| Vinyl chloride | 2 | U | 1 | U | | 1 |
| Chloroethane | 5 | U | 1 | U | | 2.5 |
| 1,1-Dichloroethene | 5 | U | 1 | U | | 0.5 |
| trans-1,2-Dichloroethene | 5 | U | 1 | U | | 2.5 |
| Trichloroethene | 5 | UJ | 1 | U | | 0.5 |
| 1,2-Dichlorobenzene | 3 | UJ | 1 | U | | 2.5 |
| 1,3-Dichlorobenzene | 3 | U | 1 | U | | 2.5 |
| 1,4-Dichlorobenzene | 3 | UJ | 1 | U | | 2.5 |
| Methyl tert butyl ether | 10 (G) | U | 0.5 | U | | 2.5 |
| p/m-Xylene | 5 | - | | U | | 2.5 |
| o-Xylene | 5 | - | | U | | 2.5 |
| cis-1,2-Dichloroethene | 5 | U | 1 | U | | 2.5 |
| Styrene | 5 | U | 1 | U | | 2.5 |
| Dichlorodifluoromethane | 5 | U | 1 | U | | 5 |
| Acetone | 50 (G) | U | 10 | 1.4 | J | |
| Carbon disulfide | 60 (G) | U | 1 | U | | 5 |
| 2-Butanone | 50 (G) | U | 1 | U | | 5 |
| 4-Methyl-2-pentanone | - | U | 1 | U | | 5 |
| 2-Hexanone | 50 (G) | U | 1 | U | | 5 |
| Bromochloromethane | 5 | - | | U | | 2.5 |
| 1,2-Dibromoethane | 5 | U | 1 | U | | 2 |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | 1 | U | | 2.5 |
| Isopropylbenzene | 5 | U | 1 | U | | 2.5 |
| 1,2,3-Trichlorobenzene | 5 | - | | U | | 2.5 |
| 1,2,4-Trichlorobenzene | 5 | UJ | 1 | U | | 2.5 |
| Methyl Acetate | - | - | | U | | 2 |
| Cyclohexane | - | U | 1 | U | | 10 |
| 1,4-Dioxane | - | - | | U | | 250 |
| Freon-113 | 5 | U | 1 | U | | 2.5 |
| Methyl cyclohexane | - | U | 1 | U | | 10 |
| Total Xylenes | 5 | U | 1 | - | | |
| Total VOCs | | ND | | 1.4 | | |

All values reported as ug/L (parts per billion)

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(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 8 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | Duplicate | | | | |
| Date Sampled | | June-13 (MW-2R) | | 5/14/2014 (MW-5) | | |
| **VOCs by EPA Method 8260B** | | | RPD | | | RPD |
| Methylene chloride | 5 | U | NA | U | | NA |
| 1,1-Dichloroethane | 5 | U | NA | U | | NA |
| Chloroform | 7 | U | NA | U | | NA |
| Carbon tetrachloride | 5 | U | NA | U | | NA |
| 1,2-Dichloropropane | 1 | U | NA | U | | NA |
| Dibromochloromethane | 50 (G) | U | NA | U | | NA |
| 1,1,2-Trichloroethane | 1 | U | NA | U | | NA |
| Tetrachloroethene | 5 | U | NA | U | | NA |
| Chlorobenzene | 5 | U | 0.00% | U | | NA |
| Trichlorofluoromethane | 5 | UJ | NA | U | | NA |
| 1,2-Dichloroethane | 0.6 | U | NA | U | | NA |
| 1,1,1-Trichloroethane | 5 | UJ | NA | U | | NA |
| Bromodichloromethane | 50 (G) | U | NA | U | | NA |
| trans-1,3-Dichloropropene | 0.4 | U | NA | U | | NA |
| cis-1,3-Dichloropropene | 0.4 | U | NA | U | | NA |
| Bromoform | 50 (G) | U | NA | U | | NA |
| 1,1,2,2-Tetrachloroethane | 5 | UJ | NA | U | | NA |
| Benzene | 1 | U | NA | U | | NA |
| Toluene | 5 | U | NA | U | | NA |
| Ethylbenzene | 5 | U | NA | U | | NA |
| Chloromethane | - | U | NA | U | | NA |
| Bromomethane | 5 | U | NA | U | | NA |
| Vinyl chloride | 2 | **6.2** | 27.52% | U | | NA |
| Chloroethane | 5 | U | NA | U | | NA |
| 1,1-Dichloroethene | 5 | U | NA | U | | NA |
| trans-1,2-Dichloroethene | 5 | U | NA | U | | NA |
| Trichloroethene | 5 | UJ | NA | U | | NA |
| 1,2-Dichlorobenzene | 3 | UJ | NA | U | | NA |
| 1,3-Dichlorobenzene | 3 | U | NA | U | | NA |
| 1,4-Dichlorobenzene | 3 | UJ | NA | U | | NA |
| Methyl tert butyl ether | 10 (G) | U | 104.76% | 10 | | 7.25% |
| p/m-Xylene | 5 | - | | U | | NA |
| o-Xylene | 5 | - | | U | | NA |
| cis-1,2-Dichloroethene | 5 | U | NA | U | | NA |
| Styrene | 5 | U | NA | U | | NA |
| Dichlorodifluoromethane | 5 | U | NA | U | | NA |
| Acetone | 50 (G) | U | NA | 2.7 | J | 20.41% |
| Carbon disulfide | 60 (G) | U | NA | U | | NA |
| 2-Butanone | 50 (G) | U | NA | U | | NA |
| 4-Methyl-2-pentanone | - | U | NA | U | | NA |
| 2-Hexanone | 50 (G) | U | NA | U | | NA |
| Bromochloromethane | 5 | - | | U | | NA |
| 1,2-Dibromoethane | 5 | U | NA | U | | NA |
| 1,2-Dibromo-3-chloropropane | 0.04 | UJ | NA | U | | NA |
| Isopropylbenzene | 5 | U | NA | U | | NA |
| 1,2,3-Trichlorobenzene | 5 | - | | U | | NA |
| 1,2,4-Trichlorobenzene | 5 | UJ | NA | U | | NA |
| Methyl Acetate | - | - | | U | | NA |
| Cyclohexane | - | U | NA | U | | NA |
| 1,4-Dioxane | - | - | | U | | NA |
| Freon-113 | 5 | U | NA | U | | NA |
| Methyl cyclohexane | - | U | NA | U | | NA |
| Total Xylenes | 5 | U | NA | - | | |
| Total VOCs | | 6.2 | | 12.7 | | |

All values reported as ug/L (parts per billion)

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(G) - Guidance value

Baseline data was collected on 6/11/2013 and 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NS - Not sampled

R.L. - Laboratory Reporting Limit

RPD - Relative Percent Difference between the duplicate and parent sample concentrations. When one sample is non-detect, the laboratory detection limit is used as the concentration for the calculation.

$$RPD = \frac{2(\text{Sample Value} - \text{Duplicate Sample Value})}{(\text{Sample Value} + \text{Duplicate Sample Value})}$$

