# Periodic Review Report

Former American Linen Supply Company Facility 822 Seneca Street, Buffalo, New York BCP Site No. C915241

May 24, 2022, to May 24 2023 Certifying Period

June 2023 Rev. July 2023 Prepared For:

B0126-023-001

Mill Race Commons, LLC



Prepared By:



2558 Hamburg Turnpike, Buffalo, New York | phone: (716) 856-0635 | fax: (716) 856-0583

# PERIODIC REVIEW REPORT for the FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY (SITE NO. C915241)

#### 822 SENECA STREET BUFFALO, NEW YORK

June 2023 (May 24, 2022 to May 24, 2023 reporting period) Revised July 2023 B0126-023-001

Prepared for:

#### Mill Race Commons, LLC

726 Exchange Street, Suite 825 Buffalo, New York 14210

Prepared By:



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#### PERIODIC REVIEW REPORT

# Former American Linen Supply Company Facility BCP Site No. C915241

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#### PERIODIC REVIEW REPORT

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Appendix B Site Photograph Log

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B0126-023-001 ii

#### 1.0 Introduction

Benchmark Civil/Environmental Engineering and Geology, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) on behalf of Mill Race Commons, LLC to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C915241 (i.e. the "Site"), located in the City of Buffalo, Erie County, New York (see Figure 1).

This PRR and the associated Institutional and Engineering Control (IC/EC) Certification Forms (see Appendix A) have been prepared for the May 24, 2022 – May 24, 2023 reporting period in accordance with the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 1).

#### 1.1 Site Background

The Site, which is the location of the Former American Linen Supply Company Facility located at 822 Seneca Street in the City of Buffalo, Erie County, New York, is identified as Section 122.27, Block 1, and Lot 4 on the City of Buffalo Tax Map. The Site is comprised of one (1) parcel totaling approximately 2.9 acres. The Site is bordered by Seymour Street and residential properties to the north; Seneca Street, a residential property, and a vacant former industrial property which has recently been redeveloped with a mixed-use commercial/residential building to the south; Lord Street and commercial/industrial properties to the east; and vacant commercial and residential properties to the west.

Previous reports indicate that the Site was improved with a two-story industrial building utilized as a book binding and printing facility from 1910 to 1978. In 1978, AmeriPride purchased the Site and utilized the first floor and portions of the basement of the existing building as a uniform dry cleaning and industrial laundry facility, formerly known as the American Linen Supply Company. Tetrachloroethylene (PCE) was used as part of the drying cleaning process between 1978 and 1985. The second floor of the building and portions of the basement were utilized by Thorner Sydney Press until 1997.

After dry cleaning and laundry operations ceased in 2004, a temporary vehicle maintenance shop utilized the Site until July 2005. The Site has been vacant since late July 2005, and the vacant industrial building was demolished by AmeriPride between 2011 and 2012. In 2014, Mill Race Commons, LLC purchased the vacant Site. The Site currently



consists of greenspace (soil cover system) within the eastern portion and an asphalt paved parking lot with landscaped areas in the western portion.

#### 1.2 Compliance

No violations of the Site Management Plan (SMP) or associated Institutional and Engineering Control (IC/EC) and monitoring requirements were identified during the subject monitoring period.

It should be noted, a small patch of the soil cover and grass located in the central portion of the of the eastern half of the Site required repair and reseeding during the reporting period. Approximately 2 cubic yards (cy) of topsoil previously approved for import by the Department and used on-Site was placed in the area for cover repair activities on May, 21, 2023 to maintain compliance with DER-10 regulations (see Figure 2 and photo log).



#### 2.0 SITE OVERVIEW

On May 17, 2011, AmeriPride Services Inc. (AmeriPride) entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC to investigate and remediate the contaminated Site. The Site was investigated and remediated under the NYSDEC BCP and in accordance with the approved May 2011 Remedial Investigation Work Plan (RIWP) and the approved May 2014 Alternatives Analysis Report and Remedial Action Work Plan (AAR/RAWP) (Refs. 2 & 3). The Site received a Certificate of Completion (COC) from the NYSDEC in December 2014.

#### 2.1 Existing Conditions

During the Site visit on April 10, 2023, the Site vegetated soil and hardscape cover system was inspected and observed. No evidence of erosion, cracking or breaches was observed on the hardscape covered areas, and a good stand of vegetation was present across the soil-covered areas of the property.

A small patch of soil cover/grass near the center of the lawn area was noted as barren. As such, approximately 2 cubic yards of topsoil tested for previous cover system modifications and approved for import by the Department was placed in the area and reseeded on May 21, 2023.

The Site was reinspected on June 8, 2023. Although seed has not yet germinated due to dry weather conditions, it was visibly present in the freshly-placed topsoil. Accordingly, the site was determined to be in compliance with the IC/EC requirements. Photo verification is provided in Appendix B.

#### 2.1.1 Site Cover System Update

During the reporting period it was noted that the Site Plan (Figure 2) mistakenly identified some areas within the asphalt lot as landscaped. These areas were hatched on construction drawings using a hatch pattern similar to that used for the landscape hatch, but in fact were meant to convey areas within the paved lot that were striped and excluded from parking (e.g., setbacks from fencing and at lot corners). Landscaping comprised of a mix of low-lying shrubbery and trees in mulched beds remains along the northern portion of the parking area and northern property boundary. Figure 2 and the Site photo log provided in Appendix B depict existing conditions.



