

June 30, 2015

Mr. William T. Ports, P.E.
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Subject: Former M. Argueso and Company, Inc.

441 & 442 Waverly Avenue, Mamaroneck, NY

Site #C360108

Periodic Review Report

STERLING File #28012 (Task 995)

Dear Mr. Ports,

Sterling Environmental Engineering, P.C. provides the attached Periodic Review Report for the above referenced site. This report covers the period December 30, 2013 to January 14, 2015. A hard copy of the certification forms will follow.

Please contact me should you have any questions.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

Mark P. Millspaugh, P.E.

President

mark.millspaugh@sterlingenvironmental.com

MPM/bc Email/Federal Express Attachments

cc: T.J. Milo, New Waverly Avenue Associates, LLC (Email Only) Kevin Young, Young Sommer, LLC (Email Only)



#### PERIODIC REVIEW REPORT (December 30, 2013 – January 14, 2015) FORMER M. ARGUESO AND CO., INC. SITE

#### TOWN OF MAMARONECK WESTCHESTER CO., NEW YORK SITE #C360108

#### Prepared for:

New Waverly Avenue Associates, LLC 566 Westchester Avenue Rye Brook, New York 10573

#### Prepared by:

Sterling Environmental Engineering, P.C. 24 Wade Road
Latham, New York 12110

June 29, 2015

"Serving our clients and the environment since 1993"

## PERIODIC REVIEW REPORT (December 30, 2013 – January 14, 2015)

#### FORMER M. ARGUESO AND CO., INC. SITE

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#### **CERTIFICATION**

I, Mark P. Millspaugh, P.E., certify that I am a New York State registered professional engineer and that this Periodic Review Report (PRR) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities will be performed in accordance with the DER-approved work plan and any DER-approved modifications.

/g/m/	June 29, 2015
Mark P. Millspaugh, P.E.	Date

#### 1.0 INTRODUCTION

Sterling Environmental Enginering, P.C. (STERLING) prepared this Periodic Review Report (PRR) on behalf of New Waverly Avenue Associates, LLC for the Brownfield Cleanup Program (BCP) Site No. C360108 ("the Site"). The subject of this PRR is the Former M. Argueso and Co., Inc. Site located at 441, 442, 501 and 513 Waverly Avenue, Town and Village of Mamaroneck, Westchester County, New York. The location of the Site is shown in Figure 1. The Site has been investigated and remediated under the New York State Department of Environmental Conservation's (NYSDEC's) BCP.

This PRR covers the period December 30, 2013 to January 14, 2015

A Site Management Plan (SMP), dated October 2013, is in place for ongoing remedial activities. This PRR presents the results of monitoring activities outlined in the SMP.

#### 1.1 Summary of Site Contamination and Remedial History

The Site was previously used in the wax manufacturing process. Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCS) have been detected in the soil and groundwater at the site, and in offsite monitoring wells.

An Interim Remedial Measure (IRM) was conducted in 2009 and 2010 to remove several Underground Storage Tanks (USTs), wastewater tanks and associated piping, and contaminated soil.

The Site was remediated in accordance with the NYSDEC-approved Remedial Action and Interim Remedial Measure Work Plan dated July 29, 2009 and the Remedial Action Work Plan (RAWP) dated October 9, 2012.

Remedial activities were completed at the Site in August and September 2009, October 2010 and June 2013 as detailed in Section 2.2.

#### 1.2 Effectiveness of the Remedial Program and Compliance

The remedial activities completed at the site appear to have been effective, based on the results of groundwater monitoring.

No areas of non-compliance with the SMP have been identified.

#### 1.3 Recommendations

The NYSDEC by letter dated April 29, 2015 approved a reduction in the frequency of groundwater monitoring to biannually.

No additional changes to the primary elements of the SMP or to the frequency for submitting this Periodic Review Report are recommended at this time. Monitoring will continue according to the requirements of the SMP and the modifications approved by the NYSDEC April 29, 2015 letter.

The requirements for discontinuing site management have not been met.

#### 2.0 SITE OVERVIEW

#### 2.1 Site Description

The Site is comprised of two (2) separate properties located in the Village and Town of Mamaroneck, County of Westchester, New York. 441 Waverly Avenue includes the parcels of 441, 501 and 513 Waverly Avenue which are identified by the Town of Mamaroneck Tax Map 28-37 (Section/Block/Lot) as 8/25/278, 8/25/273 and 8/25/268.2, respectively. 442 Waverly Avenue is 8/25/33. The Site is an approximate 1.04-acre area bounded by commercial and residential properties to the north, Railroad Way to the south and commercial and residential properties to the east and west (see Figure 1).

441 Waverly Avenue was originally a residential property until 1934, when a store was constructed. The property was purchased in the 1960s by Argueso, which constructed the existing two (2) story office building and former storage/parking garage.

442 Waverly Avenue was a lumber planing mill in 1912. Subsequent uses include Mamaroneck Sash, Trim and Door, followed by the Mamaroneck Chemical Company. The property was purchased by Argueso in the 1930s.

The Site features at 442 Waverly Avenue included a one (1) story manufacturing building (former Argueso facility) and multiple underground storage tanks (USTs). The building has been demolished and all known USTs have been removed.

A Remedial Investigation (RI) was performed in 2009-2012 to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the following report:

• Interim Remedial Measures & Remedial Investigation (IRM/RI) Report by Sterling Environmental Engineering, P.C. dated September 7, 2012.

Below is a summary of site conditions prior to remediation.

#### Soil

Several soil samples reported parameter concentrations that exceed the Part 375-6.8(a) Unrestricted SCOs for Volatile Organic Compounds (VOCs).

#### Site-Related Groundwater

Groundwater samples collected from groundwater monitoring wells onsite and offsite contained several VOCs; specifically, Tetrachloroethylene (PCE) and Trichloroethylene (TCE) were detected above groundwater standards.

#### Site-Related Soil Vapor Intrusion

A Soil Vapor Intrusion Investigation (SVII) was conducted on March 28 and 29, 2013 for the existing two-story building located at 441 Waverly Avenue. The SVII was performed in accordance with the Soil Vapor Intrusion Investigation Work Plan, submitted by STERLING for the Site on March 18, 2013, and approved by the NYSDEC on March 22, 2013.

The analytical data for samples collected at the Site detected organic vapors in the sub-slab vapor, the indoor and the outdoor air.

#### 2.2 Remedial History

The Site was remediated in accordance with the NYSDEC-approved Remedial Action and Interim Remedial Measure Work Plan dated July 29, 2009 and the Remedial Action Work Plan (RAWP) dated October 9, 2012.

The following is a summary of the Remedial Actions performed at the Site:

- 1. Excavation of soil/fill exceeding 6 NYCRR Part 375 Commercial SCOs.
- 2. Construction and maintenance of an asphalt pavement and soil cover system to prevent human exposure to remaining contaminated soil/fill remaining at the Site.
- 3. Hydrogen Release Compound (HRC) injection into two (2) areas surrounding wells GZ-22D and GZ-23D for treatment of groundwater.
- 4. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.
- 5. Development and implementation of a SMP for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, and (3) reporting.

Remedial activities were completed at the Site in August and September 2009, October 2010 and June 2013.

