NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9 700 Delaware Avenue, Buffalo, NY 14209 P: (716) 851-7220 | F: (716) 851-7275 www.dec.ny.gov

March 2, 2023

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

Re: Periodic Review Report (PRR) Response Letter
Durez Div. - Occidental Chemical Corp., Site No.: 932018
North Tonawanda, Niagara County

Dear Joseph Branch (as the Certifying Party):

The Department has reviewed your Periodic Review Report (PRR) and IC/EC Certification for following period: December 31, 2021 to December 31, 2022.

The Department hereby accepts the PRR and associated Certification. The frequency of Periodic Reviews for this site is 1 year(s), your next PRR is due on January 30, 2024. You will receive a reminder letter and updated certification form 75-days prior to the due date. Regardless of receipt or not, of the reminder notice, the next PRR including the signed certification form, is still due on the date specified above.

While the PRR has been accepted for both the Plant (OU1) and Inlet (OU3), the Department has comments on both reports that are included in the attached. These comments will be clarified/revised as appropriate for the nature of the comment.

If you have any questions, or need additional certification forms, please contact me at 716-851-7220 or e-mail: benjamin.mcpherson@dec.ny.gov.

Sincerely,

DN: cn=Benjamin McPherson, o=NYSDEC, ou=DER, email=benjamin.mcpherson@dec.ny.gov, c=US

Date: 2023.03.02 14:20:33 -05'00'

Benjamin McPherson Project Manager

Benjamin & McPherse

Professional Engineer 1 (Environmental)

Attachment

Ec:

Andrea Caprio – DEC



Benjamin McPherson – DEC
Clint Babcock – GSH (clint_babcock@oxy.com)
Joseph Branch – GSH (joseph_branch@oxy.com)
Dennis Hoyt – Geosyntec (DHoyt@Geosyntec.com)
Christa Bucior – Geosyntec (christa.bucior@geosyntec.com)
Ian Richardson – Geosyntec (IRichardson@Geosyntec.com)

Durez Plant (OU1):

- Section 2.2.1, T-2A: the report indicates that there was insufficient NAPL for recovery. Since NAPL has not been removed from the piezometer since 2013 consideration should be given to purging the well dry of both groundwater and any NAPL to see if the formation still contains mobile NAPL;
- 2) <u>Section 3.1, Walck Road Sewer Lateral</u>: it is stated in this section that the sewer bedding collection lateral was installed to intercept any contamination that may be present in the sewer bedding. Consideration for sampling this lateral to determine if the water does require collection should be completed. If the sewer bedding water is no longer impacted by the site the lateral could be closed, reducing the amount of water treated by the IT system thus reducing energy consumption;
- 3) <u>Section 4.3, NAPL</u>: the units for the amount of NAPL disposed of off-site is missing from this section.

North Lobe/Inlet (OU3):

- Section 2.2.2, Second Paragraph: it is not clear what the relevance of the top of the containment wall is relative to the top of the extraction well sumps. Given that DNAPL is of concern in the North Lobe it would seem more relevant to compare the sump elevations to the bottom elevation of the containment wall. This paragraph will be clarified as appropriate;
- 2) <u>Section 3.1, Purge Logs</u>: the groundwater sampling/purge record forms from Appendix C of the *Inlet Monitoring Plan (IMP)* [2019] are not included in the PRR. The logs from 2022 will be provided to the Department, and included in all future PRRs;
- 3) <u>Section 3.1.1, MW-22I</u>: in the last sentence of the second paragraph of this section it is believed that "MW-20I" should be revised to "MW-22I";
- 4) Section 4, Second Paragraph: the first sentence in this paragraph states that the groundwater quality north and east of the cutoff wall has improved since the 2011/2012 injection events. It is not clear how much effect, if any, the injections would have had in these areas as the injections were primarily west of the cutoff wall and downgradient of the eastern wells. This statement was commented on in the 2021 PRR, and does not appear to have been revised; and
- 5) <u>Section 5.1, Purging Modification</u>: the field procedures in the IMP are for low flow monitoring, it is the text in Section 2.2.2 of the IMP that states that volumetric

purging will be completed prior to groundwater sampling. The Department is not opposed to updating procedures used at the site, but the proposed change would require a revision to the IMP, not a field procedure;

- 6) Table 2.4, NAPL Removal: there has been limited volume of NAPL removed from the extraction wells since 2015. Consideration should be given to removing all NAPL that is present in the sumps (regardless of NAPL elevation) to remove a potential source of groundwater contamination from the subsurface and allow for a better assessment of NAPL mobility within the containment wall;
- 7) <u>Table 2.5, MW-17I</u>: for the April 2022 monitoring event there is a depth to water reported for MW-17I, but the table note indicates the well could not be accessed due to a large boat being parked over it. It is not clear where this depth to water value came from;
- 8) <u>Table 2.5</u>, <u>Installed Depth</u>: for the extraction wells, and to a lesser degree the monitoring wells, there is a difference in the installed depth reported in this table and the well completion logs provided in Appendix A of the IMP. The reason for this difference will be clarified; and
- 9) <u>Chart Index, Moving Average</u>: clarification is requested on what period is used to generate the running averages shown on the charts in this index.

B&B Engineers & Geologists of new york, p.c.

an affiliate of Geosyntec Consultants

2022 Site Management Periodic Review Report – Durez Inlet

NYSDEC Site No. 932018
Durez Inlet
560 River Road
North Tonawanda, New York

Prepared for

Glenn Springs Holdings, Inc.

Prepared by

B&B Engineers & Geologists of New York, P.C. PO Box 351 Ransomville, New York 14131

Project Number TR1045-04A

January 30, 2023

EXECUTIVE SUMMARY

Effective July 1, 1998, Site responsibilities for the former Occidental Chemical Corporation (OxyChem) Durez Inlet (Inlet/Site) in North Tonawanda, New York were assigned by OxyChem to Glenn Springs Holdings, Inc. (GSH), an affiliate of OxyChem. Pursuant to Section 11.0 of the Approved Inlet Remedial Plan (AIRP), GSH is conducting a post-remediation monitoring program at the Inlet.

During the calendar year 2022, hydraulic monitoring and chemical monitoring were conducted on a semiannual basis. Historically, hydraulic monitoring data has shown that the overall direction of groundwater flow at the Site is from east to west, across the upland area of the Inlet toward the Little Niagara River (River) with seasonal variations in groundwater flow at times producing west to east flow from the River into the upland area. The 2022 hydraulic monitoring data indicated an inward gradient from the River towards the upland area along the western edge of the Site while groundwater elevation data for wells located along the eastern edge indicated an east to west flow direction.

Based on field measurements and observations collected in 2022, no dense non-aqueous phase liquid (DNAPL) was observed in the groundwater monitoring wells located outside the cutoff wall (North Lobe). As such, it is reasonable to conclude that the cutoff wall is functioning as designed, and that the remedial program continues to meet its design objectives.

The calendar year 2022 groundwater quality monitoring results are consistent with historical results. Analytical results for wells MW-16I, MW-18I, and MW-19I were less than the New York State (NYS) Groundwater Standards for Class GA (potable) groundwater. Concentrations of total Targeted Site Compounds (TSCs) were present in MW-20I (average 2,746 micrograms per liter [µg/L] in 2022 versus 3,388 µg/L in 2021) and in MW-22I (average 3,975 µg/L in 2022 versus 3,961 µg/L in 2021). The general trend in the total TSC concentrations in MW-20I has been downward since 1996. As a result of implementation of the in situ chemical oxidation (ISCO) program in 2011/2012, the concentrations observed in MW-20I were reduced by orders of magnitude and have since stabilized at these reduced concentrations. Historical concentrations of total TSCs in groundwater samples collected from monitoring well MW-22I have shown both increasing and decreasing trends historically. Total TSC concentrations in well MW-22I have remained relatively consistent with only slight increases since 2016, other than recent increased concentrations following implementation of the passive diffusion remedial program (discussed below) that are expected to be short-term. The concentrations prior to implementation of the passive diffusion program were lower than the pre-injection concentrations.

A passive diffusion remedial program was implemented at groundwater monitoring wells MW-16I, MW-20I, and MW-22I in October 2019. The program was implemented for three years and then the results of the program were to be evaluated. The program is now complete as of 4th quarter 2022. Results of the completed program will be submitted to the New York State Department of Environmental Conservation (NYSDEC) by GSH under a separate cover.

TABLE OF CONTENTS

Exec	utive S	Summary		1
1.	Intro	duction		1
2.	Inlet	Monitori	ng Program	3
	2.1	Purpose		3
	2.2	Scope		
		2.2.1 2.2.2	Groundwater Quality Monitoring Program	
3.	Inlet		ng Program Results	
<i>J</i> .				
	3.1		water Quality Monitoring	
		3.1.1 3.1.2	Chemical Concentrations	
		3.1.2	Passive Diffusion Remediation at MW-16I, MW-20I, and MW-22I	
	3.2	Hydraul	ic Monitoring	10
		3.2.1	Dense Non-Aqueous Phase Liquid	
		3.2.2	Site and Well Inspections	
		3.2.3	Maintenance Activities	11
4.	Sumi	mary of 2	022 Operation	12
5.	Reco	mmendat	ions	13
	5.1	Groundy	vater Purging and Sampling	13
			LIST OF TABLES	
Table	2.1	2022	Groundwater Chemistry Monitoring – Analytical Results	
Table	2.2	2022	Water Level Elevations	
Table	2.3	2022	DNAPL Levels and Volumes	
Table	2.4	Cum Prese	ulative DNAPL Extracted from Site – From Remediation August 1993 to ent)
Table	2.5	2022	Well Inspections	
			LIST OF FIGURES	
Figur	e 1.1	Site I	Location Map	
Figur	e 2.1	Site I	Plan	
Figur	e 2.2	Histo	orical Concentrations of Total Target Site Compounds – MW-16I	

i

Figure 2.3	Historical Concentrations of Total Target Site Compounds – MW-18I
Figure 2.4	Historical Concentrations of Total Target Site Compounds – MW-19I
Figure 2.5	Historical Concentrations of Total Target Site Compounds – MW-20I
Figure 2.6	Historical Concentrations of Total Target Site Compounds – MW-22I
Figure 2.7	Hydraulic Head Distribution Map – May 27, 2022
Figure 2.8	Hydraulic Head Distribution Map – October 17, 2022
	CHART INDEX
CI 1	
Chart 1	Groundwater Concentration Versus Time: MW-20I
Chart 2	Groundwater Concentration Versus Time: MW-22I
Chart 3	Groundwater Concentration Versus Time: MW-16I
Chart 4	Groundwater Concentration Versus Time: MW-18I
Chart 5	Groundwater Concentration Versus Time: MW-19I
	LIST OF APPENDICES
Appendix A	Institutional and Engineering Controls Certification Form
Appendix B	Data Validation Memoranda
Appendix C	Historical Groundwater Chemistry Monitoring – Analytical Results
Appendix D	2022 Completed Semiannual Inspection Field Sheet

1. INTRODUCTION

Effective July 1, 1998, Site responsibilities for the former Occidental Chemical Corporation (OxyChem) Durez Inlet (Inlet) were assigned by OxyChem to Glenn Springs Holdings, Inc. (GSH), an affiliate of OxyChem. Since that time, pursuant to the individual Site documents and subsequent approved modifications, GSH has conducted routine monitoring and maintenance programs at the Site. On October 1, 2008, GHD, formerly Conestoga-Rovers & Associates (CRA), was retained to perform monitoring, maintenance, and reporting activities for the Site under the direct management of GSH. Effective August 1, 2022, B&B Engineers and Geologists of New York, P.C. (B&B), an affiliate of Geosyntec Consultants, Inc. (Geosyntec), was retained by GSH to perform operation, maintenance, monitoring, and reporting activities for the Site. GHD completed all tasks required on the Site through July 31, 2022, and then shared responsibilities of the tasks with B&B from August 1, 2022 through August 31, 2022. B&B took over responsibility for all tasks beginning September 1, 2022.

Pursuant to Section 11.0 of the *Approved Inlet Remedial Plan (AIRP)*, GSH is conducting a post-remediation monitoring program at the Inlet. The AIRP is Appendix A to the *Third Stipulation and Partial Consent Judgment* (Third PCJ) filed in United States District Court-Western District of New York by the State and OxyChem as part of the Durez Inlet Remediation Project. The monitoring program has been underway since May 1995, following completion of Site environmental restoration in April 1995.

The requirements of the post-remediation monitoring program were outlined in the NYSDEC-approved "Inlet Monitoring Plan" (Rust Environment and Infrastructure, October1995). The "Inlet Monitoring Plan" (IMP) was revised in 2019 (GHD, April 2019) and approved by NYSDEC in an email dated August 13, 2019.

Additional remediation activities that have been conducted over the years include the following:

- An active in situ chemical oxidation (ISCO) program was conducted from April 2011 through April 2012 with injections occurring in April 2011, November 2011, and April 2012.
- A passive diffusion remedial technology installing Oxygen Release Compound (ORC) socks in October 2019 with completion in late October 2022.

A Site location plan is presented on Figure 1.1.

This Periodic Review Report (PRR) describes the monitoring and maintenance activities conducted and presents the data collected for the Inlet from January 1, 2022 through December 31, 2022. The completed *NYSDEC Institutional Controls and Engineering Controls (ICEC) Certification Form* is included as Appendix A.

Other activities associated with the Site include ongoing evaluation of sediment in the Pettit Cove. This evaluation is separate from the operation, maintenance, and monitoring (OM&M) activities

1



for the Durez Inlet Site, and therefore, is not discussed in the PRR. Documentation associated with these other activities will continue to be provided to the NYSDEC under separate cover.

2. INLET MONITORING PROGRAM

The activities associated with the Inlet monitoring program in accordance with Section 11.0 of the AIRP include:

- Measurement of the Little Niagara River (River) water level and groundwater levels
- Chemical analysis of groundwater samples
- Monitoring and operation of dense non-aqueous phase liquid (DNAPL) extraction wells
- Maintenance of wells
- Inspection of Site physical characteristics
- Evaluation of remediation performance
- Submittal of summary reports to the NYSDEC

This annual report presents the results of hydraulic and chemical monitoring of groundwater; monitoring and extraction of DNAPL; and inspection activities conducted at the Inlet for the calendar year 2022 in support of the AIRP.

2.1 Purpose

The IMP outlines the DNAPL and groundwater monitoring program and a systematic inspection of the Inlet. The purpose of the IMP is to verify the effectiveness of the remedy in the North Lobe, such as extraction of free or mobile DNAPL and isolation of the residuals by the cutoff and sheet pile walls. The North Lobe is defined as the area located inside of the cutoff wall to the north of the Inlet Cove (Figure 2.1). Five (5) DNAPL extraction wells are located within the North Lobe. Eight (8) groundwater monitoring wells are located within and outside of the North Lobe for the purposes of hydraulic and chemical groundwater monitoring. Specific objectives of the DNAPL/groundwater monitoring program for the North Lobe are as follows:

- To identify and remove, as necessary, DNAPL that collects in the extraction well sumps;
- To characterize groundwater flow directions and hydraulic gradients in the vicinity of the North Lobe;
- To identify and document long-term changes in groundwater quality in the North Lobe area (inside and outside of the cutoff wall); and
- To inspect groundwater collected from the lower alluvium monitoring wells outside of the North Lobe for the presence of DNAPL.

Inspection of the Site includes observations for evidence of erosion and disturbance to remedial structures.

2.2 Scope

2.2.1 Groundwater Quality Monitoring Program

The groundwater quality monitoring program (chemical monitoring) consists of collecting and analyzing groundwater samples from five monitoring wells designated as "intermediate" wells, consisting of one well hydraulically upgradient to the North Lobe (MW-16I) and four wells hydraulically down- or cross-gradient to the North Lobe (MW-18I, MW-19I, MW-20I, and MW-22I). The groundwater samples are analyzed for the Targeted Site Compounds (TSCs), consisting of:

Benzene	Toluene	Chlorobenzene
1,2,-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	

The groundwater samples are also inspected for the presence of DNAPL. The monitoring well locations are shown on Figure 2.1.

2.2.2 Hydraulic Monitoring Program

The hydraulic monitoring program consists of measuring groundwater elevations in seven intermediate monitoring wells (MW-15I, MW-16I, MW-17I, MW-18I, MW-19I, MW-20I, and MW-22I) installed in the lower alluvium outside the cutoff wall, and one monitoring well (MW-21S) installed in the upper alluvium and fill inside the cutoff wall and designated as a "shallow" well. Groundwater elevations and DNAPL levels are also measured in five extraction wells (EW-1, EW-2, EW-3, EW-4, and EW-5) installed in the lower alluvium inside the cutoff wall in the isolated area where DNAPL has been detected. The River elevation is recorded utilizing a staff gauge (SG) located along the River's edge and is measured before and after groundwater levels are measured. The monitoring and extraction well locations and the SG location are presented on Figure 2.1.

DNAPL extraction only occurs during the boating off-season from October 15 to April 15. During this period, DNAPL is removed from an extraction well when the level of DNAPL in that well reaches the top of the extraction well sump. During the boating season when DNAPL extraction does not occur, any accumulated DNAPL remains within the containment wall of the North Lobe area. The top of the containment wall is at an elevation of approximately 562 feet above mean sea level (AMSL), while the top of sump elevations range from 538.10 to 539.20 feet AMSL (approximately 24 feet below the top of the containment wall).

3. INLET MONITORING PROGRAM RESULTS

3.1 Groundwater Quality Monitoring

Sampling, analytical protocols, and detection limits for the sampling program have been established and set forth in the original Partial Consent Judgment (PCJ) Appendix B-1, which is also included as Appendix B to the IMP. The IMP also includes sampling and field procedures that supplement those in the PCJ. The five intermediate groundwater monitoring wells (MW-16I, MW-18I, MW-19I, MW-20I, and MW-22I) were sampled semiannually on April 27, 2022 and October 18, 2022. All sampling was conducted in accordance with the procedures described in Appendix B of the IMP.

ALS Environmental (ALS) in Rochester, New York, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified (NELAP New York ID # 10145) laboratory, conducted the sample analyses. The analytical results are summarized in Table 2.1. The Quality Assurance/Quality Control (QA/QC) reviews for the two semiannual sampling events are provided in Appendix B.

The analytical results were compared to New York State (NYS) Class GA Groundwater Standards (Class GA Groundwater Standards) [NYS GQS] set forth in the Division of Water "Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (June 1998). The comparison is presented in Table 2.1. Concentrations of individual TSCs versus time for the five monitoring wells sampled are presented on Charts 1 through 5. Graphs showing concentrations of total TSCs versus time are presented on Figures 2.2 through 2.6. Only the TSC concentrations for the parent samples are shown on the charts and figures. Historical groundwater results and TSC concentrations are provided in Appendix C.

3.1.1 Chemical Concentrations

Groundwater quality generally remained stable during the calendar year 2022. A review of the analytical results for the two sampling events conducted in 2022 from monitoring wells MW-16I, MW-18I, and MW-19I indicated that TSC concentrations were less than the NYS GQS, which is generally consistent with previous monitoring results. Concentrations of benzene; chlorobenzene; and 1,3- and 1,4-dichlorobenzene detected at the remaining two monitoring wells, MW-20I and MW-22I, were significantly greater than the NYS GQS, which is also consistent with previous monitoring results.

A passive diffusion remedial program was implemented at groundwater monitoring wells MW-16I, MW-20I, and MW-22I in October 2019 and was recently completed in the fourth quarter of 2022. Details of the remedial program will be presented by GSH to the NYSDEC under separate cover.

The groundwater quality in each of the five intermediate groundwater monitoring wells is further discussed below.

MW-16I

The concentrations of total TSCs in samples collected from monitoring well MW-16I, which is considered to be an upgradient well for the Site, were primarily non-detect (ND) at 1.0 micrograms per liter (μ g/L) from the time monitoring began in July 1995 until June 2006 (Figure 2.2 and Appendix C). In June 2006, the total concentration of TSCs at this monitoring well was 17.63 μ g/L. In September 2006, the total TSC concentration at this monitoring well decreased back to nearly ND and then began to fluctuate, demonstrating a general increasing trend. The reason for this increasing trend is not known. Total TSC concentrations have remained at less than 4 μ g/L since September 2006.

Total TSC concentrations at monitoring well MW-16I in 2022 were 1.87 μ g/L during the spring monitoring event and 3.05 μ g/L during the fall monitoring event. These concentrations were slightly lower than the total TSC concentrations in 2021 (3.50 μ g/L during the spring monitoring event and 1.95 μ g/L during the fall monitoring event).