#### 2.2 Remedial Program Chronology

A Phase I Environmental Site Assessment (ESA), Initial Phase II Subsurface Investigation, Supplemental Phase II, and site-wide groundwater monitoring were completed between 2004 and 2009, prior to entry into the BCP in 2011. Findings of the previous investigations were used to support the approved May 2011 RIWP.

#### 2.2.1 Remedial Investigation

From November 2011 through December 2012, a Remedial Investigation (RI) was performed to characterize the nature and extent of soil, groundwater, and soil vapor contamination at the Site. Remedial investigation sample locations are shown on Figure 2. RI activities included:

- Soil Investigation borings, test pits, and surface samples collected from the former parking lot area near the former underground storage tanks, basement sub-slab soil, and beneath slab-on-grade in the former dry-cleaning operation area.
- Groundwater Investigation groundwater samples were collected from discrete locations and from permanent monitoring wells located both on and off-site.
- Soil Vapor Investigation Soil vapor samples were collected from four locations across the Site.

Environmental investigations of the Site identified the presence of chlorinated volatile organic compounds (cVOCs) including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride (VC) in soil and groundwater; polycyclic aromatic hydrocarbons (PAHs) and heavy metals including arsenic, copper, lead and mercury in historic fill; and petroleum-related VOCs in soil vapor that required remediation. The SMP identifies the five cVOCs as "Target cVOCs," the presence of which is consistent with the former dry-cleaning operations at the Site.

#### 2.2.2 Remedial Action

Remedial activities were reportedly performed across the Site from 2012 through 2014, in accordance with the approved September 2013 Revised Interim Remedial Measures



Work Plan and August 2014 Revised Alternatives Analysis Report and Remedial Action Work Plan (Ref. 3). The Interim Remedial Measures and Remedial Actions included:

- Excavation and off-site disposal of cVOC impacted soil/fill exceeding Commercial/Industrial SCOs in the former dry cleaning area and impacted "oily" material in the southwest corner of the basement beneath the floor slab.
- Removal of former industrial Site features including basement cisterns, underground storage tanks (USTs), and a sewer vault.
- Construction and maintenance of a soil cover system consisting of at least one-foot of NYSDEC-approved clean cover material over a demarcation layer, in accordance with 6NYCRR Part 375 and NYSDEC DER-10 guidelines.
- Execution and recording of an Environmental Easement (EE) to restrict land use and prevent future exposure to any contamination remaining at the Site.
- Development and implementation of a Site Management Plan (SMP) for long-term management of remaining contamination as required by the EE, which includes: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.
- Periodic certification of the institutional and engineering controls listed above.

After completion of remedial activities, remaining contamination was identified in the subsurface at the Site. Therefore, an SMP (Ref. 4), was prepared on behalf of AmeriPride, in accordance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 1). Periodic groundwater monitoring is a requirement of the SMP until the NYSDEC determines that it can be discontinued.



#### 3.0 SITE MANAGEMENT PLAN

An SMP was prepared for the Site and approved by the Department in October 2014 (Ref. 4). The SMP was updated and submitted in November 2021 to reflect NYSDEC-approved cover system changes that were completed earlier that year as well as changes to the monitoring program. The SMP includes Institutional and Engineering Control (IC/EC) Requirements, a Monitoring Plan, and an Operation and Maintenance (OM&M) Plan. A brief description of the SMP components is presented below.

#### 3.1 IC/EC Compliance

Because remaining contaminated soil/fill and groundwater exists at the Site, Institutional Controls and Engineering Controls (IC/ECs) are required to protect human health and the environment.

#### 3.1.1 Institutional Controls (ICs) Requirements

The Site is subject to the following ICs:

- Compliance with the EE;
- The controlled property may only be used for commercial and/or industrial use as defined by the NYSDEC;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie County Department of Health;
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management and the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- All future activities on the property that will disturb the remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;



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

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

#### 3.1.2 Engineering Controls (ECs) Requirements

A cover system was installed at the site to prevent exposure to remaining contamination above the commercial use and protection of groundwater soil cleanup objectives (SCOs) in soil/fill.

The cover system is comprised of a minimum of 12 inches of clean soil, asphalt pavement or concrete cover. Specifically, the cover system consists of the following:

- Pavement Area the majority of the areas that were formerly parking lots and driveways associated with the former dry cleaner are presently covered with asphalt and/or concrete. Landscape beds comprised of 12 inches of soils underlain by demarcation layer and vegetated with a mix of low-lying shrubbery and trees in mulched beds are present on the northern portion of this area.
- Former Building Slab Area the area that was the slab-on-grade portion of the former building as well as a former driveway area leading to Seneca Street are improved with a demarcation layer consisting of geotextile fabric placed over remaining historic fill and native soils above which is a minimum of 12 inches of clean soil. The area was seeded for aesthetic purposes and erosion control.
- Former Building Basement Area the area that was the location of the basement of the former Site building. The basement was backfilled with up to 10 feet of clean soil. The area was seeded for aesthetic purposes and erosion control.



#### 3.1.3 Site Inspection & IC/EC Compliance

On April 10, 2023, Benchmark's Certifying Professional Engineer performed a Site visit and assessment. During this visit, the Site covered by this PRR was found to be substantially compliant with the IC/EC requirements, although a minor repair was required to reestablish the lawn in a small area near the center of the vegetated lot. This work was undertaken in May of 2023 and the site was reinspected by Benchmark's Certifying Professional Engineer on June 8, 2023, at which time the site was fully compliant with IC/EC requirements. Appendix A includes the completed PE-certified IC/EC Form for the Site. Appendix B includes a photographic log of the Site at the time of the inspection.