## 3.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

This section provides an evaluation of the extent to which the implemented remedy meets the remedial objective to minimize or eliminate exposure pathways or significant risks to the public or the environment under the conditions of the contemplated use of the site (i.e. Restricted Commercial). The implemented remedy includes source removal, construction and maintenance of a soil cover system, in-situ remediation (HRC injection), and groundwater monitoring.

#### 3.1 Performance

The results of analysis of soil samples collected during the source removal action indicate that soil impacted with VOCs and petroleum was excavated and disposed, thereby removing a potential continuing source of groundwater contamination. Injection of HRC provided a means of continued, long-term degradation of residual VOCs in groundwater. The majority of the VOCs analyzed in groundwater samples meet the applicable groundwater standard criteria guidances (SCGs), as described in Section 5.0.

#### 3.2 Effectiveness

The selected remedy (source removal, cover system, in-situ remediation (HRC injection), and groundwater monitoring) is an effective short-term remedial measure. The remedy immediately oxidized contaminants from the site environment and eliminated the potential for human exposure. Groundwater

sampling and analysis monitors the effectiveness of the remedy and impacts from residual contaminants. There are no known risks to workers, the community, or the environment from the selected remedy.

The soil removal action, cover system, injection of HRC, and groundwater monitoring are effective long-term remedial measures. The soil removal action permanently removed contaminants from the site, and the asphalt and soil cover system eliminates the potential for exposure to remaining site contaminants. HRC is designed to remain active and continue to degrade chlorinated compounds over a period of several years. The long-term effect of the HRC is to eliminate or reduce the concentration of VOCs in the groundwater. Groundwater monitoring is an accepted method of monitoring the long-term effectiveness of remediation.

#### 3.3 Protectiveness

The implemented remedy achieves the remedial action objective to protect human health and the environment. The impacted soil removed during the source removal action was transported offsite for disposal at a permitted disposal facility. This source removal action effectively removed the source of contamination from the environment and eliminated human exposure by removing the impacted material from the site.

Groundwater sampling and analysis is performed to monitor the concentration of residual compounds in groundwater at the site. The results of the sampling and analysis indicate the area of contamination is localized to the Site, and the residual compounds in the groundwater are not a threat to offsite receptors.

The results further indicate the concentrations of VOCs in groundwater have been substantially reduced compared to historical levels. These conditions indicate it is unlikely that VOCs have migrated, or will migrate offsite. Human exposure is not an issue due to the absence of a pathway for human contact with, or use of, the impacted groundwater under the conditions of the contemplated Restricted Commercial Use of the Site.

#### 4.0 IC/EC COMPLIANCE REPORT

#### 4.1 Institutional Controls

The institutional control for the site consists of an Environmental Easement (EE) that includes groundwater use restrictions, land use restrictions, a SMP, and certification reporting. The EE prohibits the use of the property for any means other than the contemplated Restricted Commercial Use of the Site. The EE also restricts groundwater use and requires that any impacted soil encountered during future intrusive activities be managed and disposed according to State regulations. Finally, the EE requires compliance with the SMP, including the periodic reporting covered by this report. The EE for the property that outlines the use restrictions was filed in Westchester County (Document No. 523243327).

The potential for vapor intrusion must be evaluated for any buildings developed on the Site property and prior to the leasing of 441 Waverly Avenue for human occupation (as compared to storage) and any potential impacts that are identified must be monitored or mitigated.

#### **4.2** Engineering Controls

Exposure to remaining contamination in soil/fill at the Site is prevented by an asphalt and soil cover system placed over the Site. This cover system is comprised of a minimum asphalt layer of five (5) inches

thick, underlain by a compacted sub-base eight to eighteen (8 to 18) inches thick and 12 inches of clean backfill soil. The Excavation Work Plan (EWP) provided in the SMP outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this cover system are provided in the Monitoring Plan included in the SMP.

#### 4.3 Corrective Measures

The Institutional and Engineering Controls described above are fully in place and effective. Therefore, no corrective measures are proposed at this time.

#### 4.4 IC/EC Certification

The NYSDEC Institutional and Engineering Controls Certification Form is provided as Appendix A.

#### 5.0 MONITORING PLAN COMPLIANCE REPORT

#### 5.1 Components of the Monitoring Plan

The SMP contains details on the Site Monitoring Plan. Components of the monitoring plan are summarized below.

	N	Monitoring/Inspection Schedule	
Monitoring Program	Frequency*	Matrix	Analysis
Soil and Asphalt Cover Inspection	Annual	Soil and Asphalt Cover System.	Inspection.
Groundwater Monitoring	Quarterly for the first year*	Groundwater	VOCs Method 8260C 6 NYCRR Part 375 Parameters.
Site-Wide Inspection	Annual	Monitoring Wells Condition. Stormwater Drainage Catch Basins Condition.	Inspection.

<sup>\*</sup>The frequency of events will be conducted as specified until otherwise approved by the NYSDEC and NYSDOH. NYSDEC by letter dated April 29, 2015 reduced the frequency of groundwater monitoring to biannual.

#### 5.1.1 Soil and Asphalt Cover System Monitoring

The asphalt cover will be visually inspected for cracks wider than one-quarter (1/4) inch and potholes. Soil cover will be visually inspected for signs of erosion and areas of bare soil. Routine asphalt maintenance will be conducted by the property owner.

#### **5.1.2** Groundwater Monitoring

Groundwater monitoring was performed on a quarterly basis initially to assess the performance of the remedy.

A network of existing monitoring wells allows monitoring of both upgradient and downgradient groundwater conditions at the site.

<b>Monitoring W</b>	ells	
Screened Portion of Overburden Aquifer	Monitoring Well ID	Placement Criteria
D	B6-OWD	Upgradient well on 441 Waverly Avenue.
D	GZ-21D	Downgradient well on 441 Waverly Avenue.
D	GZ-22D	In vicinity of oil/water separator tank and dry wells location at 441 Waverly Avenue.
D	OSMW-3	Offsite.
D	OSMW-4	Offsite.
D	GZ-23D	Well with the highest TCE concentration at 442 Waverly Avenue.

The wells listed above are sampled for Part 375 VOCs by Method 8260C.

The SMP will be modified as needed to reflect any changes in sampling plans approved by the NYSDEC.

#### **5.1.3** Site-Wide Inspection

Site-wide inspections are performed on a regular schedule at a minimum of once a year.

#### 5.2 Summary of Monitoring Data

#### **5.2.1** Summary of Groundwater Monitoring

Groundwater monitoring data for 2014 and prior sampling events is summarized in Table 1. Four (4) onsite and two (2) offsite monitoring wells were sampled via peristaltic pump and analyzed for Part 375 VOCs. The results are compared to Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Water Quality Standards and Guidance Values. Figure 2 shows the monitoring well locations.

Since the injections, levels of Tetrachloroethylene (PCE) and Trichloroethylene (TCE) have decreased in monitoring wells B6-OWD, GZ-21D, GZ-22D, GZ-23D, and OSMW-4. The graphs attached to Table 1 depict the decreasing levels of PCE and TCE in these wells for 2014.

Initially, wells GZ-22D and GZ-23D contained the highest concentrations of PCE and TCE of the onsite wells and were therefore chosen for treatment.

