

Periodic Review Report

202 – 218 Morgan Avenue BCP Site BCP Site #C224133

November 22, 2017 to November 22, 2018

Reporting Period

Rolling Frito-Lay Sales, LP





Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site	e No.	C224133	Site Details	Box 1	
Site	e Name	Frito Lay			
City Cou			Zìp Code: 11237		
Rep	porting P	Period: November 22, 2017 to Nov	vember 22, 2018		
				YES	NO
1.	Is the ir	nformation above correct?		×	
	if NO, i	nclude handwritten above or on a	separate sheet.		
2.		me or all of the site property been o amendment during this Reporting	sold, subdivided, merged, or undergone a g Period?		×
3.		ere been any change of use at the NYCRR 375-1.11(d))?	site during this Reporting Period		×
4.		ny federal, state, and/or local perm t the property during this Reporting	nits (e.g., building, discharge) been issued g Period?		×
		S. Carrier and the second			
			ru 4, include documentation or evidence sly submitted with this certification form.		
5.	that do		ly submitted with this certification form.	□	×
5.	that do	ocumentation has been previous	ly submitted with this certification form.	Box 2	×
5.	that do	ocumentation has been previous	ly submitted with this certification form.		X
	Is the s	cumentation has been previous ite currently undergoing developm	ely submitted with this certification form.	Box 2	
	Is the s	cumentation has been previous ite currently undergoing developm	sly submitted with this certification form. sent? use(s) listed below?	Box 2 YES	NO
6.	Is the solution industrial	cumentation has been previous ite currently undergoing developm current site use consistent with the ial ICs/ECs in place and functioning a	sly submitted with this certification form. sent? use(s) listed below?	Box 2 YES	NO
6.	Is the solution industrial	cumentation has been previous ite currently undergoing developm current site use consistent with the ial ICs/ECs in place and functioning a	use(s) listed below? as designed?	Box 2 YES	NO

	Box 2	Α
8. Has any new information revealed that assumptions made in the Qualitative Exposure	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		×
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
 Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years) 	×	
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	Воз	x 3
Description of Institutional Controls		

Parcel Owner
3-02942-0105 Rolling Frito Lay Sales, LP

Institutional Control

Soil Management Plan Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan O&M Plan 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.

3-02942-0111

Rolling Frito Lay Sales, LP

Soil Management Plan
Ground Water Use Restriction
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

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3-02942-0112

Rolling Frito Lay Sales, LP

Ground Water Use Restriction
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan
Soil Management Plan

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Box 4

Description of Engineering Controls

Parcel

3-02942-0105

Engineering Control

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

Parcel

Engineering Control

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.

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3-02942-0112

Vapor Mitigation Cover System Subsurface Barriers Fencing/Access Control

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Р	ar	cel	

Engineering Control

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Box 5

Periodic Review Report (PRR) Certification Statements

- 1. I certify by checking "YES" below that:
 - a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
 - b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES NO

X □

- 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.

Cedric Robinson at	7701 Legacy Drive, Plano, TX 75025
print name	print business address
am certifying as Owner	(Owner or Remedial Party)
for the Site named in the Site Details Section	of this form.
Lidic Remains Signature of Owner, Remedial Party, or Des	ignated Representative Date
Rendering Certification	

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

ו Damian J. Vanetti at	GHD Consulting Services Inc. One Remington Park Drive, Cazenovia, NY 13035
print name	print business address
am certifying as a Professional Engineer fo	r the Owner
	(Owner or Remedial Party)
Antha 1	STATE OF NEW LORK LORK LORK LORK LORK LORK LORK LORK
Signature of Professional Engineer, for the Remedial Party, Rendering Certification	Owner or Stamp Date (Required for PE)



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, including annual inspections and annual groundwater monitoring, with groundwater samples being collected from on-Site and off-Site monitoring wells. In general, increasing and decreasing concentrations are observed for the various parameters across the Site, with no distinct discernable trends recognizable at this time. However, off-Site groundwater monitoring well MW-7 appears to have a generally increasing trend in concentrations of chlorinated VOCs, with tetrachloroethene being detected above groundwater standards for the second year in a row. In addition, concentrations of trichloroethene, cis-1,2-dichloroethene, and vinyl chloride have historically been detected at concentrations above groundwater standards in samples taken from MW-7 and appear to further indicate a generally increasing trend in chlorinated VOC concentrations off-site. The concentrations of detected compounds in Site groundwater samples do not indicate the need for further assessment or further action at this time. It is noted that the Site groundwater quality could be influenced by the adjacent English Kills and/or upgradient groundwater for certain compounds.

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 and functioning as intended. At the time of the annual Site inspection (November 15, 2018), it was noted that minor vegetation growth should be removed from the area around monitoring well MW-2R and woody vegetation should be removed from the stone rip-rap portion of the Site during regular maintenance. Woody growth should be monitored periodically as part of routine maintenance to determine if removal is required. Annual groundwater monitoring has been completed in accordance with the Site Management Plan (SMP). There are no new buildings constructed on-Site and the existing warehouse on the adjacent property to the north has not been expanded. As a result, there is no need for a sub-slab depressurization system (SSDS) engineering control. The institutional and engineering controls certification form, as issued by the Department, has been completed and included Attachment 1 at the beginning of this report.

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 on an annual basis and Site inspections will continue to the performed on an annual basis, in accordance with the SMP. If buildings are constructed in the future they 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.



Table of Contents

1.	Introd	duction		. 1
	1.1	Purpose.		. 1
	1.2	Certificati	on Period	. 1
	1.3	Scope an	d Limitations	. 2
2.	Site 0	Overview		. 3
3.	Institu	utional and	Engineering Controls	. 6
	3.1	Institution	al Controls	. 6
		3.1.1 3.1.2 3.1.3	Site Use	. 6
	3.2	Engineer	ng Controls	. 7
		3.2.1 3.2.2 3.2.3	Asphalt and Soil (Engineered) Cover Systems	. 7
4.	Opera	ations and	Monitoring	. 8
5.	Reco	mmendatio	ons	. 9

Figure Index

- Figure 1 Site Location Map
- Figure 2 Site Layout
- Figure 3 Engineering Controls
- Figure 4 Exceedances of Groundwater Standards Total Metals
- Figure 5 Exceedances of Groundwater Standards Dissolved Metals
- Figure 6 Exceedances of Groundwater Standards Other Analytes
- Figure 7 Groundwater Elevation and Flow Direction

Table Index

- Table 1 Groundwater Elevation Data
- Table 2 Groundwater Field Parameter Data
- Table 3 Summary of Groundwater Sample Laboratory Analytical Results



Attachment and Appendix Index

Attachment 1 Institutional and Engineering Controls Certification Form (prior to Executive Summary)

Appendix A Annual Inspection Form

Appendix B Approval Notifications for EQuIS Database Submittals



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
 - o 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 the 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 at the beginning of this report.
- Data tables and figures depicting results of annual groundwater monitoring activities conducted on- and off-Site.

1.2 Certification Period

NYSDEC requested that this PRR cover the period between November 22, 2017 and November 22, 2018. During this period, Frito-Lay performed regular inspections of the soil cover engineering control on-Site. GHD Consulting Services Inc. (GHD), on behalf of Frito-Lay, performed annual groundwater monitoring, conducted an annual visual inspection of engineering controls on-Site, and prepared this PRR.



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.



Site Overview

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 further 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) were present in Site soil, groundwater, and soil vapor. It was determined that Site surface and subsurface soils contained arsenic, lead, mercury, polychlorinated biphenyls (PCBs), and semi-volatile organic compounds (SVOCs) at concentrations that exceeded the Unrestricted Use Soil Cleanup Objectives (SCOs). Analytical results of Site groundwater samples identified arsenic, lead, and volatile organic compounds (VOCs) at concentrations that exceeded the Technical and Operational Guidance Series (TOGS) Class GA groundwater standards or 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
- 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 implementation of 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
- 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 reportedly 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 future expansions added to the Frito-Lay warehouse located on the adjoining property to the north. 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 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.



- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Periodic Review Report, November 6, 2013 – November 22, 2014, GHD Consulting Services Inc., December 2014.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Annual Post-Remediation Groundwater Monitoring 2015, GHD Consulting Services Inc., August 12, 2015.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Periodic Review Report,
 November 22, 2014 November 22, 2015, GHD Consulting Services Inc., February 12, 2016.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Annual Post-Remediation Groundwater Monitoring 2016, GHD Consulting Services Inc., September 15, 2016.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Periodic Review Report, November 22, 2015 – November 22, 2016, GHD Consulting Services Inc., January 6, 2017.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Annual Post-Remediation Groundwater Monitoring – 2017, GHD Consulting Services Inc., July 28, 2017.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Periodic Review Report, November 22, 2016 – November 22, 2017, GHD Consulting Services Inc., January 5, 2018.
- 202-218 Morgan Avenue BCP Site (BCP Site #C224133) Annual Post-Remediation Groundwater Monitoring 2018, GHD Consulting Services Inc., August 20, 2018.



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, or expansions added to the existing warehouse to the north, and any potential impacts that are identified must be monitored and/or mitigated
- vegetable gardens and farming on the property are prohibited
- 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 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 the 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.

3.1.1 Site Use

The Site use has not changed since the NYSDEC issued the Certificate of Completion and is currently used for industrial uses and parking of Frito-Lay company/delivery 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 2017). Laboratory analytical results were tabulated and submitted to the NYSDEC (GHD, July 28, 2017) 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 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, consisting of maintained landscape areas or rip rap. 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. At the time of the annual Site inspection (November 15, 2018), it was noted that minor surface cracks were present in the asphalt pavement but were not significant enough to warrant additional action at the time. The remainder of the soil cover system was in good repair.

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

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 (November 15, 2018) 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 if the warehouse on the adjacent property to the north, which is also owned by Frito-Lay, is expanded or renovated.

At the time of the annual Site inspection (November 15, 2018) no new buildings had been constructed on-Site and the adjacent warehouse to the north had not been expanded. Therefore, no SSDS 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 in the Annual Post-Remediation Groundwater Monitoring letter report (GHD, August 20, 2018) and were also successfully uploaded into the NYSDEC's EQuIS Database on August 3, 2018 (Appendix B). Table 3 summarizes laboratory analytical results of groundwater samples taken since remediation was completed at the Site. The groundwater results are compared to Class GA groundwater quality standards or guidance values from the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1, June 1998 and subsequent addenda).

In general, since post-remediation baseline samples were taken, concentrations of analytes detected in groundwater samples have both increased and decreased, with no consistent Site-wide trends recognizable at this time. Overall the number of contaminants detected above groundwater standards are limited as noted in the tables and figures. However, off-Site groundwater monitoring well MW-7 appears to have a generally increasing trend in concentrations of chlorinated VOCs, with tetrachloroethene being detected above groundwater standards for the second year in a row. In addition, concentrations of trichloroethene, cis-1,2-dichloroethene, and vinyl chloride have historically been detected at concentrations above groundwater standards in samples taken from MW-7 and appear to further indicate a generally increasing trend in chlorinated VOC concentrations off-site. In addition, the concentrations of barium in off-site groundwater monitoring well MW-8 appears to have an increasing trend. The detected contaminants in MW-7 and MW-8 are likely related to an off-site source. The concentrations of detected compounds in Site groundwater samples do not indicate the need for further assessment or further action at this time. It is noted that the Site groundwater quality could be influenced by the tidal water dynamics of the adjacent English Kills and/or upgradient groundwater for certain compounds.

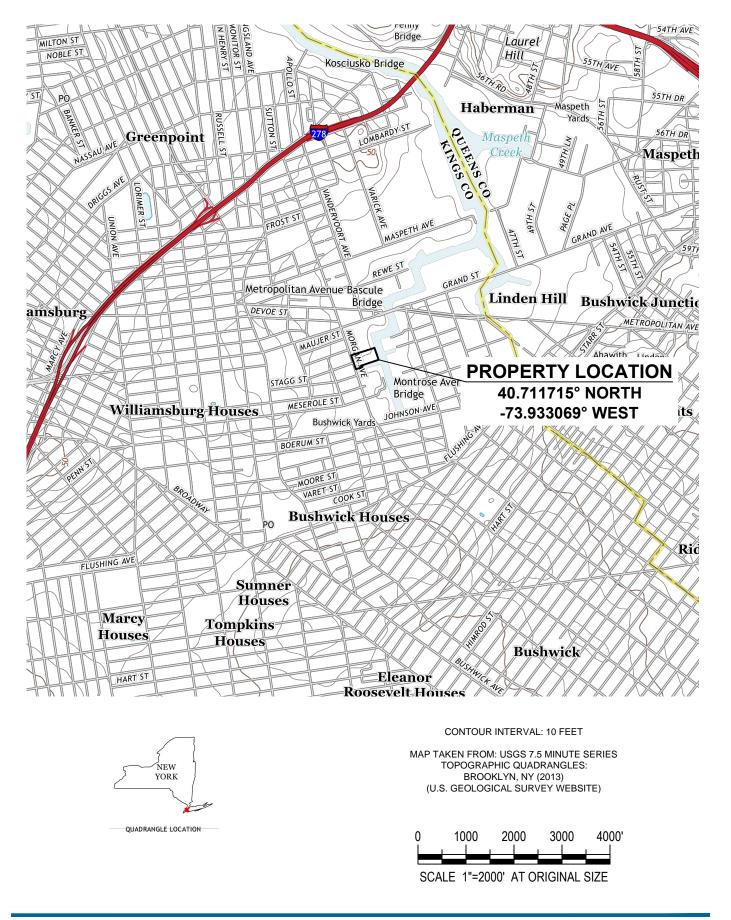
Based on the groundwater data received to date, the qualitative exposure assessment assumptions regarding on-Site and off-site contamination have not changed and are still valid. As future groundwater monitoring events occur, the data will be reviewed to determine if any compound-specific or Site-wide trends (decreasing or increasing) can be identified.



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. The trends in groundwater quality associated with the off-site monitoring wells MW-7 and MW-8 should continue to be assessed for potential impacts to Site groundwater quality. Groundwater monitoring should continue to be conducted on an annual basis, as identified in the SMP, until the May 2019 monitoring event, after which the monitoring results should be reviewed and modifications to future monitoring requirements, if any, should be recommended to the NYSDEC. The effectiveness of the remedy should continue to be evaluated through analytical results from the groundwater monitoring events.

The minor surface cracks in the asphalt pavement should be periodically monitored to ensure they are not progressing to the point where potential exposure to remaining contamination could occur or could compromise the engineering control. In general, the asphalt pavement should be maintained and cracks sealed as part of the Site maintenance program. Vegetation growth around monitoring well MW-2R should be removed to allow for clear access to the wells. Also, the woody growth along the perimeter rip-rap should be periodically removed to control potential impacts to the cover system. The annual Site inspections should be continued to ensure that the Site use has not changed and the engineering controls are in place and functioning as intended.