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 9 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-1 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. |
| Aluminum | - | 220 | | | 2,710 | | |
| Antimony | 3 | | U | 12 | **6.53** | | |
| Arsenic | 25 | | U | 8 | 4.26 | | |
| Barium | 1,000 | 180 | | | 218.7 | | |
| Beryllium | 3 (G) | | U | 4 | 0.17 | J | |
| Cadmium | 5 | | U | 4 | 0.83 | | |
| Calcium | - | 210,000 | | | 166,000 | | |
| Chromium | 50 | | U | 50 | 35.47 | | |
| Cobalt | - | | U | 20 | 3.58 | | |
| Copper | 200 | | U | 50 | 66.06 | | |
| Iron | 300 | **4,100** | | | **21,500** | | |
| Lead | 25 | 6 | | | **147.4** | | |
| Magnesium | 35,000 (G) | **36,000** | | | 29,100 | | |
| Manganese | 300 | **3,000** | | | **2,458** | | |
| Mercury | 0.7 | | U | 1 | **3.27** | | |
| Nickel | 100 | | U | 50 | 30.45 | | |
| Potassium | - | 18,000 | | | 13,900 | | |
| Selenium | 10 | | U | 40 | 1.03 | J | |
| Silver | 50 | | U | 20 | 0.66 | | |
| Sodium | 20,000 | **220,000** | **J** | | **290,000** | | |
| Thallium | 0.5 (G) | | U | 10 | 0.04 | J | |
| Vanadium | - | | U | 50 | 9.55 | | |
| Zinc | 2,000 (G) | | U | 50 | 298.2 | | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | 180 | 9.6 | J | |
| Antimony | 3 | | U | 12 | 0.17 | J | |
| Arsenic | 25 | 8.3 | | | 1.68 | | |
| Barium | 1,000 | 140 | | | 175.8 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | | U | 0.2 |
| Calcium | - | 180,000 | | | 193,000 | | |
| Chromium | 50 | | U | 50 | 3.34 | | |
| Cobalt | - | | U | 20 | 0.82 | | |
| Copper | 200 | | U | 50 | 0.64 | J | |
| Iron | 300 | **760** | | | **7,470** | | |
| Lead | 25 | | U | 4 | | U | 1 |
| Magnesium | 35,000 (G) | 30,000 | | | 27,300 | | |
| Manganese | 300 | **2,500** | | | **2,728** | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | | U | 50 | 7.43 | | |
| Potassium | - | 15,000 | | | 14,200 | | |
| Selenium | 10 | | U | 40 | 1.29 | J | |
| Silver | 50 | | U | 20 | | U | 0.4 |
| Sodium | 20,000 | **190,000** | **J** | | **356,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | 0.35 | J | |
| Zinc | 2,000 (G) | | U | 50 | 2.48 | J | |

All values reported as ug/L (parts per billion)

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Baseline data was collected on 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

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( - ) - No standard established or no sample analyzed for specific analyte

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 10 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | MW-2R | | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. | |
| Aluminum | - | 4,200 | J | | 404 | | | |
| Antimony | 3 | | U | 12 | **3.12** | | | |
| Arsenic | 25 | | U | 8 | **36.36** | | | |
| Barium | 1,000 | 200 | | | 192.8 | | | |
| Beryllium | 3 (G) | | U | 4 | 0.1 | J | | |
| Cadmium | 5 | | U | 4 | 0.19 | J | | |
| Calcium | - | 320,000 | | | 88,100 | | | |
| Chromium | 50 | | U | 50 | 10.5 | | | |
| Cobalt | - | | U | 20 | 1.18 | | | |
| Copper | 200 | | U | 50 | 20.21 | | | |
| Iron | 300 | **13,000** | **J** | | **58,600** | | | |
| Lead | 25 | **120** | **J** | | **73.18** | | | |
| Magnesium | 35,000 (G) | **140,000** | | | 33,900 | | | |
| Manganese | 300 | **900** | | | **374.7** | | | |
| Mercury | 0.7 | | U | 1 | 0.38 | | | |
| Nickel | 100 | | U | 50 | 3.41 | | | |
| Potassium | - | 55,000 | | | 14,400 | | | |
| Selenium | 10 | | U | 40 | 0.53 | J | | |
| Silver | 50 | | U | 20 | | U | 0.4 | |
| Sodium | 20,000 | **770,000** | **J** | | **142,000** | | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 | |
| Vanadium | - | | U | 50 | 6.59 | | | |
| Zinc | 2,000 (G) | 120 | | | 68.19 | | | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | | |
| Aluminum | - | | U | 180 | - | | | |
| Antimony | 3 | | U | 12 | - | | | |
| Arsenic | 25 | | U | 8 | - | | | |
| Barium | 1,000 | 160 | | | - | | | |
| Beryllium | 3 (G) | | U | 4 | - | | | |
| Cadmium | 5 | | U | 4 | - | | | |
| Calcium | - | 320,000 | | | - | | | |
| Chromium | 50 | | U | 50 | - | | | |
| Cobalt | - | | U | 20 | - | | | |
| Copper | 200 | | U | 50 | - | | | |
| Iron | 300 | **870** | | | - | | | |
| Lead | 25 | | U | 4 | - | | | |
| Magnesium | 35,000 (G) | **140,000** | | | - | | | |
| Manganese | 300 | **830** | | | - | | | |
| Mercury | 0.7 | | U | 1 | - | | | |
| Nickel | 100 | | U | 50 | - | | | |
| Potassium | - | 55,000 | | | - | | | |
| Selenium | 10 | | U | 40 | - | | | |
| Silver | 50 | | U | 20 | - | | | |
| Sodium | 20,000 | **760,000** | **J** | | - | | | |
| Thallium | 0.5 (G) | | U | 10 | - | | | |
| Vanadium | - | | U | 50 | - | | | |
| Zinc | 2,000 (G) | | U | 50 | - | | | |

All values reported as ug/L (parts per billion)

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R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 11 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-4 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. |
| Aluminum | - | 250 | | | 103 | | |
| Antimony | 3 | | U | 12 | 2.91 | | |
| Arsenic | 25 | | U | 8 | 9.74 | | |
| Barium | 1,000 | 660 | | | 92.03 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | 0.05 | J | |
| Calcium | - | 520,000 | J | | 272,000 | | |
| Chromium | 50 | | U | 50 | 0.77 | J | |
| Cobalt | - | | U | 20 | 0.36 | | |
| Copper | 200 | | U | 50 | 1.12 | J | |
| Iron | 300 | **650** | | | 186 | | |
| Lead | 25 | 9 | | | 3.12 | | |
| Magnesium | 35,000 (G) | 8,400 | J | | 6,600 | | |
| Manganese | 300 | 100 | | | 5.31 | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | | U | 50 | 3.56 | | |
| Potassium | - | 64,000 | | | 70,700 | | |
| Selenium | 10 | | U | 40 | 0.55 | J | |
| Silver | 50 | | U | 20 | | U | 0.4 |
| Sodium | 20,000 | **250,000** | **J** | | **303,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | 0.92 | J | |
| Zinc | 2,000 (G) | | U | 50 | 13.78 | | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | 180 | - | | |
| Antimony | 3 | | U | 12 | - | | |
| Arsenic | 25 | | U | 8 | - | | |
| Barium | 1,000 | 620 | | | - | | |
| Beryllium | 3 (G) | | U | 4 | - | | |
| Cadmium | 5 | | U | 4 | - | | |
| Calcium | - | 440,000 | J | | - | | |
| Chromium | 50 | | U | 50 | - | | |
| Cobalt | - | | U | 20 | - | | |
| Copper | 200 | | U | 50 | - | | |
| Iron | 300 | | U | 280 | - | | |
| Lead | 25 | | U | 4 | - | | |
| Magnesium | 35,000 (G) | | UJ | 2,000 | - | | |
| Manganese | 300 | | U | 40 | - | | |
| Mercury | 0.7 | | U | 1 | - | | |
| Nickel | 100 | | U | 50 | - | | |
| Potassium | - | 65,000 | | | - | | |
| Selenium | 10 | | U | 40 | - | | |
| Silver | 50 | | U | 20 | - | | |
| Sodium | 20,000 | **250,000** | **J** | | - | | |
| Thallium | 0.5 (G) | | U | 10 | - | | |
| Vanadium | - | | U | 50 | - | | |
| Zinc | 2,000 (G) | | U | 50 | - | | |