#### 5.2.2 Inspections

In accordance with the SMP, a comprehensive annual site-wide inspection and asphalt and soil cover system inspection were conducted on November 5, 2014. The Site-Wide Inspection Form and Asphalt and Soil Cover System Inspection Form are provided as Appendix B. Photographs taken during the inspection are provided in Appendix B. Photograph locations are presented on Figure 2.

The site-wide inspection determined all items to be in acceptable condition. The asphalt and soil cover was found to be in excellent condition. The concrete surface at 441 Waverly Avenue had minor cracks, but no potholes or penetrations were observed. As such, no corrective actions or repairs are needed to the cover system at this time.

#### 5.3 Comparison with Remedial Objectives

The following discussion details the trends in each well:

#### **B6-OWD**

Initially, levels of several VOCs increased in this well. During the most recent event, levels of all VOCs in this well have decreased to undetectable levels.

#### **GZ-21D**

Initially, levels of several VOCs increased in this well. During the most recent event, levels of all VOCs in this well have decreased to below standards.

#### **GZ-22D**

PCE levels in this well have been below standards for this and the past two monitoring events. TCE was detected slightly above the standard during this event, and has been below standards for the past two events. All other VOCs have decreased to levels below or slightly above standards for this event.

#### **GZ-23D**

Both PCE and TCE have been steadily decreasing since the injections, although they remain above groundwater standards for this event. Vinyl chloride, a daughter compound of PCE and TCE, increased following the injections and has recently slightly decreased. Both cis-1,2-dichloroethene and trans-1,2-dichloroethene increased following the injections, and remain above standards.

#### OSMW-3

Both PCE and TCE levels increased following the injections and remain elevated. Cis-1,2-dichloroethene also increased, and remains above standards for this event.

#### **OSMW-4**

All VOCs are below standards for this event, with the exception of cis-1,2-dichloroethene, which is slightly above the groundwater standard.

#### 5.4 Monitoring Deficiencies

Monitoring activities fully complied with the approved monitoring plan.

#### 5.5 Conclusions and Recommendations for Changes

A review of the groundwater monitoring data since the injections occurred indicates an overall decrease in the level of VOCs in all wells except OSMW-3. Therefore, the remedy continues to achieve remedial goals at this site. STERLING recommended groundwater monitoring continue at a reduced frequency of biannual sampling. This recommendation was approved by NYSDEC on April 29, 2015.

#### 6.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Compliance with SMP

All requirements of the SMP (IC/EC, monitoring) have been complied with for the reporting period.

#### 6.2 Performance and Effectiveness of the Remedy

The results of the groundwater monitoring suggest that overall groundwater quality is improving and that concentrations of VOCs are decreasing with time. The data indicate that concentrations of VOCs decreased substantially in the source area. Groundwater analytical results further suggest that the remedial objective to minimize or eliminate exposure pathways or significant risks to the public or the environment under the conditions of the contemplated use of the site (i.e. Restricted Commercial) have been satisfied.

Therefore, the remedy continues to achieve remedial goals established for this site.

#### **6.3** Future PRR Submittals

The frequency of submittal of future PRRs will remain on an annual basis.

#### 7.0 IC AND EC CERTIFICATION FORM

The NYSDEC Institutional and Engineering Control Certification Form for the Site is presented in Appendix A.

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#### Table 1 Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values 441 and 442 Waverly Avenue Volatile Organic Compounds Site #C360108

Location														441 Waverly	Avenue											-
Sample ID		Water Quality Standard*				B6-OWD						G	Z-21D				DUP-1 [4]				GZ-22D				DUP-1 [1]	DUP-1 [2]
Unit		μg/L				μg/L							μg/L								μg/L					
Sample Date			08/21/09	01/11/12	10/15/13	03/24/14	06/18/14	09/24/14	11/05/14	08/20/09	01/11/12	10/15/13	03/24/14	06/18/14	09/24/14	11/05/14	06/18/14	08/19/09	01/11/12	10/15/13	03/24/14	06/18/14	09/24/14	11/05/14	10/15/13	03/24/14
Parameter																										
Volatile Organic Compounds:	CAS#																									
1,1-Dichloroethane	75-34-3	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<3.0	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.38	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.38	<0.5	<25
1,1-Dichloroethene	75-35-4	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<2.3	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.29	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.29	<0.5	<25
1,2,3-Trichlorobenzene	87-61-6	5	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	5	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	0.6	9.7	<5.0	<b>1.9</b> J	2.8	8.0	9.1	<1.7	<b>170</b> D	5.3	<5.0	<b>190</b> D	190	4.1	0.4 J	190	22	17	16	<b>24</b> J	<25	1.3	<b>0.64</b> J	16	22 .
cis-1,2-Dichloroethene	156-59-2	5	<b>390</b> D	1.5 J	76	<b>180</b> D	330	<b>430</b> D	<6.5	<b>270</b> D	10	7.6	<b>310</b> D	290	5.6	<0.81	350	8.4	6.5	12	110	<25	1.9	1.7	12	100
trans-1,2-Dichloroethene	156-60-5	5	150	<5.0	6.8	7.2	8.4	14	<7.2	6.6	<5.0	<5.0	3.8	<5.0	<1.0	<0.9	<4.0	<5.0	1.3 J	4.2 J	<25	<25	5.8	5.5	4.4 J	J <25
2-Butanone (MEK)	78-93-3	50 GV	<5.0	<5.0	<5.0	<10	<40	<40	<11	<5.0	<5.0	<5.0	<10	<50	<10	<1.3	<40	<5.0	<5.0	<5.0	<250	1400	190	12	<5.0	<250
Acetone	67-64-1	50 GV	<50.0	<5.0	<5.0	<10	<40	<40	<24	<50.0	<5.0	<5.0	<10	<50	<10	<3.0	<40	<50.0	<5.0	<5.0	<250	<b>370</b> J	270	51	<5.0	<250
Benzene	71-43-2	1	<5.0	0.51 J	<5.0	<1.0	<4.0	<4.0	<3.3	61	<5.0	<5.0	8.2	<5.0	<1.0	<0.41	<4.0	<b>2.6</b> J	<b>1.3</b> J	<b>1.2</b> J	<25	<25	1.6	1.7	<b>1.2</b> J	J <25
n-Butylbenzene	104-51-8	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<5.1	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.64	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.64	<5.0	<25
sec-Butylbenzene	135-98-8	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<6.0	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.75	<4.0	1.2 J	<5.0	<5.0	<25	<25	<1.0	<0.75	<5.0	<25
tert-Butylbenzene	98-06-6	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<6.5	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.81	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.81	<5.0	<25
Carbon disulfide	75-15-0		NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	<25	NA	NA	NA	NA	NA
Ethylbenzene	100-41-4	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<5.9	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.74	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.74	<5.0	<25
Hexachlorobutadiene	87-68-3	0.5	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	<25	NA	NA	NA	NA	NA
Isopropylbenzene	98-82-8	5	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	1.5 J	NA	NA	<25	NA	NA	NA	NA	NA
Methyl tert-butyl ether (MTBE)	1634-04-4	10 GV	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<1.3	<5.0	<5.0	<5.0	0.27 J	<5.0	<1.0	<0.16	<4.0	14	31	42	34	25	33	25	43	36
n-Propylbenzene	103-65-1	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<5.5	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.64	<4.0	4.4 J	<5.0	<5.0	<25	<25	<1.0	< 0.69	<5.0	<25
Tetrachloroethene	127-18-4	5	23	6.2	18	59	47	110	<2.9	41	1.7 J	<5.0	9.8	3.4 J	0.89 J	1.0	2.9 J	120	97	62	<b>14</b> J	<25	2.1	0.88 J	60	21 .
Trichloroethene	79-01-6	5	43	2.1 J	41	<b>170</b> D	180	330	<3.7	33	0.58 J	<5.0	7.8	15	0.82 J	2.3	13	110	92	89	29	<25	2.5	5.5	88	34
Toluene	108-88-3	5	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<4.1	<5.0	<5.0	<5.0	<1.0	<5.0	<1.0	<0.51	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.51	<5.0	<25
Vinvl chloride	75-01-4	2	<5.0	<5.0	<5.0	<1.0	<4.0	<4.0	<7.2	<b>4</b> J	<5.0	<5.0	4.3	<5.0	<1.0	< 0.90	<4.0	<5.0	<5.0	<5.0	<25	<25	<1.0	<0.9	<5.0	<25