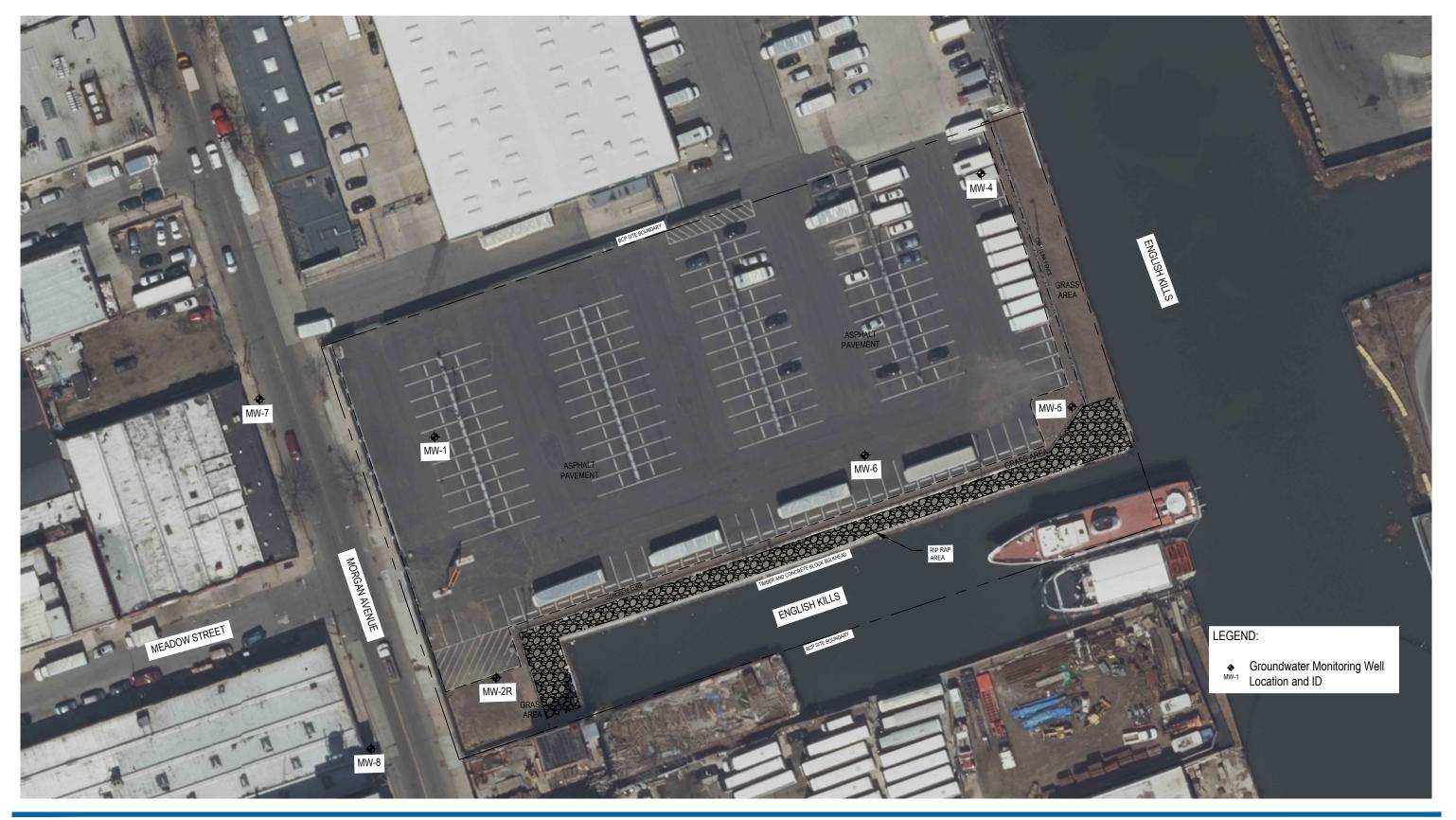


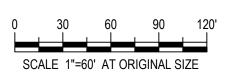


Rolling Frito-Lay Sales, LP
Periodic Review Report - Nov. 22, 2017 to Nov. 22, 2018 - 202-218 Morgan Avenue BCP Site (#C224133)

Job Number | 86-16480 Revision | A 3) Date | 12.6.2018

Site Location Map







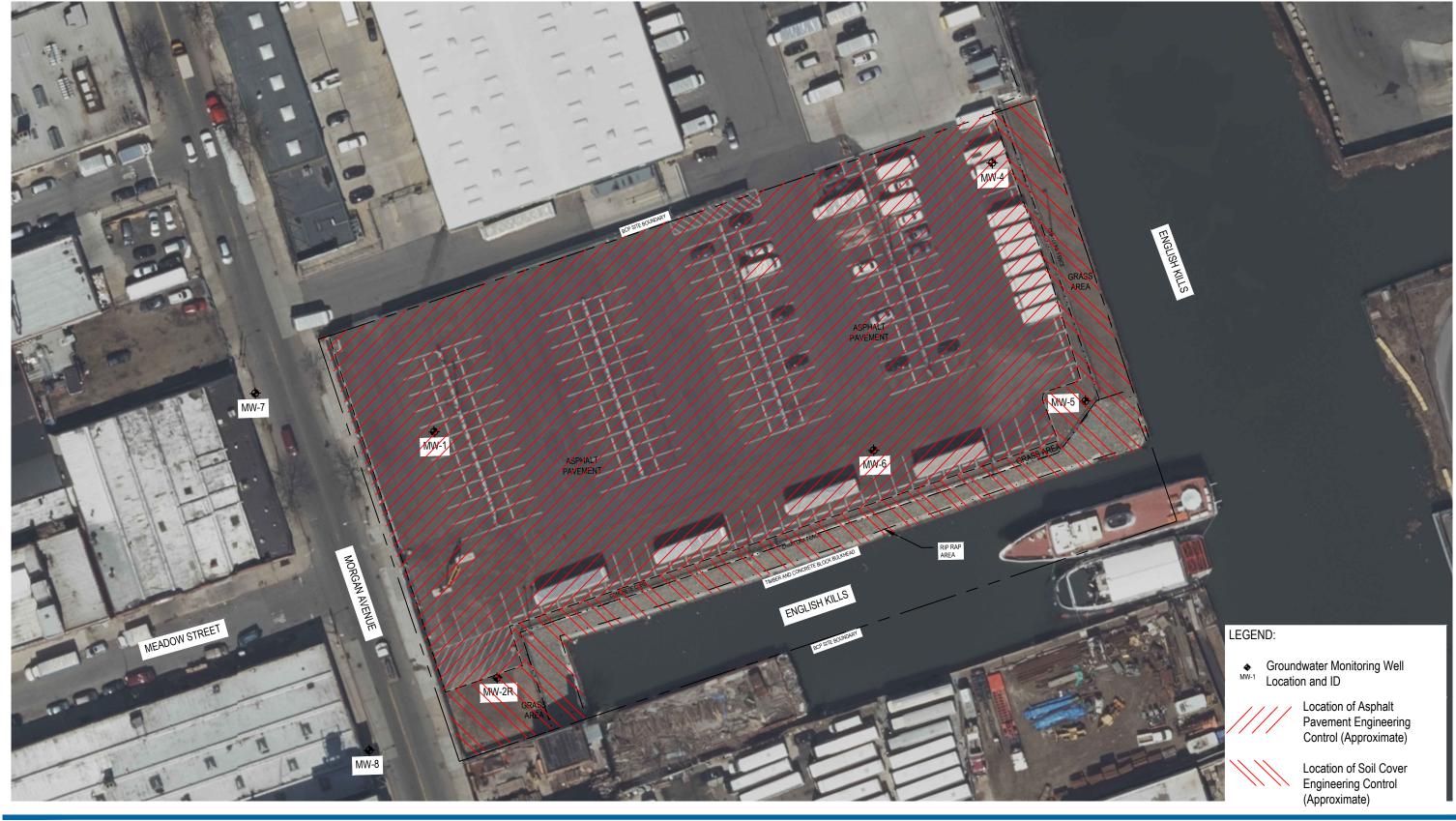
NOTES:
1. Aerial photograph is a 2014, 6-inch resolution, true color image taken from the U.S. Geological Survey website: http://earthexplorer.usgs.gov/
2. Site features taken from an as-built field survey completed by PS&S on August 21, 2013.

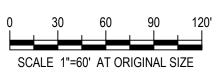


Job Number | 86-16480

Rolling Frito-Lay Sales, LP Job Number 86-Periodic Review Report - Nov. 22, 2017 to Nov. 22, Revision A 2018 - 202-218 Morgan Avenue BCP Site (#C224133) Date 12.6.2018

Site Layout







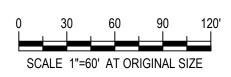
NOTES:
1. Aerial photograph is a 2014, 6-inch resolution, true color image taken from the U.S. Geological Survey website:

http://earthexplorer.usgs.gov/
2. Site features taken from an as-built field survey completed by PS&S on August 21, 2013.



Job Number | 86-16480 Rolling Frito-Lay Sales, LP Periodic Review Report - Nov. 22, 2017 to Nov. 22, Revision A 2018 - 202-218 Morgan Avenue BCP Site (#C224133) Date 12.6.2018 **Engineering Controls**







 Only analytes that exceed groundwater standards are shown here. For complete results, see tables in report.
 Aerial photograph is a 2014, 6-inch resolution, true color image taken from the U.S. Geological Survey website: http://earthexplorer.usgs.gov/
3. Site features taken from an as-built field survey completed by PS&S on August 21, 2013.



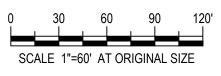
Rolling Frito-Lay Sales, LP

Periodic Review Report - Nov. 22, 2017 to Nov. 22, Revision A 2018 - 202-218 Morgan Avenue BCP Site (#C224133) Date 12.6.2018

Exceedances of Groundwater Standards - Total Metals

Job Number | 86-16480







 Only analytes that exceed groundwater standards are shown here. For complete results, see tables in report.
 Aerial photograph is a 2014, 6-inch resolution, true color image taken from the U.S. Geological Survey website: http://earthexplorer.usgs.gov/
3. Site features taken from an as-built field survey completed by PS&S on August 21, 2013.



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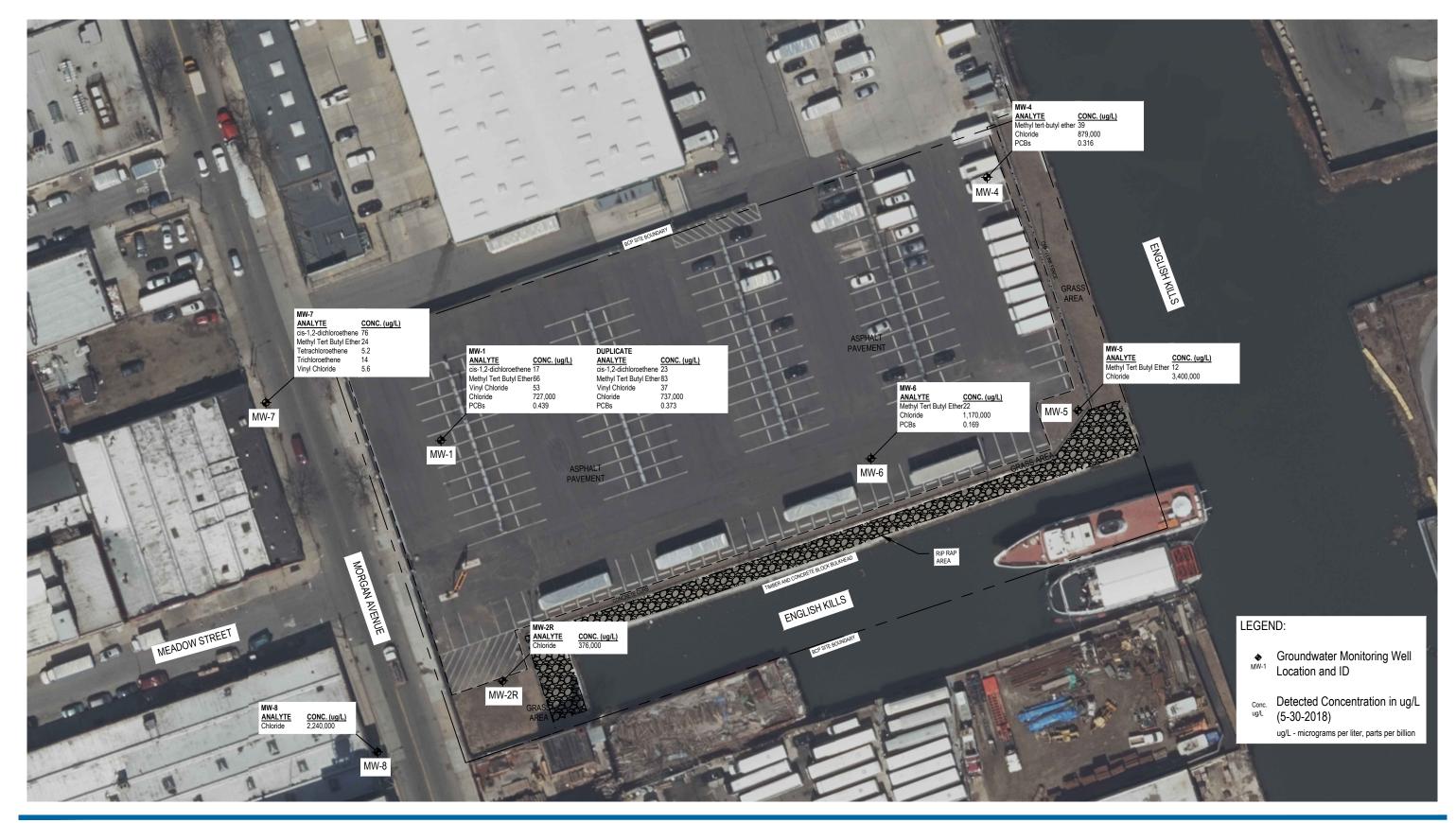
Standards - Dissolved Metals

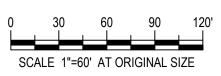
Job Number | 86-16480 Date 12.11.2018

Periodic Review Report - Nov. 22, 2017 to Nov. 22, Revision A 2018 - 202-218 Morgan Avenue BCP Site (#C224133) **Exceedances of Groundwater**

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







 Only analytes that exceed groundwater standards are shown here. For complete results, see tables in report.
 Aerial photograph is a 2014, 6-inch resolution, true color image taken from the U.S. Geological Survey website: 13. Site features taken from an as-built field survey completed by PS&S on August 21, 2013.