#### 3.2 Monitoring Plan Compliance

The Monitoring Plan presented in the SMP describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected site media presented below. The Monitoring Plan consists of three (3) major components, including cover system monitoring, groundwater monitoring, and soil vapor/indoor air monitoring. Monitoring programs are summarized in Table 1 below and described in the following Sections.

Table 1: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Cover System	Annual Inspection	N/A	Visual only
Groundwater	Semi-annual for 2 years (completed November 21, 2016); annual events conducted in 2017 and 2018, 2020, 2021, and 2023**	Groundwater	Target cVOCs (PCE, TCE, cis-1,2-DCE, VC)
Soil Vapor/Indoor Air	If two (2) consecutive groundwater monitoring events indicate increase in Target CVOC concentrations at MW-102R, then soil vapor and indoor air sampling may be warranted at the 798 Seneca Street residence and will be discussed with the NYSDEC and NYSDOH	Soil Vapor & Indoor Air	Target cVOCs (PCE, TCE, cis-1,2-DCE, VC)

<sup>\*</sup> The frequency of events will be conducted as specified in the SMP until otherwise approved by NYSDEC and NYSDOH.



<sup>\*\*</sup> The 2023 sampling event was conducted on January 12, 2023, for this May 24, 2022 to May 24, 2023 reporting period.

#### 3.2.1 Cover System Monitoring

In accordance with the SMP, the cover system must be maintained at all times, and must be replaced in the event it is breached as described in the Excavation Work Plan in Appendix B of the SMP (Ref. 4). The cover will be inspected on an annual basis. If frequent areas of distress are noted, they will be repaired based on the following conditions.

- Asphalt Cover Monitoring A brief summary of the key maintenance concerns and the respective corrective actions is provided below:
  - Half-inch or greater cracks or pot holes exposing the sub-base will be sealed or repaired to restore the asphalt cover.
  - Vegetation will be removed and the associated impact, hole, or crack will be sealed or repaired to restore the asphalt cover.
- <u>Vegetative Soil Cover Monitoring</u> A brief summary of the key maintenance concerns and the respective corrective actions is provided below:
  - Areas where erosion problems (i.e., rills or gullies) are observed will be repaired by re-grading the localized area, adding the required fill material and/or topsoil, and reseeding/replanting as necessary.
  - If burrowing animals are observed breaching the soil cover, as evidenced by exposed fill material, they will be eradicated by a licensed exterminator.

Based on the Site reconnaissance performed on April 10, 2023, the asphalt and vegetative soil cover system at the Site was substantially compliant with the IC/EC requirements; however, a small portion of the soil cover area within the eastern portion of the Site was barren of grass cover and some minor soil loss. As such, approximately 2 cubic yards of topsoil which was previously approved by the Department and used on-Site for the existing cover material and which had remained in storage by the Site owner was imported on May 21, 2023. The soil was spread within the barren area and seeded. The Site was reinspected on June 8, 2023 to verify the repair. The Site was determined to be fully compliant with the IC/EC requirements. Phot verification is provided in Appendix B.

The newly constructed improvements to the cover system, described in the 2021 PRR, have significantly improved the condition of the asphalt and impervious cover at the Site which existed prior to that time, and remain well-maintained.



#### 3.2.2 Groundwater Monitoring

Groundwater monitoring was performed on a semi-annual basis for a period of two years post-COC, with the final semi-annual event completed on November 21, 2016. Annual monitoring events were conducted on July 11, 2017 and December 14, 2018. The SMP required that groundwater sampled from all nine (9) wells be analyzed for Target cVOCs including PCE, TCE, cis-1,2-DCE, and VC. The network of monitoring wells has been installed to monitor both up-gradient and down-gradient groundwater conditions at the Site. Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance. The monitoring well network is summarized in Table 2 below.

Well ID	Location	Casing Diameter	Screen Depth (fbgs)	Analytes Tested
MW-101*	On-Site	2 inch	13.2-18.2	
MW-102R	On-Site	2 inch	6.5-11.5	
MW-103	On-Site	2 inch	7.3-12.3	
MW-104	On-Site	2 inch	8.1-13.1	
MW-105	On-Site	2 inch	9.2-14.2	Target cVOCs
MW-106	On-Site	2 inch	9.4-14.4	
MW-301	Off-Site	2 inch	13.5-18.5	
MW-302	Off-Site	2 inch	12.8-17.5	
MW-303	Off-Site	2 inch	11.1-15.8	

Table 2: Monitoring Well Network Summary

Based upon overall improvement in groundwater quality and indication that target cVOCs are not migrating offsite, the March 27, 2019 report requested permission to limit the number of wells sampled to the three downgradient wells (i.e., MW-102R, MW-105, and MW-106), and to reduce the frequency of monitoring to once every 3 years. The NYSDEC issued correspondence on April 23, 2019 which approved the requested reduction in well sampling locations but required continued annual sampling at those locations.

During this reporting period, samples were collected from MW-102R, MW-105, and MW-106 by Haley & Aldrich of New York (Haley & Aldrich) on January 12, 2023. The groundwater monitoring results are presented in the "2022-2023 Groundwater Monitoring Summary Report" completed by Haley & Aldrich, dated April 15, 2023 and revised July 6, 2023 (see Appendix C).