**BOLD** Indicates exceedance of groundwater standard

- \* Groundwater Standards are obtained from Title 6 Part 703.5, and Guidance Values are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".
- < Indicates the parameter was not detected at the laboratory detection limit shown.

#### NA Not Analyzed.

--- No standard or not applicable.

- [1], [2] DUP-1 samples collected from monitoring well location GZ-22D.
   [3] DUP-1 samples collected from offsite monitoring well location OSMW-4.
   [4] DUP-1 samples collected from monitoring well location GZ-21D.
   [5] DUP-1 samples collected from monitoring well location OSMW-4.

- [6] DUP-1 samples collected from monitoring well location OSMW-3

#### Laboratory Qualifiers:

- D Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis.

  J Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit.

Waverly Avenue (441 & 442) - 28012\GZ-23D Treatment & Post-Treatment Monitoring\Table 1\_PRR - Summary of 2009-2014 Groundwater Analytical Results

#### Table 1 Summary of Groundwater Analytical Data Results to Title 6 Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Guidance Values 441 and 442 Waverly Avenue Volatile Organic Compounds Site #C360108

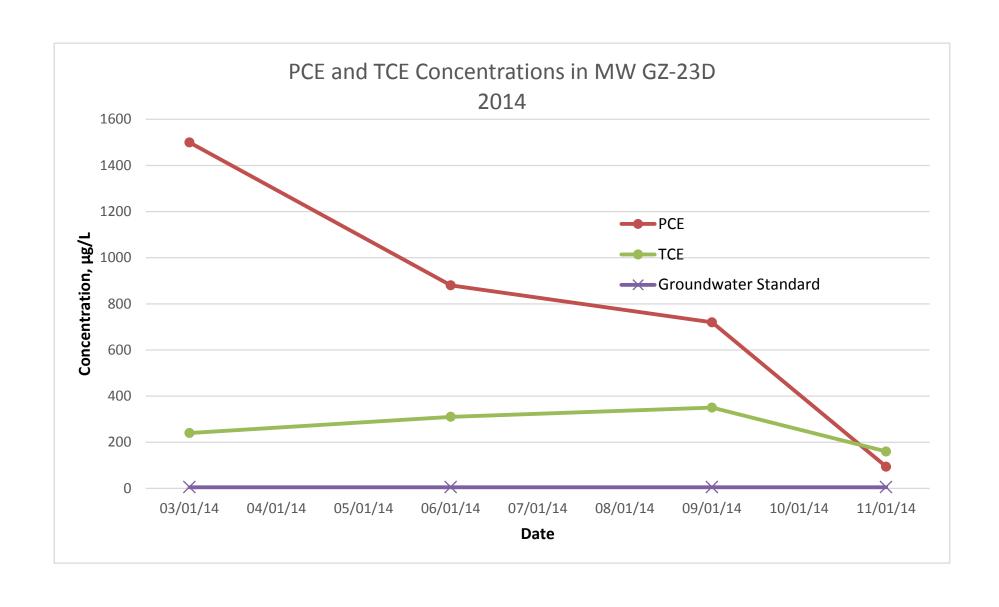
Location				442 Waverly	Avenue											Offsite Mon	itoring Wells							
Well ID		Water Quality Standard*				GZ-23D						OSM	W-3			DUP-1 [6]			OSMV	N-4			DUP-1 [3]	DUP-1 [5]
Unit		μg/L				μg/L						μg/				μg/L			μg/				μg/L	μg/L
Sample Date			08/20/09	01/11/12	10/15/13	03/25/14	06/19/14	09/25/14	11/05/14	01/10/12	10/16/13	03/24/14	06/19/14	09/24/14	11/05/14	11/05/14	01/10/12	10/16/13	03/25/14	06/18/14	09/24/14	11/05/14	01/10/12	09/24/14
Parameter																								
Volatile Organic Compounds	CAS#																							
1,1-Dichloroethane	75-34-3	5	<5.0	<5.0	<100	<1.0	<20	<20	<7.6	<5.0	<80	<1.0	<20	<20	<19	<0.38	<5.0	<5.0	<25	<25	<1.0	<0.38	<5.0	<1.0
1,1-Dichloroethene	75-35-4	5	5.5	1.6 J	<100	1.7	<20	<20	<5.8	<5.0	<80	<1.0	<20	<20	<15	1.4	<5.0	<5.0	<25	<25	<1.0	<0.29	<5.0	<1.0
1,2,3-Trichlorobenzene	87-61-6	5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	0.6	13	9	<100	7.8	<b>6.6</b> J	<b>7.6</b> J	<4.2	<b>4.4</b> J	<80	4.7	<20	<20	<11	3.5	<b>1.1</b> J	<5.0	<25	<25	<1.0	<0.21	<b>1.1</b> J	<1.0
cis-1,2-Dichloroethene	156-59-2	5	10	<b>780</b> D	380	<b>2200</b> D	930	1100	1100	14	<b>31</b> J	46	100	220	210	<b>210</b> D	29	3.8 J	<25	<25	6.2	6.0	29	5.2
trans-1,2-Dichloroethene	156-60-5	5	<5.0	9.1	<100	41	<20	<20	<b>18</b> J	1.7 J	<80	3.7	<20	28	<45	26	6.9	1 J	<25	<25	<1.0	<0.9	7.2	<1.0
2-Butanone (MEK)	78-93-3	50 GV	<5.0	<5.0	260	46	<b>190</b> J	770	37 J	<5.0	<5.0	<10	<200	<200	<66	<1.3	<5.0	<5.0	<250	<250	<1.0	<1.3	<5.0	<10
Acetone	67-64-1	50 GV	<50.0	200	<100	9.8 J	<b>81</b> J	480	<60	<5.0	<80	<10	<200	<200	<150	<3.0	<5.0	<5.0	<250	<250	3.2 J	<3.0	<5.0	3.0 J
Benzene	71-43-2	1	11	<b>4</b> J	<100	2.7	<20	<20	<8.2	<5.0	<80	1	<20	<20	<21	1.6	45	<5.0	<25	<25	2.8	0.86 J	47	2.9
n-Butylbenzene	104-51-8	5	< 5.0	<5.0	<100	<1.0	<20	<20	<13	<5.0	<80	<1.0	<20	<20	<32	<0.64	<5.0	<5.0	<25	<25	<1.0	< 0.64	<5.0	<1.0
sec-Butylbenzene	135-98-8	5	<5.0	<5.0	<100	<1.0	<20	<20	<15	<5.0	<80	<1.0	<20	<20	<38	< 0.75	1.5 J	<5.0	<25	<25	<1.0	< 0.75	1.5 J	<1.0
tert-Butylbenzene	98-06-6	5	<5.0	<5.0	<100	<1.0	<20	<20	<16	<5.0	<80	<1.0	<20	<20	<41	<0.81	<5.0	<5.0	<25	<25	<1.0	<0.81	<5.0	<1.0
Carbon disulfide	75-15-0		<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100-41-4	5	<5.0	<5.0	<100	<1.0	<20	<20	<15	<5.0	<80	<1.0	<20	<20	<37	< 0.74	<5.0	<5.0	<25	<25	<1.0	<0.74	<5.0	<1.0
Hexachlorobutadiene	87-68-3	0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	98-82-8	5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether (MTBE)	1634-04-4	10 GV	2.1 J	1.6 J	<100	<1.0	<20	<20	<3.2	<5.0	<80	0.4 J	<20	<20	<8.0	0.48 J	0.78 J	<5.0	<25	<25	0.57 J	0.59 J	<5.0	0.63 J
n-Propylbenzene	103-65-1	5	<5.0	<5.0	<100	<1.0	<20	<20	<14	<5.0	<80	<1.0	<20	<20	<35	< 0.69	1.6 J	<5.0	<25	<25	<1.0	<0.69	1.7 J	<1.0
Tetrachloroethene	127-18-4	5	<b>9700</b> D	<b>4300</b> D	3100	<b>1500</b> D	880	720	94	<b>760</b> D	1900	<b>2400</b> D	1300	<b>2600</b> D	3400	<b>2900</b> D	<b>790</b> D	11	<25	<25	3.4	3.2	<b>730</b> D	3.4
Trichloroethene	79-01-6	5	<b>450</b> DJ	<b>1600</b> D	1000	<b>240</b> D	310	350	160	120	280	<b>330</b> D	440	1000	1000	<b>900</b> D	<b>230</b> D	15	<25	<25	6	4.5	<b>220</b> D	5.5
Toluene	108-88-3	5	<5.0	<5.0	<100	<1.0	<20	<20	<10	<5.0	<80	<1.0	<20	<20	<26	<0.51	<5.0	<5.0	<25	<25	<1.0	<0.51	0.67 J	<1.0
Vinyl chloride	75-01-4	2	<5.0	1.2 J	<b>28</b> J	<b>200</b> D	250	390	320	<5.0	<80	<1.0	<20	<20	<45	< 0.9	<5.0	<5.0	<25	<25	<1.0	<0.9	<5.0	<1.0