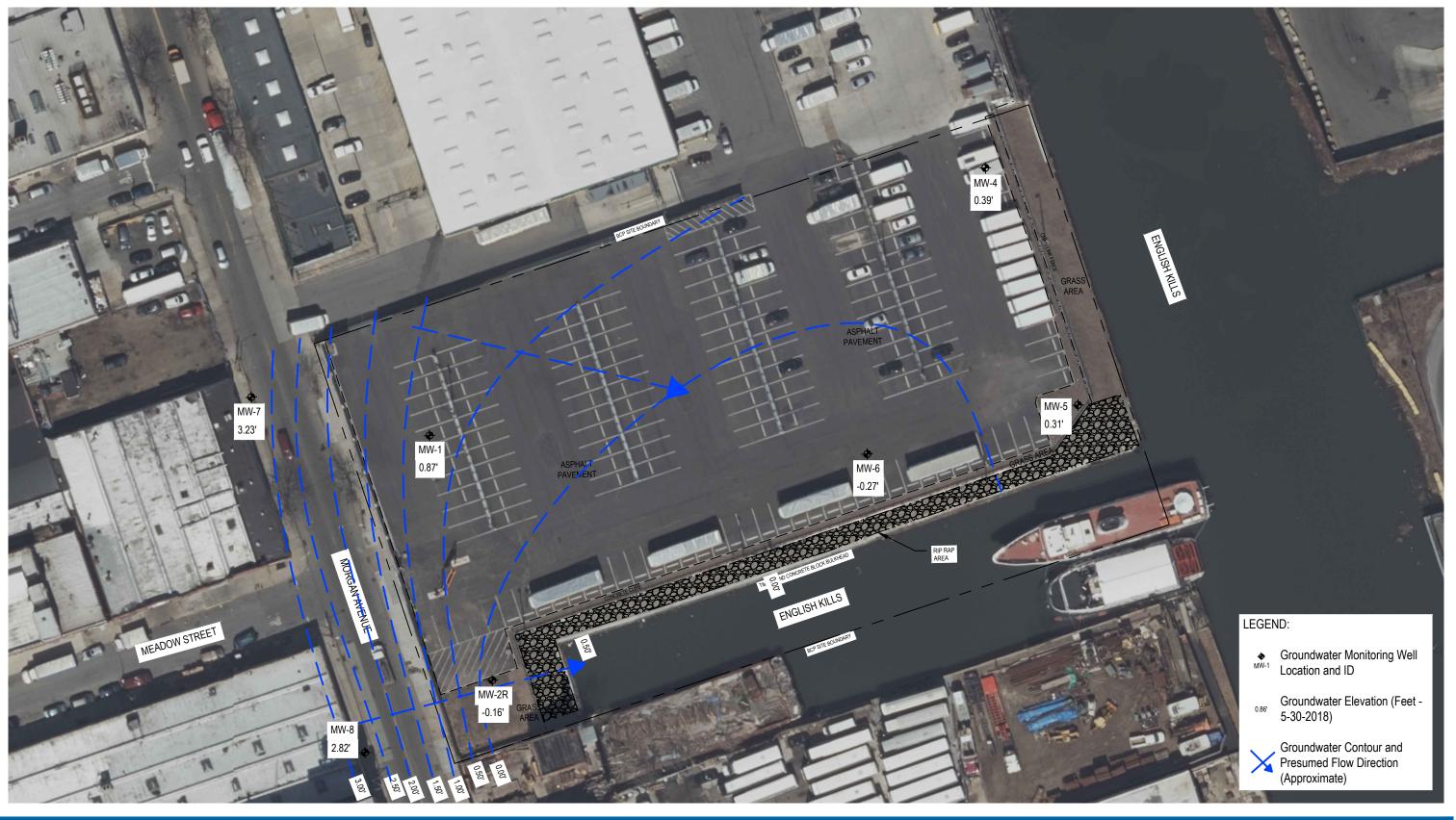


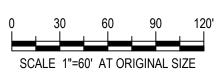
Rolling Frito-Lay Sales, LP

Periodic Review Report - Nov. 22, 2017 to Nov. 22, Revision A 2018 - 202-218 Morgan Avenue BCP Site (#C224133) Date 12/6/2018

Exceedances of Groundwater Standards - Other Analytes

Job Number | 86-16480







NOTES:
1. Aerial photograph is a 2014, 6-inch resolution, true color image taken from the U.S. Geological Survey website:

http://earthexplorer.usgs.gov/
2. Site features taken from an as-built field survey completed by PS&S on August 21, 2013.



Rolling Frito-Lay Sales, LP Job Number 86-Periodic Review Report - Nov. 22, 2017 to Nov. 22, Revision 2018 - 202-218 Morgan Avenue BCP Site (#C224133) Job Number | 86-16480 Date 12.11.2018

Groundwater Elevation and Flow Direction

Tables



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

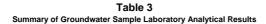
Monitoring Well I.D.	Date	Reference Point	Reference Elevation (feet)	DTW (feet)	DOW (feet)	Water Elevation (feet)	Well Volume (gal)
-	2009			-	-	1.74	-
	2011	1		-	-	1.54	-
	5/14/2014			9.07	16.33	0.86	1.16
MW-1	6/4/2015	Top of PVC	9.93	9.74	16.38	0.19	1.06
	5/26/2016			9.55	16.24	0.38	1.07
	5/22/2017			9.24	16.93	0.69	1.23
	5/30/2018			9.06	16.93	0.87	1.26
	2009			-	-	2.71	-
	2011]		-	-	0.40	-
	7/4/2015	1		9.75	17.92	0.51	1.31
MW-2R	6/4/2015	Top of PVC	10.26	9.69	17.92	0.57	1.32
	5/26/2016			10.22	17.61	0.04	1.18
	5/22/2017			9.53	17.95	0.73	1.35
	5/30/2018	1		10.42	17.95	-0.16	1.20
	2009			-	-	2.04	-
	2011			-	-	0.54	-
	5/14/2014	1		9.91	16.48	0.31	1.05
MW-4	6/4/2015	Top of PVC	10.22	10.50	 	-0.28	0.95
	5/26/2016			10.76		-0.54	0.88
	5/22/2017			10.15		0.07	1.03
	5/30/2018			9.83	- 1.74 - 1.54 - 1.54 - 16.33 0.86 - 16.38 0.19 - 16.24 0.38 - 16.93 0.69 - 16.93 0.87 - 2.71 - 0.40 - 17.92 0.51 - 17.92 0.57 - 17.61 0.04 - 17.95 0.73 - 17.95 -0.16 - 2.04 - 0.54 - 0.54 - 16.48 0.31 - 16.45 -0.28 - 16.28 -0.54	1.08	
	2009			-	_	1.76	-
MW-5	2011			_	-	-0.80	-
	5/14/2014	1		11.01	18 69	-0.24	1.23
MW-5	6/4/2015	Top of PVC	10.77	9.91		0.86	1.39
	5/26/2016			12.65		-1.88	0.95
	5/22/2017	1		11.25		-0.48	1.19
	5/30/2018			10.46	1	0.31	1.32
	2009			-	_	1.11	-
	2011			_	-	0.80	-
	5/14/2014	1		10.36	17.05		1.07
MW-6	6/4/2015	Top of PVC	10.22	10.81		-0.59	1.00
	5/26/2016	·		10.97		-0.75	0.95
	5/22/2017			10.55		-0.33	1.05
	5/30/2018	1		10.49	17.10	-0.27	1.06
	2009			-	_	2.92	-
	2011			_	-		-
	5/14/2014	1		8.17	15.42		1.16
MW-7	6/4/2015	Top of PVC	11.11	8.33		2.78	1.29
	5/26/2016			8.32		2.79	1.10
	5/22/2017			8.15		2.96	1.17
	5/30/2018	1		7.88			1.21
	2009			-			-
	2011	1		-			-
	5/14/2014	1		8.85	14.45		0.90
MW-8	6/4/2015	Top of PVC	11.43	8.92	14.45	2.51	0.88
	5/26/2016]		8.70	14.20	2.73	0.88
	5/22/2017			8.88	14.60	2.55	0.92
	5/30/2018			8.61	14.60	2.82	0.96



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 (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (gal)	Comments
		-	15.9	2.879	-	0.17	6.49	-146.0	301.0		Duplicate sample taken here.
MW-1	5/30/2018	-	15.6	2.911	-	0.09	6.49	-170.0	189.0	3.50	Water very slight black tint,
IVIVV-I	3/30/2010	-	15.6	2.936	-	0.08	6.48	-176.0	192.0	3.30	slight odor.
		-	15.7	2.994	-	0.09	6.47	-180.0	178.0		ongin odon
		-	15.2	1.911	-	0.71	6.70	-99.0	196.0		
MW-2R	5/30/2018	-	15.3	1.896	-	0.25	6.56	-96.0	144.0	3.60	Water clear, no odor.
WWV-ZIX	3/30/2010	-	15.2	1.889	-	0.22	6.55	-100.0	151.0	3.00	Water clear, no odor.
		-	15.2	1.882	-	0.16	6.57	-102.0	160.0		
		-	15.4	3.931	-	0.60	7.14	-206.0	272.0		
MW-4	5/30/2018	-	15.4	3.961	-	0.18	7.12	-283.0	279.0	3.60	Water slight light brown tint,
IVIVV-4 ;	5/30/2016	-	15.3	4.075	-	0.10	7.12	-288.0	280.0	3.00	some odor.
		-	15.3	4.080	-	0.11	7.12	-289.0	281.0		
			14.5	12.450	_	0.18	6.72	-206.0	421.0		
		_	14.3	12.190	_	0.10	6.69	-210.0	422.0		MS/MSD sample taken here. Water clear, slight odor.
MW-5	5/30/2018	_	14.2	12.020	_	0.07	6.64	-216.0	417.0	4.00	
		-	14.3	11.790	_	0.08	6.63	-210.0	319.0		water clear, slight odor.
		_	14.2	11.790		0.08	6.63	-221.0	301.0		
		-	15.7	5.098	-	1.05	6.82	-166.0	32.0		
MW-6	5/30/2018	-	15.7	5.132	-	0.38	6.84	-213.0	319.0	3.20	Water slightly cloudy, fine
IVIVV-0	3/30/2010	-	15.6	5.093	-	0.17	6.86	-255.0	166.0	3.20	black particles, some odor.
		-	15.6	5.045	-	0.09	6.87	-302.0	171.0		
		-	15.5	4.988		0.07	6.87	-369.0	97.0		
		-	16.9	0.889	-	0.98	6.59	-8.0	499.0		
MW-7	5/30/2018	-	15.9	0.860	-	0.33	6.54	-19.0	211.0	3.70	Water clear, no odor.
10100-7	3/30/2010	-	15.5	0.655	-	0.18	6.48	-27.0	198.0	0.70	Trater olear, no odor.
		-	15.5	0.859	-	0.18	6.49	-29.0	210.0		
		-	14.5	6.105	-	1.03	6.20	46.0	494.0		
MW-8	5/30/2018	-	14.5	6.044	-	0.84	6.20	32.0	334.0	3.60	Water clear, no odor.
11111-0	3/30/2010	-	14.5	6.315	-	0.65	6.19	25.0	20.0	0.00	Trater olear, no odor.
		-	14.5	6.349	-	0.62	6.18	23.0	24.0		

Field parameters collected during purging using a YSI ProDSS with flow thru cell and GeoPump peristaltic pump





		Sample ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
ChemName	Units	TOGS 1.1.1	Ì					
Total Metals			Ì					
Aluminum, Total	μg/L		220	2,710	5,230	1,000	19.8	700
Antimony, Total	μg/L	3	<12U	6.53	2.1	0.7J	<0.42U	0.69J
Arsenic, Total	μg/L	25	<8U	4.26	12.1	2.5	1.54	3.01
Barium, Total	μg/L	1000	180	218.7	333.3	235.6	284.9	224.9
Beryllium, Total	μg/L	3 ^{#1}	<4U	0.17J	0.4J	<0.2U	<0.1U	<0.5U
Cadmium, Total	μg/L	5	<4U	0.83	2.1	0.5	0.06J	0.36
Calcium, Total	μg/L		210,000	166,000	211,000	189,000	276,000	182,000
Chromium, Total	μg/L	50	<50U	35.47	91.6	18.2	2.89	11.93
Cobalt, Total	μg/L		<20U	3.58	7.9	2	1.16	2.12
Copper, Total	μg/L	200	<50U	66.06	180	17.7	0.71J	21.1
Iron, Total	μg/L	300	4,100	21,500	24,000	7,160	3,710	6,260
Lead, Total	μg/L	25	6	147.4	360.1	85.7	0.84J	45.6
Magnesium, Total	μg/L	35000 ^{#1}	36,000	29,100	36,200	31,100	39,200	32,600
Manganese, Total	μg/L	300	3,000	2,458	3,322	2,939	2,792	2,093
Mercury, Total	μg/L	0.7	<1U	3.27	0.81	0.14J	<0.06U	<0.2U
Nickel, Total	μg/L	100	<50U	30.45	69.1	18.4	9.44	13.13
Potassium, Total	μg/L	100	18,000	13,900	17,500	16,300	20,700	16,100
Selenium, Total	μg/L	10	<40U	1.03J	2J	<1U	<1.73U	<5U
Silver, Total	μg/L	50	<20U	0.66	1.6	0.1J	<0.16U	0.17J
Sodium, Total	μg/L	20000	220,000J	290,000	315,000	342,000	477,000	369,000
Thallium, Total	μg/L	0.5 ^{#1}	<10U	0.04J	0.1J	<0.1U	<0.14U	<0.5U
Vanadium, Total	μg/L μg/L	0.5	<50U	9.55	34.1	4.3J	<1.57U	3.55J
Zinc, Total		2000#1	<50U	298.2	952.9	104.2	4.44J	82.02
Dissolved Metals	μg/L	2000	<500	298.2	952.9	104.2	4.443	82.02
Aluminum, Dissolved (Filtered)	/1		<180U	9.6J	10.6	8J		6.76J
Antimony, Dissolved (Filtered)	μg/L μg/L	3	<12U	0.17J	0.1J	1.2J	-	0.76J 0.69J
Arsenic, Dissolved (Filtered)	1.0	25	8.3	1.68	0.13	2.2	-	1.14
	μg/L	1000	140		195.9	200.1		
Barium, Dissolved (Filtered)	μg/L			175.8			-	182.2
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	<0.5U	<0.5U	<0.2U		<0.5U
Cadmium, Dissolved (Filtered)	μg/L	5	<4U	<0.2U	<0.5U	<0.1U	-	<0.2U
Calcium, Dissolved (Filtered)	μg/L		180,000	193,000	159,000	198,000	-	183,000
Chromium, Dissolved (Filtered)	μg/L	50	<50U	3.34	3.04	2.9		0.96J
Cobalt, Dissolved (Filtered)	μg/L		<20U	0.82	1.3	1.3	-	1.56
Copper, Dissolved (Filtered)	μg/L	200	<50U	0.64J	0.3J	<0.3U	-	1.48
Iron, Dissolved (Filtered)	μg/L	300	760	7,470	5,360	1,920	-	25.6J
Lead, Dissolved (Filtered)	μg/L	25	<4U	<1U	<1U	0.2J	-	<1U
Magnesium, Dissolved (Filtered)	μg/L	35000 ^{#1}	30,000	27,300	30,800	30,300	-	26,400
Manganese, Dissolved (Filtered)	μg/L	300	2,500	2,728	2,886	3,222	-	1,771
Mercury, Dissolved (Filtered)	μg/L	0.7	<1U	<0.2U	<0.2U	<0.06U	-	<0.2U
Nickel, Dissolved (Filtered)	μg/L	100	<50U	7.43	10.17	14.1	-	8.2
Potassium, Dissolved (Filtered)	μg/L		15,000	14,200	15,800	16,400	-	15,900
Selenium, Dissolved (Filtered)	μg/L	10	<40U	1.29J	<100U	<1U	-	<5U
Silver, Dissolved (Filtered)	μg/L	50	<20U	<0.4U	<5U	<0.1U	-	<0.4U
Sodium, Dissolved (Filtered)	μg/L	20000	190,000J	356,000	298,000	382,000	-	430,000
Thallium, Dissolved (Filtered)	μg/L	0.5 ^{#1}	<10U	<0.5U	<0.5U	<0.1U	-	<0.5U
Vanadium, Dissolved (Filtered)	μg/L		<50U	0.35J	<5U	<0.6U	-	<5U
Zinc, Dissolved (Filtered)	μg/L	2000#1	<50U	2.48J	4.87J	<2.6U	-	7.39J

TOGS 1.1.1 - 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 samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