During each of the 2022 monitoring events, the individual TSCs in MW-16I were either ND or were detected at estimated concentrations below the reporting limits of $1.0\,\mu\text{g/L}$ and NYS GQS (Table 2.1). Benzene was detected at estimated concentrations of $0.236\,\mu\text{g/L}$ and $0.254\,\mu\text{g/L}$ during the spring and fall monitoring events, respectively, which were below the NYS GQS of $1\,\mu\text{g/L}$. Benzene has been detected consistently at estimated concentrations below $1.0\,\mu\text{g/L}$ or slightly above $1.0\,\mu\text{g/L}$ since 2006. Benzene marginally exceeded the NYS GQS in at least one quarter per year from 2013 through 2018 but has not been detected at a concentration greater than the NYS GQS since February 2018. The chlorobenzene concentrations of $1.63\,\mu\text{g/L}$ and $2.8\,\mu\text{g/L}$ detected during the spring and fall monitoring events, respectively, did not exceed the NYS GQS of $5\,\mu\text{g/L}$. Concentrations of individual TSCs at MW-16I with time are shown on Chart 3.

MW-18I

The total concentrations of TSCs in samples collected from monitoring well MW-18I have been primarily ND since July 1999 (Figure 2.3 and Appendix C). Individual concentrations of TSCs at this location have not exceeded the NYS GQS since April 1999. The concentrations of individual TSCs during 2022 were all ND at $1.0 \,\mu\text{g/L}$ (Table 2.1). Concentrations of individual TSCs at MW-18I versus time are shown on Chart 4.

MW-19I

The total concentrations of TSCs in samples collected from monitoring well MW-19I have been primarily ND since July 2002 (Figure 2.4 and Appendix C). Individual concentrations of TSCs at this location have not exceeded the NYS GQS since July 1999. Individual concentrations of TSCs during 2022 were all ND at $1.0 \,\mu\text{g/L}$ (Table 2.1). Concentrations of individual TSCs at MW-19I versus time are shown on Chart 5.

MW-201

The total concentration of TSCs in samples collected from well MW-20I has fluctuated during the years of Site monitoring; however, overall, the trend has been downward since 1996 (Figure 2.5 and Appendix C). In 2008 and 2009, the total concentrations of TSCs were consistently greater than 10,000 μ g/L. Following the first ISCO injection event in April 2011, the total concentration of TSCs decreased to less than 3,200 μ g/L during the May 2011 sampling event. Upon completion of the final ISCO injection event in April 2012, the total concentration of TSCs decreased to less than 2,200 μ g/L during the May 2012 sampling event. From May 2012 to October 2022, the total concentration of TSCs has trended slightly upwards, likely due to rebound effects following the ISCO injections, but overall the concentrations remain stable. Total TSC concentrations have remained at less than 4,000 μ g/L since February 2012.

Total concentrations of TSCs during 2022 were 3,055 μ g/L (2,672 μ g/L in the duplicate sample) during the spring monitoring event and 2,511 μ g/L during the fall monitoring event. These concentrations were slightly lower than the total TSC concentrations in 2021 (3,546 μ g/L during the spring monitoring event and 3,229 μ g/L during the fall monitoring event).

During each of the 2022 monitoring events, benzene; chlorobenzene; and 1,3- and 1,4-dichlorobenzene were detected at concentrations greater than the NYS GQS at MW-20I (Table 2.1). Benzene was detected at a concentration of 367 μ g/L (295 μ g/L in the duplicate sample) and 254 μ g/L during the spring and fall monitoring events, respectively, which were above the NYS GQS of 1 μ g/L. These concentrations were greater than the concentrations detected in 2021 (20.2 μ g/L [estimated] in the spring and 18.3 μ g/L [estimated] in the fall), but within the historical concentration range for benzene at this location (refer to Appendix C). Concentrations of chlorobenzene; 1,3-dichlorobenzene; and 1,4-dichlorobenzene detected in 2022 were marginally less than the concentrations detected in 2021. The concentrations of these three TSCs have remained relatively stable since approximately 2012, with a slight downward trend observed for 1,3-dichlorobenzene since that time. Concentrations of individual TSCs at MW-20I versus time are shown on Chart 1.

The post-injection concentrations observed in MW-20I have remained orders of magnitude lower than those observed prior to the implementation of the ISCO program and have since stabilized.

MW-22I

The total concentration of TSCs in samples collected from well MW-22I has fluctuated during the years of Site monitoring (Figure 2.6 and Appendix C). The total TSC concentration at this location exhibited an overall increasing trend from approximately 2005 to approximately 2009, and then exhibited fluctuations from 2009 through 2016. Concentrations were relatively stable and consistent from approximately 2016 through 2019. Following implementation of the passive diffusion remedial program in October 2019, both total and individual concentrations of TSCs decreased to near-historic lows in May 2020 and then started increasing. The total concentrations of TSCs in well MW-22I during 2022 were 4,104 μ g/L during the spring 2022 monitoring event and 3,846 μ g/L during the fall 2022 monitoring event, which were slightly less than and greater

than the total TSC concentrations of 3,870 μ g/L and 4,061 μ g/L during the spring and fall 2021 events, respectively. These increases are likely attributable to the ongoing passive diffusion remedial program (refer to Section 3.1.3) and are expected to be short-term.

During each of the 2022 monitoring events, benzene; chlorobenzene; and 1,3- and 1,4-dichlorobenzene were detected at concentrations greater than the NYS GQS at MW-22I (Table 2.1). Benzene was detected at concentrations of 47.7 μ g/L and 329 μ g/L during the spring and fall monitoring events, respectively, which were above the NYS GQS of 1 μ g/L. These concentrations were less than and greater than the concentrations detected in 2021 (54.7 μ g/L in the spring and 58.7 μ g/L in the fall), respectively. The concentration of benzene detected at this location was relatively stable from approximately 2014 through October 2019 and has also fluctuated since implementation of the passive diffusion remediation program in October 2019. Concentrations of chlorobenzene; 1,3-dichlorobenzene; and 1,4-dichlorobenzene detected in 2021 were greater than the concentrations detected in 2022. However, similar to the concentration of total TSCs at this location, these concentrations increased following implementation of the passive diffusion remedial program but appear to be stabilizing. Concentrations of individual TSCs at MW-20I with time are shown on Chart 2.

Although the 2011 to 2012 ISCO program targeted the areas around MW-20I and MW-22I, the concentrations of TSCs in MW-22I were consistently lower than in MW-20I following the ISCO treatment, up until 2021. Total concentrations of TSCs in MW-22I were reduced after the 2011 and 2012 ISCO events to less than 1,000 μ g/L; however, rebound was observed following the injection events. The increase in concentrations since the ISCO events, excluding the increases in 2020 through 2022 likely related to the passive diffusion program, is indicative of rebound within clayey soils after three injections of activated sodium persulfate. Total TSC concentrations in MW-20I and MW-22I during 2020, 2021, and 2022 are presented in the following tables.

Table 1 2020 Total TSC Concentrations (μg/L)

Well Location	First Semiannual Period	Second Semiannual Period
MW-20I	3,372	3,822
MW-22I	94.9	3,410

Table 2 2021 Total TSC Concentrations (μg/L)

Well Location	First Semiannual Period	Second Semiannual Period	
MW-20I	3,546	3,229	
MW-22I	3,870	4,051	

Table 3 2022 Total TSC Concentrations (μg/L)

Well Location	First Semiannual Period	Second Semiannual Period	
MW-20I	3,055 (2,672 duplicate)	2,511	
MW-22I	4,104	3,846	

The clayey (tight) soils, the sheet pile wall installed cross-gradient to groundwater flow, the adjacent River, and a clay aquitard surrounding the MW-20I and MW-22I well cluster do not allow significant groundwater flow through this area of the Site. These factors, combined with the ISCO injections, help to explain the fluctuating concentrations observed at well MW-22I in the years subsequent to the injections. No DNAPL has been observed in MW-22I during any of the monitoring events.

Figure 2.6 and Chart 2 show that the concentrations of TSCs in MW-22I were lower than the pre-injection concentrations and were relatively stable until concentrations started increasing in 2020. These increases in concentration in MW-22I likely represent a short-term fluctuation associated with the passive diffusion remedial program implemented in October 2019.

3.1.2 Chemical Trends

As indicated in Section 3.1.1, graphs of the total concentrations of TSCs in monitoring wells MW-16I, MW-18I, MW-19I, MW-20I, and MW-22I since completion of Site remedy (April 1995) through the end of the year 2022 are presented on Figures 2.2 through 2.6. Concentrations of individual TSCs are shown in Charts 1 through 5. The historical and current analytical data for these wells are presented in Appendix C.

A review of the graphs and data indicate:

- 1. While occasional detections of low concentrations of the TSCs have occurred in the upgradient monitoring well MW-16I, the concentrations of the TSCs in this well have been less than the NYS GQS since July 1996, with the exception of the chlorobenzene concentrations during the June 2006 sampling event (16 μg/L) and October 2020 sampling event (7.04 μg/L [estimated] in the duplicate sample versus 2.79 J μg/L [estimated] in the parent sample); and benzene concentrations during the August 2009, November 2013, May and November 2014, May 2015, February 2016, February 2017, and February 2018 sampling events. These benzene concentrations exceeding the NYS GQS of 1.0 μg/L have ranged from 1.1 to 1.3 μg/L. No TSC concentrations exceeded the NYS GQS in 2022. Total TSC concentrations have remained at less than 4 μg/L since September 2006.
- 2. Individual concentrations of TSCs detected in groundwater samples collected from monitoring wells MW-18I and MW-19I have been less than the NYS GQS since October 1999.

- 3. Although there is variability in the concentrations of TSCs in monitoring well MW-20I between groundwater monitoring events, concentrations have stabilized at lower than historical levels, with slight increases in concentrations since 2012. This is likely due to rebound following completion of the 2011/2012 ISCO injections.
- 4. The concentrations of TSCs in groundwater samples collected from monitoring well MW-22I have fluctuated historically. Concentrations were relatively stable and consistent from approximately 2016 through 2019. Increases in concentrations of TSCs have been observed since the start of the passive diffusion remedial program in October 2019, but these increases appear to be stablizing and were likely due to changing geochemical conditions in the subsurface resulting from the passive diffusion remedial program. These increases are expected to be short-term.

3.1.3 Passive Diffusion Remediation at MW-16I, MW-20I, and MW-22I

In response to requests from the NYSDEC expressed in letters dated May 30, 2018 and July 11, 2019, GSH evaluated the feasibility of implementing passive diffusion remedial technologies at groundwater monitoring wells MW-16I, MW-20I, and MW-22I. The objective of the passive diffusion remedial effort is to decrease the concentrations of TSCs in these three wells over time. A work plan (Work Plan) dated July 26, 2019 and revised on August 6, 2019 was approved by the NYSDEC in an email dated August 12, 2019. The Work Plan provided for the installation of Oxygen Release Compound (ORC) socks into wells MW-16I, MW-20I, and MW-22I (ORC wells) for a period of three years. Installation of the first set of ORC socks occurred in October 2019, immediately following the semiannual monitoring event and final field activities were completed in late October 2022. As stated in the Work Plan, a summary letter describing the results of the program and presenting recommendations will be provided to the NYSDEC at the conclusion of the 3-year implementation period. GSH intends to provide the detailed evaluation of the 3-year program to the NYSDEC under separate cover.

3.2 Hydraulic Monitoring

Groundwater elevations were measured semiannually in the DNAPL extraction wells, and the groundwater monitoring wells on May 27 and October 17, 2022.

During a hydraulic monitoring event, the elevation of the River is also measured for comparison to the groundwater elevations. A summary of the 2022 water elevations for the eight monitoring wells, five extraction wells, and the River is presented in Table 2.2.

Groundwater potentiometric surface maps for the Site have been prepared based on the semiannual groundwater elevations and are presented on Figures 2.7 and 2.8.

A review of the hydraulic data measured during the 28 years of monitoring shows a correlation of the lower alluvium groundwater elevations (as measured in Inlet Site monitoring wells) with the elevation of the River. The potentiometric contours presented on Figures 2.7 and 2.8 show that groundwater flow is generally in an east-to-west direction across the upland area of the Site toward

the River. However, groundwater flow has been observed from the River into the North Lobe. Groundwater flow direction that fluctuates temporally is not uncommon near the groundwater-surface water interface. However, based on a comparison of the groundwater elevations in the wells farthest from the River (MW-15I through MW-18I) to wells closest to the River's shoreline, over the course of the monitoring period, the overall general direction of groundwater flow at the Site was still east to west.

3.2.1 Dense Non-Aqueous Phase Liquid

DNAPL levels were measured in the five extraction wells (EW-1, EW-2, EW-3, EW-4, and EW-5) on a semiannual basis on May 27 and October 17, 2022. Table 2.3 summarizes the DNAPL elevations.

DNAPL removal from the five extraction wells is restricted to October 15 to April 15, during the boating off-season. DNAPL is removed only if its level rises above the top of the sump in the bottom of the extraction well. DNAPL did not accumulate to this level and therefore was not removed from the extraction wells in 2022.

The accumulation rate of DNAPL in the extraction wells has slowed over time. Table 2.4 shows the volume of DNAPL recovered from the Site since the onset of maintenance and monitoring activities in May 1995. A total of 1,135.1 gallons of DNAPL has been recovered from the Site since remediation began in August 1993. Since 2002, 19.2 gallons of DNAPL have been recovered. The highest annual amount of DNAPL recovered since 2002 was 5.3 gallons in 2010. No DNAPL was removed from the extraction wells from 2002 through 2008, from 2015 through 2018, or in 2020 through 2022.

3.2.2 Site and Well Inspections

Site and physical well inspections were completed semiannually on April 26 and October 17, 2022. The completed field inspection forms are included as Appendix D. Evidence of minor animal burrowing was observed beneath the concrete pads at EW-2 and MW-15I during both Site inspections. Evidence of burrowing animals was also observed in the northwest corner under the sidewalk during the spring 2022 Site inspection. It is not anticipated that these animal burrows present a concern to the integrity of the wells at this time. Repairs were not required.

Results of the semiannual well inspections are presented in Table 2.5. No deficiencies were noted during the semiannual well inspections. Repairs were not required.

3.2.3 Maintenance Activities

No maintenance activities were performed during the monitoring period.

4. SUMMARY OF 2022 OPERATION

The remedial systems at the Site are functioning as designed to contain the DNAPL, which allows for DNAPL removal and off-Site disposal as necessary.

Overall, groundwater quality to the north and east outside the cutoff wall has stabilized, in part due to the 2011 and 2012 ISCO injection events, which included injections of aqueous sodium persulfate and sodium hydroxide (April 2011, November 2011, and April 2012). The concentrations observed in MW-20I have remained orders of magnitude lower than those observed prior to the implementation of the ISCO program in 2011/2012 and have since stabilized; however, the concentrations have remained orders of magnitude greater than the NYS GQS. Only slight increases have occurred in MW-20I since 2012 due to rebound. The pre-injection concentrations observed in MW-22I were significantly lower than those observed in nearby well MW-20I. The concentrations of TSCs in MW-22I have remained relatively consistent with only slight increases since 2016, other than recent increased concentrations following implementation of the passive diffusion remedial program (discussed below) that are expected to be short-term.

The 2022 semiannual groundwater quality data for MW-16I, MW-18I, and MW-19I are consistent with historical analytical data. Analytical results for wells MW-16I, MW-18I, and MW-19I were less than the NYS GQS.

A passive diffusion remedial program was implemented at groundwater monitoring wells MW-16I, MW-20I, and MW-22I in October 2019. The program was implemented for three years and then the results were to be evaluated once complete. The remedial program ended in October 2022. The results and data evaluation of the program will be provided under separate cover. Based on the data presented in Figures 2.2, 2.5, and 2.6, concentrations of total TSCs in MW-22I and MW-16I have increased since implementation of the passive diffusion remedial program, while concentrations of total TSCs in MW-20I remain relatively unchanged. However, it is unclear as to the cause of these trends and upward trends at wells MW-16I and MW-20I while the passive diffusion remedial activities were occurring. As stated previously, the passive diffusion data will be further evaluated, and results of that evaluation will be provided as a separate document to the NYSDEC.

The hydraulic monitoring data show that the overall direction of groundwater flow at the Site is from east to west, across the upland area of the Inlet toward the River, however there are localized groundwater flow patterns where there is a west to east directionality from the River towards the North Lobe.

No DNAPL has been observed in any of the groundwater monitoring wells located outside the cutoff wall in the North Lobe area. The monitoring results indicate that the cutoff wall is functioning as designed.

The long-term changes in groundwater quality will continue to be monitored and evaluated. The Inlet monitoring program data for the Site demonstrates that the remedial program continues to meet its design objectives.

5. **RECOMMENDATIONS**

Based on the performance of the system and historical data trends, GSH has the following recommendation for program changes:

5.1 Groundwater Purging and Sampling

Currently groundwater purging and sampling procedures is a mix of procedures pulled from the original Partial Consent Judgement Appendix B-1 and updated field protocols as outlined in the IMP, specifically Appendix B and D of the IMP. These procedures follow a traditional volumetric purging approach where a minimum of three well volumes up to a maximum of 10 well volumes will be purged prior to sampling along with the monitoring of field parameter stability within specified criteria. While this approach is an acceptable purging approach, this method is labor intensive and can generate large volumes of potentially impacted groundwater that must be collected, and vehicle transported to the Durez NT facility approximately two miles from the Inlet via City of North Tonawanda public streets. In addition, it also generates additional waste materials such as extra personal protective equipment (PPE), excess tubing, etc. The current sampling procedure was updated to follow low-flow sampling requirements in the revised IMP dated April 5, 2019 (Appendix D).

In order to reduce waste generation, reduce the risk of a large spill during transport, and reduce labor effort, GSH would recommend that the purging procedures be updated to be consistent with NYSEDC and USEPA accepted low-flow purging and sampling procedures. GSH would submit revised field procedures for purging and sampling reflecting the low flow approach for NYSDEC review and approval prior to the 2023 annual groundwater sampling event.

By switching to low-flow purging and sampling, the following goals could be achieved:

- Reduce the volume of wastewater generated and requiring transport to the Durez NT facility via City of North Tonawanda public streets.
- Reduce the risk of a spill associated with the transport of collected purge waters (smaller volumes transported) from Inlet site to the Durez NT facility.
- Reduce the volume of PPE and other incidental wastes that are generated during volumetric purging and sampling techniques.
- Improve the quality of data; low flow purging, and sampling is considered a more representative sampling technique and the samples can be collected within a shorter time window since the approach is much quicker than the traditional approach.
- The overall labor effort and cost associated with completing the sampling event would be reduced since purging and sampling time would decrease.