Cis-1,2-dichloroethylene (cis-1,2-DCE) was detected at a concentration of 2.7  $\mu$ g/L and vinyl chloride (VC) was detected at a concentration of 7  $\mu$ g/L at MW-102R. The



<sup>\*</sup> MW-101 was decommissioned in June 2020.

NYSDEC groundwater standards and comparison criterion are 5  $\mu$ g/L and 2  $\mu$ g/L respectively. The slight detections of cis-1,2-DCE and VC identified at MW-102R in the January 12, 2023 samples are generally consistent with prior results and may reflect some seasonal variability. Note that the subject Groundwater Monitoring Summary Report addresses a question concerning the need for redevelopment of the wells, which Haley & Aldrich concludes is not necessary.

During the subject reporting period groundwater monitoring wells MW-102R, MW-105, and MW-106 were sounded and sampled by Haley & Aldrich in accordance with NYSDEC requirements and the Department-approved SMP. The Groundwater Monitoring Summary Report includes trendlines and data summaries for the sampled wells; the data show that the upgradient well (MW-102R) analytical results remain below the NYSDEC groundwater quality standards except for VC which is slightly above its respective standard. The report concludes that the source wells (MW-105 and MW-106) analytical results continue to be above the NYSDEC criteria for cis-1,2-DCE and/or VC; however, concentrations of CVOCs in source area wells MW-105 and MW-106 are consistent with the previous sampling events and have remained consistent or decreasing since 2013.

#### 3.2.3 Soil Vapor/Air Monitoring

Per the SMP, potential evaluation of indoor air and sub-slab vapor in the adjacent residence at 798 Seneca Street may be considered in the future if the property continues to be used as a residence and concentrations of cVOCs in MW-102R indicate an increasing trend.

Based on the most recent groundwater monitoring results, summarized in Appendix C, further evaluation of indoor air and sub-slab vapor in the adjacent residence at 798 Seneca Street does not appear to be required at this time.

#### 3.3 O&M Compliance

The Site remedy does not rely on any mechanical systems (e.g., sub-slab depressurization systems, groundwater pump and treat, or air sparge/soil vapor extraction systems) to protect public health and the environment, therefore an Operation and Maintenance (O&M) Plan is not required for the Site.



#### 4.0 CONCLUSIONS

Based on our April 10, 2023 site reconnaissance visit, the January 2023 groundwater monitoring event results, and cover system repairs completed on May 21, 2023, our conclusions are as follows:

- The Site covered by this PRR is fully compliant with the IC/EC requirements.
- Indoor air sampling at the 798 Seneca Street residence does not appear to be required at this time.
- Groundwater results are generally consistent with prior sample results as of the January 2023 sampling event.
- No groundwater use, changes of use or excavations occurred during the Certifying Period.



#### 5.0 DECLARATION/LIMITATION

This report has been prepared for the exclusive use of Mill Race Commons, LLC. The contents of this report are limited to information available at the time of the site inspection. Data provided by others as referenced herein is assumed to be accurate and reliable. The findings herein may be relied upon only at the discretion of Mill Race Commons, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Civil/Environmental Engineering and Geology, PLLC.



#### 6.0 REFERENCES

- 1. New York State Department of Environmental Conservation. DER-10/Technical Guidance for Site Investigation and Remediation. May 2010.
- 2. Haley & Aldrich of New York. Report on Remedial Investigations and Interim Remedial Measure Completion for the Former American Linen Supply Company Facility, Buffalo, New York, BCP Site No. C915241. May 2013.
- 3. Haley & Aldrich of New York. Revised Alternatives Analysis Report & Remedial Action Work Plan for the Former American Linen Supply Company Facility, Buffalo, New York, BCP Site No. C915241. May 2014.
- 4. Haley & Aldrich of New York. Site Management Plan for the Former American Linen Supply Company Facility, Buffalo, New York, BCP Site No. C915241. October 2014. Revised by Mill Race Commons, LLC October 2021.
- 5. New York State Department of Health (NYSDOH). Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006.