Bold and highlighted results indicate an exceedance of standards

^{#1 -} Guidance value



		Sample ID	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R
ChemName	Units	TOGS 1.1.1						
Total Metals								
Aluminum, Total	μg/L		4,200J	404	1,690	33	193	35.5
Antimony, Total	μg/L	3	<12U	3.12	2.1	0.3J	<0.42U	0.8J
Arsenic, Total	μg/L	25	<8U	36.36	7.8	6.8	6.51	6.25
Barium, Total	μg/L	1000	200	192.8	227.1	227.7	298	308.7
Beryllium, Total	μg/L	3 ^{#1}	<4U	0.1J	0.2J	<0.2U	<0.1U	<0.5U
Cadmium, Total	μg/L	5	<4U	0.19J	0.1J	<0.1U	0.2	<0.2U
Calcium, Total	μg/L		320,000	88,100	93,300	73,700	73,300	82,200
Chromium, Total	μg/L	50	<50U	10.5	10.4	0.5J	1.01	0.4J
Cobalt, Total	μg/L		<20U	1.18	2.6	0.2	0.23J	<0.5U
Copper, Total	μg/L	200	<50U	20.21	30.9	<0.3U	2.47	0.6J
Iron, Total	μg/L	300	13,000J	58,600	24,100	14,000	14,100	17,300
Lead, Total	μg/L	25	120J	73.18	178	1.9	13.48	2.01
Magnesium, Total	μg/L	35000#1	140,000	33,900	35,700	33,800	34,400	41,500
Manganese, Total	μg/L	300	900	374.7	699.3	804.9	708.6	901.2
Mercury, Total	μg/L	0.7	<1U	0.38	0.46	0.09J	0.06J	<0.2U
Nickel, Total	μg/L	100	<50U	3.41	5.5	1.3J	1.75J	<2U
Potassium, Total	μg/L		55,000	14,400	16,000	14,300	16,500	16,800
Selenium, Total	μg/L	10	<40U	0.53J	<5U	<1U	<1.73U	<5U
Silver, Total	μg/L	50	<20U	<0.4U	0.1J	<0.1U	<0.16U	<0.4U
Sodium, Total	μg/L	20000	770,000J	142,000	221,000	200,000	273,000	178,000
Thallium, Total	μg/L	0.5 ^{#1}	<10U	<0.5U	<0.5U	<0.1U	<0.14U	<0.5U
Vanadium, Total	μg/L	0.5	<50U	6.59	8.1	<0.6U	<1.57U	<5U
Zinc, Total	μg/L	2000#1	120	68.19	80.8	<2.6U	5.88J	<10U
Dissolved Metals	P6/ =	2000	120	00.23	00.0	12.00	3.003	1200
Aluminum, Dissolved (Filtered)	μg/L		<180U	_	_	_	_	4.54J
Antimony, Dissolved (Filtered)	μg/L	3	<12U	_	_	_	_	<4U
Arsenic, Dissolved (Filtered)	μg/L	25	<8U	_	_	_	_	0.83
Barium, Dissolved (Filtered)	μg/L	1000	160	_	_	_	_	231.6
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	_	_	_	_	<0.5U
Cadmium, Dissolved (Filtered)	μg/L	5	<4U	_	_	_	_	<0.2U
Calcium, Dissolved (Filtered)	μg/L		320,000	_	_	_	_	88,800
Chromium, Dissolved (Filtered)	μg/L	50	<50U	_	_	_	_	0.18J
Cobalt, Dissolved (Filtered)	μg/L		<20U	_	_	_	-	0.18J
Copper, Dissolved (Filtered)	μg/L	200	<50U	_	_	_	_	0.10J
Iron, Dissolved (Filtered)	μg/L	300	870	_	-	-	_	35.1J
Lead, Dissolved (Filtered)	μg/L	25	<4U	-	_	_	_	<1U
Magnesium, Dissolved (Filtered)	μg/L	35000 ^{#1}	140,000	_	_	_	-	34,400
Manganese, Dissolved (Filtered)	μg/L	3000	830	_	_	-	_	915.9
Mercury, Dissolved (Filtered)	μg/L	0.7	<1U	-	_	-	_	<0.2U
Nickel, Dissolved (Filtered)	μg/L	100	<50U	_	_	_	-	0.87J
		100	55,000	_	_	_	_	17,400
Potassium, Dissolved (Filtered) Selenium, Dissolved (Filtered)	μg/L	10	<40U	<u> </u>	-	<u> </u>	-	<5U
Silver, Dissolved (Filtered)	μg/L μg/L	50	<20U	-	-	-	-	<0.4U
	1 0	20000	760,000J	-	-	-	-	213,000
Sodium, Dissolved (Filtered)	μg/L						-	
Thallium, Dissolved (Filtered)	μg/L	0.5 ^{#1}	<10U	-	-	-	-	<0.5U
Vanadium, Dissolved (Filtered)	μg/L	#1	<50U	-	-	-	-	<5U
Zinc, Dissolved (Filtered) TOGS 1.1.1 - Class GA Groundwater Quality Sta	μg/L	2000#1	<50U	-	-	-	-	<10U

TOGS 1.1.1 - 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 samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals dissolved)

U - Analyzed for but Not Detected above the identified laboratory reporting limit

J - Indicates an estimated value

(-) - No sample analyzed for specific analyte

Bold and highlighted results indicate an exceedance of standards

^{#1 -} Guidance value



		Sample ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
ChemName	Units	TOGS 1.1.1						
Total Metals			Ì					
Aluminum, Total	μg/L		250	103	87	616	148	5,000
Antimony, Total	μg/L	3	<12U	2.91	1.2J	1J	1.2J	3.39J
Arsenic, Total	μg/L	25	<8U	9.74	5.9	7.8	3.56	55.78
Barium, Total	μg/L	1000	660	92.03	80.4	80.8	112.5	290.4
Beryllium, Total	μg/L	3#1	<4U	<0.5U	<0.5U	<0.2U	<0.1U	0.43J
Cadmium, Total	μg/L	5	<4U	0.05J	0.1J	0.3	0.5	2.74
Calcium, Total	μg/L		520,000J	272,000	294,000	207,000	220,000	291,000
Chromium, Total	μg/L	50	<50U	0.77J	2.8	2.2	0.81J	16.9
Cobalt, Total	μg/L		<20U	0.36	0.49J	1.6	0.69	13.26
Copper, Total	μg/L	200	<50U	1.12J	2.2	9.9	2.13	111.6
Iron, Total	μg/L	300	650	186	219	1,290	336	16,400
Lead, Total	μg/L	25	9	3.12	3.5	25	5.51	288.8
Magnesium, Total	μg/L	35000#1	8,400J	6,600	12,300	16,200	30,700	36,900
Manganese, Total	μg/L	300	100	5.31	13	35.3	302.2	752.8
Mercury, Total	μg/L	0.7	<1U	<0.2U	<0.2U	<0.06U	<0.06U	0.4
Nickel, Total	μg/L	100	<50U	3.56	5.5	7.6	5.08	35.7
Potassium, Total	μg/L		64,000	70,700	77,800	74,200	53,200	52,000
Selenium, Total	μg/L	10	<40U	0.55J	<5U	<1U	<1.73U	1.97J
Silver, Total	μg/L	50	<20U	<0.4U	<0.4U	<0.1U	<0.16U	0.25J
Sodium, Total	μg/L	20000	250,000J	303,000	339,000	387,000	331,000	382,000
Thallium, Total	μg/L	0.5 ^{#1}	<10U	<0.5U	<0.5U	<0.1U	<0.14U	0.16J
Vanadium, Total	μg/L		<50U	0.92J	1.3J	3.3J	1.69J	21.8
Zinc, Total	μg/L	2000#1	<50U	13.78	31.8	60.7	30.16	760.7
Dissolved Metals	11 0,							
Aluminum, Dissolved (Filtered)	μg/L		<180U	-	-	-	-	9.43J
Antimony, Dissolved (Filtered)	μg/L	3	<12U	-	-	-	-	1.23J
Arsenic, Dissolved (Filtered)	μg/L	25	<8U	-	-	-	-	23.96
Barium, Dissolved (Filtered)	μg/L	1000	620	-	-	-	-	171.1
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	-	-	-	-	<0.5U
Cadmium, Dissolved (Filtered)	μg/L	5	<4U	-	-	-	-	<0.2U
Calcium, Dissolved (Filtered)	μg/L		440,000J	-	-	-	-	243,000
Chromium, Dissolved (Filtered)	μg/L	50	<50U	-	-	-	-	0.35J
Cobalt, Dissolved (Filtered)	μg/L		<20U	-	-	-	-	0.61
Copper, Dissolved (Filtered)	μg/L	200	<50U	-	-	-	-	<1U
Iron, Dissolved (Filtered)	μg/L	300	<280U	-	-	-	-	49.1J
Lead, Dissolved (Filtered)	μg/L	25	<4U	-	-	-	-	0.91J
Magnesium, Dissolved (Filtered)	μg/L	35000#1	<2,000UJ	-	-	-	-	27,200
Manganese, Dissolved (Filtered)	μg/L	300	<40U	-	-	-	-	433.7
Mercury, Dissolved (Filtered)	μg/L	0.7	<1U	-	-	-	-	<0.2U
Nickel, Dissolved (Filtered)	μg/L	100	<50U	-	-	-	-	3.39
Potassium, Dissolved (Filtered)	μg/L		65,000	-	-	-	-	40,300
Selenium, Dissolved (Filtered)	μg/L	10	<40U	-	-	-	-	<5U
Silver, Dissolved (Filtered)	μg/L	50	<20U	-	-	-	-	<0.4U
Sodium, Dissolved (Filtered)	μg/L	20000	250,000J	-	-	-	-	457,000
Thallium, Dissolved (Filtered)	μg/L	0.5 ^{#1}	<10U	-	-	-	-	<0.5U
Vanadium, Dissolved (Filtered)	μg/L		<50U	-	-	-	-	<5U
Zinc, Dissolved (Filtered)	μg/L	2000#1	<50U	-	-	-	-	3.52J
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Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
ChemName	Units	TOGS 1.1.1						
Total Metals								
Aluminum, Total	μg/L		<180U	2,380	589	242	8.24J	95.5
Antimony, Total	μg/L	3	<12U	3.01	0.9J	1.5J	3.31J	3.89J
Arsenic, Total	μg/L	25	25	11.91	3	3.7	7.57	4.06
Barium, Total	μg/L	1000	56	126.4	125.7	129.2	68.44	80.6
Beryllium, Total	μg/L	3#1	<4U	0.12J	<0.5U	<0.2U	<0.1U	<0.5U
Cadmium, Total	μg/L	5	<4U	1.56	0.5	0.2J	<0.05U	0.16J
Calcium, Total	μg/L		210,000J	243,000	228,000	224,000	197,000	259,000
Chromium, Total	μg/L	50	<50U	8.36	3.6	1.7J	4.89	0.79J
Cobalt, Total	μg/L		<20U	3.84	2.4	1	1.08	0.96
Copper, Total	μg/L	200	<50U	49.9	13.2	<0.3U	0.51J	3.69
Iron, Total	μg/L	300	4,000	16,400	4,070	5,740	3,010	3,300
Lead, Total	μg/L	25	6	244.8	90.4	46	<1.71U	15.02
Magnesium, Total	μg/L	35000#1	120,000J	147,000	156,000	306,000	174,000	170,000
Manganese, Total	μg/L	300	950	1,020	1,060	768.1	449.9	531
Mercury, Total	μg/L	0.7	<1U	6.02	0.93	0.29	<0.06U	<0.2U
Nickel, Total	μg/L	100	<50U	26.93	14	6.8	11.62	8.52
Potassium, Total	μg/L		73,000	75,300	72,500	115,000	84,000	91,400
Selenium, Total	μg/L	10	<40U	0.77J	<5U	<1U	<1.73U	<5U
Silver, Total	μg/L	50	<20U	0.17J	<0.4U	<0.1U	<0.16U	<0.4U
Sodium, Total	μg/L	20000	740,000J	1,140,000	1,030,000	3,020,000	1,800,000	1,470,000
Thallium, Total	μg/L	0.5 ^{#1}	<10U	0.06J	<0.5U	0.1J	<0.71U	<0.5U
Vanadium, Total	μg/L	0.5	<50U	12.03	4.2J	2J	<1.57U	<5U
Zinc, Total	μg/L	2000#1	<50U	736.6	223.7	29.6	15.6	36.68
Dissolved Metals	P6/ L	2000	1500	730.0	223.7	23.0	13.0	30.00
Aluminum, Dissolved (Filtered)	μg/L		<180U	_	_	_	_	3.75J
Antimony, Dissolved (Filtered)	μg/L	3	<12U	_	_	_	_	1.75J
Arsenic, Dissolved (Filtered)	μg/L	25	10	_	_	_	_	0.98
Barium, Dissolved (Filtered)	μg/L	1000	54	_	_	_	_	82.71
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	_	_	_	_	<0.5U
Cadmium, Dissolved (Filtered)	μg/L	<u>s</u>	<4U	_	_	-	-	<0.2U
Calcium, Dissolved (Filtered)	μg/L		220,000J	_	_	_	_	249,000
Chromium, Dissolved (Filtered)	μg/L	50	<50U	_	_	_	_	<1U
Cobalt, Dissolved (Filtered)	μg/L		<20U	_	_	_	-	0.73
Copper, Dissolved (Filtered)	μg/L	200	<50U	_	_	_	_	0.9J
Iron, Dissolved (Filtered)	μg/L	300	370	_	_	-	-	35J
Lead, Dissolved (Filtered)	μg/L	25	4	-		-	-	<1U
Magnesium, Dissolved (Filtered)	μg/L	35000 ^{#1}	120,000J		-	-	-	160,000
Manganese, Dissolved (Filtered)	μg/L	3000	970	_	_	_	_	511.1
Mercury, Dissolved (Filtered)	μg/L	0.7	<1U			_	_	<0.2U
Nickel, Dissolved (Filtered)	μg/L	100	<50U	-	-	_	_	5.02
Potassium, Dissolved (Filtered)	μg/L	100	77,000	_		_	-	89,000
Selenium, Dissolved (Filtered)	μg/L	10	<40U			-	-	<5U
Silver, Dissolved (Filtered)	μg/L	50	<20U			_	_	<0.4U
Sodium, Dissolved (Filtered)	μg/L	20000	760,000J			-	-	1,540,000
Thallium, Dissolved (Filtered)	μg/L μg/L	0.5 ^{#1}	<10U	-	-	-	-	<0.5U
Vanadium, Dissolved (Filtered)	μg/L	0.5	<50U	-	-	-	-	<5U
	1.0	2052#1	<50U	-	-	-	-	
Zinc, Dissolved (Filtered)	μg/L	2000#1	<500	_	-			7.43J