Tables

Table 2.1

2022 Groundwater Chemistry Monitoring - Analytical Results Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

	* Standard	Reporting	M	W-16I	MW-18I	
Compound/Parameter	Value (μg/L)	Limit (μg/L)	April 2022	Oct 2022	April 2022	Oct 2022
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U
Benzene	1	1	0.236 J	0.254 J	1.0 U	1.0 U / 1.0 U
Chlorobenzene	5	1	1.63	2.8	1.0 U	1.0 U / 1.0 U
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U
Total Targeted Site Compounds			1.87	3.05	0.0	0.0

	* Standard	Reporting	MW-19I		MW-20I	
Compound/Parameter	Value (μg/L)	Limit (µg/L)	April 2022	Oct 2022	April 2022	Oct 2022
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	25.0 U / 25.0 U	25.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	25.0 U / 25.0 U	25.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	25.0 U / 25.0 U	25.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	22.0 J / 21.7 J	14.9 J
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	367 / 295	254
Benzene	1	1	1.0 U	1.0 U	15.6 J / 14.9 J	12.1 J
Chlorobenzene	5	1	1.0 U	1.0 U	2650 / 2340	2230
Toluene	5	1	1.0 U	1.0 U	25.0 U / 25.0 U	25.0 U
Total Targeted Site Compounds			0.0	0.0	3055 / 2672	2511

	* Standard	Reporting	MW-22I		
Compound/Parameter	Value (μg/L)	Limit (µg/L)	April 2022	Oct 2022	
1,2,3-Trichlorobenzene	5	1	25.0 U	25.0 U	
1,2,4-Trichlorobenzene	5	1	25.0 U	25.0 U	
1,2-Dichlorobenzene	3	1	25.0 U	25.0 U	
1,3-Dichlorobenzene	3	1	28.5	21.2 J	
1,4-Dichlorobenzene	3	1	458	386	
Benzene	1	1	47.7	329	
Chlorobenzene	5	1	3570	3110	
Toluene	5	1	25.0 U	25.0 U	
Total Targeted Site Compounds			4104	3846	

Notes:

J - Estimated

U - Not detected at the associated reporting limit

μg/L - Micrograms per liter

* - New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

2.80 / 3.07 - Results of investigative and duplicate sample

- Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

Table 2.2

2022 Water Level Elevations Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

	Reference		
Well	Point Elevation		
Number	(ft. AMSL)	05/27/22	10/17/22
MW-15I	569.79	565.79	565.71
MW-16I	573.31	563.79	565.60
MW-17I	574.41	565.80	565.60
MW-18I	573.51	565.71	565.44
MW-19I	572.29	565.49	565.31
MW-20I	572.35	563.65	565.24
MW-21S	572.02	565.52	565.11
MW-22I	572.31	563.89	565.44
EW-1	572.09	565.44	565.07
EW-2	571.89	565.39	565.12
EW-3	572.29	565.14	565.36
EW-4	572.69	565.39	565.03
EW-5	573.06	565.54	565.12
$\mathbf{SG}^{(1)}$	567.66	565.74	565.67
SG ⁽²⁾	567.66	565.74	565.67

Notes:

Average elevation of the top of the cut-off wall is 562 feet AMSL

NM -Not measured due to large boat parked on top of well

ft. AMSL - Feet Above Mean Sea Level

SG - Staff Gauge at the River

SG(1) - River measurement at the start of monitoring

SG(2) - River measurement at the end of monitoring

Table 2.3

2022 DNAPL Levels and Volumes Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

	Well	Elevation	Elevation	Elevation of	Height of DNAPL	Elevation of	Height of DNAPL	Elevation of	DNAPL Above	Amount of	Amount of
	Number	of Top	of DNAPL	Top of Sump	Above Top of Sump	Top of Till	Above Top of Till	Bottom of Sump	Bottom of Sump	DNAPL in Well	DNAPL Pumped
		of Pipe	(ft. AMSL)	(ft. AMSL)	(ft.) *	(ft. AMSL)	(ft.)	(ft. AMSL)	(ft.)	(Gallons)	(Gallons)
05/27/22	EW-1	572.09	537.29	538.70	-1.41	540.10	-2.81	537.10	0.19	0.29	NP
	EW-2	571.89	538.01	538.52	-0.51	539.40	-1.39	536.92	1.09	1.64	NP
	EW-3	572.29	537.94	538.10	-0.16	539.50	-1.56	536.50	1.44	2.16	NP
	EW-4	572.69	536.75	538.20	-1.45	539.50	-2.75	536.60	0.15	0.22	NP
	EW-5**	573.06	NA	539.20	NA	540.00	NA	537.60	NA	NA	NP
10/17/22	EW-1	572.09	537.41	538.70	-1.29	540.10	-2.69	537.10	0.31	0.47	NP
	EW-2	571.89	537.93	538.52	-0.59	539.40	-1.47	536.92	1.01	1.51	NP
	EW-3	572.29	537.68	538.10	-0.42	539.50	-1.82	536.50	1.18	1.77	NP
	EW-4	572.69	536.63	538.20	-1.57	539.50	-2.87	536.60	0.03	0.05	NP
	EW-5	573.06	538.25	539.20	-0.95	540.00	-1.75	537.60	0.65	0.97	NP

Notes:

- Dense non-aqueous phase liquid (DNAPL) volume was calculated based on a 1.5-gallon/foot multiplier for a 6-inch diameter pipe

-x.xx - (Negative value) DNAPL level is below the reference point

ft. AMSL - Feet Above Mean Sea Level

NP - Not pumped

NA - Not applicable

NM - Not measured

** - Not measured due to large boat parked on top of well

* - Positive value indicates a requirement to remove DNAPL from well

Table 2.4

Cumulative DNAPL Extracted from Site - From Remediation August 1993 to Present Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

	Cumulative	Extraction Wells
Period	(gallons)	(gallons)
Remediation ⁽¹⁾	880.0	
Year One, May 1995 - April 1996	959.3	79.3
Year Two, May 1996 - April 1997	1012.5	53.2
Year Three, May 1997 - April 1998	1041.5	29.0
Year Four, May 1998 - April 1999	1075.5	34.0
Year Five, May 1999 - April 2000	1099.5	24.0
Year Six, May 2000 - April 2001	1112.0	12.5
*Year Seven, May - December 2001	1116.0	4.0
Year Eight, January - December 2002	1116.0	0.0
Year Nine, January - December 2003	1116.0	0.0
Year Ten, January - December 2004	1116.0	0.0
Year Eleven, January - December 2005	1116.0	0.0
Year Twelve, January - December 2006	1116.0	0.0
Year Thirteen, January - December 2007	1116.0	0.0
Year Fourteen, January - December 2008	1116.0	0.0
Year Fifteen, January - December 2009	1121.0	5.0
Year Sixteen, January - December 2010	1126.3	5.3
Year Seventeen, January - December 2011	1128.8	2.5
Year Eighteen, January - December 2012	1130.8	2.0
Year Nineteen, January - December 2013	1131.8	1.0
Year Twenty, January - December 2014	1133.4	1.6
Year Twenty-One, January - December 2015	1133.4	0.0
Year Twenty-Two, January - December 2016	1133.4	0.0
Year Twenty-Three, January - December 2017	1133.4	0.0
Year Twenty-Four, January - December 2018	1133.4	0.0
Year Twenty-Five, January - December 2019	1135.1	1.8
Year Twenty-Six, January - December 2020	1135.1	0.0
Year Twenty-Seven, January - December 2021	1135.1	0.0
Year Twent-Eight, January - December 2022	1135.1	0.0
Total:	1135.1	255.1

Notes:

- (1) Remediation of the Site was completed between August 1993 to April 1995
- * Minor Change 11, annual reporting year January-December

DNAPL - Dense non-aqueous phase liquid

Table 2.5

2022 Well Inspections Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

Date:	April 26, 2	20212											
		Elevation	Depth			Depth	* Depth Below Top of						
Well		of Top	to	Installed	Sounded	to	Pipe at which DNAPL	DNAPL	Well Integrity				
Number	Time	of Pipe	Water	Depth	Depth	NAPL	Required to be Pumped	Removed (gal)	Locked	Capped	Cracked	Obstructed	Comments
MW-15I		569.79	3.82	22.79	22.33	NN	NR	NR	Y	Y	N	N	
MW-16I		573.31	7.59	32.31	31.70	NN	NR	NR	Y	Y	N	N	
MW-17I		574.41	8.72	28.41		NN	NR	NR	NA	NA	NA	NA	
MW-18I		573.51	7.91	34.91	34.74	NN	NR	NR	Y	Y	N	N	
MW-19I		572.29	6.88	35.19	35.55	NN	NR	NR	Y	Y	N	N	
MW-20I		572.35	6.98	34.25	33.57	NN	NR	NR	Y	Y	N	N	
MW-21S		572.02	6.63	10.02	7.82	NN	NR	NR	Y	Y	N	N	
MW-22I		572.31	7.20	34.21	31.29	NN	NR	NR	Y	Y	N	N	
EW-1		572.09	6.72	34.99	35.07	34.91	≤ 33.49	NA	Y	Y	N	N	
EW-2		571.89	6.49	34.99	34.12	33.90	≤ 33.49	NA	Y	Y	N	N	
EW-3		572.29	7.12	35.79	35.37	34.31	≤ 34.29	NA	Y	Y	N	N	
EW-4		572.69	7.38	36.09	36.21	35.89	≤ 34.59	NA	Y	Y	N	N	
EW-5		573.06	NM	35.46	35.13	34.81	≤ 33.96	NA	Y	Y	Y	N	(1)
SG-1		567.66	1.99	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SG-1		567.66	2.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Description of Site: Gravel parking lot, grass embankment

Site Conditions: Good. MW-17I could not be accessed due to large boat parked on top of well.

Weather: Mostly Cloudy Rain 57°F Winds EWE 12 MPH

Date:	October 1	7, 2022											
		Elevation	Depth			Depth	* Depth Below Top of						
Well		of Top	to	Installed	Sounded	to	Pipe at which DNAPL	DNAPL		Well Integrity			
Number	Time	of Pipe	Water	Depth	Depth	NAPL	Required to be Pumped	Removed (gal)	Locked	Capped	Cracked	Obstructed	Comments
MW-15I		569.79	3.96	22.79	22.28	NN	NR	NR	Y	Y	N	N	(2)
MW-16I		573.31	7.34	32.31	31.60	NN	NR	NR	Y	Y	N	N	
MW-17I		574.41	8.90	28.41	29.20	NN	NR	NR	Y	Y	N	N	
MW-18I		573.51	7.48	34.91	32.10	NN	NR	NR	Y	Y	N	N	
MW-19I		572.29	6.57	35.19	35.32	NN	NR	NR	Y	Y	N	N	
MW-20I		572.35	6.80	34.25	33.45	NN	NR	NR	Y	Y	N	N	
MW-21S		572.02	6.26	10.02	7.80	NN	NR	NR	Y	Y	N	N	
MW-22I		572.31	6.63	34.21	31.21	NN	NR	NR	Y	Y	N	N	
EW-1		572.09	6.41	34.99	35.08	34.94	≤ 33.49	NA	Y	Y	N	N	
EW-2		571.89	6.08	34.99	33.85	33.61	≤ 33.49	NA	Y	Y	N	N	
EW-3		572.29	6.60	35.79	35.33	34.76	≤ 34.29	NA	Y	Y	N	N	
EW-4		572.69	6.93	36.09	35.18	34.96	≤ 34.59	NA	Y	Y	N	N	
EW-5		573.06	7.26	35.46	35.01	34.90	≤ 33.96	NA	Y	Y	N	N	
SG-1		567.66	1.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SG-1		567.66	1.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Description of Site: Gravel parking lot, grass embankment

Site Conditions: Good. Weather: Cloudy

Weather: Cloudy Rain 49°F Winds SW 5-10 MPH
(1) A few minor cracks in the concrete base - no repairs necessary

(2) Burrowing animal under concrete pad

Notes:

DNAPL - Dense Non-Aqueous Phase Liquid

NAPL - Non-Aqueous Phase Liquid

- $\boldsymbol{*}$ DNAPL requires pumping/removal when it reaches the top of the extraction well (EW) sumps
- Depths listed are representative of the depth of the top of the sump from the top of the pipe

NA - Not applicable

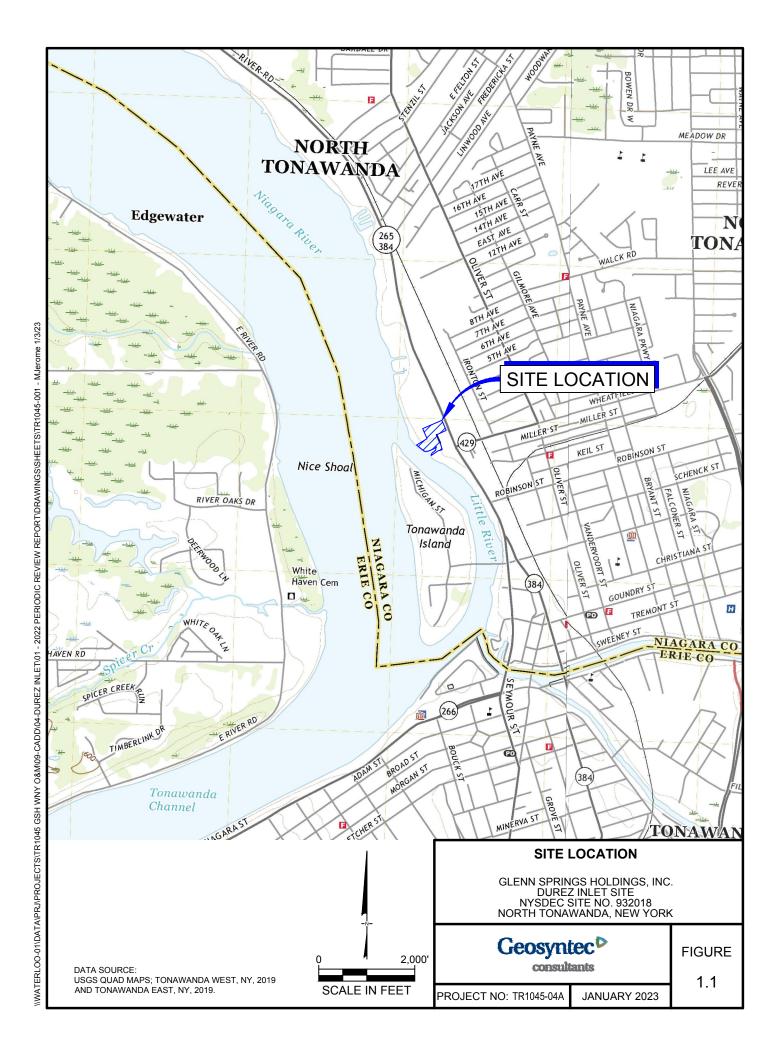
NM - Not measured

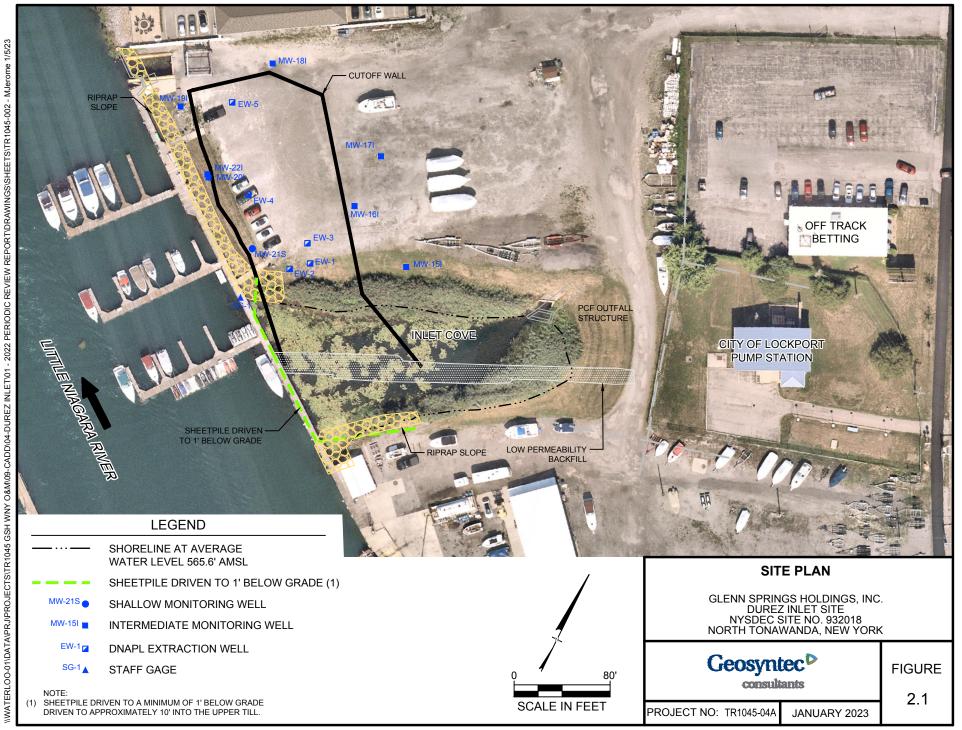
NN - No DNAPL present

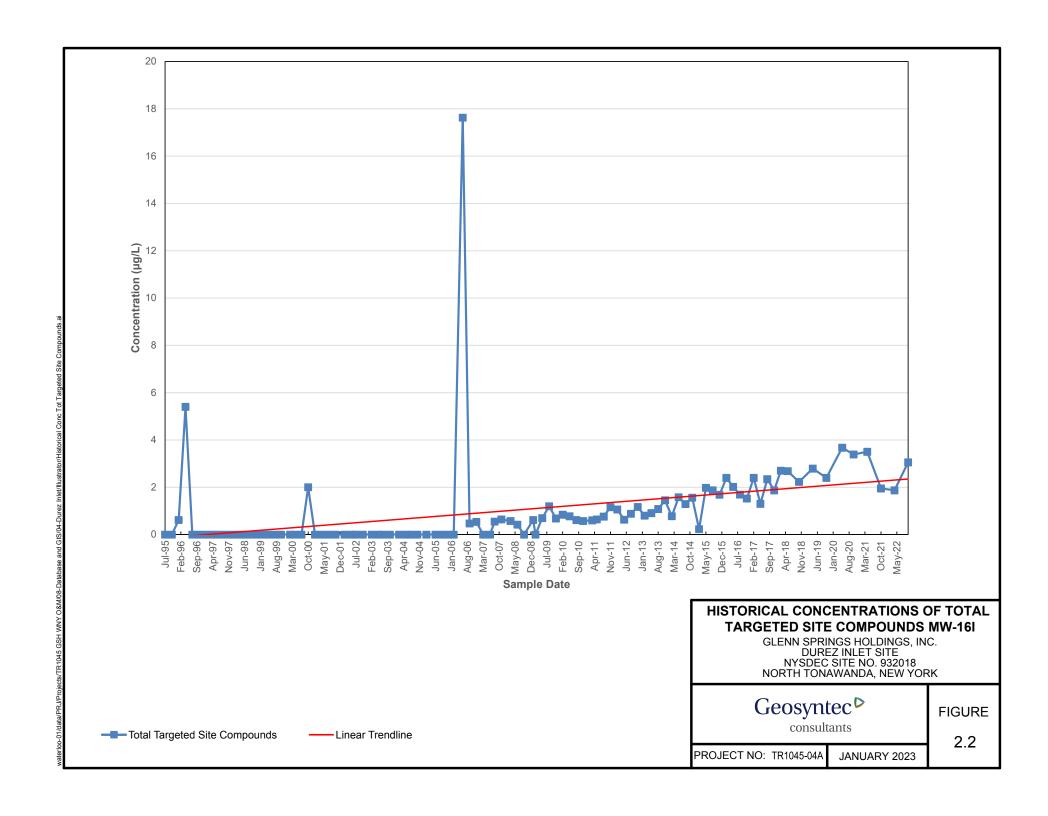
NR - Not required to be measured/assessed