All values reported as ug/L (parts per billion)

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R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 12 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification: MW-5 | | | | | |
|---|---|---|---|---|---|---|---|
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. |
| Aluminum | - | | U | 180 | 2,380 | | |
| Antimony | 3 | | U | 12 | **3.01** | | |
| Arsenic | 25 | 25 | | | 11.91 | | |
| Barium | 1,000 | 56 | | | 126.4 | | |
| Beryllium | 3 (G) | | U | 4 | 0.12 | J | |
| Cadmium | 5 | | U | 4 | 1.56 | | |
| Calcium | - | 210,000 | J | | 243,000 | | |
| Chromium | 50 | | U | 50 | 8.36 | | |
| Cobalt | - | | U | 20 | 3.84 | | |
| Copper | 200 | | U | 50 | 49.9 | | |
| Iron | 300 | **4,000** | | | **16,400** | | |
| Lead | 25 | 6 | | | **244.8** | | |
| Magnesium | 35,000 (G) | **120,000** | **J** | | **147,000** | | |
| Manganese | 300 | **950** | | | **1,020** | | |
| Mercury | 0.7 | | U | 1 | **6.02** | | |
| Nickel | 100 | | U | 50 | 26.93 | | |
| Potassium | - | 73,000 | | | 75,300 | | |
| Selenium | 10 | | U | 40 | 0.77 | J | |
| Silver | 50 | | U | 20 | 0.17 | J | |
| Sodium | 20,000 | **740,000** | **J** | | **1,140,000** | | |
| Thallium | 0.5 (G) | | U | 10 | 0.06 | J | |
| Vanadium | - | | U | 50 | 12.03 | | |
| Zinc | 2,000 (G) | | U | 50 | 736.6 | | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | 180 | - | | |
| Antimony | 3 | | U | 12 | - | | |
| Arsenic | 25 | 10 | | | - | | |
| Barium | 1,000 | 54 | | | - | | |
| Beryllium | 3 (G) | | U | 4 | - | | |
| Cadmium | 5 | | U | 4 | - | | |
| Calcium | - | 220,000 | J | | - | | |
| Chromium | 50 | | U | 50 | - | | |
| Cobalt | - | | U | 20 | - | | |
| Copper | 200 | | U | 50 | - | | |
| Iron | 300 | **370** | | | - | | |
| Lead | 25 | 4 | | | - | | |
| Magnesium | 35,000 (G) | **120,000** | **J** | | - | | |
| Manganese | 300 | **970** | | | - | | |
| Mercury | 0.7 | | U | 1 | - | | |
| Nickel | 100 | | U | 50 | - | | |
| Potassium | - | 77,000 | | | - | | |
| Selenium | 10 | | U | 40 | - | | |
| Silver | 50 | | U | 20 | - | | |
| Sodium | 20,000 | **760,000** | **J** | | - | | |
| Thallium | 0.5 (G) | | U | 10 | - | | |
| Vanadium | - | | U | 50 | - | | |
| Zinc | 2,000 (G) | | U | 50 | - | | |

All values reported as ug/L (parts per billion)

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R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 13 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-6 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. |
| Aluminum | - | | U | 180 | 137 | | |
| Antimony | 3 | | U | 12 | **3.09** | | |
| Arsenic | 25 | 14 | | | 7.55 | | |
| Barium | 1,000 | 140 | | | 104.8 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | 0.93 | | |
| Calcium | - | 360,000 | J | | 292,000 | | |
| Chromium | 50 | | U | 50 | 3.97 | | |
| Cobalt | - | | U | 20 | 4.53 | | |
| Copper | 200 | | U | 50 | 3.64 | | |
| Iron | 300 | **650** | | | **5,820** | | |
| Lead | 25 | 10 | | | 9.28 | | |
| Magnesium | 35,000 (G) | **47,000** | **J** | | **46,300** | | |
| Manganese | 300 | **640** | | | **1,526** | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | | U | 50 | 22.81 | | |
| Potassium | - | 66,000 | | | 61,100 | | |
| Selenium | 10 | | U | 40 | 0.51 | J | |
| Silver | 50 | | U | 20 | | U | 0.4 |
| Sodium | 20,000 | **410,000** | **J** | | **385,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | 2.66 | J | |
| Zinc | 2,000 (G) | | U | 50 | 819.6 | | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | 180 | - | | |
| Antimony | 3 | | U | 12 | - | | |
| Arsenic | 25 | 10 | | | - | | |
| Barium | 1,000 | 130 | | | - | | |
| Beryllium | 3 (G) | | U | 4 | - | | |
| Cadmium | 5 | | U | 4 | - | | |
| Calcium | - | 340,000 | J | | - | | |
| Chromium | 50 | | U | 50 | - | | |
| Cobalt | - | | U | 20 | - | | |
| Copper | 200 | | U | 50 | - | | |
| Iron | 300 | **370** | | | - | | |
| Lead | 25 | 5 | | | - | | |
| Magnesium | 35,000 (G) | **46,000** | **J** | | - | | |
| Manganese | 300 | **630** | | | - | | |
| Mercury | 0.7 | | U | 1 | - | | |
| Nickel | 100 | | U | 50 | - | | |
| Potassium | - | 65,000 | | | - | | |
| Selenium | 10 | | U | 40 | - | | |
| Silver | 50 | | U | 20 | - | | |
| Sodium | 20,000 | **400,000** | **J** | | - | | |
| Thallium | 0.5 (G) | | U | 10 | - | | |
| Vanadium | - | | U | 50 | - | | |
| Zinc | 2,000 (G) | | U | 50 | - | | |