16

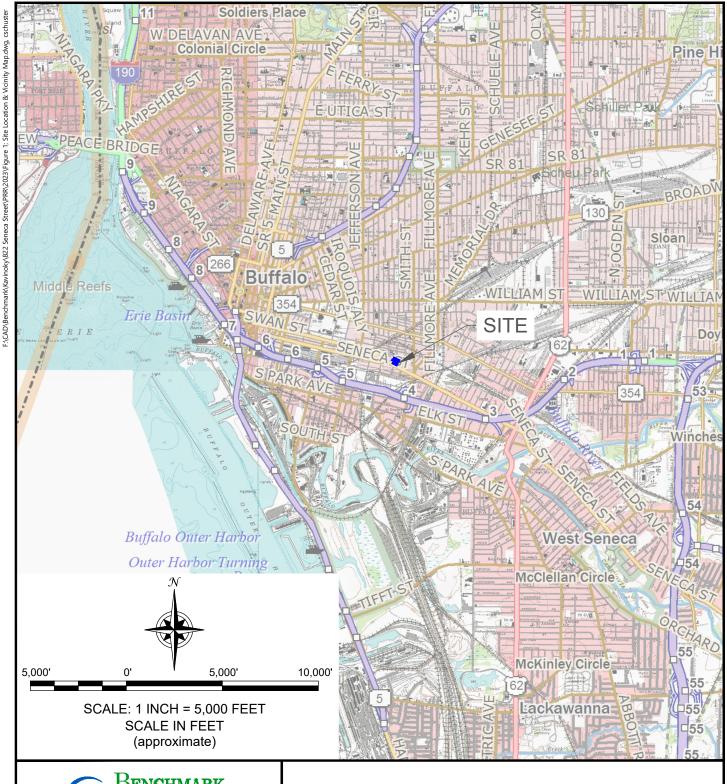


B0126-023-001

# **FIGURES**



#### FIGURE 1





2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0126-023-001

DATE: JUNE 2023 DRAFTED BY: CMS

#### SITE LOCATION & VICINITY MAP

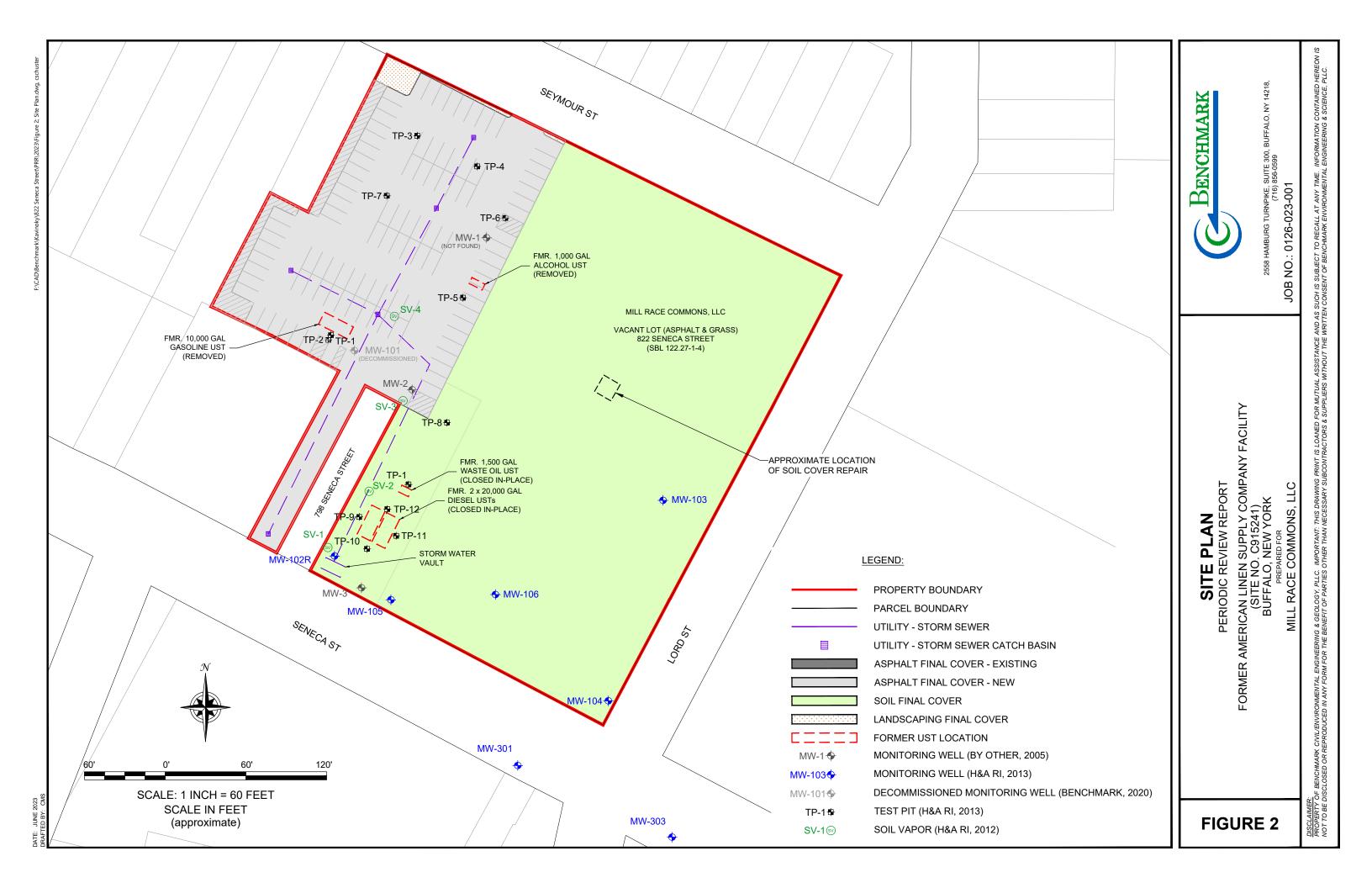
PERIODIC REVIEW REPORT

FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY (SITE NO. C915241) BÙFFALO, NEW YOŔK