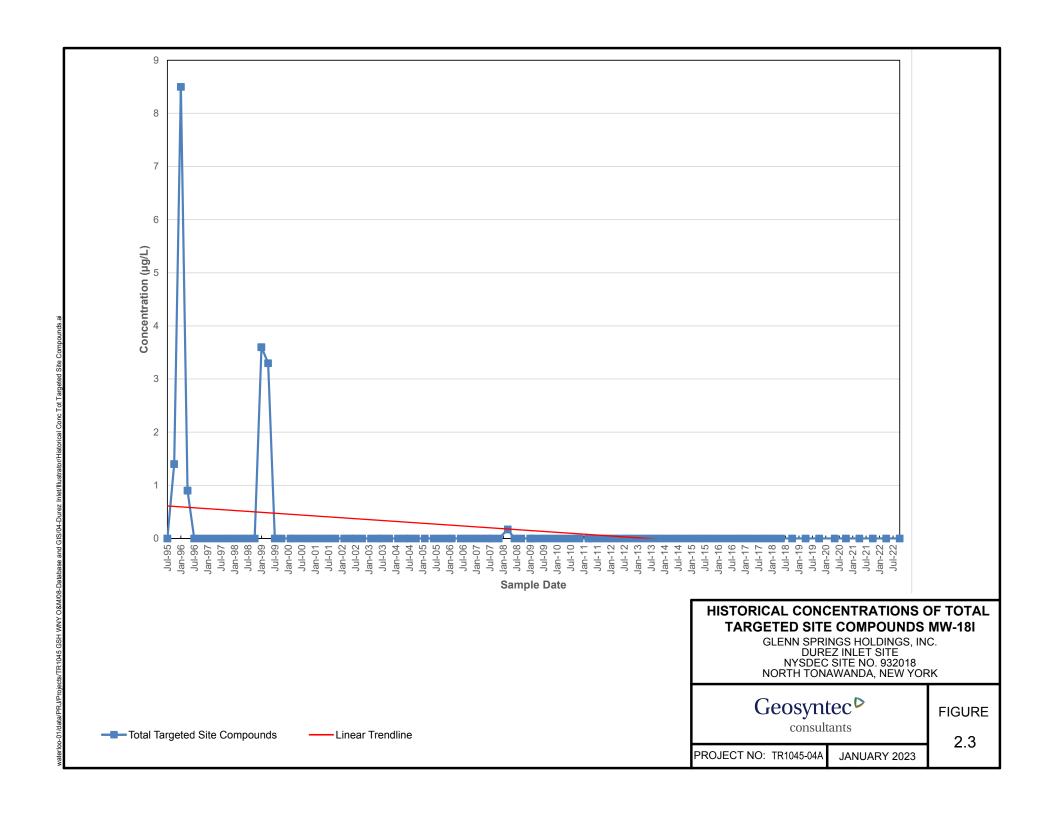
gal - Gallon

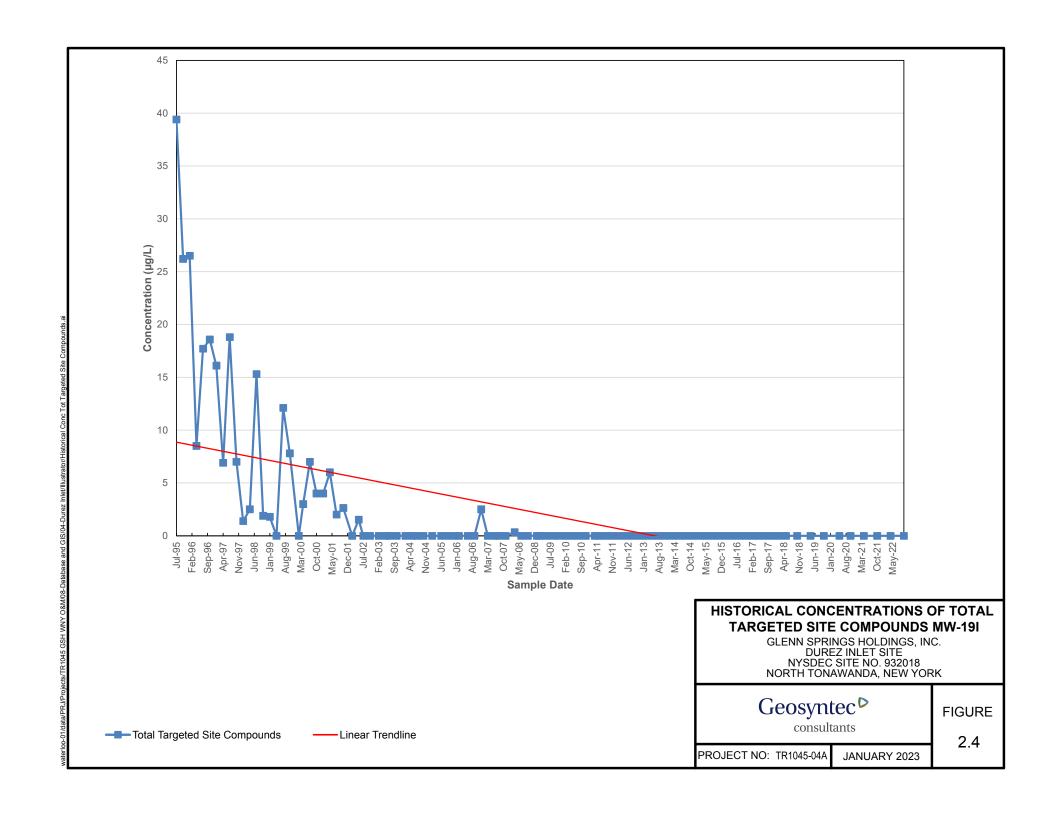
Figures

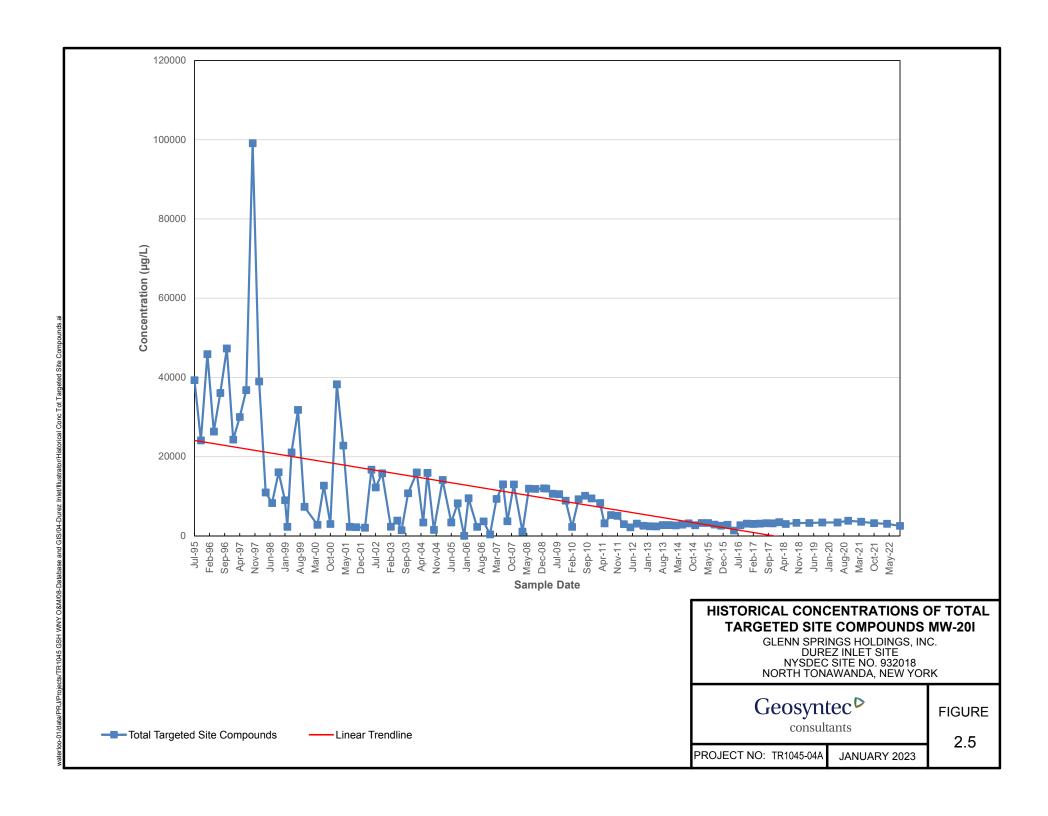


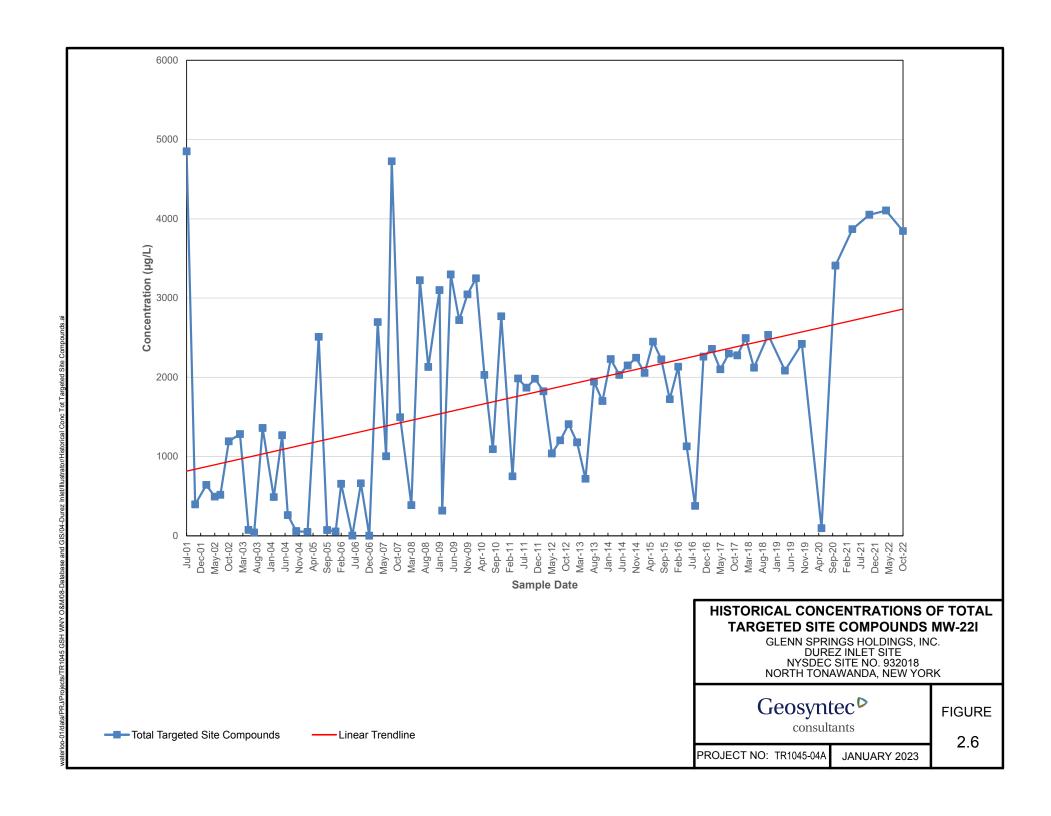


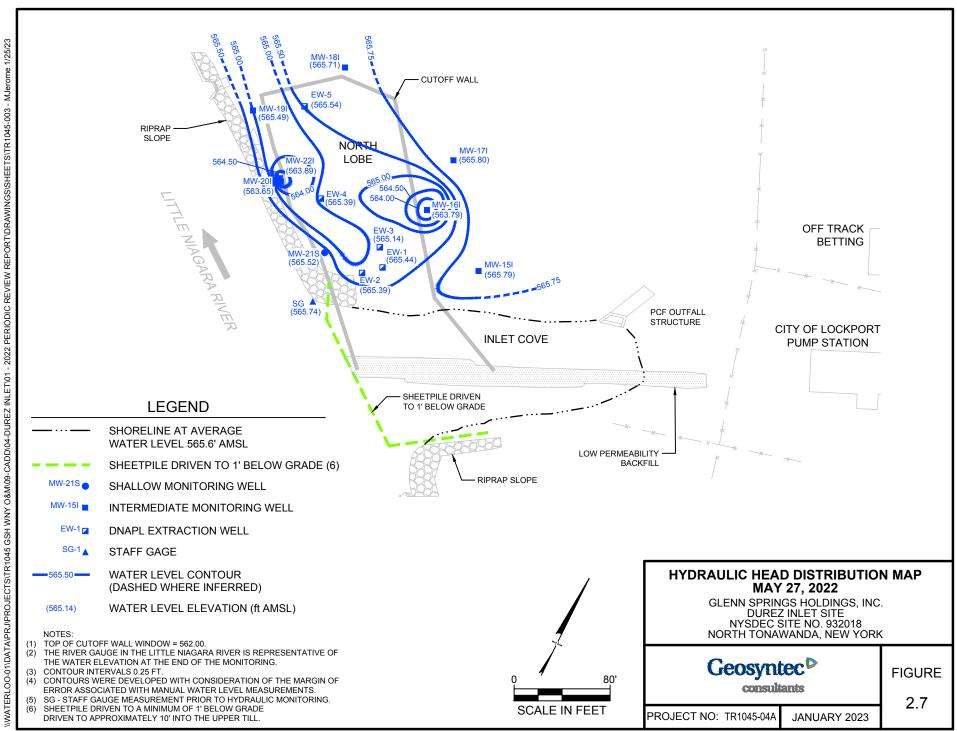












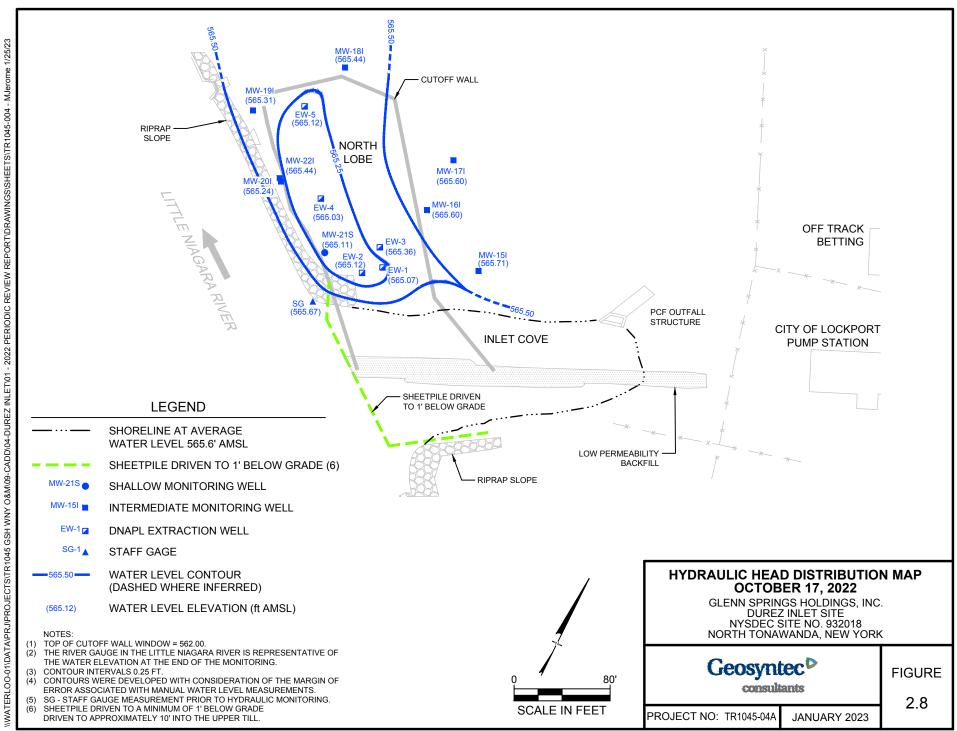
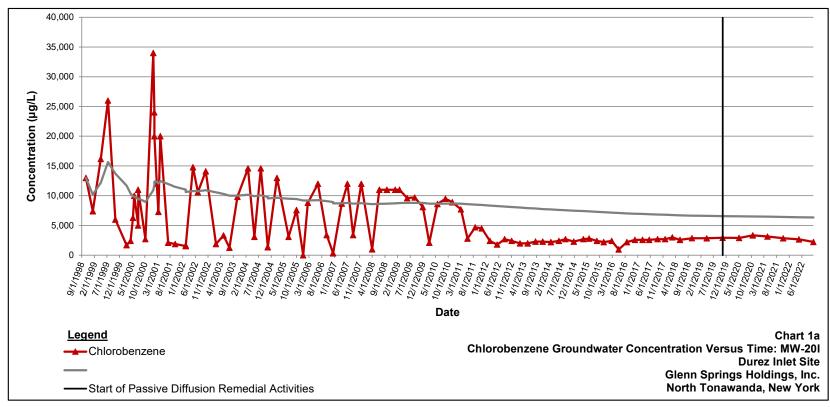
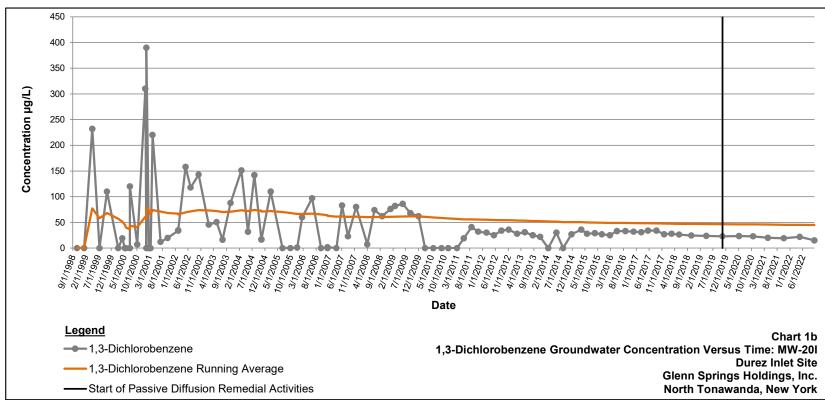
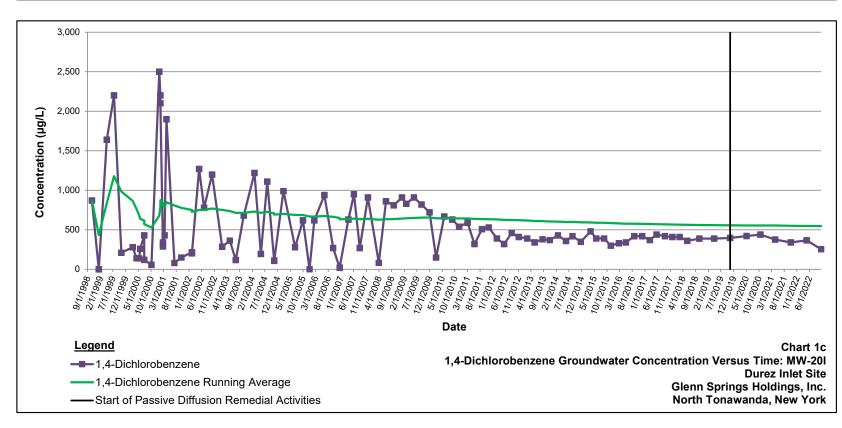


Chart Index

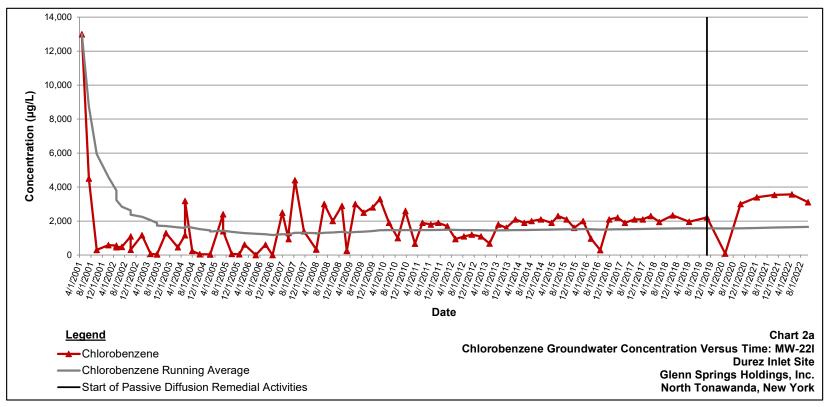
Groundwater Concentration Versus Time: MW-20I Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

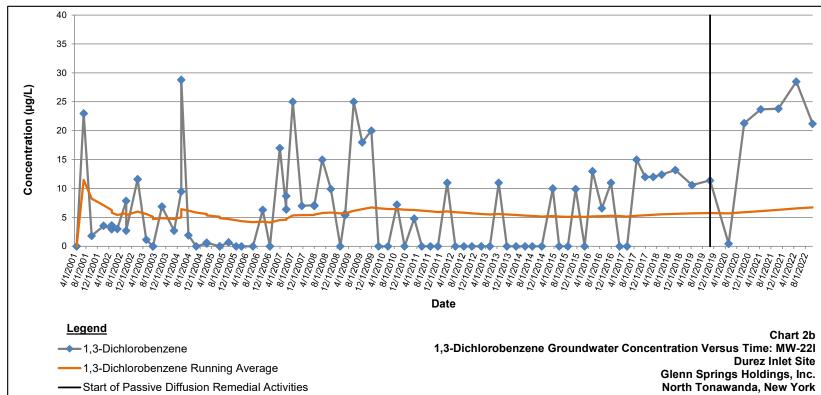


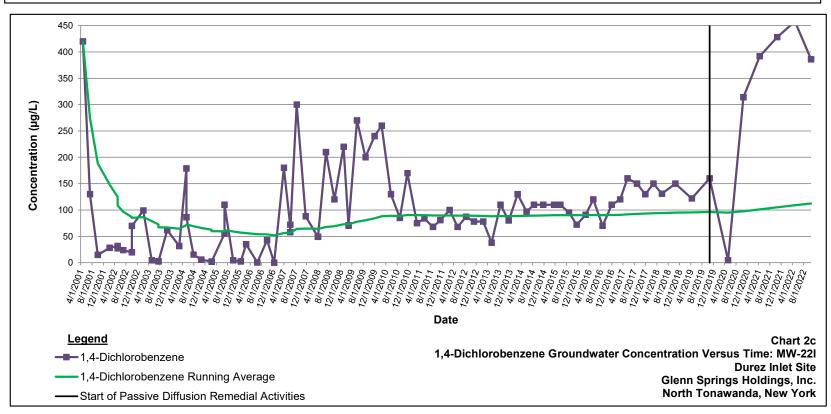




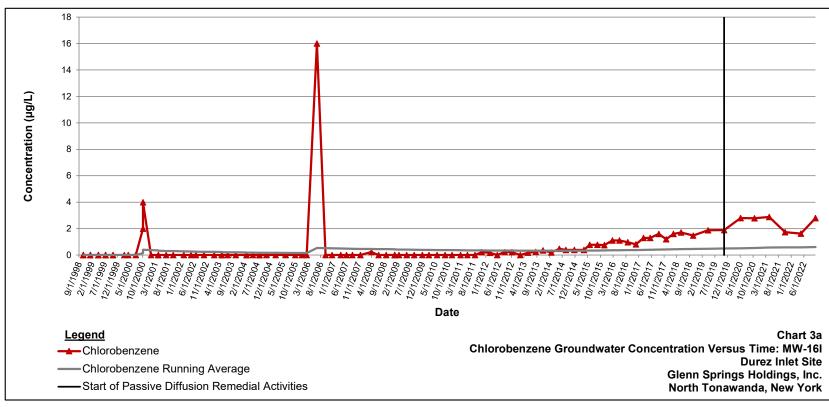
Groundwater Concentration Versus Time: MW-22I Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