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



Well ID MW-6			Sample ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
ChemName Units TOGS 1.1.1			Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
Total Metals			Well ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Aluminum, Total	ChemName	Units	TOGS 1.1.1						
Antimony, Total	Total Metals	· ·		Ì					
Antimony, Total	Aluminum, Total	μg/L		<180U	137	330	191	449	1,230
Barlum, Total	Antimony, Total		3	<12U	3.09	1.4J	1.1J	1.95J	4.92
Barlum, Total		1.0	25	14	7.55	3.2	4.5	14.06	10.44
Beryllium, Total			1000	140	104.8	156	166.5	145.5	217.1
Cadinium, Total			3#1	<4U	<0.5U	<0.5U	<0.2U	<0.1U	<0.5U
Calcium, Total									
Chromium, Total μg/L 50 <50U 3.97 2.1 1.2J 3.44 3.75				360,000J	292,000	285,000	280,000	286,000	340,000
Cobatt, Total		1.0	50		_				· ·
Copper, Total μg/L 200 <50U 3.64 4.9 7.1 11.45 28.28 Iron, Total μg/L 300 650 5,820 1,270 1,870 5,550 6,000 Lead, Total μg/L 25 10 9.28 17.4 15.1 25.67 92.14 Magnesium, Total μg/L 35000" 47,000U 46,300 52,500 57,400 40,000 49,000 Manganess, Total μg/L 300 640 1,526 757.3 952.6 1,118 1,165 Mercury, Total μg/L 0.7 <1U <0.2U <0.2U <0.06U <0.06U <0.06U <0.2U Nickel, Total μg/L 100 <50U 22.81 8 9.4 11.82 11.23 Potassium, Total μg/L 10 <40U 0.51U <50U <0.1U <0.13U <1.13U <5U Silver, Total μg/L 50 <20U <0.4U <0.01U <0.16U <0.4U Silver, Total μg/L 50 <20U <0.4U <0.01U <0.16U <0.4U Sodium, Total μg/L 20000 410,0001 385,000 393,000 470,000 488,000 499,000 Thallium, Total μg/L 20000 410,0001 385,000 393,000 470,000 488,000 499,000 Thallium, Total μg/L 20000 410,0001 385,000 393,000 470,000 488,000 499,000 Thallium, Total μg/L 20000 410,0001 385,000 393,000 470,000 488,000 499,000 Thallium, Dissolved (Filtered) μg/L 20000 410,0001 40,5U 40,5U 40,4U 40,5U Aluminum, Dissolved (Filtered) μg/L 20000 41,0001		1.0							
Iron, Total μg/L 300 650 5,820 1,270 1,870 5,550 6,000 Lead, Total μg/L 25 10 9,28 17.4 15.1 25.67 92.14 3000° 47,0000 46,300 52,500 57,400 40,000 49,000 Manganese, Total μg/L 3000 640 1,526 757.3 952.6 1,118 1,165 Mercury, Total μg/L 100 <500 22.81 8 9.4 11.82 11.23 11.23 Potassium, Total μg/L 100 <500 22.81 8 9.4 11.82 11.23 11.23 Selenium, Total μg/L 100 <500 24.81 8 9.4 11.82 11.23 Silver, Total μg/L 50 <200 <0.400 0.050 <0.050 49,900 61,000 51,000 52,000 60,800 49,900 61,000 52,000 60,800 49,900 61,000 60,000			200						
Lead, Total IIg/L 25			300						
Magnesium, Total μg/L 35000e ^{±1} 47,0001 46,300 52,500 57,400 40,000 49,000 Manganese, Total μg/L 300 640 1,526 757.3 952.6 1,118 1,165 1,120		_						-	
Manganese, Total μg/L 300 640 1,526 757.3 952.6 1,118 1,165 Mercury, Total μg/L 0.7 <11 <0.2U <0.2U <0.06U <0.06U <0.00U Mickel, Total μg/L 100 <50U 22.81 8 9.4 11.82 11.23 Potassium, Total μg/L 66,000 61,100 54,200 60,800 49,900 61,000 Selenium, Total μg/L 50 <20U <0.4U <0.1U <0.1U <0.15U <0.4U Sodium, Total μg/L 20000 410,000 385,000 393,000 470,000 408,000 499,000 Thallium, Total μg/L 20000 410,000 385,000 393,000 470,000 408,000 499,000 Thallium, Total μg/L 20000 410,000 385,000 393,000 470,000 408,000 499,000 Thallium, Total μg/L 20000 2.66 3.11 21 4.95 6.45 Zinc, Total μg/L 20000 450 450 450 450 450 Zinc, Total μg/L 20000 450 450 450 450 450 Zinc, Total μg/L 20000 450 450 450 450 450 Zinc, Total μg/L 20000 450 450 450 450 Zinc, Total μg/L 2000 450 450 450 450 Zinc, Total μg/L 2000 450 450 450 450 Zinc, Total μg/L 2000 450 450 450 450 Zinc, Total μg/L 3 412U 9.721 Antimony, Dissolved (Filtered) μg/L 3 412U 3.821 Arsenic, Dissolved (Filtered) μg/L 3 412U 5.05 Beryllium, Dissolved (Filtered) μg/L 3 44U 5.05 Beryllium, Dissolved (Filtered) μg/L 5 44U									
Mercury, Total									
Nickel, Total μg/L 100 <50U 22.81 8 9.4 11.82 11.23 Potassium, Total μg/L 10 66,000 61,100 54,200 60,800 49,900 61,000 Selenium, Total μg/L 10 <40U 0.51 <50U <10U <0.10 <0.40 Sodium, Total μg/L 20000 410,000 385,000 393,000 470,000 408,000 499,000 Thallium, Total μg/L 20000 410,000 385,000 393,000 470,000 408,000 499,000 Vanadium, Total μg/L 2000° 45,000 2.66 3.1 2 4.95 6.45 Zinc, Total μg/L 2000° 45,000 2.66 3.1 2 4.95 6.45 Zinc, Total μg/L 2000° 45,000 49,000 49,000 Vanadium, Dissolved (Filtered) μg/L 3 412U -					-			-	-
Potassium, Total μg/L 10 66,000 61,100 54,200 60,800 49,900 61,000 5elenium, Total μg/L 10 400 0.511 <50 410 4.73U <50 <50 4.01U 4.73U <50 <50 4.01U 4.04U 4.01U 4.01EV 4.01EV 4.04U 4.01EV 4.05U 5.00U 5.00U 5.00U 5.05U 4.05U									
Selenium, Total			100			_			
Silver, Total			10						
Sodium, Total μg/L 20000 410,0001 385,000 393,000 470,000 408,000 490,000									
Thallium, Total μg/L 0,5 st <10U <0.5U <0.1U <0.14U <0.5U <0.15U <0.14U <0.5U <0.15U <0.15U									
Vanadium, Total μg/L 2000 ^{#1} <50U 2.66J 3.1J 2J 4.95J 6.45 Zinc, Total μg/L 2000 ^{#1} <50U 819.6 121.7 98.3 177 157.5 Dissolved Metals					-	-			-
Zinc, Total μg/L 2000 ^{f1} <50U 819.6 121.7 98.3 177 157.5			0.5						
Aluminum, Dissolved (Filtered) µg/L 3 <12U - - - - 3.82J			#1						
Aluminum, Dissolved (Filtered) μg/L 3 <12U - - - 9.72J		μg/L	2000	<500	819.0	121.7	96.5	1//	157.5
Antimony, Dissolved (Filtered)		a/I		<100U					0.721
Arsenic, Dissolved (Filtered) µg/L 25 10 - - - - 5.05 Barium, Dissolved (Filtered) µg/L 1000 130 - - - - 159.1 Beryllium, Dissolved (Filtered) µg/L 3*1 4U <ld>- - - - - - - - - - - - - - -<</ld>			2		-				
Barium, Dissolved (Filtered) μg/L 3 ^{s1} <4U - - - - - - - - -		1.0				-			
Beryllium, Dissolved (Filtered) μg/L 3#1 <4U - - - - - <0.5U			-			-			
Cadmium, Dissolved (Filtered) μg/L S <4U - - - - <0.2U		1.0							
Calcium, Dissolved (Filtered) μg/L 340,000 - - - 363,000 Chromium, Dissolved (Filtered) μg/L 50 <50U									
Chromium, Dissolved (Filtered) μg/L 50 <50U - - - - 0.43J			5	_	-		-	-	
Cobalt, Dissolved (Filtered) μg/L 200 - - - - 1.25				<u> </u>	-		-	-	· ·
Copper, Dissolved (Filtered) μg/L 200 <50U - - - - 1.98 Iron, Dissolved (Filtered) μg/L 300 370 - - - - 79.9 Lead, Dissolved (Filtered) μg/L 25 5 - - - - 0.76 Magnesium, Dissolved (Filtered) μg/L 35000 ^{#1} 46,000J - - - - 43,000 Manganese, Dissolved (Filtered) μg/L 300 630 - - - - - 1,155 Mercury, Dissolved (Filtered) μg/L 0.7 <1U - - - - - - 0.2U Nickel, Dissolved (Filtered) μg/L 100 <50U - - - - - 6.44 Potassium, Dissolved (Filtered) μg/L 10 <40U - - - - <5U Silver, Dissolved (Filtered) μg/L 50 <20U - - - - <0.2U Sodium, Dissolved (Filtered) μg/L 20000 400,000J - - - - - 617,000 Thallium, Dissolved (Filtered) μg/L 0.5 ^{#1} <10U - - - - - 0.23J Vanadium, Dissolved (Filtered) μg/L <50U - - - - - - 0.23J Vanadium, Dissolved (Filtered) μg/L <50U - - - - - - - 0.23J Vanadium, Dissolved (Filtered) μg/L <50U - - - - - - - - -			50						
Iron, Dissolved (Filtered) μg/L 300 370 - - - - 79.9									
Lead, Dissolved (Filtered) μg/L 25 5 - - - 0.761 Magnesium, Dissolved (Filtered) μg/L 35000 $^{#1}$ 46,000J - - - - 43,000 Manganese, Dissolved (Filtered) μg/L 300 630 - - - - - 1,155 Mercury, Dissolved (Filtered) μg/L 0.7 <1U									
Magnesium, Dissolved (Filtered) μg/L $35000^{#1}$ $46,000J$ - - - 43,000 Manganese, Dissolved (Filtered) μg/L 300 630 - - - - 1,155 Mercury, Dissolved (Filtered) μg/L 0.7 <1U									
Manganese, Dissolved (Filtered) μg/L 300 630 - - - - 1,155 Mercury, Dissolved (Filtered) μg/L 0.7 <1U									
Mercury, Dissolved (Filtered) μg/L 0.7 <1U - - - - 0.2U Nickel, Dissolved (Filtered) μg/L 100 <50U									
Nickel, Dissolved (Filtered)					-	-	-	-	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
			100					-	_
					-	-		-	
					-	-	-	-	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Silver, Dissolved (Filtered)	μg/L	50	<20U	-	-	-	-	<0.4U
Vanadium, Dissolved (Filtered) μg/L <50U - - - - <5U	Sodium, Dissolved (Filtered)				-	-	-	-	617,000
			0.5 ^{#1}		-	-	-	-	
Zinc, Dissolved (Filtered) μg/L 2000 ^{#1} <50U 13.14					-	-	-	-	<5U
	Zinc, Dissolved (Filtered)	μg/L	2000#1	<50U	-	-	-	-	13.14

TOGS 1.1.1 - 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).

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annua
		Well ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
ChemName	Units	TOGS 1.1.1						
Total Metals								
Aluminum, Total	μg/L		<180U	2.89J	40	50	15.5	56.2
Antimony, Total	μg/L	3	<12U	0.52J	0.2J	0.3J	<0.42U	<4U
Arsenic, Total	μg/L	25	<8U	1.4	2.8	2.3	1.47	1.78
Barium, Total	μg/L	1000	150	85.68	120.7	97.9	67.41	83.01
Beryllium, Total	μg/L	3 ^{#1}	<4U	<0.5U	<0.5U	<0.2U	<0.1U	<0.5U
Cadmium, Total	μg/L	5	<4U	<0.2U	<0.2U	<0.1U	<0.05U	<0.2U
Calcium, Total	μg/L		110,000	109,000	122,000	91,600	85,000	94,400
Chromium, Total	μg/L	50	<50U	0.99J	7.7	7.3	4.01	12.18
Cobalt, Total	μg/L	30	<20U	1.15	1.5	1.3	1.82	2.65
·	μg/L μg/L	200	<50U		1.9J	<0.3U	<0.38U	0.42J
Copper, Total Iron, Total		300	6,400	1.13J				
	μg/L		-	3,170	5,040	4,630	3,750	5,330
Lead, Total	μg/L	25	<4U	<1U	1.1	0.7J	0.39J	0.71J
Magnesium, Total	μg/L	35000#1	7,300	7,040	10,300	8,580	9,690	15,700
Manganese, Total	μg/L	300	830	823.6	913.5	801.4	1,074	1,957
Mercury, Total	μg/L	0.7	<1U	<0.2U	<0.2U	0.11J	<0.06U	<0.2U
Nickel, Total	μg/L	100	100	121.9	160	173.4	143.7	187.2
Potassium, Total	μg/L		13,000	9,020	12,200	11,400	8,360	8,530
Selenium, Total	μg/L	10	<40U	<5U	<5U	<1U	<1.73U	<5U
Silver, Total	μg/L	50	<20U	<0.4U	<0.4U	<0.1U	<0.16U	<0.4U
Sodium, Total	μg/L	20000	330,000J	153,000	186,000	138,000	81,800	58,200
Thallium, Total	μg/L	0.5 ^{#1}	<10U	<0.5U	<0.5U	<0.1U	<0.14U	<0.5U
Vanadium, Total	μg/L		<50U	<5U	<5U	<0.6U	<1.57U	<5U
Zinc, Total	μg/L	2000#1	<50U	9.03J	42.6	<2.6U	<3.41U	3.89J
Dissolved Metals								
Aluminum, Dissolved (Filtered)	μg/L		<180U	68.3	-	4J	<3.27U	4.06J
Antimony, Dissolved (Filtered)	μg/L	3	<12U	0.75J	-	0.4J	<0.42U	<4U
Arsenic, Dissolved (Filtered)	μg/L	25	<8U	5.08	-	1.2	0.69	0.6
Barium, Dissolved (Filtered)	μg/L	1000	150	119.3	-	80.8	64.71	76.08
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	<0.5U	-	<0.2U	<0.1U	<0.5U
Cadmium, Dissolved (Filtered)	μg/L	5	<4U	0.05J	_	<0.1U	<0.05U	<0.2U
Calcium, Dissolved (Filtered)	μg/L		130,000	118,000	_	126,000	87,900	97,300
Chromium, Dissolved (Filtered)	μg/L	50	<50U	23.34	_	3	0.69J	0.69J
Cobalt, Dissolved (Filtered)	μg/L		<20U	1.28	_	1.6	1.85	2.6
Copper, Dissolved (Filtered)	μg/L	200	<50U	1.31	_	<0.3U	<0.38U	0.77J
Iron, Dissolved (Filtered)	μg/L	300	980	13,400	_	652	172	22.8J
		25	<4U	2.24	_	<0.1U	<0.34U	<1U
Lead, Dissolved (Filtered) Magnesium, Dissolved (Filtered)	μg/L		8,500	8,240	-	7,540	9,920	15,900
	μg/L	35000 ^{#1}		-	-	-	-	-
Manganese, Dissolved (Filtered)	μg/L	300	950	853.8		1,038	1,130	1,688
Mercury, Dissolved (Filtered)	μg/L	0.7	<1U	<0.2U	-	<0.06U	<0.06U	<0.2U
Nickel, Dissolved (Filtered)	μg/L	100	110	135.9	-	158	142.7	169.5
Potassium, Dissolved (Filtered)	μg/L		15,000	10,400	-	10,200	9,080	8,570
Selenium, Dissolved (Filtered)	μg/L	10	<40U	0.59J	-	<1U	<1.73U	<5U
Silver, Dissolved (Filtered)	μg/L	50	<20U	0.13J	-	<0.1U	<0.16U	<0.4U
Sodium, Dissolved (Filtered)	μg/L	20000	380,000J	175,000	-	185,000	84,800	63,400
Thallium, Dissolved (Filtered)	μg/L	0.5 ^{#1}	<10U	<0.5U	-	<0.1U	<0.14U	<0.5U
Vanadium, Dissolved (Filtered)	μg/L		<50U	0.54J	-	<0.6U	<1.57U	<5U
Zinc, Dissolved (Filtered)	μg/L	2000#1	<50U	6.31J	-	<2.6U	<3.41U	<10U

TOGS 1.1.1 - 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).