PREPARED FOR

MILL RACE COMMONS, LLC

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# **APPENDIX A**

**IC-EC CERTIFICATION FORM** 





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



Sit	e No.	C915241	Site Details		Box 1	
Sit	e Name Fo	ormer American Line	n Supply Company Facility			
Cit Co	e Address: y/Town: Bu unty:Erie e Acreage:		Zip Code: 14210			
Re	porting Peri	od: May 24, 2022 to N	May 24, 2023			
					YES	NO
1.	Is the infor	mation above correct?	?			
	If NO, inclu	ude handwritten above	e or on a separate sheet.			
2.		or all of the site prope mendment during this	erty been sold, subdivided, merge Reporting Period?	ed, or undergone a		
3.		been any change of u CRR 375-1.11(d))?	se at the site during this Reporti	ng Period		
4.		federal, state, and/or lee property during this	ocal permits (e.g., building, disch Reporting Period?	narge) been issued		
			ions 2 thru 4, include documer previously submitted with this			
5.	Is the site	currently undergoing of	development?			
					Box 2	
					YES	NO
6.		ent site use consistent al and Industrial	t with the use(s) listed below?			
7.	Are all ICs	in place and functioni	ing as designed?			
	IFT		IER QUESTION 6 OR 7 IS NO, si THE REST OF THIS FORM. Ot	_	and	
Α (	Corrective N	leasures Work Plan m	nust be submitted along with thi	is form to address t	nese iss	ues.
Sic	nature of Ov	vner, Remedial Party o	r Designated Representative	Date		

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

SITE NO. C915241 Box 3

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

<u>Parcel</u> <u>Owner</u>

122.27-1-4 Mill Race Commons, LLC

Institutional Control

Soil Management Plan Monitoring Plan Site Management Plan

Ground Water Use Restriction

Landuse Restriction IC/EC Plan

1. Prohibition of use of groundwater.

- 2. Landuse Restriction for Commercial or Industrial use.
- 3. Soil Management or Excavation Work Plan for any future intrusive work.
- 4. Soil Vapor Intrusion Evaluation for any proposed structures.
- 5. Monitoring Plan for Cover System and Groundwater. Soil Vapor/Indoor monitoring at 798 Seneca Street property, if warranted.

Box 4

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

Parcel <u>Engineering Control</u>

122.27-1-4

Cover System

Cover System is comprised of a minimum 12 inches of clean soil, asphalt pavement, or concrete cover.

Box	5
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	Periodic Review Report (PRR) Certification Statements
1.	I certify by checking "YES" below that:
	a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;
	b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted
	engineering practices; and the information presented is accurate and compete.  YES NO
2.	For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:
	(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 Department;
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.
	YES NO
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.
	A Corrective Measures Work Plan must be submitted along with this form to address these issues.
	Signature of Owner, Remedial Party or Designated Representative Date

#### IC CERTIFICATIONS SITE NO. C915241

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.

Gary Kriner	Mill Race Commons, LLC, 726 Exchange Stre	et, Suite 412, Buffalo NY 14210
print name	print business address	,
am certifying as Owner's Repr	esentative	(Owner or Remedial Party)
for the Site named in the Site Details S	Section of this form.	1 1
Say Mine	1 REPSURER	6/12/23
Signature of Owner, Remedial Party, or Rendering Certification	or Designated Representative	Date

#### **EC CERTIFICATIONS**

Box 7

#### **Qualified Environmental Professional 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.

Thomas Forbes, P.E. at	Benchmark Civil/Environmental Engineering & Geology., PLLC 2558 Hamburg Tpk, Buffalo, NY 14218
print name	print business address
am certifying as a Qualified Environmental l	Professional for the Owner
	(Owner or Remedial Party)

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Date

### **APPENDIX B**

SITE PHOTOGRAPH LOG





Client Name:	Site Location:	Project No.:
Mill Race Commons, LLC	822 Seneca Street, Buffalo, NY	B0126-023-001

Photo No. Date
1 04/10/23

**Direction Photo Taken:** 

Description:

Barren soil area prior to cover system repair activities.



Photo No.	Date	
2	04/10/23	
Direction Photo SE	o Taken:	
Description: Soil Cover (look Street)	ing toward Lord	



Client Name:Site Location:Project No.:Mill Race Commons, LLC822 Seneca Street, Buffalo, NYB0126-023-001

Photo No. Date 04/10/23

**Direction Photo Taken:** SW

Description:

Asphalt Cover (looking toward Seneca Street)

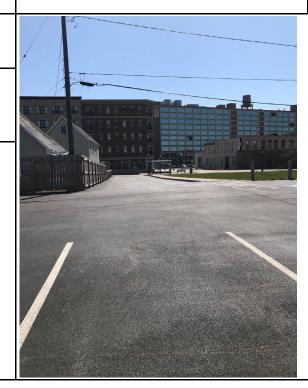


Photo No. Date
4 04/10/23

Direction Photo Taken:
S

**Description:** 

Soil Cover (looking toward Seneca Street and Lord Street)





Client Name:	Site Location:	Project No.:
Mill Race Commons, LLC	822 Seneca Street, Buffalo, NY	B0126-023-001

Photo No. Date 04/10/23

**Direction Photo Taken:** W-NW

Description:

Soil and Asphalt Cover



Photo No.	Date
6	04/10/23

**Direction Photo Taken:** 

S

**Description:** 

Soil Cover (looking toward Seneca Street and Lord Street)





Client Name:Site Location:Project No.:Mill Race Commons, LLC822 Seneca Street, Buffalo, NYB0126-023-001

Photo No. Date 7 04/10/23

**Direction Photo Taken:** SW

**Description:**Asphalt Cover

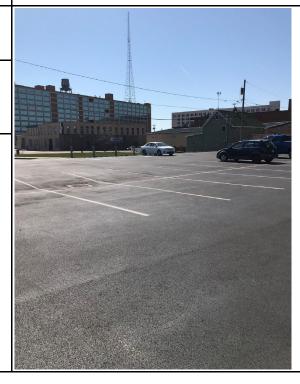


Photo No.	Date
_	
8	04/10/23
Direction Photo Taken:	
N-NE	

Description:

Asphalt Cover (looking toward Seymour Street)





Client Name:

Mill Race Commons, LLC

Site Location:

822 Seneca Street, Buffalo, NY

Project No.: B0126-023-001

Photo No.