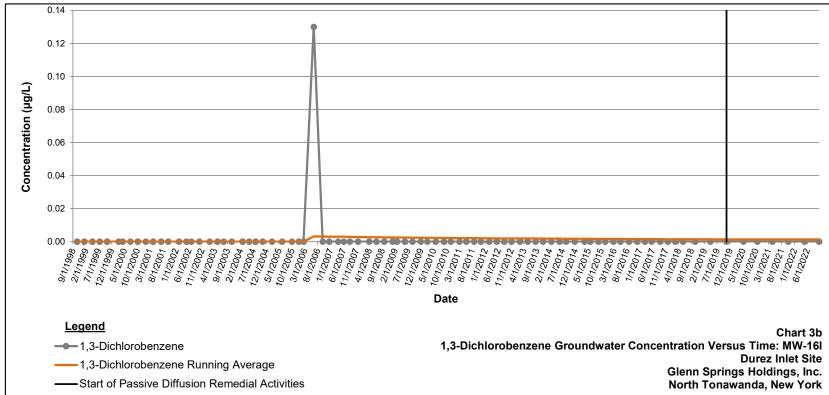


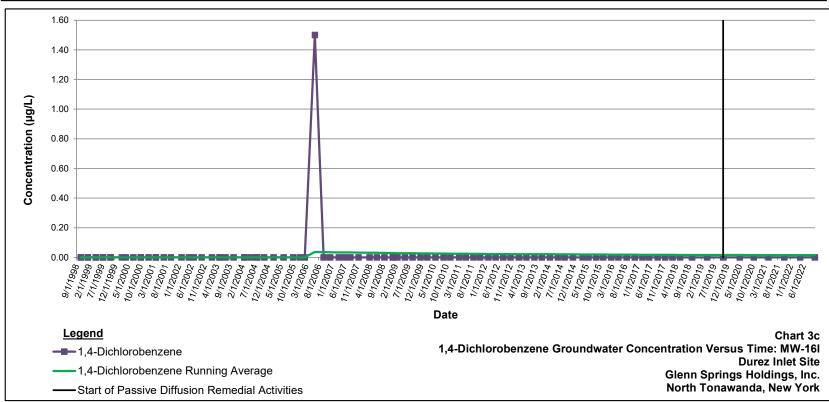




Groundwater Concentration Versus Time: MW-16I Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

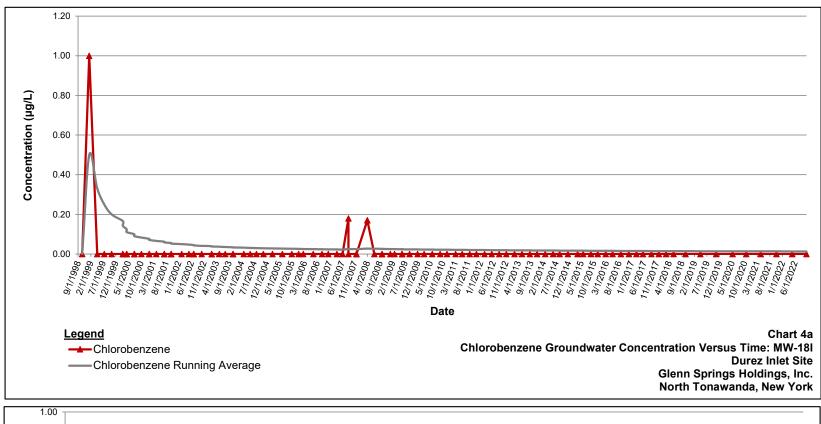


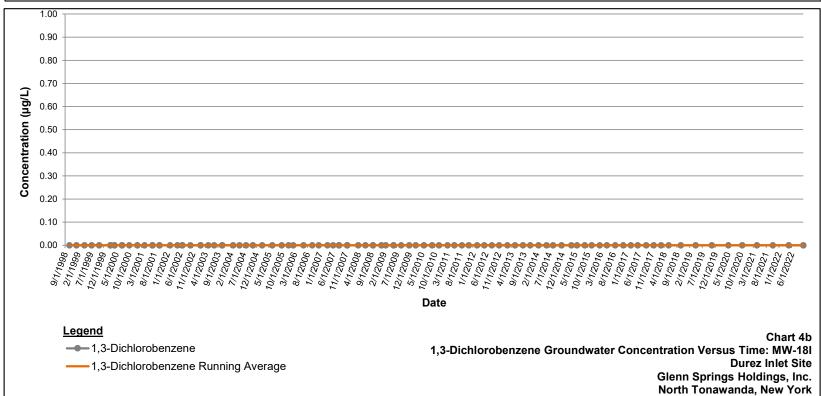


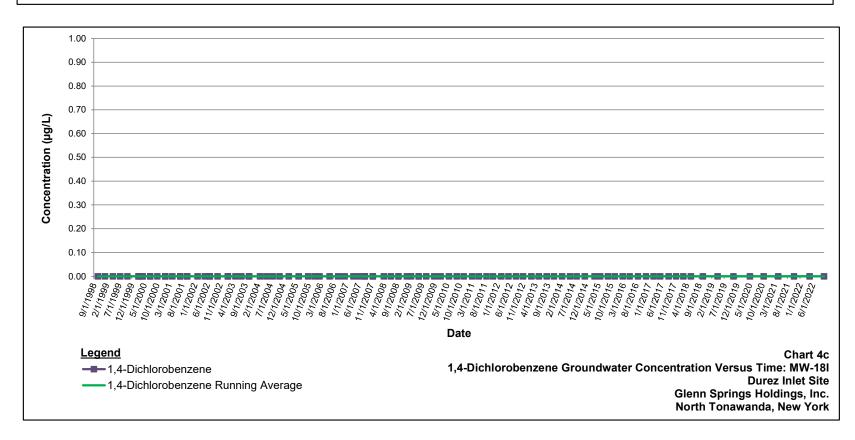


Charts 4a - 4c

Groundwater Concentration Versus Time: MW-18I Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site

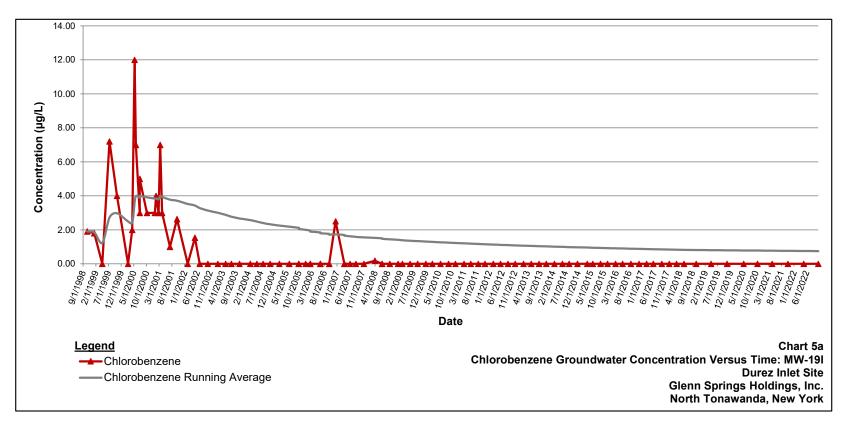


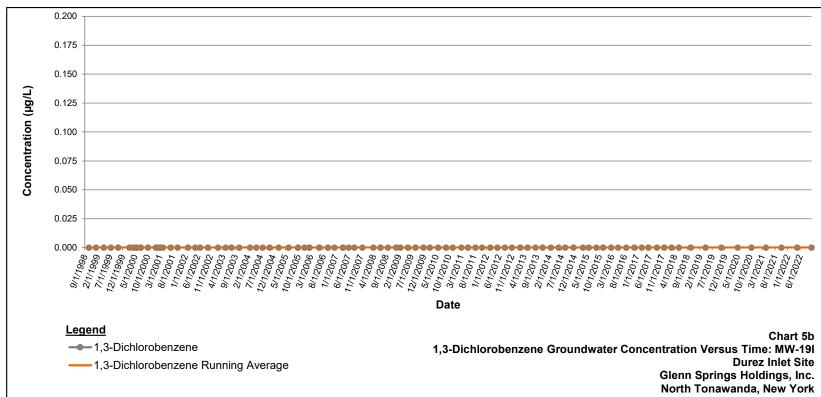


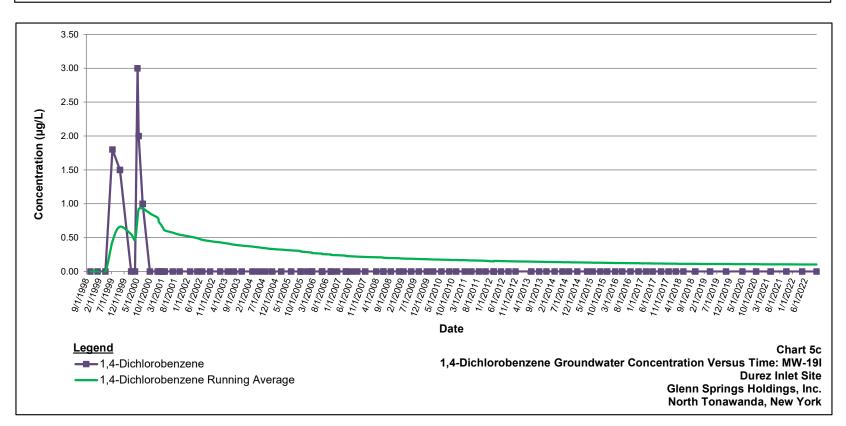


Charts 5a - 5c

Groundwater Concentration Versus Time: MW-19I Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site







Appendix A Institutional and Engineering Controls Certification Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

625 Broadway, 11th Floor, Albany, NY 12233-7020 P: (518)402-9543 | F: (518)402-9547 www.dec.ny.gov

11/29/2022

Joseph Branch
Project Manager
OCC/Glenn Springs Holdings, Inc.
7601 Old Channel Trail
Montague, MI 49437
Joseph Branch@oxy.com

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal

Site Name: Durez Div. - Occidental Chemical Corp.

Site No.: 932018

Site Address: Walck Road/River Road

North Tonawanda, NY 14120

Dear Joseph Branch:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **January 30, 2023**. Guidance on the content of a PRR is enclosed.

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

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

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



All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Benjamin Mcpherson, the Project Manager, at 716-851-7220 or benjamin.mcpherson@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation 700 Delaware Ave

Buffalo, NY 14209-2202

Enclosures

PRR General Guidance Certification Form Instructions Certification Forms

ec: w/ enclosures

Occidental Chemical Corporation - joseph branch@oxy.com

ec: w/ enclosures

Benjamin Mcpherson, Project Manager

Andrea Caprio, Hazardous Waste Remediation Supervisor, Region 9

GHD - Margaret Popek - margaret.popek@ghd.com

GHD - John Pentilchuk - jpentilchuk@ghd.com

B&B Engineers and Geologists of New York, P.C. - Dennis Hoyt - dhoyt@geosyntec.com

The following parcel owner did not receive an ec:

National Grid - Parcel Owner Oar Marina, Llc - Parcel Owner

Enclosure 1

Certification Instructions

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

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

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

- 1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.
- 2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.
- 3. If you <u>cannot</u> certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

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

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

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

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



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



Site	Site Details No. 932018	Box 1	
Site	Name Durez Div Occidental Chemical Corp.		
Site	Address: Walck Road/River Road Zip Code: 14120		
	/Town: North Tonawanda inty: Niagara Walck Road = 67.45 acres		
	Acreage: 73.300 72.23 River Road = 4.78 acres		
Rep	orting Period: December 31, 2021 to December 31, 2022		
		YES	NO
1.	Is the information above correct?		X
	If NO, include handwritten above or on a separate sheet.		
	Has some or all of the site property been sold, subdivided, merged, or undergone tax map amendment during this Reporting Period?	a	X
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
	Have any federal, state, and/or local permits (e.g., building, discharge) been issue for or at the property during this Reporting Period?	ed 🗆	x
	If you answered YES to questions 2 thru 4, include documentation or evider that documentation has been previously submitted with this certification for		
5.	Is the site currently undergoing development?		X
		Box 2	!
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Industrial	X	
7.	Are all ICs in place and functioning as designed?	x	
	IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date belo DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue		
A C	orrective Measures Work Plan must be submitted along with this form to addres	s these is:	sues.
Siar	nature of Owner, Remedial Party or Designated Representative Date		

SITE NO. 932018 Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

181.20-2-9

Oar Marina, LLC

Monitoring Plan O&M Plan

Site Operation, Maintenance and Monitoring (OMM) is conducted by the RP in accordance with the February 1989 Record of Decision and approved work plans. At the Inlet Site, site management includes groundwater quality monitoring, NAPL removal from extraction wells during the off-boating season, and maintenance of the cover system.

Groundwater Quality Monitoring; Durez Third Stipulation and PCJ and associated minor changes to the PCJ (currently minor change number 10, Rev.2, September 1999).

DNAPL Removal: Inlet Monitoring Plan, GHD 2019.

182.06-3-19

Occidental Chemical Corporation

Monitoring Plan O&M Plan

Site Operation, Maintenance and Monitoring (OMM) is conducted by the RP in accordance with the February 1989 Record of Decision and approved work plans.

182.06-3-20

Occidental Chemical Corporation

Monitoring Plan O&M Plan

Site Operation, Maintenance and Monitoring (OMM) is conducted by the RP in accordance with the February 1989 Record of Decision and approved work plans.

182.06-3-21

Occidental Chemical Corporation

Monitoring Plan O&M Plan

Site Operation, Maintenance and Monitoring (OMM) is conducted by the RP in accordance with the February 1989 Record of Decision and approved work plans.

182.07-1-14

Occidental Chemical Corporation

Monitoring Plan O&M Plan

Record of Decision (ROD); February 25, 1989.

Appendix B, Durez Partial Consent Judgement (PCJ) "Monitoring, Operations, and Maintenance Plan" (1989) Subsequent Minor Modification #10, Rev. 2 "Minor Change to Appendix B" Monitoring, Operations, and Maintenace Plan" (September 1999) (Minor Change No. 10) groundwater monitoring.

PCJ 1992; amended by Minor Change No. 5 to allow for semi-annual reporting to the NYSDEC on quarterly hydraulic groundwater data.

Plant Site: OMM includes operation, maintenance and monitoring of the cover system, groundwater collection system, groundwater conveyance system, groundwater treatment system, groundwater monitoring wells, fencing/access points and the panhandle area.

182.32.-1-47

Occidental Chemical Corporation

Monitoring Plan O&M Plan

Site Operation, Maintenance and Monitoring (OMM) is conducted by the RP in accordance with the February 1989 Record of Decision and approved work plans.

p/o 182.07-1-17

National Grid

Monitoring Plan O&M Plan

Site Operation, Maintenance and Monitoring (OMM) is conducted by the RP in accordance with the February 1989 Record of Decision and approved work plans.

Box 4

Description of Engineering Controls

Parcel <u>Engineering Control</u>

181.20-2-9

Cover System

Groundwater Containment

Monitoring Wells Subsurface Barriers

Sheet pile wall, NAPL extraction wells and cover system.

182.06-3-19

Groundwater Treatment System

Cover System

Groundwater Containment Leachate Collection Fencing/Access Control

At the Plant Site, OMM includes operation, maintenance and monitoring of the cover system, groundwater collection system, groundwater conveyance system, groundwater treatment system, goundwater monitoring wells, fencing/access points and the panhandle area.

182.06-3-20

Groundwater Treatment System

Cover System

Groundwater Containment Leachate Collection Fencing/Access Control

At the Plant Site, OMM includes operation, maintenance and monitoring of the cover system, groundwater collection system, groundwater conveyance system, groundwater treatment system, groundwater monitoring wells,fencing/access points and the panhandle area.

182.06-3-21

Parcel <u>Engineering Control</u>

Groundwater Treatment System

Cover System

Groundwater Containment

Leachate Collection Fencing/Access Control

At the Plant Site, OMM includes operation, maintenance and monitoring of the cover system, groundwater collection system, groundwater conveyance system, groundwater treatment system, goundwater monitoring wells, fencing/access points and the panhandle area.

182.07-1-14

Point-of-Entry Water Treatment

Monitoring Wells

Groundwater Treatment System

Cover System

Groundwater Containment Leachate Collection Fencing/Access Control

Soil cover system with encompassing groundwater interceptor trench and conveyance to an onsite treatment plant.

182.32.-1-47

Groundwater Treatment System

Cover System

Groundwater Containment Leachate Collection Fencing/Access Control

At the Plant Site, OMM includes operation, maintenance and monitoring of the cover system, groundwater collection system, groundwater conveyance system, groundwater treatment system, groundwater monitoring wells, fencing/access points and the panhandle area.

p/o 182.07-1-17

Monitoring Wells

Groundwater Treatment System

Cover System

Groundwater Containment

Leachate Collection Fencing/Access Control

At the Plant Site, OMM includes operation, maintenance and monitoring of the cover system, groundwater collection system, groundwater conveyance system, groundwater treatment system, groundwater monitoring wells and fencing/access points. The Right Of Way (ROW) for National Grid is on site. Reporting is done by the RP; OCC/Glenn Springs Holdings, Inc.

	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 direct reviewed by, the party making the Engineering Control certification; 	tion of,	and						
		b) to the best of my knowledge and belief, the work and conclusions described in this ceare in accordance with the requirements of the site remedial program, and generally accessing practices; and the information presented is accurate and compete							
	engineering practices, and the information presented is accurate and compete.	YES	NO						
		X							
2.	For each Engineering control listed in Box 4, I certify by checking "YES" below that all c following statements are true:	of the							
	(a) The 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 Dep	artmen	t;						
	(b) nothing has occurred that would impair the ability of such Control, to protect $\mathfrak p$ the environment;	oublic h	ealth and						
	(c) access to the site will continue to be provided to the Department, to evaluate remedy, including access to evaluate the continued maintenance of this Control;	the							
	(d) nothing has occurred that would constitute a violation or failure to comply with Site Management Plan for this Control; and	n the							
	(e) if a financial assurance mechanism is required by the oversight document for mechanism remains valid and sufficient for its intended purpose established in the								
		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 the	iese iss	ues.						
	Signature of Owner, Remedial Party or Designated Representative Date								

IC CERTIFICATIONS SITE NO. 932018

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.

Doselt Branch print name	at <u>7601 Old chame</u> Trail,
am certifying as	(Owner or Remedial Party)
for the Site named in the Site Details Sec Signature of Owner, Remedial Party, or D Rendering Certification	1-19-2023

EC CERTIFICATIONS

Professional En	Box 7 gineer Signature
I certify that all information in Boxes 4 and 5 are true punishable as a Class "A" misdemeanor, pursuant to BAR I Lan Richardson at RO print name am certifying as a Professional Engineer for the	Section 210.45 of the Penal Law. Engineers & Geologists of New York P.C. Box 351 Ransmille NY, 14131, print business address OWNER
	(Owner or Remedial Party)
Signature of Professional Engineer, for the Owner Remedial Party, Rendering Certification	SINTE OF NEW PORT AND STAN 30, 2023 REQUIRED FOR THE TOWN THE TOW

Enclosure 3

Periodic Review Report (PRR) General Guidance

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

II. Site Overview (one page or less)

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

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

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

IV. IC/EC Plan Compliance Report (if applicable)

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

V. Monitoring Plan Compliance Report (if applicable)

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

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)

- A. Components of O&M Plan Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
- B. Summary of O&M Completed During Reporting Period Describe the O&M tasks actually completed during this PRR reporting period.

- C. Evaluation of Remedial Systems Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.
- D. O&M Deficiencies Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals

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

VIII. Additional Guidance

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

Appendix B Data Validation Memoranda



Technical Memorandum

18 May 2022

То	Joseph Branch	Tel	716-205-1970
Copy to	John Pentilchuk, Darrell Crockett, Maggie Popek, Paul Fowler	Email	Paul.McMahon@ghd.com
From	Paul McMahon/cs/28	Ref. No.	11223794
Subject	Analytical Results and Reduced Validation Semiannual Groundwater Monitoring Program Durez Inlet North Tonawanda, New York April 2022		

1. Introduction

Groundwater samples were collected on April 27, 2022 in support of the Semiannual Monitoring Program at the Durez Inlet site (Site). ALS Environmental (ALS) in Rochester, New York analyzed the samples for the following:

Parameter	Methodology
Volatile Organic Compounds (VOCs)	USEPA 624.1 ¹

A field sample key is presented in Table 1. The analytical results are summarized in Table 2. The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical method and the "USEPA National Functional Guidelines for Superfund Organic Methods Data Review", EPA-540-R-2016-002, September 2016.

A copy of the chain of custody is attached.

Final data assessment was based on information obtained from the chain of custody, finished data sheets, blank data, surrogate recoveries, laboratory control sample (LCS)/matrix spike (MS) recoveries, and field QA/QC samples.

2. QA/QC Review

All samples were analyzed within the method required holding time.

Surrogate compounds were added to all samples, blanks, and QC samples prior to analysis. All surrogate recoveries were acceptable, demonstrating good analytical efficiency.

→ The Power of Commitment

11223794

¹ 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants", United States Environmental Protection Agency (USEPA).

Method blanks were prepared from deionized water and analyzed with the samples. All method blank results were non-detect, demonstrating laboratory contamination was not a factor for this investigation.

LCS were prepared and analyzed with the samples. The LCS analyses demonstrated acceptable analytical accuracy.

A matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample MW-16I-0422. All MS/MSD results were acceptable, demonstrating good analytical precision and accuracy.

A field duplicate from well MW-20I was collected and submitted "blind" to the laboratory, as indicated in Table 1. The sample results from the original and field duplicate sample showed acceptable agreement.

One trip blank was submitted with the samples. All trip blank results were non-detect.

3. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Regards,

Paul McMahon

I mondon

Data Management Lead Team-Specialist

Table 1

Sample Collection and Analysis Summary Semiannual Groundwater Monitoring Program Durez Inlet North Tonawanda, New York April 2022

				Analysis/Parameters	
Sample ID	Location ID	Collection Date	Collection Time	VOCs	Comment
MW16I-0422	MW-16I	04/27/2022	08:35	X	MS/MSD
MW18I-0422	MW-18I	04/27/2022	12:40	Χ	
MW19I-0422	MW-19I	04/27/2022	11:50	Χ	
MW20I-0422	MW-20I	04/27/2022	09:55	Χ	
MW9I-0422	MW-20I	04/27/2022	09:55	Χ	Duplicate of MW-20I-0422
MW22I-0422	MW-22I	04/27/2022	11:00	Χ	
INLETTRIP-042722	-	04/27/2022	-	Χ	Trip Blank

Notes:

- Not applicableMS - Matrix Spike

MSD - Matrix Spike Duplicate

VOCs - Volatile Organic Compounds

Table 2 Page 1 of 1

Analytical Results Summary Semiannual Groundwater Monitoring Program Durez Inlet North Tonawanda, New York April 2022

	Location ID: Sample Name: Sample Date:	MW-16I MW16I-0422 04/27/2022	MW-18I MW18I-0422 04/27/2022	MW-19I MW19I-0422 04/27/2022	MW-20I MW20I-0422 04/27/2022	MW-20I MW9I-0422 04/27/2022	MW-22I MW22I-0422 04/27/2022
	Sample Date.	04/2//2022	04/21/2022	04/27/2022	04/27/2022	Duplicate	04/21/2022
Parameters	Unit						
Volatile Organic Compounds							
1,2,3-Trichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U	25.0 U
1,2,4-Trichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U	25.0 U
1,2-Dichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U	25.0 U
1,3-Dichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	22.0 J	21.7 J	28.5
1,4-Dichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	367	295	458
Benzene	μg/L	0.236 J	1.00 U	1.00 U	15.6 J	14.9 J	47.7
Chlorobenzene	μg/L	1.63	1.00 U	1.00 U	2650	2340	3570
Toluene	μg/L	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U	25.0 U

Notes:

J - Estimated concentration

U - Not detected at the associated reporting limit

SSOW ref code/file name: 281-402-D02-3100 11223794 Durez Inlet semi-annual GW

CHAIN OF CUSTODY RECORD

COC Number:

ADDRESS:	2055	Niago	محزب	Falls	Bluc	NFNY	PAGE	L	OF	2
	PHONE: 716-	297-0	6150	,	FAX	:				

11:	ct No/Phase/Task Code: 225877		Laboratory Name:										Lab Location:						ssow id 281-4		02-3	100			
Du	ct Name: rez Inlet semi-annual GW sampling	Lab Contact: Brady Kalkman										Rochester NY						Cooler N	o:						
R	et Location: over Road North Tonau	uanda		Sam	ple T	уре					Analy	sis R	eque	sted					nple	Carr	ier: J-	وط	Ēχ		
Pa	Chemistry Contact: ul McMahon				отр С)													ers/sar	Request	Airbil	l No:			
Samp	oler(s): D. Tyran			Matrix Code	Grab (G) or Comp	Filtered (Y/N)	\mathcal{Z}												Total Containers/sample	ASD Rec	27	# of Con			
Item	Sample Identification (containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hhimm)	I I		Filter	\nearrow													MS/MSD		ments/ S	-	•	ions:
1	MW16I-0422	04/27/22	8:35	W	G		X												9	X	MS	MSD ta	ken h	ere	
2	INLETTRIP-042722	04/27/22	7:00	W	G		X												3						
3	MW18I-0422	04/27/22	12:40	W	G		X	\Box		_	\perp	_							3						
4	MW19I-0422	04/27/22	11:50	W	G		X												3						
5	MW201-0422	04/27/22	9:55	W	G		X												3						
6	MW22I-0422	04/27/22	11:00	W	G		X												3						
7	MW9I-0422	04/27/22	9:55	W	G		X									Ĭ			3						
8															Ī										
9																									
10											寸						$\neg \uparrow$								
11	* ***									T															
12																									
13													Ī			\neg									
14								\Box			T			\neg										/	
15							\neg	\neg	T	\neg	一		7	7											
16								$\neg \uparrow$	7		寸	\dashv	ヿ	一		寸	\neg								
17												1	1				\neg	\neg							
18							\neg	_				一	_	\neg	\neg		$\neg \dagger$	_							
TAT	Required in business days (use separate COCs fro differe days)	nt TATs)	Notes/Spec				ts:	1		1										L	·				
(Just)		pany	Date		Time					Rec	eived (Rv-					· ·	mpan			1	Oate		Tîn	
1		-7D	4/27/22		120		1			-vec	- 9) '	_					e S	7		111	28/72		1215°	-
2	has infa		17-7-6	<u> </u>	<u>,</u>		2		كالح	77	16/4		لت		\dashv		_#				7/	4/1-	+-	ر ب	
3	<u> </u>						3			/	/	•									<u> </u>				
							-						-												

CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM ALS) Environmental

1565 Jefferson Road, Bldg 300, Suite 360, Rochester, NY 14623 Phone (585) 288-5380 / FAX (585) 288-8475 www.alsglobal.com -

005, 006, 007, 008, 009, 010, 011

T047444

SR#

Project Name: Durez Inlet/281-402-D02-3100 Project Number: 7405: Semi-Annual GW	Report To	iban	<u> </u>		14D												
7405: Semi-Annual GW Company / Address GHD Services Inc. 2055 Niagara Falls Blvd., Suite 3 Niagara Falls NY, 14304	T⊢ani wews	AL INDI		NUMBER OF CONTAINERS													
	FAX#			NO.	ᇤ									•			
Phone # 716-297-2160	۵ 2	51					:		,		•						
716-297-2160 716-297-2265 Sampler Signature Sampler Printed Name					624 / VOC_FP						Damade		1 .				
CLIENT SAMPLE ID	LABID	SAMPLING Date Time	Matrix		9	۔	2	3	4	9	Remarks		:				
1.			Liquid	6	Х												
2.			Liquid	3	Х												
3.	-		Liquid	3	Х												
4.			Liquid	3	Х			\Box				1					
5.			Liquid	3	Х							1	;				
6.			Liquid	3	Х							1					
7.			Liquid	3	Х								i				
8.			Liquid														
9.		- 112.1	Liquid	-								1					
10.			Liquid										•				
Special Instructions/Cor	nments:		•				Т	Tur	nar	our	nd Requirement	s R	eport Requirements	Invoice Information			
							,		RUS	H (S	URCHARGES APPLY)		Results Only				
									C+			— II.	Results + QC Summaries (LCS, UP, MS/MSD as required)	P.O.#			
							-		Stan	dard		III.	Results + QC and Cilibration cummaries	Bill To:			
							-		RE	QUE	STED FAX DATE		. Data Validation Report ith Raw Data				
							-		Re	eque	sted Report Date	EData	YesNo				
Relinquished By: Received By:					linq	uish	ed	Ву:		T	Received	Ву:	Relinquished By:	Received By:			
Signature	Signature		Sign	ature						s	ignature		Signature	Signature			
Printed Name	Printed Na	ame	Print	ed N	ame					P	rinted Name		Printed Name	Printed Name			
Firm	Firm		Firm								irm		Firm	Firm			
Date/Time Date/Time Date			/Time							Pate/Time		Date/Time	Date/Time				



Technical Memorandum

November 4, 2022

То	Joseph Branch	Tel	716-205-1970			
Copy to	Christa Bucior, Dennis Hoyt, Paul Fowler	Email	Paul.McMahon@ghd.com			
From	Paul McMahon/cs/36	Ref. No. 11223794				
Subject	Analytical Results and Reduced Validation Semiannual Groundwater Monitoring Progra Durez Inlet North Tonawanda, New York October 2022	m				

1. Introduction

Groundwater samples were collected on October 18, 2022 in support of the Semiannual Monitoring Program at the Durez Inlet site (Site). ALS Environmental (ALS) in Rochester, New York analyzed the samples for the following:

Parameter	Methodology
Volatile Organic Compounds (VOCs)	USEPA 624.1 ¹

A field sample key is presented in Table 1. The analytical results are summarized in Table 2. The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical method and the "National Functional Guidelines for Superfund Organic Methods Data Review", EPA-540-R-20-005, November 2020

A copy of the chain of custody is attached.

Final data assessment was based on information obtained from the chain of custody, finished data sheets, blank data, surrogate recoveries, laboratory control sample (LCS)/matrix spike (MS) recoveries, and field QA/QC samples.

2. QA/QC Review

All samples were analyzed within the method required holding time.

Surrogate compounds were added to all samples, blanks, and QC samples prior to analysis. All surrogate recoveries were acceptable, demonstrating good analytical efficiency.

Method blanks were prepared from deionized water and analyzed with the samples. All method blank results were non-detect, demonstrating laboratory contamination was not a factor for this investigation.

→ The Power of Commitment

11223794

¹ 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants", United States Environmental Protection Agency (USEPA).

LCS were prepared and analyzed with the samples. The LCS analyses demonstrated acceptable analytical accuracy.

A matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample MW-19I-1022. All MS/MSD results were acceptable, demonstrating good analytical precision and accuracy.

A field duplicate from well MW-18I was collected and submitted "blind" to the laboratory, as indicated in Table 1. The sample results from the original and field duplicate sample showed acceptable agreement.

One trip blank was submitted with the samples. All trip blank results were non-detect.

3. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Regards,

Paul McMahon

Val mondon

Data Management Lead Team-Specialist

Table 1

Sample Collection and Analysis Summary Semiannual Groundwater Monitoring Program Durez Inlet North Tonawanda, New York October 2022

				Analysis/Parameters	
Sample ID	Location ID	Collection Date	Collection Time	VOCs	Comment
MW-16I-1022	MW-16I	10/18/2022	10:05	X	
MW-18I-1022	MW-18I	10/18/2022	11:00	Χ	
MW-9I-1022	MW-18I	10/18/2022	11:00	Χ	Duplicate of MW-18I-1022
MW-19I-1022	MW-19I	10/18/2022	12:10	Χ	MS/MSD
MW-20I-1022	MW-20I	10/18/2022	14:00	Χ	
MW-22I-1022	MW-22I	10/18/2022	15:35	Χ	
INLETTRIP-101822	-	10/18/2022	-	X	Trip Blank

Notes:

- Not applicableMS - Matrix Spike

MSD - Matrix Spike Duplicate

VOCs - Volatile Organic Compounds

Table 2 Page 1 of 1

Analytical Results Summary Semiannual Groundwater Monitoring Program Durez Inlet North Tonawanda, New York October 2022

	Location ID: Sample Name: Sample Date:	MW-16I MW-16I-1022 10/18/2022	MW-18I MW-18I-1022 10/18/2022	MW-18I MW-9I-1022 10/18/2022 Duplicate	MW-19I MW-19I-1022 10/18/2022	MW-20I MW-20I-1022 10/18/2022	MW-22I MW-22I-1022 10/18/2022
Parameters	Unit						
Volatile Organic Compounds							
1,2,3-Trichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U
1,2,4-Trichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U
1,2-Dichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U
1,3-Dichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	1.00 U	14.9 J	21.2 J
1,4-Dichlorobenzene	μg/L	1.00 U	1.00 U	1.00 U	1.00 U	254	386
Benzene	μg/L	0.254 J	1.00 U	1.00 U	1.00 U	12.1 J	32.9
Chlorobenzene	μg/L	2.80	1.00 U	1.00 U	1.00 U	2230	3110
Toluene	μg/L	1.00 U	1.00 U	1.00 U	1.00 U	25.0 U	25.0 U

Notes:

U - Not detected at the associated reporting limit

J - Estimated concentration

Attachment A

Chain of Custody Document

CHAIN OF CUSTODY RECORD WO # / LAB USE ONLY Laboratory: ALS 1565 Jefferson Road Building 300, Suite 360 Rochester, NY 14623 PAGE: (585) <u>288-5380</u> LABORATORY CLIENT: CUENT PROJECT NAME / NUMBER Geosyntec Report to Paul McMahon Durez Inlet 112237954 281-402-D02-3100 805 97th Street PROJECT CONTACT: BAMPLER(S): (PR:NT) Niagara Falls 14304 Shawn Gardner Shawn Gardner 716-818-2743 Shawn.Gardner@geosyntec.com **REQUESTED ANALYSES** TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"). ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ※ STANDARD EVENT COMPLETE MS/MSD LAB SAMPLING NO. OF SAMPLE ID MATRIX CONT. DATE TIME ONLY 10/18/2022 MW-16I-1022 10:05 WG 10/18/2022 MW-18I-1022 11:00 WG 3 MW-9I-1022 10/18/2022 WG 3 11:00 X MW-19I-1022 10/18/2022 12:10 WG 9 MW-20I-1022 10/18/2022 WG 3 14:00 MW-22I-1022 10/18/2022 15:35 WG 3 INLETTRIP-101822 10/18/2022 WGQ 3 Received by: (Signature/Affiliation) SHAWN GARDVER Relinquished by: (Printed) 10/19/22 0720 Received by: (Signature/Affiliation) Relinquished by: (Printed) Relinquished by: (Signature) Date: Received by: (Print) Received by: (Signature/Affiliation) Date:

R2210032	5
GHD Bervices Inc. Durez Intet/281-402-D02-3100	

CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM SK# 001 1565 Jefferson Road, Bldg 300, Suite 360, Rochester, NY 14623 T063911 Phone (585) 288-5380 / FAX (585) 288-8475 S) Environmental www,alsglobal,com 14D Durez Inlet/281-402-D02-3100 Report To Paul McMahon Project Number: 7405: Semi-Annual GW NUMBER OF CONTAINERS Company / Address GHD Services Inc. 2055 Niagara Falls Blvd., Niagara Falls NY, 14304 24 / VOC_FP Phone # 716-297-2160 716-297-2265 Sampler Signature Sampler Printed Name Remarks SAMPLING Matrix CLIENT SAMPLE ID LABID Date Time Х 3 Liquid 3 X Liquid 3 Liquid 3 X Liquid 3 Х Liquid Liquid 3 Х 3 Х Liquid Liquid Liquid Liquid Special Instructions/Comments: **Turnaround Requirements** Report Requirements Invoice Information RUSH (SURCHARGES APPLY) .__ I. Results Only P.O.# II. Results + QC Summaries (LCS, DUP, MS/MSD as required) Standard III. Results + QC and Cilibration Bill To:____ Summaries

			Requested Report Date	DataYesNo	
Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name
Firm	Firm	Firm	Firm	Firm	Firm
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

REQUESTED FAX DATE

IV. Data Validation Report

with Raw Data

Appendix C Historical Groundwater Chemistry Monitoring Analytical Results

Historical Groundwater Chemistry Monitoring - Analytical Results **Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site**

							MW-1	161								
							Reported	Values								
Compound/Parameter	* Standard Value (μg/L)	Quantitation Limit (µg/L)	Jul-95	Oct-95	Jan-96	Apr-96	Jul-96	Oct-96	Jan-97	Apr-97	Jul-97	Oct-97	Jan-98	Apr-98	Jul-98	Oct-98
Benzene	1	1	1.0 U	1.0 U	0.62 J	5.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U/1.0 U
Total Targeted Site Compounds			0.0	0.0	0.62	5.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
							Reported	Values								
			Jan-99	Apr-99	Jul-99	Oct-99	Feb-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Feb-02	May-02
Benzene	1	1	1.0 U/2.8	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
Toluene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	2/4	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1 U	1 U	1 U/1 U	1.0 U	2.0 U/2.0 U	1 U	1.00 U	1.00 U	1.00 U
Total Targeted Site Compounds			0.0/2.8	0.0/0.0	0.0/0.0	0.0/0.0	0.0	0.0	0.0	2/4	0.0	0.0/0.0	0.0	0.0	0.0	0.0
							Reported	Values								
			Jul-02	Oct-02	Feb-03	May-03	Jul-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Feb-05	Jun-05	Sep-05	Dec-05
Benzene	1	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Toluene	5	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Chlorobenzene	5	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichlorobenzene	3	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	3	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dichlorobenzene	3	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2,3-Trichlorobenzene	5	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2,4-Trichlorobenzene	5	1	1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 UJ
T 1 1 T 1 1 1 0 1 1 0 1 1 1			0.0	0.0	0.0	0.0/0.0	0.0	0.0	0.0/0.0	0.0	0.010.0	0.0	0.0	0.0	0.0	0.0

0.0

0.0

0.0/0.0

0.0

0.0/0.0

0.0

0.0

0.0

0.0

Notes:

- Estimated

U - Not detected at the associated reporting limit

UJ - Not detected; associated reporting limit is estimated

μg/L *

Total Targeted Site Compounds

Micrograms per liter
 New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

8.5/9.0 - Results of investigative and duplicate sample

- Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

0.0

0.0/0.0

							MW-16I - Co	ontinued								
							Reported	Values								
Compound/Parameter	* Standard Value (μg/L)	Quantitation Limit (μg/L)	Feb-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Aug-07	Nov-07	Mar-08	Jun-08	Sep-08	Jan-09	Feb-09	Мау-09
Benzene	1	1	1.0 U	1.0 U	0.47 J	0.54 J	1.0 U	1.0 U	0.55 J	0.64 J	0.34 J	0.42 J	1.0 U	0.62 J/0.67 J	1.0 U	0.70 J
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1	1.0 U	16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.23 J	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	0.13 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U 0.0	1.0 U 17.63	1.0 U 0.47	1.0 U 0.54	1.0 U 0.0	1.0 U 0.0	1.0 U 0.55	1.0 U 0.64	1.0 U 0.57	1.0 U 0.42	1.0 U 0.0	1.0 U/1.0 U 0.62/0.67	1.0 U 0.0	1.0 U 0.7
Total Targeted Site Compounds			0.0	17.03	0.47	0.54	0.0	0.0	0.55	0.64	0.57	0.42	0.0	0.62/0.67	0.0	0.7
							Reported									
			Aug-09	Nov-09	Feb-10	May-10	Aug-10	Nov-10	Mar-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12
Benzene	1	1	1.2	0.68 J	0.84 J	0.77 J	0.61 J	0.57 J	0.60 J	0.64 J/0.63 J	0.76 J/0.71 J	0.94 J/0.96 J	0.89 J/0.88 J	0.63 J/0.68 J	0.65 J/0.68 J	0.95 J
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.22 J/0.22 J	0.17 J/0.21 J	1.0 U/1.0 U	0.23 J/0.23 J	0.22 J
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U
Total Targeted Site Compounds			1.2	0.68	0.84	0.77	0.61	0.57	0.60	0.64/0.63	0.76/0.71	1.16/1.18	1.06/1.09	0.63/0.68	0.88/0.91	1.17
							Reported	Values								
			Feb-13	May-13	Aug-13	Nov-13	Feb-14	May-14	Aug-14	Nov-14	Feb-15	May-15	Aug-15	Nov-15	Feb-16	May-16
Benzene	1	1	0.80 J	0.73 J/0.67 J	0.84 J	1.1/1.0	0.58 J	1.1	0.90 J/0.88 J	1.1	0.23 J	1.2 / 1.2	0.95 J	0.93 J	1.3	0.92 J
Toluene	5	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1	1.0 U	0.18 J/1.0 U	0.24 J	0.35 J/0.42 J	0.20 J	0.48 J	0.39 J/0.42 J	0.46 J	1.0 U	0.78 J / 0.72 J	0.92 J	0.75 J	1.1	1.1
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene Total Targeted Site Compounds	5	1	1.0 U 0.80	1.0 U/1.0 U 0.91/0.67	1.0 U 1.08	1.0 U/1.0 U 1.45/1.42	1.0 U 0.78	1.0 U 1.58	1.0 U /1.0 U 1.29 J/1.30 J	1.0 U 1.56	1.0 U 0.23	1.0 U / 1.0 U 1.98 / 1.92	1.0 U 1.87	1.0 U 1.68	1.0 U 2.4	1.0 U 2.0
Total Targeted Site Compounds			0.60	0.91/0.07	1.00	1.43/1.42	0.76	1.56	1.29 3/1.30 3	1.50	0.23	1.96 / 1.92	1.07	1.00	2.4	2.0
			Aug-16	Nov-16	Feb-17	May-17	Reported Aug-17	Values Nov-17	Feb-18	May-18	Oct-18	Apr-19	Oct-19	May-20	Oct-20	Apr-21
			Aug-16	NOV-16	reb-17	way-17	Aug-17	NOV-17	Feb-16	May-10	OC1-16	Apr-19	OCI-19	May-20	Oct-20	Apr-21
Benzene	1	1	0.72 J	0.70 J	1.1	1.0 U	0.74 J / 0.75 J	0.69 J / 0.67 J	1.1 / 1.1	0.970 J / 0.978 J		0.910 J	0.510 J / 0.520 J	0.866 J / 0.949 J	0.595 J / 1.0 U	0.622 J / 0.673 J
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.00 U / 1.00 U	1.00 U / 1.00 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
Chlorobenzene	5	1	0.97 J	0.82 J	1.3	1.3	1.6 / 1.6	1.2 / 1.2	1.6 / 1.6	1.71 / 1.76	1.47 / 1.57	1.88	1.89 / 1.76	2.80 / 3.07	2.79 J / 7.04 J	2.88 / 3.01
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.00 U / 1.00 U	1.00 U / 1.00 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.00 U / 1.00 U	1.00 U / 1.00 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.00 U / 1.00 U	1.00 U / 1.00 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.82	1.0 U / 1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.00 U / 1.00 U	1.00 U / 1.00 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.00 U / 1.00 U	1.00 U / 1.00 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
Total Targeted Site Compounds			1.69	1.52	2.40	1.3	2.34 / 2.33	1.87	2.7 / 2.7	2.68 / 2.74	2.23 / 2.30	2.79	2.40 / 2.28	3.67 / 4.02	3.39 / 8.86	3.50 / 3.68