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annua
		Well ID	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
ChemName	Units	TOGS 1.1.1						
Total Metals	00							
Aluminum, Total	μg/L		220	230	39	2,310	9.3J	15.1
Antimony, Total	μg/L	3	<12U	0.5J	0.7J	0.4J	<0.42U	<4U
Arsenic, Total	μg/L	25	<8U	0.39J	0.7	0.43	0.33J	<0.5U
Barium, Total	μg/L μg/L	1000	270	376.1	464.6	707.2	1,023	803.5
Beryllium, Total	1.0	3 ^{#1}	<4U	<0.5U	<0.5U	<0.2U	<0.1U	<0.5U
Cadmium, Total	μg/L	<u>3</u>	<4U	0.65	<0.2U	1.1	0.27	0.28
	μg/L	o						
Calcium, Total	μg/L		150,000	221,000	280,000	302,000	466,000	445,000
Chromium, Total	μg/L	50	<50U	1.29	2.4	7	1.26	<1U
Cobalt, Total	μg/L		<20U	0.21	0.2J	1.5	0.17J	<0.5U
Copper, Total	μg/L	200	<50U	1.36J	1.9J	<0.3U	0.5J	<1U
Iron, Total	μg/L	300	13,000	25,800	29,700	54,300	36,600	17,500
Lead, Total	μg/L	25	7.8	2.72	0.9J	11.7	<1.71U	<1U
Magnesium, Total	μg/L	35000 ^{#1}	7,700	10,000	17,400	17,300	23,300	27,700
Manganese, Total	μg/L	300	780	1,180	1,368	1,654	1,559	901.3
Mercury, Total	μg/L	0.7	<1U	<0.2U	<0.2U	<0.06U	<0.06U	<0.2U
Nickel, Total	μg/L	100	<50U	0.93	1.9	5.1	1.98J	<2U
Potassium, Total	μg/L		18,000	15,900	22,600	26,100	32,700	31,600
Selenium, Total	μg/L	10	<40U	<5U	<5U	<1U	<1.73U	<5U
Silver, Total	μg/L	50	<20U	<0.4U	<0.4U	<0.1U	<0.16U	<0.4U
Sodium, Total	μg/L	20000	420,000J	504,000	519,000	731,000	1,350,000	1,020,000
Thallium, Total	μg/L	0.5 ^{#1}	<10U	<0.5U	<0.5U	<0.1U	<0.71U	<0.5U
Vanadium, Total	μg/L		<50U	2.15J	<5U	8.3	<1.57U	<5U
Zinc, Total	μg/L	2000#1	<50U	6.77J	30	8.2J	<3.41U	<10U
Dissolved Metals	11 0,							
Aluminum, Dissolved (Filtered)	μg/L		<180U	3.95J	_	3J	<16.4U	4.28J
Antimony, Dissolved (Filtered)	μg/L	3	<12U	0.19J	_	0.6J	<2.14U	<4U
Arsenic, Dissolved (Filtered)	μg/L	25	<8U	0.89	-	<0.1U	<0.82U	<0.5U
Barium, Dissolved (Filtered)	μg/L	1000	200	366.9	_	658.2	910.4	694.3
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	<0.5U	_	<0.2U	<0.53U	<0.5U
Cadmium, Dissolved (Filtered)	μg/L	3 	<4U	<0.2U	_	<0.1U	<0.29U	0.09J
Calcium, Dissolved (Filtered)	μg/L μg/L	<u> </u>	160,000	217,000	-	358,000	455,000	419,000
Chromium, Dissolved (Filtered)		50	<50U	1.56	-	1.6J	<0.89U	<1U
	μg/L	50			-			
Cobalt, Dissolved (Filtered)	μg/L	200	<20U	0.33J	-	<0.1U	<0.81U	<0.5U
Copper, Dissolved (Filtered)	μg/L	200	<50U	0.68J		<0.3U	<1.92U	1.1
Iron, Dissolved (Filtered)	μg/L	300	1,200	19,400	-	26,500	19,200	43J
Lead, Dissolved (Filtered)	μg/L	25	<4U	<1U	-	<0.1U	<1.71U	<1U
Magnesium, Dissolved (Filtered)	μg/L	35000#1	8,200	11,600	-	17,900	24,300	24,900
Manganese, Dissolved (Filtered)	μg/L	300	810	971.8	-	1,939	1,551	744.6
Mercury, Dissolved (Filtered)	μg/L	0.7	<1U	<0.2U	-	<0.06U	<0.06U	<0.2U
Nickel, Dissolved (Filtered)	μg/L	100	<50U	3.29	-	5	<2.78U	1.44J
Potassium, Dissolved (Filtered)	μg/L		19,000	17,800	-	25,500	33,600	29,500
Selenium, Dissolved (Filtered)	μg/L	10	<40U	1.08J	-	<1U	<8.65U	<5U
Silver, Dissolved (Filtered)	μg/L	50	<20U	<0.4U	-	<0.1U	<0.81U	<0.4U
Sodium, Dissolved (Filtered)	μg/L	20000	450,000J	500,000	-	866,000	1,320,000	1,060,000
Thallium, Dissolved (Filtered)	μg/L	0.5 ^{#1}	<10U	<0.5U	-	<0.1U	<0.71U	<0.5U
Vanadium, Dissolved (Filtered)	μg/L		<50U	0.48J	-	<0.6U	<7.85U	<5U
Zinc, Dissolved (Filtered)	μg/L	2000#1	<50U	3.82J	-	<2.6U	<17.05U	3.79J

TOGS 1.1.1 - 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).

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- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	Duplicate	Duplicate	Duplicate	Duplicate	Duplicate	Duplicate
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-2R	MW-5	MW-2R	MW-1	MW-1	MW-1
ChemName	Units	TOGS 1.1.1						
Total Metals								
Aluminum, Total	μg/L		1,700J	4,070	1,660	1,110	16.9	272
Antimony, Total	μg/L	3	<12U	4.21	2.4	0.8J	<0.42U	<4U
Arsenic, Total	μg/L	25	<8U	19.91	8.5	2.7	1.4	1.77
Barium, Total	μg/L	1000	160	167.5	224.5	225.3	277.4	192.2
Beryllium, Total	μg/L	3 ^{#1}	<4U	0.21J	<0.5U	<0.2U	<0.1U	<0.5U
Cadmium, Total	μg/L	5	<4U	2.45	0.1J	0.4	0.08J	0.22
Calcium, Total	μg/L		280,000	240,000	84,900	181,000	256,000	160,000
Chromium, Total	μg/L	50	<50U	14.57	10.1	18.8	2.73	5.81
Cobalt, Total	μg/L		<20U	6.66	2.3	2	1.36	1.51
Copper, Total	μg/L	200	<50U	88.29	26.2	18.3	<0.38U	7.73
Iron, Total	μg/L	300	9,000J	30,600	24,000	7,430	3,690	4,730
Lead, Total	μg/L	25	49J	375.6	165.3	76.1	0.83J	17.16
Magnesium, Total	μg/L	35000#1	120,000	137,000	33,800	31,500	39,900	28,500
Manganese, Total	μg/L	300	790	1,016	624.2	2,788	2,707	1,841
Mercury, Total	μg/L	0.7	<1U	12.5	0.36	0.1J	<0.06U	<0.2U
Nickel, Total	μg/L	100	<50U	45.52	6.1	20.4	7.27	9.07
Potassium, Total	μg/L		48,000	70,000	15,300	16,500	19,200	14,200
Selenium, Total	μg/L	10	<40U	1.18J	<5U	<1U	<1.73U	<5U
Silver, Total	μg/L	50	<20U	0.33J	<0.4U	0.1J	<0.16U	<0.4U
Sodium, Total	μg/L	20000	660,000J	1,130,000	215,000	333,000	478,000	325,000
Thallium, Total	μg/L	0.5 ^{#1}	<10U	0.11J	<0.5U	<0.1U	<0.14U	<0.5U
Vanadium, Total	μg/L	0.5	<50U	22.13	7.6	4.1J	<1.57U	1.61J
Zinc, Total	μg/L	2000#1	76	1,320	69.9	114.1	3.89J	31.44
Dissolved Metals	P6/ -	2000		1,020	03.3		0.033	52
Aluminum, Dissolved (Filtered)	μg/L		<180U	_	_	4J	_	6.66J
Antimony, Dissolved (Filtered)	μg/L	3	<12U	_	_	0.7J	_	0.55J
Arsenic, Dissolved (Filtered)	μg/L	25	<8U	_	_	1	_	1.01
Barium, Dissolved (Filtered)	μg/L	1000	160	_		213.5	_	180.8
Beryllium, Dissolved (Filtered)	μg/L	3 ^{#1}	<4U	_		<0.2U	_	<0.5U
Cadmium, Dissolved (Filtered)	μg/L	<u>s</u>	<4U	_	_	<0.1U	-	<0.2U
Calcium, Dissolved (Filtered)	μg/L	<u> </u>	310,000	_		247,000	_	183,000
Chromium, Dissolved (Filtered)	μg/L μg/L	50	<50U	_		3.3	-	0.97J
Cobalt, Dissolved (Filtered)	μg/L		<20U	-	-	1.7	_	1.59
Copper, Dissolved (Filtered)	μg/L	200	<50U	_		<0.3U	-	0.4J
Iron, Dissolved (Filtered)	μg/L μg/L	300	750	_		2,090	-	24.4J
Lead, Dissolved (Filtered)	μg/L μg/L	25	750 <4U	-	-	0.1J	-	<1U
Magnesium, Dissolved (Filtered)	μg/L μg/L	35000 ^{#1}	140,000	-	-	32,800	-	26,600
Manganese, Dissolved (Filtered)	μg/L	35000	860	-		3,892	-	1,726
Mercury, Dissolved (Filtered)	μg/L μg/L	0.7	<1U	-	-	<0.06U	-	<0.2U
Nickel, Dissolved (Filtered)		100	<50U	-	-	14.6	-	8.42
	μg/L	100	54,000	-	-	16,800	-	15,800
Potassium, Dissolved (Filtered) Selenium, Dissolved (Filtered)	μg/L μg/L	10	<40U	-	-	<1U	-	15,800 <5U
				-	-			
Silver, Dissolved (Filtered)	μg/L	50	<20U			<0.1U	-	<0.4U
Sodium, Dissolved (Filtered)	μg/L	20000	750,000J	-	-	470,000	-	425,000
Thallium, Dissolved (Filtered)	μg/L	0.5 ^{#1}	<10U			<0.1U		<0.5U
Vanadium, Dissolved (Filtered)	μg/L	#1	<50U	-	-	<0.6U	-	<5U
Zinc, Dissolved (Filtered)	μg/L	2000 ^{#1}	<50U	-	-	<2.6U	-	4.89J

TOGS 1.1.1 - 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).

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		347,000	400,000	766,000	437,000	398,000	364,000
Biological Oxygen Demand, Five day	μg/L		10,600	<50,000U	<40,000U	<10,000U	5,400	2,800
Chemical Oxygen Demand	μg/L		690,000	1,300,000	2,800,000	46,000	20,000	47,000
Chloride	μg/L	250000	-	600,000	540,000	560,000	840,000	727,000
Total Organic Carbon	μg/L		5,400	10,600	7,500	3,500	1,700	4,330
Total Organic Halogen	ug/l		-	<20U	<20U	27.7	54	44.1
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	0.043J	<0.0833U
Aroclor 1248	μg/L		<0.05U	0.768	1.46	0.286	<0.014U	0.262
Aroclor 1254	μg/L		<0.05U	0.416	0.746	0.137	<0.022U	0.142
Aroclor 1260	μg/L		<0.05U	<0.083U	0.119	<0.023U	<0.023U	0.035J
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	1.18	2.33	0.423	0.043	0.439

TOGS 1.1.1 - 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).

#1 - Guidance value

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte



		Sample ID	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		308,000	312,000	317,000	271,000	281,000	298,000
Biological Oxygen Demand, Five day	μg/L		<6,000U	<10,000U	<5,000U	<2,000U	<2,000U	<2,000U
Chemical Oxygen Demand	μg/L		32,900	74,000	55,000	22,000	18,000	6,000J
Chloride	μg/L	250000	-	270,000	340,000	340,000	430,000	376,000
Total Organic Carbon	μg/L		2,800	11,200	3,200	2,600	2,300	3,120
Total Organic Halogen	ug/l		-	26.9	20.9	14.1J	41.1	19.9J
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1248	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1254	μg/L		<0.05U	<0.083U	<0.083U	0.034J	<0.022U	<0.0833U
Aroclor 1260	μg/L		<0.05U	<0.083U	<0.083U	<0.023U	<0.023U	<0.0833U
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	<0.083U	<0.083U	0.034J	<0.014	<0.0833U

TOGS 1.1.1 - 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).

#1 - Guidance value

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte



Table 3 Summary of Groundwater Sample Laboratory Analytical Results

		Sample ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		446,000	186,000	83,400	96,800	484,000	586,000
Biological Oxygen Demand, Five day	μg/L		11,700	<5,000U	<5,000U	4,300	<5,000U	<5,000U
Chemical Oxygen Demand	μg/L		1,170,000	150,000	110,000	99,000	82,000	100,000
Chloride	μg/L	250000	-	460,000	560,000	620,000	640,000	879,000
Total Organic Carbon	μg/L		26,900	52,100	25,000	25,000	17,000	17,000
Total Organic Halogen	ug/l		-	47.4	50.5	36.9	42	19.6J
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	0.045J	<0.0833U
Aroclor 1248	μg/L		<0.05U	0.11	<0.083U	<0.014U	<0.014U	0.158
Aroclor 1254	μg/L		<0.05U	<0.083U	<0.083U	<0.022U	<0.022U	0.114
Aroclor 1260	μg/L		<0.05U	<0.083U	<0.083U	<0.023U	<0.023U	0.044J
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	0.11	<0.083U	<0.012U	0.045	0.316

TOGS 1.1.1 - 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 samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		637,000	387,000	455,000	370,000	377,000	421,000
Biological Oxygen Demand, Five day	μg/L		21,000	13,000	7,400	<40,000U	<2,000U	<5,000U
Chemical Oxygen Demand	μg/L		324,000	220,000	260,000	150,000	73,000	51,000
Chloride	μg/L	250000	-	1,400,000	1,900,000	4,600,000	3,100,000	3,400,000
Total Organic Carbon	μg/L		18,800	23,200	13,000	6,200	9,000	13,900
Total Organic Halogen	ug/l		-	66.5	41.4	72.2	81.1	80.3
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1248	μg/L		<0.05U	0.195	0.216	<0.014U	<0.014U	<0.0833U
Aroclor 1254	μg/L		<0.05U	0.17	0.153	<0.022U	<0.022U	<0.0833U
Aroclor 1260	μg/L		<0.05U	0.084	0.103	<0.023U	<0.023U	<0.0833U
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	0.449	0.472	<0.012U	<0.014	<0.0833U

TOGS 1.1.1 - 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).