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Table 3: (Page 14 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | MW-7 | | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. |
| Aluminum | - | | U | 180 | 2.89 | J | |
| Antimony | 3 | | U | 12 | 0.52 | J | |
| Arsenic | 25 | | U | 8 | 1.4 | | |
| Barium | 1,000 | 150 | | | 85.68 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | | U | 0.2 |
| Calcium | - | 110,000 | | | 109,000 | | |
| Chromium | 50 | | U | 50 | 0.99 | J | |
| Cobalt | - | | U | 20 | 1.15 | | |
| Copper | 200 | | U | 50 | 1.13 | J | |
| Iron | 300 | **6,400** | | | **3,170** | | |
| Lead | 25 | | U | 4 | | U | 1 |
| Magnesium | 35,000 (G) | 7,300 | | | 7,040 | | |
| Manganese | 300 | **830** | | | **823.6** | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | 100 | | | **121.9** | | |
| Potassium | - | 13,000 | | | 9,020 | | |
| Selenium | 10 | | U | 40 | | U | 5 |
| Silver | 50 | | U | 20 | | U | 0.4 |
| Sodium | 20,000 | **330,000** | **J** | | **153,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | | U | 0.5 |
| Zinc | 2,000 (G) | | U | 50 | 9.03 | J | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | 180 | 68.3 | | |
| Antimony | 3 | | U | 12 | 0.75 | J | |
| Arsenic | 25 | | U | 8 | 5.08 | | |
| Barium | 1,000 | 150 | | | 119.3 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | 0.05 | J | |
| Calcium | - | 130,000 | | | 118,000 | | |
| Chromium | 50 | | U | 50 | 23.34 | | |
| Cobalt | - | | U | 20 | 1.28 | | |
| Copper | 200 | | U | 50 | 1.31 | | |
| Iron | 300 | **980** | | | **13,400** | | |
| Lead | 25 | | U | 4 | 2.24 | | |
| Magnesium | 35,000 (G) | 8,500 | | | 8,240 | | |
| Manganese | 300 | **950** | | | **853.8** | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | **110** | | | **135.9** | | |
| Potassium | - | 15,000 | | | 10,400 | | |
| Selenium | 10 | | U | 40 | 0.59 | J | |
| Silver | 50 | | U | 20 | 0.13 | J | |
| Sodium | 20,000 | **380,000** | **J** | | **175,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | 0.54 | J | |
| Zinc | 2,000 (G) | | U | 50 | 6.31 | J | |

All values reported as ug/L (parts per billion)

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Table 3: (Page 15 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification MW-8 | | | | | |
|---|---|---|---|---|---|---|---|
| Date Sampled | | June-13 | | | 5/14/2014 | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | R.L. | | | R.L. |
| Aluminum | - | 220 | | | 230 | | |
| Antimony | 3 | | U | 12 | 0.5 | J | |
| Arsenic | 25 | | U | 8 | 0.39 | J | |
| Barium | 1,000 | 270 | | | 376.1 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | 0.65 | | |
| Calcium | - | 150,000 | | | 221,000 | | |
| Chromium | 50 | | U | 50 | 1.29 | | |
| Cobalt | - | | U | 20 | 0.21 | | |
| Copper | 200 | | U | 50 | 1.36 | J | |
| Iron | 300 | **13,000** | | | **25,800** | | |
| Lead | 25 | 7.8 | | | 2.72 | | |
| Magnesium | 35,000 (G) | 7,700 | | | 10,000 | | |
| Manganese | 300 | **780** | | | **1,180** | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | | U | 50 | 0.93 | | |
| Potassium | - | 18,000 | | | 15,900 | | |
| Selenium | 10 | | U | 40 | | U | 5 |
| Silver | 50 | | U | 20 | | U | 0.4 |
| Sodium | 20,000 | **420,000** | **J** | | **504,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | 2.15 | J | |
| Zinc | 2,000 (G) | | U | 50 | 6.77 | J | |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | 180 | 3.95 | J | |
| Antimony | 3 | | U | 12 | 0.19 | J | |
| Arsenic | 25 | | U | 8 | 0.89 | | |
| Barium | 1,000 | 200 | | | 366.9 | | |
| Beryllium | 3 (G) | | U | 4 | | U | 0.5 |
| Cadmium | 5 | | U | 4 | | U | 0.2 |
| Calcium | - | 160,000 | | | 217,000 | | |
| Chromium | 50 | | U | 50 | 1.56 | | |
| Cobalt | - | | U | 20 | 0.33 | J | |
| Copper | 200 | | U | 50 | 0.68 | J | |
| Iron | 300 | **1,200** | | | **19,400** | | |
| Lead | 25 | | U | 4 | | U | 1 |
| Magnesium | 35,000 (G) | 8,200 | | | 11,600 | | |
| Manganese | 300 | **810** | | | **971.8** | | |
| Mercury | 0.7 | | U | 1 | | U | 0.2 |
| Nickel | 100 | | U | 50 | 3.29 | | |
| Potassium | - | 19,000 | | | 17,800 | | |
| Selenium | 10 | | U | 40 | 1.08 | J | |
| Silver | 50 | | U | 20 | | U | 0.4 |
| Sodium | 20,000 | **450,000** | **J** | | **500,000** | | |
| Thallium | 0.5 (G) | | U | 10 | | U | 0.5 |
| Vanadium | - | | U | 50 | 0.48 | J | |
| Zinc | 2,000 (G) | | U | 50 | 3.82 | J | |

All values reported as ug/L (parts per billion)

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**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 16 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | | |
|---|---|---|---|---|---|---|---|
| | | DUPLICATE | | | | | |
| Date Sampled | | June-13 (MW-2R) | | | 5/14/2014 (MW-5) | | |
| **Total Metals by EPA Methods 6020A and 7470A** | | | | RPD | | | RPD |
| Aluminum | - | 1,700 | J | 84.75% | 4,070 | | 52.40% |
| Antimony | 3 | | U | NA | **4.21** | | 33.24% |
| Arsenic | 25 | | U | NA | 19.91 | | 50.28% |
| Barium | 1,000 | 160 | | 22.22% | 167.5 | | 27.97% |
| Beryllium | 3 (G) | | U | NA | 0.21 | J | 54.55% |
| Cadmium | 5 | | U | NA | 2.45 | | 44.39% |
| Calcium | - | 280,000 | | 13.33% | 240,000 | | 1.24% |
| Chromium | 50 | | U | NA | 14.57 | | 54.16% |
| Cobalt | - | | U | NA | 6.66 | | 53.71% |
| Copper | 200 | | U | NA | 88.29 | | 55.56% |
| Iron | 300 | **9,000** | **J** | 36.36% | **30,600** | | 60.43% |
| Lead | 25 | **49** | **J** | 84.02% | **375.6** | | 42.17% |
| Magnesium | 35,000 (G) | **120,000** | | 15.38% | **137,000** | | 7.04% |
| Manganese | 300 | **790** | | 13.02% | **1,016** | | 0.39% |
| Mercury | 0.7 | | U | NA | **12.5** | | 69.98% |
| Nickel | 100 | | U | NA | 45.52 | | 51.32% |
| Potassium | - | 48,000 | | 13.59% | 70,000 | | 7.30% |
| Selenium | 10 | | U | NA | 1.18 | J | 42.05% |
| Silver | 50 | | U | NA | 0.33 | J | 64.00% |
| Sodium | 20,000 | **660,000** | **J** | 15.38% | **1,130,000** | | 0.88% |
| Thallium | 0.5 (G) | | U | NA | 0.11 | J | 58.82% |
| Vanadium | - | | U | NA | 22.13 | | 59.13% |
| Zinc | 2,000 (G) | 76 | | 44.90% | 1,320 | | 56.73% |
| **Dissolved Metals by EPA Methods 6020A and 7470A** | | | | | | | |
| Aluminum | - | | U | NA | - | | |
| Antimony | 3 | | U | NA | - | | |
| Arsenic | 25 | | U | NA | - | | |
| Barium | 1,000 | 160 | | 0.00% | - | | |
| Beryllium | 3 (G) | | U | NA | - | | |
| Cadmium | 5 | | U | NA | - | | |
| Calcium | - | 310,000 | | 3.17% | - | | |
| Chromium | 50 | | U | NA | - | | |
| Cobalt | - | | U | NA | - | | |
| Copper | 200 | | U | NA | - | | |
| Iron | 300 | **750** | | 14.81% | - | | |
| Lead | 25 | | U | NA | - | | |
| Magnesium | 35,000 (G) | **140,000** | | 0.00% | - | | |
| Manganese | 300 | **860** | | 3.55% | - | | |
| Mercury | 0.7 | | U | NA | - | | |
| Nickel | 100 | | U | NA | - | | |
| Potassium | - | 54,000 | | 1.83% | - | | |
| Selenium | 10 | | U | NA | - | | |
| Silver | 50 | | U | NA | - | | |
| Sodium | 20,000 | **750,000** | **J** | 1.32% | - | | |
| Thallium | 0.5 (G) | | U | NA | - | | |
| Vanadium | - | | U | NA | - | | |
| Zinc | 2,000 (G) | | U | NA | - | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline data was collected on 6/12/2013 by others, following completion of remedial activities