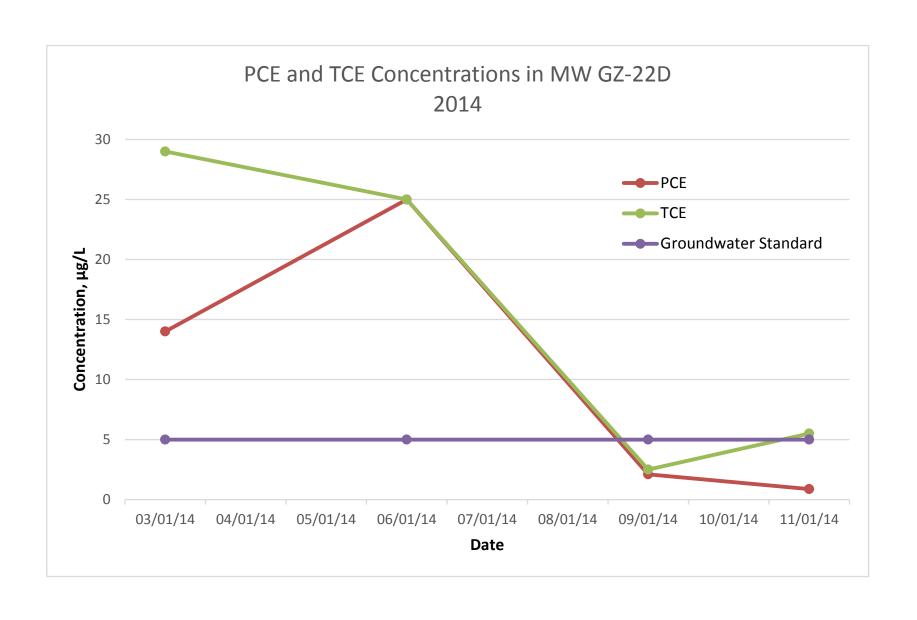
- BOLD Indicates exceedance of groundwater standard
- Groundwater Standards are obtained from Title 6 Part 703.5, and Guidance Values are obtained from NYSDEC TOGS (1.1.1) "Ambient Water Quality Standards and Guidance Values".
- Indicates the parameter was not detected at the laboratory detection limit shown.
- NA Not Analyzed.
- No standard or not applicable.
- [1], [2] DUP-1 samples collected from monitoring well location GZ-22D.
- DUP-1 samples collected from offsite monitoring well location OSMW-4.
- DUP-1 samples collected from monitoring well location GZ-21D.
- DUP-1 samples collected from monitoring well location OSMW-4.
- DUP-1 samples collected from monitorring well location OSMW-3

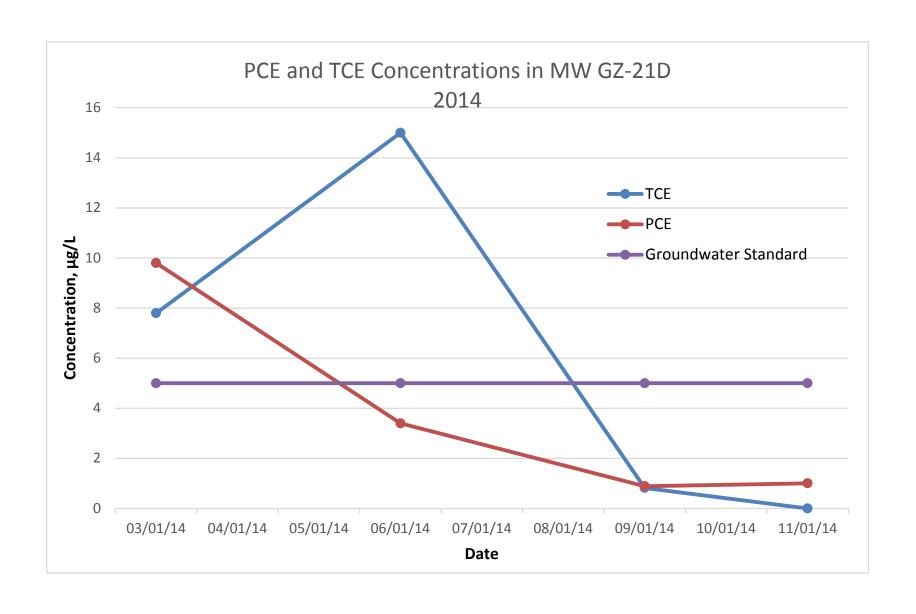
#### Laboratory Qualifiers:

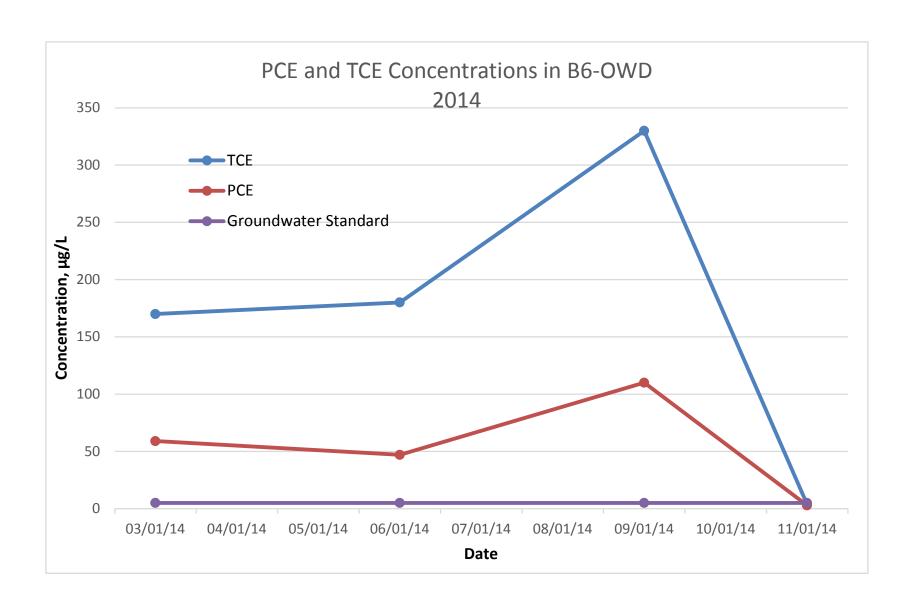
- Indicates the undiluted analysis exceeded the equipment calibration range. The concentration shown is obtained from a diluted analysis. Indicates the concentration shown is an estimated value because the compound was detected below the reporting limit. D

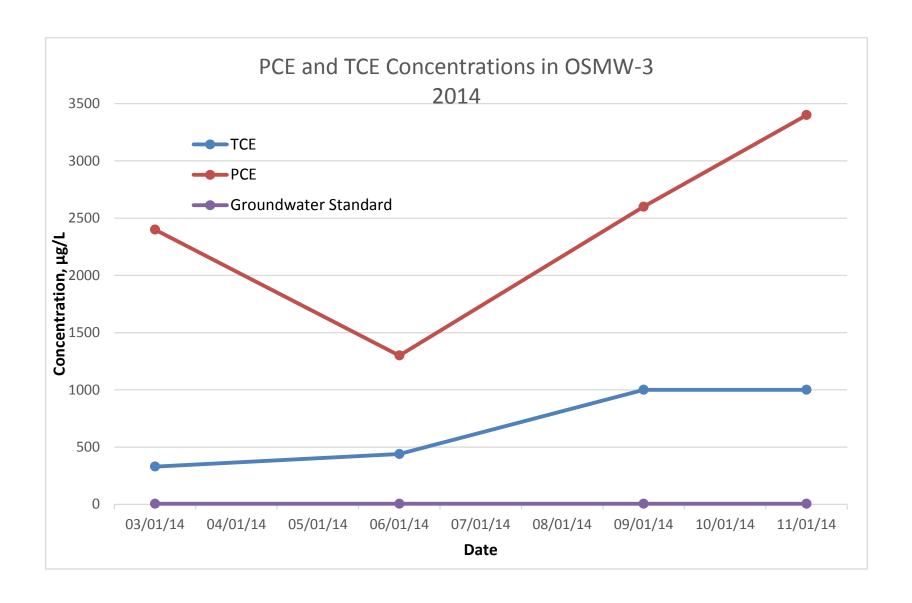
Waverly Avenue (441 & 442 ) - 28012\GZ-23D Treatment & Post-Treatment Monitoring\Table 1\_PRR - Summary of 2009-2014 Groundwater Analytical Results

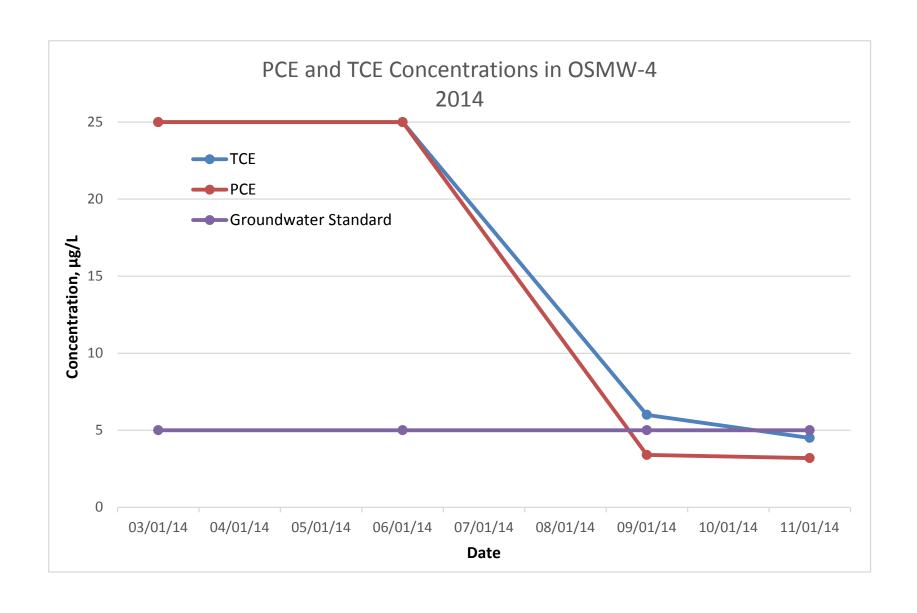




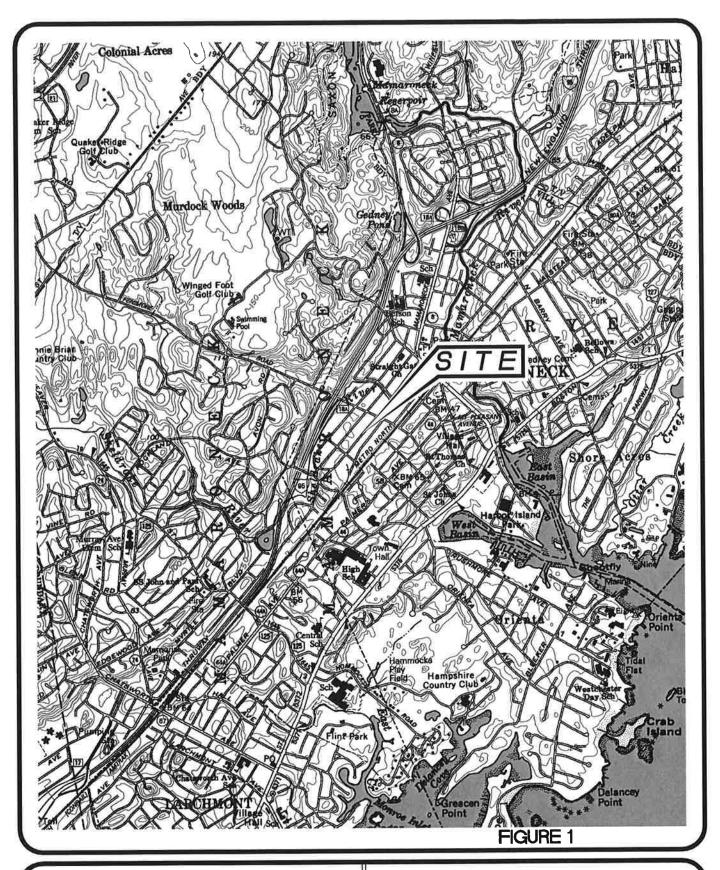














Sterling Environmental Engineering, P.C.