#1 - Guidance value

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte



		Sample ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		530,000	560,000	807,000	718,000	492,000	569,000
Biological Oxygen Demand, Five day	μg/L		12,300	26,000	48,000	29,000	15,000	<10,000U
Chemical Oxygen Demand	μg/L		994,000	320,000	180,000	580,000	71,000	95,000
Chloride	μg/L	250000	-	620,000	660,000	780,000	980,000	1,170,000
Total Organic Carbon	μg/L		24,000	35,100	21,000	22,000	16,000	15,800
Total Organic Halogen	ug/l		-	47.4	35.7	30.5	50.8	50.7
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	0.279	<0.083U	<0.014U	0.026J	<0.0833U
Aroclor 1248	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	0.075J
Aroclor 1254	μg/L		<0.05U	0.187	<0.083U	0.022J	<0.022U	0.058J
Aroclor 1260	μg/L		<0.05U	<0.083U	<0.083U	<0.023U	<0.023U	0.036J
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	0.466	<0.083U	0.022J	0.026	0.169J

TOGS 1.1.1 - 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).

#1 - Guidance value

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte



		Sample ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		291,000	330,000	323,000	319,000	265,000	238,000
Biological Oxygen Demand, Five day	μg/L		10,300	14,000	3,300	<2,000U	<2,000U	<2,000U
Chemical Oxygen Demand	μg/L		199,000	35,000	19,000J	37,000	4,100J	<10,000U
Chloride	μg/L	250000	-	250,000	240,000	170,000	91,000	108,000
Total Organic Carbon	μg/L		5,200	6,440	3,900	4,000	2,700	3,940
Total Organic Halogen	ug/l		-	50.4	27.9	26.3	63.6	74.8
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1248	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1254	μg/L		<0.05U	<0.083U	<0.083U	<0.022U	<0.022U	<0.0833U
Aroclor 1260	μg/L		<0.05U	<0.083U	<0.083U	<0.023U	<0.023U	<0.0833U
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	<0.083U	<0.083U	<0.012U	<0.014	<0.0833U

TOGS 1.1.1 - 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 samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value



		Sample ID	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		613,000	575,000	564,000	521,000	505,000	453,000
Biological Oxygen Demand, Five day	μg/L		<6,000U	3,400	<2,000U	<2,000U	2,800	<2,000U
Chemical Oxygen Demand	μg/L		359,000	49,000	42,000	56,000	55,000	29,000
Chloride	μg/L	250000	-	740,000	940,000	1,400,000	2,300,000	2,240,000
Total Organic Carbon	μg/L		5,500	7,620	2,200	1,600	1,000	3,690J
Total Organic Halogen	ug/l		-	40.5	62.1	11.9J	40.8	46.2
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1248	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	<0.014U	<0.0833U
Aroclor 1254	μg/L		<0.05U	<0.083U	<0.083U	<0.022U	<0.022U	<0.0833U
Aroclor 1260	μg/L		<0.05U	<0.083U	<0.083U	<0.023U	<0.023U	<0.0833U
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	<0.083U	<0.083U	<0.012U	< 0.014	<0.0833U

TOGS 1.1.1 - 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).

#1 - Guidance value

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte



		Sample ID	Duplicate	Duplicate	Duplicate	Duplicate	Duplicate	Duplicate
		Monitoring Round	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-2R	MW-5	MW-2R	MW-1	MW-1	MW-1
ChemName	Units	TOGS 1.1.1						
General Chemistry								
Alkalinity, Total	μg/L		-	391,000	315,000	436,000	403,000	363,000
Biological Oxygen Demand, Five day	μg/L		-	23,000	<5,000U	<10,000U	<2,000U	3,300
Chemical Oxygen Demand	μg/L		-	230,000	80,000	44,000	27,000	24,000
Chloride	μg/L	250000	-	1,300,000	350,000	560,000	840,000	737,000
Total Organic Carbon	μg/L		-	22,700	3,400	3,400	1,800	4,250
Total Organic Halogen	ug/l		-	46.1	22	24.7	61.1	56.7
PCBs								
Aroclor 1016	μg/L		<0.05U	<0.083U	<0.083U	<0.021U	<0.021U	<0.0833U
Aroclor 1221	μg/L		<0.05U	<0.083U	<0.083U	<0.028U	<0.028U	<0.0833U
Aroclor 1232	μg/L		<0.05U	<0.083U	<0.083U	<0.012U	<0.012U	<0.0833U
Aroclor 1242	μg/L		<0.05U	<0.083U	<0.083U	<0.014U	0.061	<0.0833U
Aroclor 1248	μg/L		<0.05U	<0.083U	<0.083U	0.41	<0.014U	0.218
Aroclor 1254	μg/L		<0.05U	<0.083U	<0.083U	0.238	<0.022U	0.124
Aroclor 1260	μg/L		<0.05U	<0.083U	<0.083U	<0.023U	<0.023U	0.031J
Aroclor 1262	μg/L		-	<0.083U	<0.083U	-	-	-
Aroclor 1268	μg/L		-	<0.083U	<0.083U	-	-	-
PCBs, Total	μg/L	0.09	<0.05U	<0.083U	<0.083U	0.648	0.061	0.373

TOGS 1.1.1 - 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 samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





		Sample ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
ChemName	Units	TOGS 1.1.1					l .	l .
VOCs								
1,1,1-trichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	<2.5U	0.81J	<0.7U	<0.7U	<2.5U
1.1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,2,3-trichlorobenzene	μg/L	-	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1.2.4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L	_	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		-	<250U	<250U	<41U	<61U	<250U
2-butanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.50	<1U	<5U
4-methyl-2-pentanone	μg/L	50	<1U	<5U	<5U	<1U	<1U	<5U
Acetone	μg/L	50 ^{#1}	<10U	2.7J	<5U	<1.5U	4.8J	<5U
Benzene	μg/L	50 1	<0.5U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Bromochloromethane	μg/L μg/L		-	<2.5U	<2.5U	<0.7U	<0.100	<2.5U
Bromodichloromethane	μg/L μg/L	5	<1U	<0.5U	<0.5U	<0.70	<0.70	<0.5U
Bromoform	μg/L μg/L	50 ^{#1}	<1UJ	<2U	<2U	<0.190 <0.65U	<0.190 <0.65U	<2U
Bromomethane	μg/L μg/L	50	<1U	<2.5U	<2.5U	<0.7U	<0.030	<2.5U
Carbon disulfide	μg/L μg/L	60 ^{#1}	<1U	<5U	<5U	<1U	<1U	<5U
Carbon tetrachloride	μg/L μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L μg/L	5	1	0.72J	0.81J	0.77J	0.71J	<2.5U
Chloroethane		5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane		,	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L μg/L	5	<1U	2.1J	2.7	1.5J	80	17
cis-1,3-dichloropropene		0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U	<0.5U
	μg/L	0.4	<1U	<0.50 <10U	<0.50	<0.140 <0.27U	<0.140 <0.27U	<0.50 <10U
Cyclohexane Dibromochloromethane	μg/L	#1	<1U		<0.5U	<0.270	<0.270 <0.15U	<0.5U
Dichlorodifluoromethane	μg/L	50 ^{#1}	<1U	<0.5U <5U	<0.5U	<0.150 <1U	<0.150 <1U	<0.5U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L	3	- <101	<2.5U	- <2.50	<0.70	<0.70 <0.23U	<2.5U
Methyl cyclohexane	μg/L		- <1U	<20 <10U	-	<0.23U <0.4U	<0.23U <0.4U	<10U
Methyl tert butyl ether	μg/L μg/L	10#1	1.5	4.6	21	5	7	66
Methylene chloride	μg/L μg/L	10" ² 5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene		5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
	μg/L	5	-	<2.5U	i	<0.7U	<0.7U	<2.5U
p/m-xylene Styrono	μg/L	5	<1U		<2.5U <2.5U	<0.7U	<0.7U	<2.5U
Styrene	μg/L	5	<1U	<2.5U				
Tetrachloroethene Toluene	μg/L	5	<1U <1U	<0.5U <2.5U	<0.5U	<0.18U <0.7U	<0.18U <0.7U	<0.5U <2.5U
trans-1,2-dichloroethene	μg/L	5			<2.5U			
	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene Trichloroethene	μg/L	5	<1UJ	0.17J	<0.5U	<0.18U	<0.18U	<0.5U
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride	μg/L	2	0.4	5.8	24	9.9	92	53

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





		Sample ID	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R	MW-2R
ChemName	Units	TOGS 1.1.1						
VOCs								
1,1,1-trichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,2,3-trichlorobenzene	μg/L	-	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1.2.4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L	_	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		-	<250U	<250U	<41U	<61U	<250U
2-butanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.50	<1U	<5U
4-methyl-2-pentanone	μg/L	50	<1U	<5U	<5U	<1U	<1U	<5U
Acetone	μg/L	50 ^{#1}	<10U	2.3J	<5U	<1.5U	<1.5U	<5U
Benzene	μg/L	50 1	<0.5U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Bromochloromethane	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Bromodichloromethane	μg/L	5	<1U	<0.5U	<0.5U	<0.70	<0.70	<0.5U
Bromoform	μg/L μg/L	50 ^{#1}	<1UJ	<2U	<2U	<0.190 <0.65U	<0.190 <0.65U	<2U
Bromomethane	μg/L	50	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Carbon disulfide	μg/L	60 ^{#1}	<1U	<5U	2.2J	<1U	<1U	<5U
Carbon tetrachloride	μg/L μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L	5	1	<2.5U	<2.5U	<0.130	<0.130	<2.5U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane	μg/L	,	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.74U	<0.70	<0.5U
Cyclohexane		0.4	<1U	<0.50 <10U	<0.50	<0.140 <0.27U	<0.140 <0.27U	<0.50 <10U
Dibromochloromethane	μg/L μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.270	<0.270 <0.15U	<0.5U
Dichlorodifluoromethane		50"	<1U	<5U	<5U	<1U	<1U	<5U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L	3	- <101	<2.5U	- <2.50	<0.70		
Methyl cyclohexane	μg/L		- <1U	<20 <10U	-	<0.23U <0.4U	<0.23U <0.4U	<2U <10U
Methyl tert butyl ether	μg/L μg/L	10#1	1.6	1.6J	1.1J	<0.4U <0.7U	0.77J	<2.5U
Methylene chloride			<1.b	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene	μg/L	5 5	<1U	<2.5U		<0.7U		
	μg/L				<2.5U	<0.7U	<0.7U	<2.5U
p/m-xylene Styrono	μg/L	5 5	- <1U	<2.5U	<2.5U		<0.7U	<2.5U
Styrene	μg/L			<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Tetrachloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Toluene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene	μg/L	5	<1UJ	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride	μg/L	2	4.7	<1U	3.4	2.5	0.98J	0.87J

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





		Sample ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
ChemName	Units	TOGS 1.1.1						
VOCs								
1,1,1-trichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,2,3-trichlorobenzene	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2,4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		-	<250U	<250U	<41U	<61U	<250U
2-butanone	μg/L	50#1	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1U	<1U	<5U
4-methyl-2-pentanone	μg/L		<1U	<5U	<5U	<1U	<1U	<5U
Acetone	μg/L	50 ^{#1}	4	5	<5U	2.3J	5.9	<5U
Benzene	μg/L	1	<0.5U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Bromochloromethane	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Bromodichloromethane	μg/L	5	<1U	<0.5U	<0.5U	<0.19U	<0.19U	<0.5U
Bromoform	μg/L	50 ^{#1}	<1UJ	<2U	<2U	<0.65U	<0.65U	<2U
Bromomethane	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Carbon disulfide	μg/L	60 ^{#1}	<1U	<5U	<5U	<1U	<1U	<5U
Carbon tetrachloride	μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane	μg/L	<u> </u>	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U	<0.5U
Cyclohexane	μg/L		<1U	<10U	-	<0.27U	<0.27U	<10U
Dibromochloromethane	μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.15U	<0.15U	<0.5U
Dichlorodifluoromethane	μg/L	5	<1UJ	<5U	<5U	<1U	<1U	<5U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L		-	<2U	-	<0.23U	<0.23U	<2U
Methyl cyclohexane	μg/L		<1U	<10U	-	<0.4U	<0.4U	<10U
Methyl tert butyl ether	μg/L	10#1	4	13	11	32	37	39
Methylene chloride	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
p/m-xylene	μg/L	5		<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Styrene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Tetrachloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Toluene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride	μg/L	2	<1U	<1U	<1U	<0.07U	<0.07U	<1U

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





	- 1	Sample ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual
		Well ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
ChemName	Units	TOGS 1.1.1						
VOCs								
1,1,1-trichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,2,3-trichlorobenzene	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2,4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		-	<250U	<250U	<41U	<61U	<250U
2-butanone	μg/L	50#1	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1U	<1U	<5U
4-methyl-2-pentanone	μg/L	30	<1U	<5U	<5U	<1U	<1U	<5U
Acetone	μg/L	50#1	<10U	2.2J	<5U	<1.5U	<1.5U	2.2J
Benzene	μg/L	1	<0.5U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Bromochloromethane	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Bromodichloromethane	μg/L	5	<1U	<0.5U	<0.5U	<0.19U	<0.19U	<0.5U
Bromoform	μg/L	50 ^{#1}	<1UJ	<2U	<2U	<0.65U	<0.65U	<2U
Bromomethane	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Carbon disulfide	μg/L	60#1	<1U	<5U	3.5J	<1U	<1U	<5U
Carbon tetrachloride	μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U	<0.5U
Cyclohexane	μg/L	-	<1U	<10U	-	<0.27U	<0.27U	<10U
Dibromochloromethane	μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.15U	<0.15U	<0.5U
Dichlorodifluoromethane	μg/L	5	<1UJ	<5U	<5U	<1U	<1U	<5U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L		-	<2U	-	<0.23U	<0.23U	<2U
Methyl cyclohexane	μg/L		<1U	<20U	-	<0.4U	<0.4U	<10U
Methyl tert butyl ether	μg/L	10#1	16	9.3	10	5.8	7.9	12
Methylene chloride	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
p/m-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Styrene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Tetrachloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Toluene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride	μg/L	2	<1U	<1U	<1U	<0.07U	<0.07U	<1U
vinyi chloriae	μg/L		<10	<10	<10	<0.070	<0.070	<10

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





		Sample ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annua
		Well ID	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
ChemName	Units	TOGS 1.1.1						
OCs			Ì					
1,1,1-trichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,2,3-trichlorobenzene	μg/L	-	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2,4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L	*	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		-	<250U	<250U	<41U	<61U	<250U
2-butanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L μg/L	50 50 ^{#1}	<1U	<5U	<5U	<1.90 <1U	<1.90	<5U
		50"-	<1U	<5U	<5U	<1U	<1U	<5U
4-methyl-2-pentanone	μg/L	#1						
Acetone	μg/L	50 ^{#1}	12	3.7J <0.5U	<5U	2J <0.16U	9.8	4.5J <0.5U
Benzene	μg/L	1	1.1		0.34J		<0.16U	
Bromochloromethane	μg/L			<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Bromodichloromethane	μg/L	5	<1U	<0.5U	<0.5U	<0.19U	<0.19U	<0.5U
Bromoform	μg/L	50 ^{#1}	<1UJ	<2U	<2U	<0.65U	<0.65U	<2U
Bromomethane	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Carbon disulfide	μg/L	60#1	<1U	<5U	<5U	<1U	<1U	<5U
Carbon tetrachloride	μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U	<0.5U
Cyclohexane	μg/L		<1U	<10U	-	<0.27U	<0.27U	<10U
Dibromochloromethane	μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.15U	<0.15U	<0.5U
Dichlorodifluoromethane	μg/L	5	<1UJ	<5U	<5U	<1U	<1U	<5U
Ethylbenzene	μg/L	5	1	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L		-	<2U	-	<0.23U	<0.23U	<2U
Methyl cyclohexane	μg/L		<1U	<10U	-	<0.4U	<0.4U	<10U
Methyl tert butyl ether	μg/L	10#1	16	14	17	14	5	22
Methylene chloride	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
p/m-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Styrene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Tetrachloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Toluene	μg/L	5	4.4	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride	μg/L	2	<1U	<1U	<1U	<0.07U	<0.07U	<1U