Date

9

04/10/23

**Direction Photo Taken:** 

W-NW

**Description:** 

Landscaping along northern property boundary



Photo No. Date

10 06/08/23

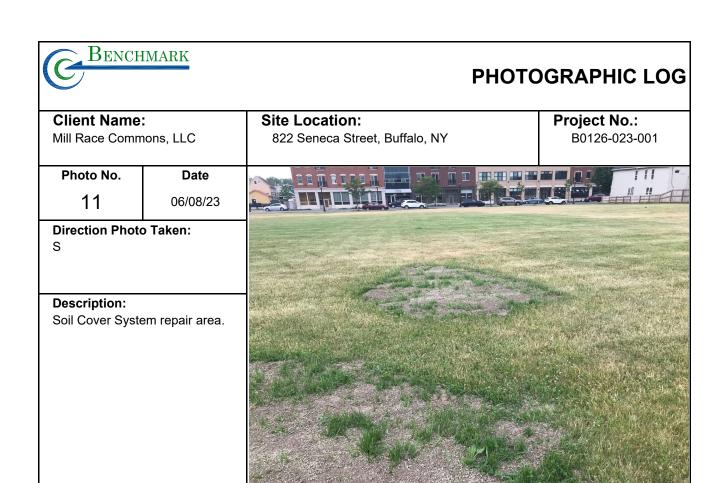
**Direction Photo Taken:** 

S

**Description:** 

Soil Cover System repair area.





### **APPENDIX C**

2022-2023 GROUNDWATER MONITORING SUMMARY REPORT





HALEY & ALDRICH OF NEW YORK 200 Town Centre Drive Suite 2 Rochester, NY 14623 585.359.9000

15 April 2023

Revised: 6 July 2023 File No. 127836-010

Aramark Union & Career Apparel, LLC 8130 S. Meridian Street, Suite 1a Indianapolis, Indiana 46217

Attention: Rebecca Armbruster

Director, Environmental Compliance

Subject: 2022-2023 Groundwater Monitoring Summary Report

Former American Linen Supply Co. Facility

BCP Site Number: C915241

822 Seneca Street Buffalo, New York

#### Dear Ms. Armbruster:

Haley & Aldrich of New York (Haley & Aldrich) is submitting this 2022-2023 Groundwater Monitoring Summary Report summarizing the results from the annual groundwater sampling event conducted in January 2023 at the Former American Linen Supply Co. facility site located at 822 Seneca Avenue, in Buffalo, New York (the "Site"). The Site was investigated and remediated under the New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP). The Site received a Certificate of Completion (COC) from the NYSDEC in December 2014. The groundwater monitoring described herein was completed in accordance with the updated Former American Linen Supply Co. Facility Site Management Plan, dated November 2021 (SMP), and the site access agreement dated 13 January 2014 between AmeriPride Services, Inc. (now Aramark Uniform & Career Apparel, LLC, the Responsible Party under the BCP, and the previous property owner) and Mill Race Commons, LLC (the current property owner as of 2014) and the revised sampling scope approved by the NYSDEC via letter dated 23 April 2019 (hereinafter referred to as the "Revised Sampling Scope"). The Revised Sampling Scope limits future annual groundwater monitoring at the Site to wells MW-102R, MW-105, and MW-106.

Prior to remediation, the Site was most recently operated as an industrial laundry. Dry cleaning ceased at the property in 1985. Operation of the laundry ceased in 2005. Remedial investigations and subsequent remedial actions were undertaken between 2011 and 2014. Contaminants of concern identified included dry-cleaning solvent-related compounds in soil, groundwater, and soil vapor, specifically the following target chlorinated volatile organic compounds (Target CVOCs): tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC). Annual groundwater monitoring is currently a requirement of the SMP.

Aramark Union & Career Apparel, LLC 15 April 2023 Revised: 6 July 2023 Page 2

This report presents the annual groundwater monitoring results related to samples collected in January 2023 and provides an assessment of the results in accordance with the annual reporting requirements in Section 3.3 of the SMP and the Revised Sampling Scope approved by the NYSDEC.

### **Groundwater Sampling Events and Methodology**

Groundwater sampling was performed by Haley & Aldrich on behalf of Aramark Uniform & Career Apparel, LLC (Aramark) on 12 January 2023, in accordance with Section 3.3 of the SMP and the Revised Sampling Scope. Groundwater depths were measured at monitoring wells MW-102R, MW-103, MW-104, MW-105, MW-106, and MW-303. Groundwater samples were collected from wells MW-102R, MW-105, and MW-106, and submitted for chemical analysis. Monitoring wells previously included in the monitoring well network included MW-101, MW-301, and MW-302. MW-101 was decommissioned by Benchmark Environmental Engineering & Science, PLLC on 8 June 2020. MW-301 was apparently paved over and has not been located since 2021, and MW-302 was removed from the program in 2016. Well locations and site features are detailed on the attached Groundwater Monitoring Well Network plan, Figure 1.