Appendix C Page 3 of 14

Historical Groundwater Chemistry Monitoring - Analytical Results Durez Inlet Remediation Project Groundwater Monitoring Program **Durez Inlet Site**

MW-16I - Continued Reported Values

			Oct-21	Apr-22	Oct-22
Benzene	1	1	0.222 J / 0.295 J	0.236 J	0.254 J
Toluene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1	1.73 / 2.04	1.63	2.8
1,2-Dichlorobenzene	3	1	1.0 U / 1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U / 1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U / 1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U
Total Targeted Site Compounds			1.95 / 2.34	1.87	3.05

Notes:

- Estimated

U

 Not detected at the associated reporting limit
 Not detected; associated reporting limit is estimated UJ

μg/L *

Micrograms per liter
 New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

* Standard Quantitation Value (μg/L) Limit (μg/L) Compound/Parameter 1 1 1.0 U 1.4 8.5 J 1.0 U/1.0 U 1.	Apr-98 U 1.0 U/1.0 U	Jul-98	Oct-98
*Standard Quantitation Value (µg/L) Limit (µg/L) Benzene 1 1 1 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.	·	Jul-98	Oct-98
Benzene 1 1 1.0 U 1.4 8.5 J 0.9 J/0.8 J 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.	J 1.0 U/1.0 U		
Toluene 5 1 1.0 U 1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/	J 1.0 U/1.0 U		
		1.0 U/1.0 U	1.0 U/1.0 U
	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
Chlorobenzene 5 1 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/0.21 J 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,2-Dichlorobenzene 3 1 1.0U 1.0U 1.0U 1.0U 1.0U 1.0U/1.0U	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,3-Dichlorobenzene 3 1 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,4-Dichlorobenzene 3 1 1.0U 1.0U 1.0U 1.0U 1.0U 1.0U/1.0U	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,2,3-Trichlorobenzene 5 1 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,2,4-Trichlorobenzene 5 1 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U/1.0	J 1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
Total Targeted Site Compounds 0.0 1.4 8.5 0.9 J/0.8 J 0.0/0.0 0.0/0.59 J 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Departed Values			
Reported Values Jan-99 Apr-99 Jul-99 Oct-99 Feb-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Jul-01	0-4.04	Fab 00	Marr 00
Jan-99 Apr-99 Jul-99 Oct-99 Feb-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Jul-01	Oct-01	Feb-02	May-02
Benzene 1 1 2.6/2.8 1.9/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1 U/1 U 1 U/1 U 1 U/1 U 2 U 1 U/1 U	1.00 U/1.00 U	1.00 U	1.00 U
Toluene 5 1 1.0 U/1.0 U 1.4/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.	1.00 U/1.00 U	1.00 U	1.00 U
Chlorobenzene 5 1 1.0/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.	1.00 U/1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene 3 1 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/	1.00 U/1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene 3 1 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/	1.00 U/1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene 3 1 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/	1.00 U/1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene 5 1 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0	1.00 U/1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene 5 1 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0 U 1.0 U/1.0 U/1.0 U 1.0 U/1.0	1.00 U/1.00 U	1.00 U	1.00 U
Total Targeted Site Compounds 3.6/2.8 3.3/0.0 0.0/0.0 0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0	0.0/0.0	0.0	0.0
Reported Values			
Jul-02 Oct-02 Feb-03 May-03 Jul-03 Oct-03 Feb-04 May-04 Jul-04 Oct-04 Feb-05	Jun-05	Sep-05	Dec-05
Benzene 1 1 1.00 U/1.00 U 1.00 U	1.0 U	1.0 U	1.0 UJ
Toluene 5 1 1.00 U/1.00 U 1.00	1.0 U	1.0 U	1.0 UJ
Chlorobenzene 5 1 1.00 U/1.00 U 1.00 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichlorobenzene 3 1 1.00 U/1.00 U 1.00 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene 3 1 1.00 U/1.00 U 1.00 U	1.0 U	1.0 U	1.0 UJ
1.00 U/1.00 U/1.	1.0 U	1.0 U	1.0 UJ
1,2-5 Trichlorobenzene 5 1 1.00 U/1.00 U 1.00 U 1.0	1.0 U	1.0 U	1.0 UJ

1.00 U

0.0

1.00 U/1.00 U

0.0/0.0

1.00 U

0.0

1.00 U

0.0

1.00 U

0.0

1.00 U

1.0 U

0.0

1.0 U

0.0

1.0 U

1.0 UJ

0.0

Notes:

J - Estimated

1,2,4-Trichlorobenzene

Total Targeted Site Compounds

U - Not detected at the associated reporting limit

UJ - Not detected; associated reporting limit is estimated

μg/L - Micrograms per liter

- New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

8.5/9.0 - Results of investigative and duplicate sample

- Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

1.00 U/1.00 U

0.0/0.0

1.00 U

0.0

1.00 U/1.00 U

0.0/0.0

1.00 U

0.0

							MW-18I - Co	ontinued								
							Reported '	Values								
Compound/Parameter	* Standard Value (µg/L)	Quantitation Limit (µg/L)	Feb-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Aug-07	Nov-07	Mar-08	Jun-08	Sep-08	Jan-09	Feb-09	May-09
Benzene	1	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/0.18 J	1.0 U/1.0 U	0.17 J	1.0 U	1.0 U/1.0 U	1.0 UJ	1.0 U	1.0 U/1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ	1.0 U	1.0 U/1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ	1.0 U	1.0 U/1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ	1.0 U	1.0 U/1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U/1.0 U
Total Targeted Site Compounds			0.0	0.0	0.0	0.0	0.0	0.0	0.0/0.18	0.0	0.17	0.0	0.0/0.0	0.0	0.0	0.0/0.0
							Reported '									
			Aug-09	Nov-09	Feb-10	May-10	Aug-10	Nov-10	Mar-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12
Benzene	1	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Total Targeted Site Compounds			0.0	0.0	0.0	0.0	0.0	0.0/0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
							Reported '									
			Feb-13	May-13	Aug-13	Nov-13	Feb-14	May-14	Aug-14	Nov-14	Feb-15	May-15	Aug-15	Nov-15	Feb-16	May-16
Benzene	1	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
Toluene	5	1	1.0 U/0.20 J	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
Chlorobenzene	5	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,2-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,3-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,4-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U /1.0 U	1.0 U /1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U	1.0 U / 1.0 U
Total Targeted Site Compounds			0/0.20	0.0	0.0/0.0	0.0	0/0	0/0	0	0	0	0	0/0	0/0	0.0	0.0
							Reported '									
			Aug-16	Nov-16	Feb-17	May-17	Aug-17	Nov-17	Feb-18	May-18	Oct-18	Apr-19	Oct-19	May-20	Oct-20	Apr-21
Benzene	1	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
Toluene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
Chlorobenzene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
1,2-Dichlorobenzene	3	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
1,3-Dichlorobenzene	3	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
1,4-Dichlorobenzene	3	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
1,2,3-Trichlorobenzene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
1,2,4-Trichlorobenzene	5	1	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U			
Total Targeted Site Compounds			0/0	0/0	0/0	0/0	0	0	0	0	0	0	0	0.0	0.0	0.0

Appendix C Page 6 of 14

Historical Groundwater Chemistry Monitoring - Analytical Results Durez Inlet Remediation Project Groundwater Monitoring Program **Durez Inlet Site**

MW-18I - Continued Reported Values

			Oct-21	Apr-22	Oct-22
Benzene	1	1	1.0 U	1.0 U	1.0 U / 1.0 U
Toluene	5	1	1.0 U	1.0 U	1.0 U / 1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U / 1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U / 1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U / 1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U / 1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U / 1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U / 1.0 U
Total Targeted Site Compounds			0.0	0.0	0.0

Notes:

- Estimated

U

 Not detected at the associated reporting limit
 Not detected; associated reporting limit is estimated UJ

μg/L *

Micrograms per liter
 New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

							MW-1	191								
							Reported	Values								
Compound/Parameter	* Standard Value (µg/L)	Quantitation Limit (µg/L)	Jul-95	Oct-95	Jan-96	Apr-96	Jul-96	Oct-96	Jan-97	Apr-97	Jul-97	Oct-97	Jan-98	Apr-98	Jul-98	Oct-98
Benzene	1	1	6.2	7.2	9.1 J	0.9 J	0.24 J	0.29 J	1.0 U	1.0 U						
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
Chlorobenzene	5	1	25	14	13	3.8	13	13	12	5.0	14.0	5.2	1.4	1.5	11	1.9
1,2-Dichlorobenzene	3	1	5.8	3.3	3	2.6	3.1	3.2	2.8	1.9	3.4	1.8	1.0 U	1.0	3.1	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	0.59 J	1.0 U	1.0 U										
1,4-Dichlorobenzene	3	1	2.4	1.7	1.4	1.2	1.4	1.5	1.3	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.2	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
Total Targeted Site Compounds			39.4	26.2	26.5	8.5	17.7	18.58 J	16.1	6.9	18.8	7.0	1.4	2.5	15.3	1.9
							Reported	Values								
			Jan-99	Apr-99	Jul-99	Oct-99	Feb-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Feb-02	May-02
Benzene	1	1	1.0 U	1 U	1 U	1 U	1 U	2 U	1 U	1.00 U	1.00 U	1.00 U				
Toluene	5	1	1.0 U	1 U	1 U	1 U	1 U	2 U	1 U	1.00 U	1.00 U	1.00 U				
Chlorobenzene	5	1	1.8	1.0 U	7.2	4.0	1.0 U	2	3	3	3	3	1	2.63	1.00 U	1.53
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	3.1	2.3	1.0 U	1 U	3	1	1	3	1	1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0	1 U	1 U	1 U	2 U	1 U	1.00 U	1.00 U	1.00 U				
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.8	1.5	1.0 U	1 U	1	1 U	1 U	2 U	1 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1 U	1 U	1 U	1 U	2 U	1 U	1.00 U	1.00 U	1.00 U				
1,2,4-Trichlorobenzene	5	1	1.0 U	1 U	1 U	1 U	1 U	2 U	1 U	1.00 U	1.00 U	1.00 U				
Total Targeted Site Compounds			1.8	0.0	12.1	7.8	0.0	3	7	4	4	6	2	2.63	0.0	1.53
							Reported	Values								
			Jul-02	Oct-02	Feb-03	May-03	Jul-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Feb-05	Jun-05	Sep-05	Dec-05
Benzene	1	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
Toluene	5	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
Chlorobenzene	5	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
1,2-Dichlorobenzene	3	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
1,3-Dichlorobenzene	3	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
1,4-Dichlorobenzene	3	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
1,2,3-Trichlorobenzene	5	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				
1,2,4-Trichlorobenzene	5	1	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 UJ				

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0/0.0

0.0

Notes:

- Estimated

- Not detected at the associated reporting limit U

 Not detected; associated reporting limit is estimated
 Micrograms per liter UJ

Total Targeted Site Compounds

- New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

8.5/9.0 - Results of investigative and duplicate sample

- Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

0.0

0.0

0.0

0.0

							MW-19I - Coi	ntinued								
							Reported V	'alues								
Compound/Parameter	* Standard Value (µg/L)	Quantitation Limit (μg/L)	Feb-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Aug-07	Nov-07	Mar-08	Jun-08	Sep-08	Jan-09	Feb-09	May-09
Benzene	1	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.5	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1.2.3-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Targeted Site Compounds	<u> </u>	·	0.0/0.0	0.0/0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0
							Reported V	/alues								
		•	Aug-09	Nov-09	Feb-10	May-10	Aug-10	Nov-10	Mar-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12
Benzene	1	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
Toluene	5	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1.2-Dichlorobenzene	3	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
1.2.3-Trichlorobenzene	5	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 UJ	1.0 U/1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U/1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U
Total Targeted Site Compounds	3	·	0.0	0.0	0.0	0.0/0.0	0.0/0.0	0.0	0.0	0.0	0.0	0.0	0.0	0/0	0/0	0/0
							Reported V	/alaa								
			Feb-13	May-13	Aug-13	Nov-13	Feb-14	May-14	Aug-14	Nov-14	Feb-15	May-15	Aug-15	Nov-15	Feb-16	May-16
Danzana	4	1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1011	1.0 U	1.0 U				
Benzene	,	•												1.0 U		
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
Chlorobenzene	5	1 1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.0 U /1.0 U	1.0 U / 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2,4-Trichlorobenzene Total Targeted Site Compounds	5	1	1.0 U 0.0	1.0 U 0.0	1.0 U 0.0	1.0 U 0.0	1.0 U 0	1.0 U	1.0 U 0	1.0 U /1.0 U 0/0	1.0 U / 1.0 U 0 / 0	1.0 U 0	1.0 U 0.0	1.0 U 0 / 0	1.0 U 0 / 0	1.0 U 0.0
Total Targeted Oile Compounds			0.0	0.0	0.0	0.0	· ·	Ü	O	0/0	070	O	0.0	070	070	0.0
			Aug-16	Nov-16	Feb-17	May-17	Reported V Aug-17	alues Nov-17	Feb-18	May-18	Oct-18	Apr-19	Oct-19	May-20	Oct-20	Apr-21
			-			•	-			•		·		-		•
Benzene	1	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
Toluene	5	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U	1.00 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				
Total Targeted Site Compounds			0.0	0/0	0.0	0.0	0.0	0	0	0	0	0	0	0.0	0.0	0.0

Appendix C Page 9 of 14

Historical Groundwater Chemistry Monitoring - Analytical Results Durez Inlet Remediation Project Groundwater Monitoring Program **Durez Inlet Site**

MW-19I - Continued Reported Values

			Oct-21	Apr-22	Oct-22
Benzene	1	1	1.0 U	1.0 U	1.0 U
Toluene	5	1	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	1	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1	1.0 U	1.0 U	1.0 U
Total Targeted Site Compounds			0.0	0.0	0.0

Notes:

- Estimated

U

 Not detected at the associated reporting limit
 Not detected; associated reporting limit is estimated UJ

μg/L *

Micrograms per liter
 New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

							MW-	201								
							Reported	Values								
Compound/Parameter	* Standard Value (μg/L)	Quantitation Limit (µg/L)	Jul-95	Oct-95	Jan-96	Apr-96	Jul-96	Oct-96	Jan-97	Apr-97	Jul-97	Oct-97	Jan-98	Apr-98	Jul-98	Oct-98
Benzene	1	1	7700	3300	8300	4600	5500	6100	4300	4000	4800	3100	3200	1900	1000	2200
Toluene	5	1	1000 U	1000 U	500 U	100 U	500 U	2000 U	2000 U	2000 U	2000 U	2000 U	50 U	200 U	200 U	400 U
Chlorobenzene	5	1	28000	18000	32000	19000	27000	37000	20000	26000	32000	96000	32000	8100	6600	13000
1,2-Dichlorobenzene	3	1	2000	1400	2700	1300	1600	1,900 J	2000 U	2000 U	2000 U	2000 U	1100	310	200	400 U
1,3-Dichlorobenzene	3	1	1000 U	1000 U	370 J	210	260 J	2000 U	2000 U	2000 U	2000 U	2000 U	360	200 U	200 U	400 U
1,4-Dichlorobenzene	3	1	1600	1400	2500	1200	1700	2300	2000 U	2000 U	2000 U	2000 U	2300	630	500	870
1,2,3-Trichlorobenzene	5	1	1000 U	1000 U	500 U	100 U	500 U	2000 U	2000 U	2000 U	2000 U	2000 U	50 U	200 U	200 U	400 U
1,2,4-Trichlorobenzene	5	1	1000 U	1000 U	500 U	100 U	500 U	2000 U	2000 U	2000 U	2000 U	2000 U	50 U	200 U	200 U	400 U
Total Targeted Site Compounds			39300	24100	45870	26310	36060	47300	24300	30000	36800	99100	38960	10940	8300	16070
							Reported	Values								
			Jan-99	Apr-99	Jul-99	Oct-99	Feb-99	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Feb-02	May-02
Benzene	1	1	1600	2660	3600	890	310	220	1100	230	1400	660	90	118	142/135	391
Toluene	5	1	400 U	50 U	1000 U	50 U	100 U	1 U	1	5 U	13 U	100 U	2 U	1.00 U	1.00 U/1.00 U	1.61 J
Chlorobenzene	5	1	7400	16200	26000	6000	1700	2400	11000	2700	34000	20000	2100	1880	1630/1540	14800
1.2-Dichlorobenzene	3	1	400 U	329	1000 U	100	100 U	18	54	9	58	100 U	8	12.0	20.2/20.4	83.0 J
1.3-Dichlorobenzene	3	1	400 U	232	1000 U	110	100 U	19	120	7	310	220	12	19.7	34.6/34.1	158
1,4-Dichlorobenzene	3	1	400 U	1640	2200	210	280	140	430	56	2500	1900	80	150	215/203	1270
1.2.3-Trichlorobenzene	5	1	400 U	50 U	1000 U	50 U	100 U	1 U	1 U	5 U	13 U	100 U	2 U	1.00 U	1.00 U/1.00 U	1.0 U
1,2,4-Trichlorobenzene	5	1	400 U	50 U	1000 U	50 U	100 U	1 U	1 U	5 U	13 U	100 U	2 U	1.00 U	1.87/2.03	1.0 U
Total Targeted Site Compounds			9000	21061	31800	7310	2290	2797	12705	3002	38268	22780	2290	2180	2044/1935	16703.61
							Reported	Values								
			Jul-02	Oct-02	Feb-03	May-03	Jul-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Feb-05	Jun-05	Sep-05	Dec-05
Benzene	1	1	664	347	74.5	89.4	18.5	164	41.5	44.8	34.5 J	8.92/9.40	500 U	250 U	500 U	1.0 UJ
Toluene	5	1	1.00 U	100 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U/1.00U	500 U	250 U	500 U	1.0 UJ
Chlorobenzene	5	1	10600	14100	1880	3310	1270	9810	14600	3100	14600	1370/1330	13000	3100	7600	9.5 J
1.2-Dichlorobenzene	3	1	66	100 U	23.5	27.0	7.47	1.00 U	1.00 U	14.8	1.00 U	6.08/ 6.16	500 U	250 U	500 U	0.26 J
1.3-Dichlorobenzene	3	1	118	143	45.7	50.4	16.3	87.7	151	31.7	142 J	16.8/16.7	110 J	250 U	500 U	0.91 J
1.4-Dichlorobenzene	3	1	779	1200	285	363	119	680	1220	194	1110	112/107	990	280	620	1.7 J
1,2,3-Trichlorobenzene	5	1	1.00 U	100 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U/1.00U	500 U	250 U	500 U	1.0 UJ
1.2.4-Trichlorobenzene	5	1	1.00 U	100 U	1.75	1.72	1.00 U	3.24	1.00 U	1.70	1.00 U	1.00 U/1.08	500 U	250 U	500 U	1.0 UJ

1431

10745

16013

3387

15886.5

1513/1469

14100

3380

8220

12.4

Notes:

- Estimated

 Not detected at the associated reporting limit
 Not detected; associated reporting limit is estimated U

UJ

- Micrograms per liter

Total Targeted Site Compounds

New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)
 Results of investigative and duplicate sample
 Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