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

NA - Not Applicable

R.L. - Laboratory Reporting Limit

RPD - Relative Percent Difference between the duplicate and parent sample concentrations. When one sample is non-detect, the laboratory detection limit is used as the concentration for the calculation.

$$RPD = \frac{2(\text{Sample Value} - \text{Duplicate Sample Value})}{(\text{Sample Value} + \text{Duplicate Sample Value})}$$

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 17 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-1 | | | | |
| Date Sampled | | June-13 | | 5/14/2014 | | |
| **PCBs by EPA Method 8082A** | | | R.L. | | | R.L. |
| Aroclor 1016 | | U | 0.05 | U | | 0.083 |
| Aroclor 1221 | | U | 0.05 | U | | 0.083 |
| Aroclor 1232 | | U | 0.05 | U | | 0.083 |
| Aroclor 1242 | | U | 0.05 | U | | 0.083 |
| Aroclor 1248 | | U | 0.05 | 0.768 | | |
| Aroclor 1254 | | U | 0.05 | 0.416 | | |
| Aroclor 1260 | | U | 0.05 | U | | 0.083 |
| Aroclor 1262 | | - | | U | | 0.083 |
| Aroclor 1268 | | - | | U | | 0.083 |
| Total PCBs | 0.09 | ND | | **1.184** | | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 347,000 | | 400,000 | | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | **600,000** | | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 690,000 | | 1,300,000 | | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | 10,600 | | U | | 50,000 |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 5,400 | | 10,600 | | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | U | | 20 |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 18 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-2R | | | | |
| Date Sampled | | June-13 | | 5/14/2014 | | |
| **PCBs by EPA Method 8082A** | | | R.L. | | R.L. | |
| Aroclor 1016 | | U | 0.05 | U | 0.083 | |
| Aroclor 1221 | | U | 0.05 | U | 0.083 | |
| Aroclor 1232 | | U | 0.05 | U | 0.083 | |
| Aroclor 1242 | | U | 0.05 | U | 0.083 | |
| Aroclor 1248 | | U | 0.05 | U | 0.083 | |
| Aroclor 1254 | | U | 0.05 | U | 0.083 | |
| Aroclor 1260 | | U | 0.05 | U | 0.083 | |
| Aroclor 1262 | | - | | U | 0.083 | |
| Aroclor 1268 | | - | | U | 0.083 | |
| Total PCBs | 0.09 | ND | | ND | | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 308,000 | | 312,000 | | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | **270,000** | | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 32,900 | | 74,000 | | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | U | 6,000 | U | 10,000 | |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 2,800 | | 11,200 | | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | 26.9 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 19 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-4 | | | | |
| Date Sampled | | June-13 | | 5/14/2014 | | |
| **PCBs by EPA Method 8082A** | | | R.L. | | R.L. | |
| Aroclor 1016 | | U | 0.05 | U | 0.083 | |
| Aroclor 1221 | | U | 0.05 | U | 0.083 | |
| Aroclor 1232 | | U | 0.05 | U | 0.083 | |
| Aroclor 1242 | | U | 0.05 | U | 0.083 | |
| Aroclor 1248 | | U | 0.05 | 0.110 | | |
| Aroclor 1254 | | U | 0.05 | U | 0.083 | |
| Aroclor 1260 | | U | 0.05 | U | 0.083 | |
| Aroclor 1262 | | - | | U | 0.083 | |
| Aroclor 1268 | | - | | U | 0.083 | |
| Total PCBs | 0.09 | ND | | **0.110** | | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 446,000 | | 186,000 | | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | **460,000** | | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 1,170,000 | | 150,000 | | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | 11,700 | | U | 5,000 | |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 26,900 | | 52,100 | | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | 47.4 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 20 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-5 | | | | |
| Date Sampled | | June-13 | | 5/14/2014 | | |
| **PCBs by EPA Method 8082A** | | | R.L. | | R.L. | |
| Aroclor 1016 | | U | 0.05 | U | 0.083 | |
| Aroclor 1221 | | U | 0.05 | U | 0.083 | |
| Aroclor 1232 | | U | 0.05 | U | 0.083 | |
| Aroclor 1242 | | U | 0.05 | U | 0.083 | |
| Aroclor 1248 | | U | 0.05 | 0.195 | | |
| Aroclor 1254 | | U | 0.05 | 0.170 | | |
| Aroclor 1260 | | U | 0.05 | 0.084 | | |
| Aroclor 1262 | | - | | U | 0.083 | |
| Aroclor 1268 | | - | | U | 0.083 | |
| Total PCBs | 0.09 | ND | | **0.449** | | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 637,000 | | 387,000 | | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | **1,400,000** | | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 324,000 | | 220,000 | | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | 21,000 | | 13,000 | | |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 18,800 | | 23,200 | | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | 66.5 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 21 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-6 | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | |
| **PCBs by EPA Method 8082A** | | | R.L. | | | R.L. |
| Aroclor 1016 | | U | 0.05 | | U | 0.083 |
| Aroclor 1221 | | U | 0.05 | | U | 0.083 |
| Aroclor 1232 | | U | 0.05 | | U | 0.083 |
| Aroclor 1242 | | U | 0.05 | 0.279 | | |
| Aroclor 1248 | | U | 0.05 | | U | 0.083 |
| Aroclor 1254 | | U | 0.05 | 0.187 | | |
| Aroclor 1260 | | U | 0.05 | | U | 0.083 |
| Aroclor 1262 | | - | | | U | 0.083 |
| Aroclor 1268 | | - | | | U | 0.083 |
| Total PCBs | 0.09 | ND | | **0.466** | | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 530,000 | | 560,000 | | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | **620,000** | | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 994,000 | | 320,000 | | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | 12,300 | | 26,000 | | |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 24,000 | | 35,100 | | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | 47.4 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 22 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-7 | | | | |
| Date Sampled | | June-13 | | 5/14/2014 | | |
| **PCBs by EPA Method 8082A** | | | R.L. | | R.L. | |
| Aroclor 1016 | | U | 0.05 | U | 0.083 | |
| Aroclor 1221 | | U | 0.05 | U | 0.083 | |
| Aroclor 1232 | | U | 0.05 | U | 0.083 | |
| Aroclor 1242 | | U | 0.05 | U | 0.083 | |
| Aroclor 1248 | | U | 0.05 | U | 0.083 | |
| Aroclor 1254 | | U | 0.05 | U | 0.083 | |
| Aroclor 1260 | | U | 0.05 | U | 0.083 | |
| Aroclor 1262 | | - | | U | 0.083 | |
| Aroclor 1268 | | - | | U | 0.083 | |
| Total PCBs | 0.09 | ND | | ND | | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 291,000 | | 330,000 | | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | 250,000 | | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 199,000 | | 35,000 | | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | 10,300 | | 14,000 | | |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 5,200 | | 6,440 | | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | 50.4 | | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 23 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | | |
|---|---|---|---|---|---|---|
| | | MW-8 | | | | |
| Date Sampled | | June-13 | | | 5/14/2014 | |
| **PCBs by EPA Method 8082A** | | | R.L. | | | R.L. |
| Aroclor 1016 | | U | 0.05 | | U | 0.083 |
| Aroclor 1221 | | U | 0.05 | | U | 0.083 |
| Aroclor 1232 | | U | 0.05 | | U | 0.083 |
| Aroclor 1242 | | U | 0.05 | | U | 0.083 |
| Aroclor 1248 | | U | 0.05 | | U | 0.083 |
| Aroclor 1254 | | U | 0.05 | | U | 0.083 |
| Aroclor 1260 | | U | 0.05 | | U | 0.083 |
| Aroclor 1262 | | - | | | U | 0.083 |
| Aroclor 1268 | | - | | | U | 0.083 |
| Total PCBs | 0.09 | ND | | | ND | |
| **Alkalinity by EPA Method 2320B** | | | | | | |
| Alkalinity, Total | - | 613,000 | | | 575,000 | |
| **Chloride by EPA Method 9251** | | | | | | |
| Chloride | 250,000 | - | | | **740,000** | |
| **COD by EPA Method 5220D** | | | | | | |
| Chemical Oxygen Demand | - | 359,000 | | | 49,000 | |
| **BOD by EPA Method 5210B** | | | | | | |
| BOD, 5 day | - | U | 6,000 | | 3,400 | |
| **TOC by EPA Method 5310C** | | | | | | |
| Total Organic Carbon | - | 5,500 | | | 7,620 | |
| **TOX by EPA Method 9020B** | | | | | | |
| Halogen, Total Organic | - | - | | | 40.5 | |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