24 Wade Road • Latham, New York 12110

PROJECT SITE MAP SITE# C360108

NEW WAVERLY AVENUE ASSOCIATES, LLC

V/T OF MAMARONECK

WESTCHESTER CO., N.Y.

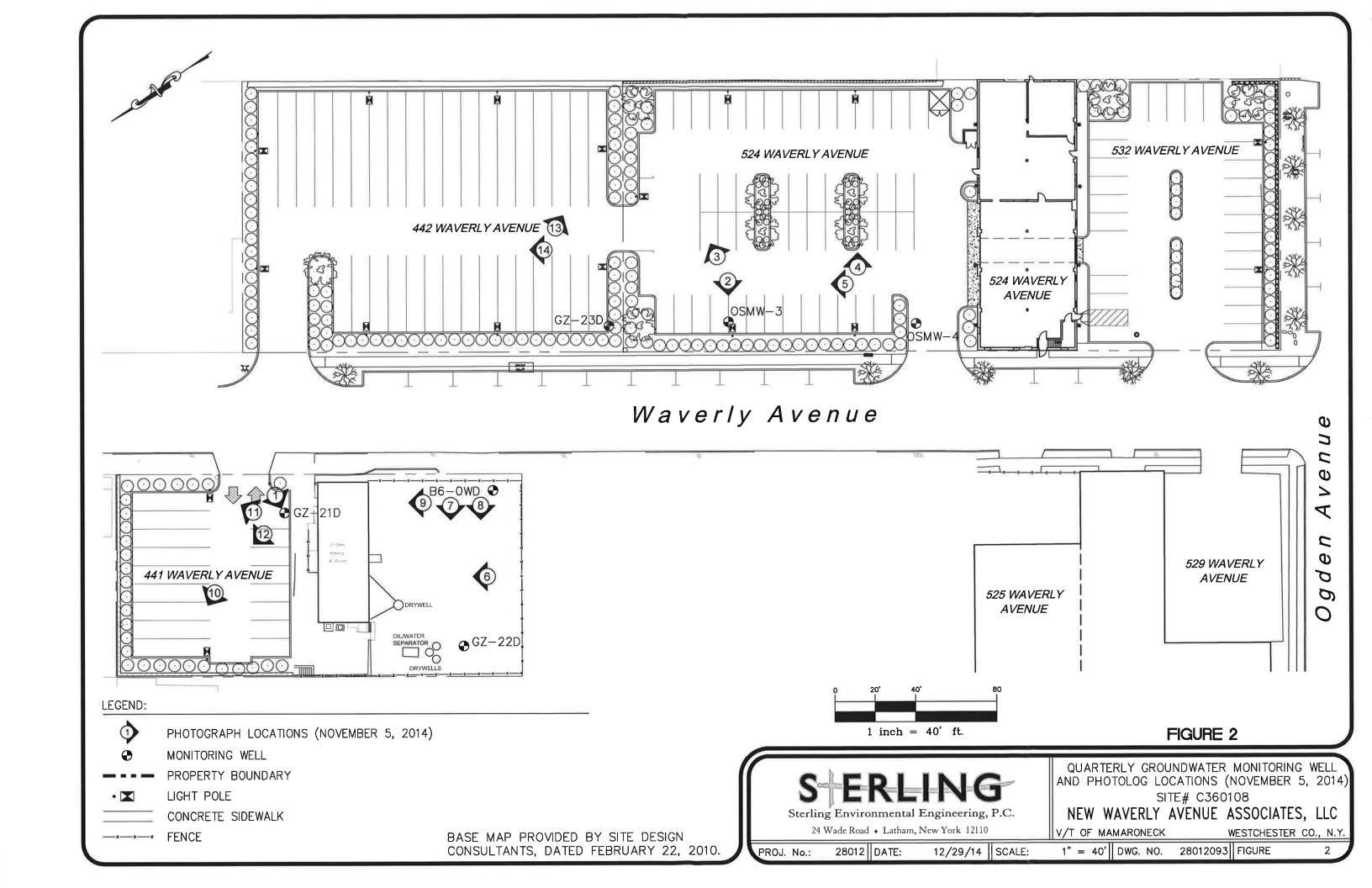
PROJ. No.:

28012 DATE:

9-13-11 | SCALE:

1" = 2000' || DWG. NO.

28012034 FIGURE



## APPENDIX A

# NYSDEC INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM



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



Site	No.	Site Details C360108	Box 1	
Site	Name For	rmer M. Argueso and Co., Inc		ļ
City	Address: 4 /Town: Ma inty:Westch Acreage:	nester		
Rep	orting Perio	od: December 30, 2013 to January 14, 2015		
			YES	NO
1.	Is the inform	mation above correct?	<b>X</b> :	
	If NO, inclu	de handwritten above or on a separate sheet.		
2.	Has some tax map an	or all of the site property been sold, subdivided, merged, or undergone a nendment during this Reporting Period?		X
3.	Has there I (see 6NYC	been any change of use at the site during this Reporting Period RR 375-1.11 (d))?		N
4.	Have any f	ederal, state, and/or local permits (e.g., building, discharge) been issued e property during this Reporting Period?		ð.
	If you ans	wered YES to questions 2 thru 4, include documentation or evidence mentation has been previously submitted with this certification form.		
5.	Is the site	currently undergoing development?		X
			Box 2	,
		au <sup>27</sup>	YES	NO
6.		ent site use consistent with the use(s) listed below? al and Industrial	X	
7.	Are all ICs	/ECs in place and functioning as designed?	X	
	IF T	HE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below a DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	and	
A	Corrective N	fleasures Work Plan must be submitted along with this form to address t	hese iss	ues.
Sig	gnature of O	wner, Remedial Party or Designated Representative Date		

		*	Box 2	A
			YES	NO
	3.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		<b>X</b>
		If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
!	€.	Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	X	
		If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		
		updated administra Exposure Assessment based on the new assumptions.		

#### SITE NO. C360108

#### **Description of Institutional Controls**

The institutional control for the site consists of an Environmental Easement (EE) that includes groundwater use restrictions, land use restrictions, a SMP, and certification reporting. The EE prohibits the use of the property for any means other than the contemplated restricted commercial use of the Site. The EE also restricts groundwater use and requires that any impacted soil encountered during future intrusive activities be managed and disposed according to State regulations. Finally, the EE requires compliance with the SMP, including the periodic reporting covered by this report. The EE for the property that outlines these use restrictions was filed in Westchester County (Document No. 523243327).