12227.3

15790

2310.45

3841.5

							MW-20I - C	ontinued								
							Reported	Values								
Compound/Parameter	* Standard Value (µg/L)	Quantitation Limit (µg/L)	Feb-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Aug-07	Nov-07	Mar-08	Jun-08	Sep-08	Jan-09	Feb-09	Мау-09
Benzene	1	1	500 U	500 U	250 U	15 U/20 U	500 U	170 U	50 U	330 U	12 U	250 U	250 UJ	200 U	11	11 J
Toluene	5	1	500 U	500 U	250 U	15 U/20 U	500 U	170 U	50 U	330 U	12 U	250 U	250 UJ	200 U	1.0 U	1.0 U
Chlorobenzene	5	1	8800	12000	3400	340 /320	8700	12000	3400	12000	1000	11000	11000 J	11000	11000	9600
1,2-Dichlorobenzene	3	1	500 U	500 U	250 U	15 U/20 U	500 U	170 U	50 U	330 U	12 U	250 UJ	250 UJ	200 U	5	1.0 U
1,3-Dichlorobenzene	3	1	60 J	97 J	250 U	1.7 J/20 U	500 U	83	23 J	80 J	7.4 J	74 J	62 J	76 J	82	86 J
1,4-Dichlorobenzene	3	1	620	940	270	20 /20	630	950	270	910	83	860 J	810 J	910	830	910
1,2,3-Trichlorobenzene	5	1	500 U	500 U	250 U	15 U/20 U	500 U	170 U	50 U	330 U	12 U	250 U	250 U	200 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1	500 U	500 U	250 U	15 U/20 U	500 U	170 U	50 U	330 U	12 U	250 U	250 U	200 U	1.0 U	1.0 U
Total Targeted Site Compounds			9480	2237	3670	361.7/340	9330	13033	3693	12990	1090	11934	11872	11986	11928	10607
							Reported									
			Aug-09	Nov-09	Feb-10	May-10	Aug-10	Nov-10	Mar-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12
Benzene	1	1	15 J/14 J	10 J	200 U	500 U	500 U	500 U	500 U/400 U	120 U	250 U/200 U	250 U	200 U/200 U	80 U	100 U/130 U	100 U/16 J
Toluene	5	1	1.0 U/1.0 U	1.0 U	200 U	500 U	500 U	500 U	500 U/400 U	120 U	250 U/250 U	250 U	200 U/200 U	80 U	100 U/130 U	100 U/100 U
Chlorobenzene	5	1	9600/9700	8100	2100	8600	9500	8900	7700/8100	2800	4700/4400	4500	2400/3300	1800	2600/2700	2100/2400
1,2-Dichlorobenzene	3	1	5.2 J/5.9 J	5.4 J	200 U	500 U	500 U	500 U	500 U/400 U	120 U	250 U/200 U	250 U	200 U/200 U	80 U	100 U/130 U	100 U/100 U
1,3-Dichlorobenzene	3	1	68 J/68 J	62 J	200 U	500 U	500 U	500 U	500 U/400 U	19 J	29 J/41 J	32 J	30 J/334 J	25 J	36 J/34 J	36 J/25 J
1,4-Dichlorobenzene	3	1	820/840	720	150 J	670	630	540	590/670	320	510/470	530	540/390	320	460/460	410/410
1,2,3-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U	200 U	500 U	500 U	500 U	500 U/400 U	120 U	250 U/200 U	250 U	200 U/200 U	80 U	100 U/130 U	100 U/100 U
1,2,4-Trichlorobenzene	5	1	1.0 U/1.0 U	1.0 U	200 U	500 U	500 U	500 U	500 U/400 U	120 U	250 U/200 U	250 U	200 U/200 U	80 U	100 U/130 U	100 U/100 U
Total Targeted Site Compounds			10508/10628	8897	2250	9270	10130	9440	8,290/8,770	3139	5239/4911	5062	2970/3724	2145	3096/3194	2546/2851
							Reported	Values								
			Feb-13	May-13	Aug-13	Nov-13	Feb-14	May-14	Aug-14	Nov-14	Feb-15	May-15	Aug-15	Nov-15	Feb-16	May-16
Benzene	1	1	130 U	130 U	21 J	17 J	200 U	27 J	26 J	25 J	26 J	37 J	23 J	35	32 J	8.1
Toluene	5	1	130 U	130 U	100 U	100 U	200 U	200 U	200 U	200 U	100 U	200 U	200 U	0.20 J	100 U	5.0 U
Chlorobenzene	5	1	2000	2000	2300	2300	2200	2400	2700	2300	2700	2800	2400	2200	2400	960
1,2-Dichlorobenzene	3	1	130 U	130 U	100 U	100 U	200 U	200 U	200 U	200 U	100 U	200 U	200 U	4.8	100 U	5.1
1,3-Dichlorobenzene	3	1	28 J	31 J	25 J	22 J	200 U	30 J	200 U	27 J	36 J	28 J	29 J	27	25 J	33
1,4-Dichlorobenzene	3	1	390	340	380	370	430	360	420	350	480	390	390	300	330	340
1,2,3-Trichlorobenzene	5	1	130 U	130 U	100 U	100 U	200 U	200 U	200 U	200 U	100 U	200 U	200 U	1.0 U	100 U	5.0 U
1,2,4-Trichlorobenzene	5	1	130 U	130 U	100 U	100 U	200 U	200 U	200 U	200 U	100 U	200 U	200 U	1.0 U	100 U	5.0 U
Total Targeted Site Compounds			2418	2371	2726	2709	2630	2817	3146	2702	3242	3255	2842	2567	2787.0	1346.0
							Reported									
			Aug-16	Nov-16	Feb-17	May-17	Aug-17	Nov-17	Feb-18	May-18	Oct-18	Apr-19	Oct-19	May-20	Oct-20	Apr-21
Benzene	1	1	29	29	25	23	25	19 J	20	16.3 J	15.0 J	12.8 J	12.8 J	17.4	17.8 J	20.2 J
Toluene	5	1	10 U	20 U	20 U	20 U	25 U	25 U	20 U	20.0 U	20.0 U	20.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Chlorobenzene	5	1	2200	2600	2600	2600	2700	2700	3000	2590	2870	2830	2940	2910	3340	3130
1,2-Dichlorobenzene	3	1	4.8 J	20 U	20 U	20 U	25 U	25 U	20 U	20.0 U	20.0 U	20.0 U	25.0 U	25.0 U	25.0 U	25.0 U
1,3-Dichlorobenzene	3	1	33	32	31	34	34	27	28	26.5	24.4	23.6	22.8 J	23.5 J	22.9 J	19.9 J
1,4-Dichlorobenzene	3	1	420	420	370	440	420	410	410	362	388	388	398	421	441	376
1,2,3-Trichlorobenzene	5	1	10 U	20 U	20 U	20 U	25 U	25 U	20 U	20.0 U	20.0 U	20.0 U	25.0 U	25.0 U	25.0 U	25.0 U
1,2,4-Trichlorobenzene	5	11	10 U	20 U	20 U	20 U	25 U	25 U	20 U	20.0 U	20.0 U	20.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Total Targeted Site Compounds			2687	3081	3026	3097	3179	3156	3458	2995	3297	3254	3374	3372	3822	3546

Appendix C Page 12 of 14

Historical Groundwater Chemistry Monitoring - Analytical Results **Durez Inlet Remediation Project Groundwater Monitoring Program Durez Inlet Site**

> MW-20I - Continued Reported Values

			Oct-21	Apr-22	Oct-22
Benzene	1	1	18.3 J	15.6 J / 14.9 J	12.1 J
Toluene	5	1	25.0 U	25.0 U / 25.0 U	25.0 U
Chlorobenzene	5	1	2850	2650 / 2340	2230
1,2-Dichlorobenzene	3	1	25.0 U	25.0 U / 25.0 U	25.0 U
1,3-Dichlorobenzene	3	1	19.2 J	22.0 J / 21.7 J	14.9 J
1,4-Dichlorobenzene	3	1	341	367 / 295	254
1,2,3-Trichlorobenzene	5	1	25.0 U	25.0 U / 25.0 U	25.0 U
1,2,4-Trichlorobenzene	5	1	25.0 U	25.0 U / 25.0 U	25.0 U
Total Targeted Site Compounds	_	·	3229	3055 / 2672	2511

Notes:

- Estimated

U - Not detected at the associated reporting limit

- Not detected; associated reporting limit is estimated

µg/L * - Micrograms per liter

- New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

							MW-	-221								
							Reported	l Values								
Compound/Parameter	* Standard Value (μg/L)	Quantitation Limit (µg/L)	Jul-01	Oct-01	Feb-02	May-02	Jul-02	Oct-02	Feb-03	May-03	Jul-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04
Benzene	1	1	150	66.9	24.3	5.11/5.76	4.55	14.1/16.0	3.3	1.00 U	1.00 U/1.00 U	1.86	1.00 U	1.80 J/4.89 J	1.00 U	1.00 U
Toluene	5	1	1 U	1.00 U	1.00 U	1.00 U/1.00U	1.00 U	2.50 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U
Chlorobenzene	5	1	4500	308	583	459/566	485	1100 J/315 J	1170	68.4	40.3 /47.5	1290 J	455	1170 J /3190 J	243	53.2
1,2-Dichlorobenzene	3	1	47	3.00	1.58	1.00 U/1.00U	1.00 U	2.50 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	3	1	23	1.81	3.56	2.98/3.62	3.01	7.86 J/2.71 J	11.6	1.15	1.00 U/1.00 U	6.88	2.72	9.49 J/28.8 J	1.91	1.00 U
1,4-Dichlorobenzene	3	1	130	14.7	28.2	27.2/31.6	23.8	69.7 J/19.8 J	99.3	4.41	2.48 /2.73	61.7 J	31.6	86.4 J /179 J	15.4	5.78
1,2,3-Trichlorobenzene	5	1	1 U	1.00 U	1.00 U	1.00 U/1.00U	1.00 U	2.50 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	5	1	1 U	1.00 U	1.00 U	1.00 U/1.00U	1.00 U	2.50 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U	1.00 U/1.00 U	1.00 U	1.00 U
Total Targeted Site Compounds			4,850	394	641	494.29/606.98	516	1192/353.51	1,284	73.96	42.78/50.23	1,360	489	1268/3403	260	58.98
							Reported	l Values								
			Feb-05	Jun-05	Sep-05	Dec-05	Feb-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Aug-07	Nov-07	Mar-08	Jun-08
Benzene	1	1	2.0 U/2.0 U	200 U/50 U	5.0 U	4.0 U	50 U	1.0 U	0.92 J	1.0 U	120 U	20 U/20 U	50 U	25 U	5.0 U/5.0 U	50 U
Toluene	5	1	2.0 U/2.0 U	201 U/50 U	5.0 U	4.0 U	50 U	1.0 U	1.0 U	1.0 U	120 U	20 U/20 U	50 U	25 U	5.0 U/5.0 U	50 U
Chlorobenzene	5	1	46/41	2400 J/1400 J	66	52	620	1.4	610	0.78 J	2500	940/1,300	4400	1400	330/330	3000
1,2-Dichlorobenzene	3	1	2.0 U/2.0 U	200 U/50 U	5.0 U	4.0 U	50 U	1.0 U	0.83 J	1.0 U	120 U	20 U/20 U	50 U	25 U	1.1 J/0.71 J	50 U
1,3-Dichlorobenzene	3	1	0.51 J/0.65 J	200 U/50 U	0.70 J	4.0 U	50 U	1.0 U	6.3	1.0 U	17 J	6.4/8.7	25 J	7.0 J	7.1/7.0	15 J
1,4-Dichlorobenzene	3	1	1.9 J/2.1	110 J/55 J	4.5 J	2.3 J	35 J	0.39 J	43 J	1.0 U	180	58/72	300	88	49/49	210
1,2,3-Trichlorobenzene	5	1	2.0 U/2.0 U	200 U/50 U	5.0 U	4.0 U	50 U	1.0 U	1.0 U	1.0 U	120 U	20 U/20 U	50 U	25 U	5.0 U/5.0 U	50 U
1,2,4-Trichlorobenzene	5	1	2.0 U/2.0 U	200 U/50 U	5.0 U	4.0 U	50 U	1.0 U	1.0 U	1.0 U	120 U	20 U/20 U	50 U	25 U	5.0 U/5.0 U	50 U
Total Targeted Site Compounds			48.41/43.75	2510/1455	71.2	54.3	655	1.79	661	0.78	2697	1004/1381	4725	1495	387.2/386.71	3225
							Reported	l Values								
			Sep-08	Jan-09	Feb-09	May-09	Aug-09	Nov-09	Feb-10	May-10	Aug-10	Nov-10	Mar-11	May-11	Aug-11	Nov-11
Benzene	1	1	50 U	100 U	1.0 U/1 U	2.9	3.5	2.5 J	250 U/250 U	120 U	50 U	250 U	30 U	100 U	100 U	100 U
Toluene	5	1	50 U	100 U	1.0 U/1 U	1.0 U	1.0 U	1.0 U	251 U/250 U	120 U	50 U	250 U	30U	100 U	75 U	100 U
Chlorobenzene	5	1	2000	2900	240/270	3000	2500	2800	3001/3300	1900	1000	2600	670	1900	1800	1900
1,2-Dichlorobenzene	3	1	50 U	100 U	1.0 U/1 U	1.0 U	1.0 U	3.1 J	250 U/250 U	120 U	50 U	250 U	30 U	100 U	100 U	100 U
1,3-Dichlorobenzene	3	1	9.9 J	100 U	5.6/5.4	25	18	20 J	250 U/250 U	120 U	7.2 J	250 U	4.8 J	100 U	100 U	100 U
1,4-Dichlorobenzene	3	1	120	200	71/70	270	200	240	250/260	130	85	170 J	75	84 J	68 J	81 J
1,2,3-Trichlorobenzene	5	1	50 U	100 U	1.0 U/1 U	1.0 U	1.0 U	1.0 U	250 U/250 U	120 U	50 U	250 U	30 U	100 U	100 U	100 U
1,2,4-Trichlorobenzene	5	1	50 U	100 U	1.0 U/1 U	1.0 U	1.0 U	1.0 U	250 U/250 U	120 U	50 U	250 U	30 U	100 U	100 U	100 U
T-4-1 T4 Cit- C			2420.0	2400	240 0/245 4	2000	0700	20.40	2050/2500	2020	1000.0	0770	740.0	4004	4000	4004

2722

3046

3250/3560

2030

1092.2

2770

749.8

1984

1868

1981

Notes:

J - Estimated

U - Not detected at the associated reporting limit
- Not detected; associated reporting limit is estimated

μg/L - Micrograms per liter

* - New York State Ambi

Total Targeted Site Compounds

- New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

8.5/9.0 - Results of investigative and duplicate sample

- Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

2129.9

316.6/345.4

3298

3100

							MW-22I - C	ontinued								
							Reported	l Values								
	* Standard	Quantitation	Feb-12	May-12	Aug-12	Nov-12	Feb-13	May-13	Aug-13	Nov-13	Feb-14	May-14	Aug-14	Nov-14	Feb-15	May-15
Compound/Parameter	Value (µg/L)	Limit (µg/L)														
Benzene	1	1	14 J/15 J	6.7 J/50 U	17 J/19 J	20 J/100 U	100 U	40 U	23 J	20 J	200 U	32 J	38 J	36 J	34 J	40 J
Toluene	5	1	100 U/100 U	50 U/50 U	50 U/50 U	100 U/100 U	100 U	40 U	100 U	100 U	200 U	200 U	200 U	200 U	50 U	200 U
Chlorobenzene	5	1	1700/1700	950/950	1100/1200	1300/1200	1100	680	1800	1600	2100	1900	2000	2100	1900	2300
1,2-Dichlorobenzene	3	1	100 U/100 U	50 U/50 U	50 U/50 U	100 U/100 U	100 U	40 U	100 U	100 U	200 U	200 U	200 U	200 U	50 U	200 U
1,3-Dichlorobenzene	3	1	100 U/11 J	6.3 J/50 U	50 U/50 U	11 J/100 U	100 U	40 U	11 J	100 U	200 U	200 U	200 U	200 U	10 J	200 U
1,4-Dichlorobenzene	3	1	110/100	75/68	87/83	78 J/87 J	78 J	38 J	110	80 J	130 J	97 J	110 J	110 J	110	110 J
1,2,3-Trichlorobenzene	5	1	100 U/100 U	50 U/50 U	50 U/50 U	100 U/100 U	100 U	40 U	100 U	100 U	200 U	200 U	200 U	200 U	50 U	200 U
1,2,4-Trichlorobenzene	5	1	100 U/100 U	50 U/50 U	50 U/50 U	100 U/100 U	100 U	40 U	100 U	100 U	200 U	200 U	200 U	200 U	50 U	200 U
Total Targeted Site Compounds			1824/1826	1038/1018	1204/1302	1409/1287	1178	718	1944	1700	2230	2029	2148	2246	2054	2450
							Reported	l Values								
			Aug-15	Nov-15	Feb-16	May-16	Aug-16	Nov-16	Feb-17	May-17	Aug-17	Nov-17	Feb-18	May-18	Oct-18	Apr-19
Benzene	1	1	31 J	38	42 J	25	8.1	36	38	40	35	34	33	28.2	30.6	21.0 / 21.2
Toluene	5	1	100 U	0.16 J	100 U	10 U	5.0 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20.0 U	20.0 U	20.0 U / 1.0 U
Chlorobenzene	5	1	2100	1600	2,000	970	290	2100	2200	1900	2100	2100	2300	1950	2340	1930 / 2040
1,2-Dichlorobenzene	3	1	100 U	2.7	100 U	10 U	2.0 J	3.1 J	20 U	20.0 U	20.0 U	20.0 U / 1.53				
1,3-Dichlorobenzene	3	1	100 U	9.9	100 U	13	6.6	11	20 U	20 U	15 J	12 J	12 J	12.4 J	13.2 J	10.6 J / 10.4
1,4-Dichlorobenzene	3	1	95 J	72 J	91 J	120	70	110	120	160	150	130	150	131	150	122 / 117
1,2,3-Trichlorobenzene	5	1	100 U	1.0 U	100 U	10 U	5.0 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20.0 U	20.0 U	20.0 U / 1.0 U
1,2,4-Trichlorobenzene	5	1	100 U	1.0 U	100 U	10 U	5.0 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20.0 U	20.0 U	20.0 U / 1.0 U
Total Targeted Site Compounds			2226	1723	2,133	1,128	377	2,260	2358	2100	2300	2276	2495	2122	2534	2084 / 2189
							Departed Values									
							Reported Values			=						

					Reported Values		
	Oct-19	May-20	Oct-20	Apr-21	Oct-21	Apr-22	Oct-22
Benzene	29.4	0.824 J	72.6	54.7	58.7	47.7	329
Toluene	20.0 U	1.0 U	1.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Chlorobenzene	2220	88.8	3000	3400	3540	3570	3110
1,2-Dichlorobenzene	20.0 U	1.0 U	2.47	25.0 U	25.0 U	25.0 U	25.0 U
1,3-Dichlorobenzene	11.4 J	0.460 J	21.3	23.7 J	23.8 J	28.5	21.2 J
1,4-Dichlorobenzene	160	4.80	314	392	428	458	386
1,2,3-Trichlorobenzene	20.0 U	1.0 U	1.0 U	25.0 U	25.0 U	25.0 U	25.0 U
1,2,4-Trichlorobenzene	20.0 U	1.0 U	1.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Total Targeted Site Compounds	2421	94.9	3410	3870	4051	4104	3846

Notes:

- Estimated

- Not detected at the associated reporting limit U

- Not detected; associated reporting limit is estimated UJ

- Micrograms per liter

* - New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

8.5/9.0 - Results of investigative and duplicate sample

- Exceeds New York State Ambient Water Quality Standards and Water Guidance's Values (GA Water Class)

Appendix D 2022 Completed Semiannual Inspection Field Sheets



Inlet Semi-Annual Inspection

Date:	4/26/2022	Inspected By: David	d Ty	/rar	1		
Weat	her: 46-48 degree	es overcast winds 8-	12 n	nph)		
nspection Item	Inspected For						Comments
Shoreline	signs of erosion		\bigcirc	Υ	•	N	
River Bank	signs of erosion			Υ	•	N	
Aquatic Areas	signs of erosion			Υ	•	N	
•	ŭ			•		14	
Cove Cap	signs of erosion/distu	ırbance - exposed	\bigcirc	Υ	•	N	
	portion						
Cove Cap	signs of erosion/distuportion	ırbance - submerged	\bigcirc	Υ	•	N	
Nowth Labo	and decrease of a self-office	and a standing that and d					Once with a second to a second
North Lobe	evidence of activity o impact effectiveness	r penetration that could of cutoff wall	•	Υ	\bigcirc	N	Some evidence of burrowing animals near EW-2 ar under the sidewalk.

Comments/Remarks (Note: If repaire/maintenance is recommended, describe its location/extent below) 0800 on-site perform site and well inspections.

0925 off-site



SEMIANNUAL INSPECTION - DUREZ INLET

Site: Dure Date: 10 Inspector: S	22 Inlet 17/2022 Weather:	CLOUDY RAIN 49°F WINDS SW 5-10MPH
Inspection Item	Inspect For	34 3 10/11/1
<u>Shoreline</u>	- signs of erosion	Y N
<u>River Bank</u>	- signs of erosion	Y (N)
Aquatic Areas	- signs of erosion	YN
Cove Cap	 signs of erosion/disturbance - exposed portion signs of erosion/disturbance - submerged portion 	Y (N) Y (N)
North Lobe	 evidence of activity or penetration that could impact effectiveness of cutoff wall 	YN
ELL MW- WO AREA		UNDER CONCRETE PAD
		Sham Hardner