R.L. - Laboratory Reporting Limit

**Bold and boxed results indicate an exceedance of Groundwater Standards**

Table 3: (Page 24 of 24) Summary of Groundwater Sample Laboratory Analytical Results. 202-218 Morgan Avenue BCP Site, Brooklyn, NY, BCP Site #C224133

| Analyte | GW Std^ (ug/L) | Sample Identification | | | |
|---|---|---|---|---|---|
| | | | | DUPLICATE | |
| Date Sampled | | June-13 (MW-5) | | 5/14/2014 (MW-5) | |
| **PCBs by EPA Method 8082A** | | | **RPD** | | **RPD** |
| Aroclor 1016 | | U | NA | U | NA |
| Aroclor 1221 | | U | NA | U | NA |
| Aroclor 1232 | | U | NA | U | NA |
| Aroclor 1242 | | U | NA | U | NA |
| Aroclor 1248 | | U | NA | U | 117.07% |
| Aroclor 1254 | | U | NA | U | 133.33% |
| Aroclor 1260 | | U | NA | U | 89.66% |
| Aroclor 1262 | | - | | U | NA |
| Aroclor 1268 | | - | | U | NA |
| Total PCBs | 0.09 | ND | | ND | |
| **Alkalinity by EPA Method 2320B** | | | | | |
| Alkalinity, Total | - | - | | 391,000 | 1.03% |
| **Chloride by EPA Method 9251** | | | | | |
| Chloride | 250,000 | - | | **1,300,000** | 7.41% |
| **COD by EPA Method 5220D** | | | | | |
| Chemical Oxygen Demand | - | - | | 230,000 | 4.44% |
| **BOD by EPA Method 5210B** | | | | | |
| BOD, 5 day | - | - | | 23,000 | 55.56% |
| **TOC by EPA Method 5310C** | | | | | |
| Total Organic Carbon | - | - | | 22,700 | 2.18% |
| **TOX by EPA Method 9020B** | | | | | |
| Halogen, Total Organic | - | - | | 46.1 | 36.23% |

All values reported as ug/L (parts per billion)

^ - GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

Baseline groundwater data was collected 11/20/2009 (PCBs) and 7/11/2011 (Other Analytes) by others

U - Analyzed for but Not Detected

J - Indicates an estimated value

( - ) - No standard established or no sample analyzed for specific analyte

ND - Analyzed for but Not Detected above laboratory detection limits

NA - Not Applicable

RPD - Relative Percent Difference between the duplicate and parent sample concentrations. When one sample is non-detect, the laboratory detection limit is used as the concentration for the calculation.

$$RPD = \frac{2(\text{Sample Value} - \text{Duplicate Sample Value})}{(\text{Sample Value} + \text{Duplicate Sample Value})}$$

**Bold and boxed results indicate an exceedance of Groundwater Standards**

# Appendices

# Appendix A - Institutional and Engineering Controls Certification 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.** **C224133**

**Site Name Frito Lay**

Site Address: 202-218 Morgan Avenue Zip Code: 11237
City/Town: Brooklyn
County: Kings
Site Acreage: 2.8

Reporting Period: November 06, 2013 to November 22, 2014

| | YES | NO |
|---|---|---|
| 1. Is the information above correct? | X | ☐ |
| 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? | ☐ | X |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | ☐ | X |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | ☐ | X |
| **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? | ☐ | X |

**Box 2**

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

**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

**Box 2A**

| | YES | NO |
|---|---|---|
| 8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid? | ☐ | X |

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

| | YES | NO |
|---|---|---|
| 9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years) | X | ☐ |

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C224133**

**Box 3**

**Description of Institutional Controls**

| Parcel | Owner | Institutional Control |
|---|---|---|
| **3-02942-0105** | Rolling Frito Lay Sales, LP | Soil Management Plan<br>Ground Water Use Restriction<br>Landuse Restriction<br>Monitoring Plan<br>Site Management Plan<br>O&M Plan<br>IC/EC Plan |

A series of ICs is required by the NYSDEC Decision Document dated July 2011 to: (1) implement, maintain and monitor engineering control (EC) systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Frito-Lay site to industrial uses only. Adherence to these institutional controls (ICs) on the Frito-Lay site is required by the Environmental Easement and will be implemented under the Site Management Plan (SMP).