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





	- 1	Sample ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annua
		Well ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
ChemName	Units	TOGS 1.1.1					l .	
'OCs								
1,1,1-trichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	0.75J	1.1J	<0.7U	<0.7U	<2.5U
1,1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	0.22J	0.24J
1,2,3-trichlorobenzene	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2,4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		- 103	<250U	<250U	<41U	<61U	<2.50U
2-butanone	μg/L μg/L	50 ^{#1}	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L	50 50 ^{#1}	<1U	<5U	<5U	<1.90	<1.90	<5U
4-methyl-2-pentanone	μg/L	50	<1U	<5U	<5U	<1U	<1U	<5U
		50#1			<5U			<5U
Acetone Benzene	μg/L	50**- 1	<10U 0.2	1.6J 2.3	4	<1.5U 0.66	<1.5U 0.54	0.36J
	μg/L	1	- 0.2					
Bromochloromethane	μg/L			<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Bromodichloromethane	μg/L	5 #1	<1U	<0.5U	<0.5U	<0.19U	<0.19U	<0.5U
Bromoform	μg/L	50 ^{#1}	<1UJ	<2U	<2U	<0.65U	<0.65U	<2U
Bromomethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Carbon disulfide	μg/L	60#1	<1U	<5U	<5U	<1U	<1U	<5U
Carbon tetrachloride	μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L	5	1	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L	5	1.2	16	6.1	17	52	76
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U	<0.5U
Cyclohexane	μg/L		<1U	<10U	-	<0.27U	<0.27U	<10U
Dibromochloromethane	μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.15U	<0.15U	<0.5U
Dichlorodifluoromethane	μg/L	5	<1U	<5U	<5U	<1U	<1U	<5U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L		-	<2U	-	<0.23U	<0.23U	<2U
Methyl cyclohexane	μg/L		<1U	<10U	-	<0.4U	<0.4U	<10U
Methyl tert butyl ether	μg/L	10#1	<0.5U	<2.5U	<2.5U	<0.7U	<0.7U	24
Methylene chloride	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
p/m-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Styrene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Tetrachloroethene	μg/L	5	<1U	2.2	0.52	1.8	11	5.2
Toluene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,2-dichloroethene	μg/L	5	<1U	<2.5U	0.78J	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene	μg/L	5	1.4J	9.1	2.2	4.8	20	14
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride	μg/L	2	2.7	5.5	5.6	12	8	5.6

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value





	T I	Sample ID	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual	5/30/2018
	l	Well ID	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
ChemName	Units	TOGS 1.1.1						
VOCs								
1,1,1-trichloroethane	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1,2,2-tetrachloroethane	μg/L	5	<1UJ	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,1,2-trichloro-1,2,2-trifluoroethane	μg/L		-	<2.5U	-	<0.7U	<0.7U	<2.5U
1,1,2-trichloroethane	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U	<1.5U
1,1-dichloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,1-dichloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U	<0.5U
1,2,3-trichlorobenzene	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2,4-trichlorobenzene	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromo-3-chloropropane	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dibromoethane	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U	<2U
1,2-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,2-dichloroethane	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U	<1U
1,3-dichlorobenzene	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dichlorobenzene	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
1,4-dioxane	μg/L		-	<250U	<250U	<41U	<61U	<250U
2-butanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.9U	<1.9U	<5U
2-hexanone	μg/L	50 ^{#1}	<1U	<5U	<5U	<1U	<1U	<5U
4-methyl-2-pentanone	μg/L		<1U	<5U	<5U	<1U	<1U	<5U
Acetone	μg/L	50 ^{#1}	<10U	1.4J	<5U	<1.5U	<1.5U	<5U
Benzene	μg/L	1	<0.5U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Bromochloromethane	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Bromodichloromethane	μg/L	5	<1U	<0.5U	<0.5U	<0.19U	<0.19U	<0.5U
Bromoform	μg/L	50 ^{#1}	<1U	<2U	<2U	<0.65U	<0.65U	<2U
Bromomethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Carbon disulfide	μg/L	60 ^{#1}	<1U	<5U	<5U	<1U	<1U	<5U
Carbon tetrachloride	μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U	<0.5U
Chlorobenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloroform	μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Chloromethane	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U	<0.5U
Cyclohexane	μg/L		<1U	<10U	-	<0.27U	<0.27U	<10U
Dibromochloromethane	μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.15U	<0.15U	<0.5U
Dichlorodifluoromethane	μg/L	5	<1U	<5U	<5U	<1U	<1U	<5U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Isopropylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methyl acetate	μg/L		-	<2U	-	<0.23U	<0.23U	<2U
Methyl cyclohexane	μg/L		<1U	<10U	-	<0.4U	<0.4U	<10U
Methyl tert butyl ether	μg/L	10 ^{#1}	<0.5U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Methylene chloride	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
o-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
p/m-xylene	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Styrene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Tetrachloroethene	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Toluene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
trans-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U	<0.5U
Trichloroethene	μg/L	5	<1UJ	<0.5U	<0.5U	<0.18U	<0.18U	<0.5U
Trichlorofluoromethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U	<2.5U
Vinyl chloride TOGS 1.1.1 - Class GA Groundwater Quality Standard	μg/L	2	<1U	<1U	<1U	<0.07U	<0.07U	<1U

Baseline samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value

Table 3 Summary of Groundwater Sample Laboratory Analytical Results



		Sample ID	Duplicate	Duplicate	Duplicate	Duplicate	Duplicate
		Monitoring Event	Baseline	2014 Annual	2015 Annual	2016 Annual	2017 Annual
		Well ID	MW-2R	MW-5	MW-2R	MW-1	MW-1
ChemName	Units	TOGS 1.1.1					
VOCs							
1,1,1-trichloroethane	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	<1UJ	<0.5U	<0.5U	<0.14U	<0.17U
	μg/L		-	<2.5U	-	<0.7U	<0.7U
	μg/L	1	<1U	<1.5U	<1.5U	<0.5U	<0.5U
	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	0.7J
	μg/L	5	<1U	<0.5U	<0.5U	<0.14U	<0.17U
	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	0.04	<1UJ	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	<1U	<2U	<2U	<0.65U	<0.65U
	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	0.6	<0.5U	<0.5U	<0.5U	<0.13U	<0.13U
1,2-dichloropropane	μg/L	1	<1U	<1U	<1U	<0.13U	<0.14U
	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L		<1UJ	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L		-	<250U	<250U	<41U	<61U
	μg/L	50 ^{#1}	<1U	<5U	<5U	<1.9U	<1.9U
	μg/L	50 ^{#1}	<1U	<5U	<5U	<1U	<1U
	μg/L		<1U	<5U	<5U	<1U	<1U
	μg/L	50 ^{#1}	<10U	2.7J	<5U	<1.5U	<1.5U
	μg/L	1	<0.5U	<0.5U	<0.5U	<0.16U	<0.16U
	μg/L		-	<2.5U	<2.5U	<0.7U	<0.7U
Bromodichloromethane	μg/L	5	<1U	<0.5U	<0.5U	<0.19U	<0.19U
Bromoform	μg/L	50 ^{#1}	<1U	<2U	<2U	<0.65U	<0.65U
Bromomethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
Carbon disulfide	μg/L	60 ^{#1}	<1U	<5U	<5U	<1U	<1U
Carbon tetrachloride	μg/L	5	<1U	<0.5U	<0.5U	<0.13U	<0.13U
Chlorobenzene	μg/L	5	<1U	<2.5U	<2.5U	0.86J	<0.7U
Chloroethane	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
Chloroform	μg/L	7	<1U	<2.5U	<2.5U	<0.7U	<0.7U
Chloromethane	μg/L		<1U	<2.5U	<2.5U	<0.7U	<0.7U
cis-1,2-dichloroethene	μg/L	5	<1U	<2.5U	<2.5U	1.7J	66
cis-1,3-dichloropropene	μg/L	0.4	<1U	<0.5U	<0.5U	<0.14U	<0.14U
Cyclohexane	μg/L		<1U	<10U	-	<0.27U	<0.27U
Dibromochloromethane	μg/L	50 ^{#1}	<1U	<0.5U	<0.5U	<0.15U	<0.15U
Dichlorodifluoromethane	μg/L	5	<1U	<5U	<5U	<1U	<1U
Ethylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
Isopropylbenzene	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
Methyl acetate	μg/L		-	<2U	-	<0.23U	<0.23U
Methyl cyclohexane	μg/L		<1U	<10U	-	<0.4U	<0.4U
Methyl tert butyl ether	μg/L	10 ^{#1}	<0.5U	10	0.99J	5.5	4.8
Methylene chloride	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	-	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	<1U	<0.5U	<0.5U	<0.18U	<0.18U
	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
	μg/L	0.4	<1U	<0.5U	<0.5U	<0.16U	<0.16U
	μg/L	5	<1UJ	<0.5U	<0.5U	<0.18U	<0.18U
	μg/L	5	<1U	<2.5U	<2.5U	<0.7U	<0.7U
Vinyl chloride	μg/L	2	6.2	<1U	3.5	6.8	100

TOGS 1.1.1 - 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 samples were taken by others on 11-20-2009 (pre-remediation for PCBs), 7-11-2011 (pre-remediation for alkalinity, COD, BOD, TOC, and TOX), and 6-11-2013 and 6-12-2013 (post-remediation for TCL VOCs, TAL metals - total, and TAL metals - dissolved)

- U Analyzed for but Not Detected above the identified laboratory reporting limit
- J Indicates an estimated value
- () No sample analyzed for specific analyte

^{#1 -} Guidance value

Appendices

Appendix A Annual Inspection Form

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

1
NAME OF INSPECTOR: Danian Vanetti
COMPANY OF INSPECTOR: GHD Consulting Services, Inc
DATE OF INSPECTION: 11 - 15 - 18
CURRENT USE OF THE SITE: Vehicle perking
HAS A CHANGE OF LAND-USE OCCURRED SINCE THE LAST INSPECTION?YESX_NO
IF YES, EXPLAIN HOW THE SITE HAS CHANGED:
IS THERE EVIDENCE OF LAND-USE OTHER THAN FOR INDUSTRIAL SINCE THE LAST INSPECTION? YESXNO 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: Site is covered with as first paving with vige fetal soil cover at perimeter surrounded by retaining wall bulkhead. Chain link fence exist at
HAS THE COVER BEEN COMPROMISED? YES X NO
IF YES, EXPLAIN HOW THE COVER HAS CHANGED:

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

HAVE COVER CONDITIONS CHANGED SINCE THE LAST INSPECTION? YESNO
IF YES, EXPLAIN HOW THE SITE COVER CONDITIONS CHANGED:
IS ANY MAINTENANCE OF THE COVER REQUIRED?YESX_NO
IF YES, EXPLAIN WHAT MAINTAINENCE IS REQUIRED: General routine maintenance of the asphalt pavement to seal surface cracks
ARE SIGNIFICANT EROSION RILLS OR CRACKING PRESENT?YESX_NO
IF YES, EXPLAIN WHERE EROSION RILLS OR CRACKING ARE PRESENT:
IS PONDING PRESENT?YESNO
IF YES, EXPLAIN WHERE PONDING IS PRESENT AND THE ASSOCIATED DEPTH
IS ANY SOIL WASTE MATERIAL EXPOSED? YESXNO
IF YES, EXPLAIN WHERE SOIL WASTE MATERIAL ARE EXPOSED:

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? YESNO
IF YES, EXPLAIN WHERE THE VISABLE CHANGE IN THE DESIGNATED DRAINAGE PATTERN ARE LOCATED:
IS SETTLEMENT OR SUBSIDNCE VISIBLE?YESNO
IF YES, EXPLAIN WHERE SETTLEMENT OR SUBSIDNCE VISIBLE IS LOCATED:
ARE SIGNIFICANT EROSION RILLS OR CRACKING PRESENT? YESNO
IF YES, EXPLAIN WHERE EROSION RILLS OR CRACKING ARE PRESENT:
ARE ALL GROUNDWATER MONITORING WELLS MAINTAINED PROPERLY
AND IN GOOD PHYSICAL CONDITION?
IF NO, EXPLAIN HOW THE GROUNDWATER MONITORING WELLS HAVE BEEN COMPROMISED: Mw-2k remove/ clear vegetation around well pad for clear access

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?YESK_NO	
IF YES, EXPLAIN HOW GROUNDWATER IS BEING USED:	
ADDITIONAL OBSERVATIONS, CONCLUSIONS, OR RECOMMENDATIONS: Woody growth should be deared from permetor stone cover retaining wall area (seneral debris (wind blown) along fence line should be deemed up so Burt.	
ANY CHANGES TO THE SITE OF REQUIRED MAINTENANCE SHOULD BE MARKED	

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

Appendix B Approval Notification for EQuIS Database Submittal

Ian McNamara

From: Dyson Sprouse

Sent: Monday, August 13, 2018 9:30 AM

To: Ian McNamara

Subject: FW: 202-218 Morgan Avenue BCP Site (Site #C224133) - Annual 2018 Groundwater

Monitoring EQuIS Submittal

Attachments: image001.png

OperatingCentre:86JobNo:16480CompleteRepository:8616480

RepoEmail: 8616480@ghd.com **Description:** Frito-Lay Brooklyn BCP

RepoType: Job

From: dec.sm.NYENVDATA [NYENVDATA@dec.ny.gov]

Sent: Friday, August 3, 2018 8:54 AM

To: Dyson Sprouse Cc: Post, Charles H (DEC)

Subject: RE: 202-218 Morgan Avenue BCP Site (Site #C224133) - Annual 2018 Groundwater Monitoring EQuIS Submittal

Dyson,

EDDs 20180726 1536.C224133.NYSDEC and 20180726 1557.C224133.NYSDEC were successfully uploaded and the data is available for use within the NYSDEC system.

Thank you,

Alison

NYSDEC EIMS Team

[New York State Dept of Environmental Conservation image]

From: Dyson.Sprouse@ghd.com [mailto:Dyson.Sprouse@ghd.com]

Sent: Thursday, July 26, 2018 4:04 PM

To: dec.sm.NYENVDATA < NYENVDATA@dec.ny.gov> Cc: Post, Charles H (DEC) < charles.post@dec.ny.gov>

Subject: 202-218 Morgan Avenue BCP Site (Site #C224133) - Annual 2018 Groundwater Monitoring EQuIS Submittal

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello,

Attached are 2 EDDs for the 2018 Annual sampling event at the above referenced site. One contains field parameters and water levels and one contains analytical results.

Please let me know if edits are needed for a successful upload.

Thank you,

Dyson Sprouse Engineer – Environment

GHD

T: 1 315 679 5763 | M: 1 607 423 7156 | V: 865763 | E: dyson.sprouse@ghd.com<mailto:dyson.sprouse@ghd.com>
One Remington Park Drive Cazenovia New York 13035 USA | www.ghd.com<http://www.ghd.com>
WATER<http://www.ghd.com/sectors/water/> | ENERGY & RESOURCES<http://www.ghd.com/global/sectors/energy-resources/> | ENVIRONMENT<http://www.ghd.com/sectors/environment/> | PROPERTY & BUILDINGS<http://www.ghd.com/global/sectors/property--buildings/> |
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about GHD

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