Box 3

The potential for vapor intrusion must be evaluated for any buildings developed on the Site property and prior to the leasing of 441 Waverly Avenue for human occupation (as compared to storage) and any potential impacts that are identified must be monitored or mitigated.

Parcel	<u>Owner</u>	Institutional Control
8-25-268.2	New Waverly Avenue As	ssociates, LLC
	·	Ground Water Use Restriction
		Soil Management Plan
		Landuse Restriction
		Monitoring Plan
		Site Management Plan
l		IC/EC Plan

- (1) The controlled property may be used for commercial use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial use as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- (2) All engineering controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All engineering controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposed, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP; and
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

8-25-273

New Waverly Avenue Associates, LLC

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

- (1) The controlled property may be used for commercial use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial use as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- (2) All engineering controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All engineering controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposed, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at

the frequency and in a manner defined in the SMP;

- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP; and
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

8-25-278

New Waverly Avenue Associates, LLC

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

- (1) The controlled property may be used for commercial use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial use as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- (2) All engineering controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All engineering controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposed, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP; and
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

8-25-33

New Waverly Avenue Associates, LLC

Ground Water Use Restriction Soil Management Plan Monitoring Plan Site Management Plan IC/EC Plan

Landuse Restriction

- (1) The controlled property may be used for commercial use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial use as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- (2) All engineering controls must be operated and maintained as specified in the Site Management

Plan (SMP);

- (3) All engineering controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposed, and the user must first notify and obtain written approval to do so from the Department;
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- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP; and
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

Box 4

#### **Description of Engineering Controls**

- asphalt/soil cover system over the site

Parcel
8-25-268.2

- asphalt/soil cover system over the site
8-25-273

- asphalt/soil cover system over the site
8-25-278

- asphalt/soil cover system over the site
8-25-278

Cover System

- asphalt/soil cover system over the site
8-25-33

Cover System

Box	5
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l certify by checking "YES" below that:  a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;  b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.  YES NO  If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institution or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:  (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged si the date that the Control was put in-place, or was last approved by the Department;  (b) nothing has occurred that would impair the ability of such Control, to protect public health at the environment;  (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;  (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and  (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.  YES NO  If THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.  A Corrective Measures Work Plan must be submitted along with this form to address these Issues.	a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification; b) to the best of my knowledge and belief, the work and conclusions described in this certification in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.  YES Now If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institution or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:  (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged the date that the Control was put in-place, or was last approved by the Department;  (b) nothing has occurred that would impair the ability of such Control, to protect public healthe environment;  (c) access to the site will continue to be provided to the Department, to evaluate the remedincluding access to evaluate the continued maintenance of this Control;  (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and  (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.	fication IO Iutiona
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	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	
Signature of Owner, Remedial Party or Designated Representative Date	A Corrective Measures Work Plan must be submitted along with this form to address these issue	s.
Signature of Owner, Remedial Party or Designated Representative Date		
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#### IC CERTIFICATIONS SITE NO. C360108

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.

Thomas M.U. Jr. at New Naver Arc Assoc, LLC print name print business address

am certifying as Owner. (Owner or Remedial Party)

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

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

#### IC/EC CERTIFICATIONS

Box 7

#### **Signature**

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

Sterling Environmental Engineering, P.C. Mark P. Millspaugh, P.E. at 24 Wade Road, Latham, NY 12110 print name print business address

am certifying as a for the

Remedial Party)

Signature of , for the Owner or Remedial Party,

Stamp (Required for PE)

Rendering Certification

### **APPENDIX B**

# SITE-WIDE INSPECTION AND ASPHALT AND SOIL COVER SYSTEM INSPECTION FORMS AND PHOTOGRAPHS

#### SITE-WIDE INSPECTION FORM SITE #C360108 441/442 WAVERLY AVENUE

Date: November 5, 2014

Inspected By: Cody Sargood (Sterling Environmental Engineering, P.C.)

Site Property Item	Condition		Remarks
-	Acceptable	Not Acceptable	
1. Asphalt Cover	X		
2. Light Pole Islands / Soil Cover	X		
3. Stormwater Catch Basins	X		
4. Entrance/Exit Ramps	X		
5. Retaining Walls	X		
6. Fences and Gates	X		

28012\GZ-23D Treatment & Post-Treatment Monitoring\2014 4th Quarter Site Inspection

## 441/442 WAVERLY AVENUE, MAMARONECK, NEW YORK SITE #C360108

#### ASPHALT AND SOIL COVER SYSTEM INSPECTION FORM

Inspect	tor: C	Cody Sargood (Sterling Environmental Engineering, P.C)	Date: November 5, 2014		
1.	Describe cover system condition and list needed repairs (note location and photograph*).				
	a.	Asphalt – Inspect for cracks, potholes, and other penetrations:			
		Asphalt is in excellent condition. Concrete surface at 441 Waverly Avenue was observed with n potholes or penetrations observed.	ninor cracks but still acceptable. No		
	b.	Curbed lighting areas, retaining walls, and other miscellaneous areas – Inspect for signs of erosi	ion		
		Curbed lighting areas and retaining walls are in excellent condition. No obvious signs of erosion	n.		
2.	Indicate corrective actions to be taken for any and all above noted deficiencies. Note who completed the repair and date complete No corrective actions or repairs needed due to no significant deficiencies observed.				
	-				

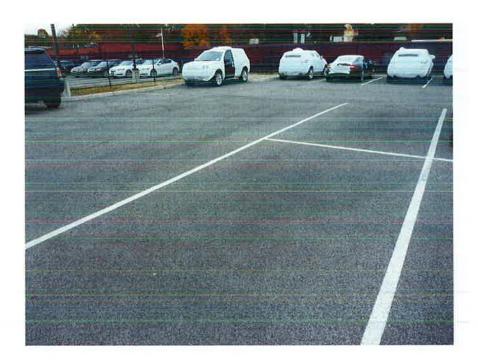
\*Attach photographs for cover systems inspection to this report with a description of each photograph taken and date.



Photograph 1: Surrounding asphalt of GZ-21D in excellent condition.



Photograph 2: Surrounding asphalt of OSMW-3 in excellent condition.



Photograph 3: Asphalt cover in parking lot of 524 Waverly Avenue in excellent condition.



Photograph 4: Curbed lighting areas and soil cover at 524 Waverly Avenue in good condition.



Photograph 5: Asphalt and stormwater catch basin in excellent condition at 524 Waverly Avenue.



Photograph 6: Minor cracks observed in concrete on western portion of 441 Waverly Avenue.



Photograph 7: More minor cracks observed in concrete surface of 441 Waverly Avenue.



Photograph 8: Additional minor cracks observed in concrete surface of 441 Waverly Avenue.



Photograph 9: Additional minor cracks observed in concrete surface of 441 Waverly Avenue.



Photograph 10: Asphalt surface in parking lot of 441 Waverly Avenue in excellent condition.



Photograph 11: Asphalt surface, gate, entrance/exit ramp at 441 Waverly Avenue in excellent condition.



Photograph 12: Stormwater catch basin at 441 Waverly Avenue in excellent condition.



Photograph 13: Asphalt surface, light pole areas, curbs, and soil cover are in good condition at 442 Waverly Avenue.



Photograph 14: Stormwater catch basin at 442 Waverly Avenue in excellent condition.