The ICs are:

Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;

All ECs must be operated and maintained as specified in the SMP;

All ECs must be inspected at a frequency and in a manner defined in the SMP.

Groundwater monitored natural attenuation sampling and analysis, soil vapor intrusion study, and other environmental or public health monitoring must be performed as defined in the SMP;

Data and information pertinent to Site Management of the site must be reported at the frequency and in a manner defined in the SMP;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance wiht the SMP;

Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP; and

Operation, monitoring, maintenance, inspection and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

The property may only be used for industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.

The property may not be used for a higher level of use, such as, unrestricted, residential, restricted residential, and commercial use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;

Vegetable gardens and farming on the property are prohibited; and,

The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such property any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

| | | |
|---|---|---|
| **3-02942-0111** | Rolling Frito Lay Sales, LP | Soil Management Plan<br>Ground Water Use Restriction<br>Landuse Restriction<br>Monitoring Plan<br>Site Management Plan<br>O&M Plan<br>IC/EC Plan |

A series of ICs is required by the NYSDEC Decision Document dated July 2011 to: (1) implement, maintain and monitor engineering control (EC) systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Frito-Lay site to industrial uses only. Adherence to these institutional controls (ICs) on the Frito-Lay site is required by the Environmental Easement and will be implemented under the Site Management Plan (SMP).

The ICs are:

Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;

All ECs must be operated and maintained as specified in the SMP;

All ECs must be inspected at a frequency and in a manner defined in the SMP.

Groundwater monitored natural attenuation sampling and analysis, soil vapor intrusion study, and other environmental or public health monitoring must be performed as defined in the SMP;

Data and information pertinent to Site Management of the site must be reported at the frequency and in a manner defined in the SMP;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP; and

Operation, monitoring, maintenance, inspection and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

The property may only be used for industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.

The property may not be used for a higher level of use, such as, unrestricted, residential, restricted residential, and commercial use without additional remediation and amendment of the Environmental

Easement, as approved by the NYSDEC;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;

The potential for vapor intrusion must be evaluated for any buildings developed on the area noted on Figure 2-3 of the SMP and any potential impacts that are identified must be monitored or mitigated;

Vegetable gardens and farming on the property are prohibited; and,

The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such property any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

| | | |
|---|---|---|
| **3-02942-0112** | Rolling Frito Lay Sales, LP | Ground Water Use Restriction<br>Landuse Restriction<br>Monitoring Plan<br>Site Management Plan<br>O&M Plan<br>IC/EC Plan<br>Soil Management Plan |

A series of ICs is required by the NYSDEC Decision Document dated July 2011 to: (1) implement, maintain and monitor engineering control (EC) systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Frito-Lay site to industrial uses only. Adherence to these institutional controls (ICs) on the Frito-Lay site is required by the Environmental Easement and will be implemented under the Site Management Plan (SMP).

The ICs are:

Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;

All ECs must be operated and maintained as specified in the SMP;

All ECs must be inspected at a frequency and in a manner defined in the SMP.

Groundwater monitored natural attenuation sampling and analysis, soil vapor intrusion study, and other environmental or public health monitoring must be performed as defined in the SMP;

Data and information pertinent to Site Management of the site must be reported at the frequency and in a manner defined in the SMP;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP; and

Operation, monitoring, maintenance, inspection and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

The property may only be used for industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.

The property may not be used for a higher level of use, such as, unrestricted, residential, restricted residential, and commercial use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;

The potential for vapor intrusion must be evaluated for any buildings developed on the area noted on Figure 2-3 of the SMP and any potential impacts that are identified must be monitored or mitigated;

Vegetable gardens and farming on the property are prohibited; and,

The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such property any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

**Description of Engineering Controls** **Box 4**

| Parcel | Engineering Control |
|---|---|
| **3-02942-0105** | Vapor Mitigation |
| | Cover System |
| | Subsurface Barriers |
| | Fencing/Access Control |

Asphalt (Engineered) and Soil Cover Systems:
Exposure to remaining contamination in soil at the Frito-Lay site is prevented by an asphalt and soil cover system placed over the site. This cover system is comprised of a minimum of 6 inches of asphalt pavement, with the exception along the bulkhead area where a soil cover system consists of a minimum of 1-foot of clean soil/fill able to support a vegetative cover.

Chain Linked Fence:
The site is enclosed by a "newly" constructed 10-foot high chain linked fence installed on the eastern, western, and southern sides which prevents unauthorized access. Access to the northern section of the site is available through the Frito-Lay facility.

Composite Cover System:
The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

Sub-Slab Depressurization System (SSDS):
The active SSD system, when it is constructed and operational, will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

Monitored Natural Attenuation:
Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until

| Parcel | Engineering Control |
|---|---|

permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

**3-02942-0111**

Vapor Mitigation
Cover System
Subsurface Barriers
Fencing/Access Control

Asphalt (Engineered) and Soil Cover Systems:
Exposure to remaining contamination in soil at the Frito-Lay site is prevented by an asphalt and soil cover system placed over the site. This cover system is comprised of a minimum of 6 inches of asphalt pavement, with the exception along the bulkhead area where a soil cover system consists of a minimum of 1-foot of clean soil/fill able to support a vegetative cover.

Chain Linked Fence:
The site is enclosed by a "newly" constructed 10-foot high chain linked fence installed on the eastern, western, and southern sides which prevents unauthorized access. Access to the northern section of the site is available through the Frito-Lay facility.

Composite Cover System:
The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

Sub-Slab Depressurization System (SSDS):
The active SSD system, when it is constructed and operational, will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

Monitored Natural Attenuation:
Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

**3-02942-0112**

Vapor Mitigation
Cover System
Subsurface Barriers
Fencing/Access Control

Asphalt (Engineered) and Soil Cover Systems:
Exposure to remaining contamination in soil at the Frito-Lay site is prevented by an asphalt and soil cover system placed over the site. This cover system is comprised of a minimum of 6 inches of asphalt pavement, with the exception along the bulkhead area where a soil cover system consists of a minimum of 1-foot of clean soil/fill able to support a vegetative cover.

Chain Linked Fence:
The site is enclosed by a "newly" constructed 10-foot high chain linked fence installed on the eastern, western, and southern sides which prevents unauthorized access. Access to the northern section of the site is available through the Frito-Lay facility.

Composite Cover System:
The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

Sub-Slab Depressurization System (SSDS):
The active SSD system, when it is constructed and operational, will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

Monitored Natural Attenuation:
Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards

| Parcel | Engineering Control |
|---|---|

or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

**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

| YES | NO |
|---|---|
| X | ☐ |

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 |
|---|---|
| X | ☐ |

**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. C224133**

**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 Cedric Robinson (print name) at 7701 Legacy Drive, Plano, TX 75024 (print business address)

am certifying as Owner (Owner or Remedial Party)

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

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

19 Dec 2014
Date

## IC/EC CERTIFICATIONS

**Box 7**

**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.

I Damian Vanetti (print name) at GHD Consulting Services, Inc One Remington Park Dr. Cazenovia NY 13035 (print business address),

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


Signature of, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

12-22-14
Date

# Appendix B - Annual Inspection Form

**SITE-WIDE INSPECTION FORM**

FRITO-LAY 202-218 MORGAN AVENUE
KINGS COUNTY
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER C224133

NAME OF INSPECTOR: Damian Vanetti

COMPANY OF INSPECTOR: GHD

DATE OF INSPECTION: 4-9-14

CURRENT USE OF THE SITE: Frito Lay Vehicle Parking Lot

HAS A CHANGE OF LAND-USE OCCURRED SINCE THE LAST INSPECTION?
_____YES __X__NO

IF YES, EXPLAIN HOW THE SITE HAS CHANGED: _____

IS THERE EVIDENCE OF LAND-USE OTHER THAN FOR INDUSTRIAL SINCE THE LAST INSPECTION?
_____YES __X__NO

IF YES, EXPLAIN THE NON-INDUSTRIAL LAND USE: _____

HAVE ANY STRUCTURES BEEN CONSTRUCTED ON THE SITE SINCE THE LAST INSPECTION? _____YES __X__NO

IF YES, EXPLAIN HOW THE SITE HAS CHANGED: _____

GENERAL DESCRIPTION OF THE COVER: Majority of site is asphalt paved parking surrounded by fence on three sides. Small area in the southwest corner is soil covered. Outside of fence to south is riprap / bulk head. Outside fence to east is soil cover / bulk head. At time of inspection vegetation had not regrown after winter in soil covered areas.

HAS THE COVER BEEN COMPROMISED? _____YES __X__NO

IF YES, EXPLAIN HOW THE COVER HAS CHANGED: _____

**SITE-WIDE INSPECTION FORM**

FRITO-LAY 202-218 MORGAN AVENUE
KINGS COUNTY
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER C224133

HAVE COVER CONDITIONS CHANGED SINCE THE LAST INSPECTION?
_____YES __X__NO

IF YES, EXPLAIN HOW THE SITE COVER CONDITIONS CHANGED:_____
_____
_____
_____

IS ANY MAINTENANCE OF THE COVER REQUIRED?
_____YES __X__NO

IF YES, EXPLAIN WHAT MAINTAINENCE IS REQUIRED: Future site inspections should confirm vegetation is reestablished in soil cover areas.
_____

ARE SIGNIFICANT EROSION RILLS OR CRACKING PRESENT?
_____YES __X__NO

IF YES, EXPLAIN WHERE EROSION RILLS OR CRACKING ARE PRESENT:_____
_____
_____
_____

IS PONDING PRESENT?
_____YES __X__NO

IF YES, EXPLAIN WHERE PONDING IS PRESENT AND THE ASSOCIATED DEPTH:
_____
_____
_____

IS ANY SOIL WASTE MATERIAL EXPOSED?
_____YES __X__NO

IF YES, EXPLAIN WHERE SOIL WASTE MATERIAL ARE EXPOSED:
_____
_____
_____

**SITE-WIDE INSPECTION FORM**

FRITO-LAY 202-218 MORGAN AVENUE
KINGS COUNTY
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER C224133

IS THERE A VISABLE CHANGE IN THE DESIGNATED DRAINAGE PATTERN?
_____YES ___X___NO

IF YES, EXPLAIN WHERE THE VISABLE CHANGE IN THE DESIGNATED DRAINAGE PATTERN ARE LOCATED:_____
_____
_____
_____

IS SETTLEMENT OR SUBSIDNCE VISIBLE?
_____YES ___X___NO

IF YES, EXPLAIN WHERE SETTLEMENT OR SUBSIDNCE VISIBLE IS LOCATED:
_____
_____
_____
_____

ARE SIGNIFICANT EROSION RILLS OR CRACKING PRESENT?
_____YES ___X___NO

IF YES, EXPLAIN WHERE EROSION RILLS OR CRACKING ARE PRESENT:_____
_____
_____
_____

ARE ALL GROUNDWATER MONITORING WELLS MAINTAINED PROPERLY AND IN GOOD PHYSICAL CONDITION?
___X___YES _____NO

IF NO, EXPLAIN HOW THE GROUNDWATER MONITORING WELLS HAVE BEEN COMPROMISED:
_____
_____
_____
_____

**SITE-WIDE INSPECTION FORM**

FRITO-LAY 202-218 MORGAN AVENUE
KINGS COUNTY
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER C224133

IS THERE ANY EVIDENCE THAT GROUNDWATER IS BEING USED FOR ANY PURPOSE?

_____YES ___X___NO

IF YES, EXPLAIN HOW GROUNDWATER IS BEING USED:

ADDITIONAL OBSERVATIONS, CONCLUSIONS, OR RECOMMENDATIONS:

fencing around perimeter is intact.

ANY CHANGES TO THE SITE OR REQUIRED MAINTENANCE SHOULD BE MARKED IN THE CORRESPONDING LOCATIONS ON AN ATTACHED MAP

# Appendix C - Approval Notifications for EQuIS Database Submittals

**Ian McNamara**

---

**From:** dec.sm.NYENVDATA <NYENVDATA@dec.ny.gov>
**Sent:** Monday, August 25, 2014 3:07 PM
**To:** Ian McNamara
**Cc:** Post, Charles H (DEC)
**Subject:** RE: EDDs for Frito-Lay - Brooklyn BCP Site (BCP Site #C224133) Groundwater Monitoring

Ian,

The EDDs "20140724 1136.C224133.NYSDEC.zip" "20140724 1140.C224133.NYSDEC.zip" and "20140724 1145.C224133.NYSDEC.zip" were successfully loaded to the FritoLay facility in the NYSDEC database. The data is available for use within the NYSDEC system.

Thank you,
Aaron
NYSDEC EIMS Team

---

**From:** Ian McNamara [mailto:Ian.McNamara@ghd.com]
**Sent:** Thursday, July 24, 2014 1:49 PM
**To:** dec.sm.NYENVDATA
**Cc:** Post, Charles H (DEC)
**Subject:** EDDs for Frito-Lay - Brooklyn BCP Site (BCP Site #C224133) Groundwater Monitoring

Hi,

Attached are 3 EDDs for the above referenced project, an initial EDD, and field results EDD, and a monitoring results EDD.

The initial EDD has different elevation information for the monitoring wells based on changes made at the site. This EDD should be used instead of the old one.

Please let me know if you have any questions.

Thanks,
Ian

**Ian McNamara, GIT**
**Scientist III**

**GHD**
T: 1 315 679 5732 | M: 1 315 368 8432 | V: 865732 | E: ian.mcnamara@ghd.com
One Remington Park Drive Cazenovia New York 13035 USA | www.ghd.com
WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

GHD Inc

One Remington Park Drive

Cazenovia NY 13035

T: 1 315 679 5800  F: 1 315 679 5801  E: cazmail@ghd.com



G:\86\16480\202-218 Morgan Ave Brooklyn BCP Site\Periodic Review Reports\11.6.2013 to 11.22.2014 PRR\FINAL PRR - Nov 2013 - Nov 2014.docx

Document Status

| Rev No. | Author | Reviewer | | Approved for Issue | | |
|---|---|---|---|---|---|---|
| | | Name | Signature | Name | Signature | Date |
| | | | | | | |
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