#### **GROUNDWATER LEVEL READINGS AND WELL ASSESSMENT**

At the start of the sampling event, the depth to groundwater was measured in the wells listed above and recorded on field forms included in Appendix A. The depth to groundwater measurements were used to prepare groundwater elevation contours, which are shown on Figure 2. Groundwater appears to be flowing in a south-southeast direction, which is generally consistent with historical data. Slight bends toward the tops of the polyvinyl chloride (PVC) riser pipes of MW-102R and MW-106 were noted by field staff during this sampling event. Field staff noted a soft bottom in three wells MW-102R, MW-103, and MW-106. A slight bend in the riser pipe of MW-102R was noted that does not effect purging and sampling. During the reporting period surface work had been completed to the surrounding sidewalk at MW-303. MW-303 was partially covered with a thin layer of cement which was removed to access the well. A crack in the outer ring of the road box of MW-303 was observed but the inner vault appeared dry. Each well can be appropriately, gauged, purged, and sampled with no issues; therefore, no repairs are necessary at this time.

#### **GROUNDWATER SAMPLING AND ANALYSIS**

Each sampled well was purged using a disposable polypropylene bailer until three well volumes were removed. Turbidity was measured during purging and final turbidity measurements were well below 50 NTU except for MW-105, which could not be measured due to excessive turbidity. However, sediment was not observed to be accumulating at the bottom of MW-105 evidenced by the "hard" bottom prior to purging. The well conditions do not indicate that re-development is necessary at this time. Samples were collected into laboratory-supplied glassware immediately following purging. Groundwater Sampling Record forms are included in Appendix A.



Aramark Union & Career Apparel, LLC 15 April 2023 Revised: 6 July 2023

Page 3

Samples were stored on ice and relinquished to Alpha Analytical Laboratories courier at the end of the day. Samples were analyzed for the NYSDEC Target Compound List (TCL) for volatile organic compounds (VOCs) by EPA Method 8260D, and the laboratory analytical data report is included in Appendix B. Target CVOCs (PCE, TCE, cis-1,2-DCE, and VC) are summarized in Table I and discussed herein. The data were validated per the quality assurance/quality control requirements in the SMP. The groundwater data were found to be 100 percent usable as qualified in the data usability summary report (DUSR) included in Appendix C. The analytical data is scheduled to be submitted to the NYSDEC electronically per their EQuIS filing requirements by 31 March 2023. Analytical results were compared to NYSDEC groundwater criteria per the SMP, and further discussed in the Results Section below.

#### **WASTE MANAGEMENT**

Purge water collected during the January 2023 sampling event was containerized and staged onsite in a 55-gallon steel, open-top drum. A request for "contained-in" determination was submitted to the NYSDEC on 17 February 2023, and a determination was received on 24 February 2023 that the purge water does not have to be managed as hazardous waste. The purge water drum was removed from the Site by Environmental Service Group of Tonawanda, New York on 3 March 2023 and transported to American Recyclers Company (ARC) in Tonawanda, New York. ARC transported the materials to Covanta Niagara in Niagara Falls, New York for incineration. Waste disposal documentation is included in Appendix D.

#### Results

A summary of the Target CVOC sampling results can be found on Table I, which also includes the results of previous sampling events. The January 2023 results are described below:

- Upgradient Well (MW-102R): Cis-1,2-DCE was detected at a concentration of 2.7 micrograms per liter ( $\mu$ g/L) and VC was detected at a concentration of 7  $\mu$ g/L. The NYSDEC groundwater standard and comparison criterion are 5  $\mu$ g/L and 2  $\mu$ g/L respectively. A trend figure for MW-102R is provided on Figure 3.
- Source Wells (MW-105, MW-106): Concentrations of cis-1,2-DCE (19 μg/L in MW-105) and/or VC (5.6 μg/L in MW-105 and 5.7 μg/L in MW-106) continue to be detected in the groundwater from MW-105 and MW-106 at concentrations above NYSDEC criteria. Concentrations of CVOCs in these wells are consistent with the previous sampling event. Concentrations of CVOCs in source area wells MW-105 and MW-106 have remained consistent or decreasing since 2013. Overall trends from these wells are shown on Figure 4.



Aramark Union & Career Apparel, LLC 15 April 2023

Revised: 6 July 2023

Page 4

Please do not hesitate to contact the undersigned with questions.

Sincerely yours,

**HALEY & ALDRICH OF NEW YORK** 

Santa E. McKenna Assistant Project Manager Glenn M. White Sr. Client Leader

Ch Whi

c: Mill Race Commons, LLC; Attn: Joseph Petrella, Gary Kriner

Kavinoky Cook LLP; Attn: Deborah Chadsey, Esq.

Haley & Aldrich; Attn: Janice Szucs

#### Attachments:

Table I – Summary of Analytical Results, Groundwater Wells

Figure 1 – Groundwater Monitoring Well Network

Figure 2 – Groundwater Elevation Contours – January 2023

Figure 3 – Groundwater Concentration Trend for MW-102/MW-102R

Figure 4 – Groundwater Concentration Trends (MW-105 and MW-106)

Appendix A – Field Forms and Inspection Records

Appendix B – Laboratory Analytical Data Report

Appendix C – Data Usability Summary Report

Appendix D – Waste Disposal Documentation



**TABLE** 

#### TABLE I

SUMMARY OF ANALYTICAL RESULTS

GROUNDWATER WELLS FORMER AMERICAN LINEN SUPPLY BUFFALO, NEW YORK BCP SITE #C915241

Location								MW-102/	MW-102R							
Sample Date	NYSDEC TOGS 1.1.1	12/11/2012	12/31/2013	05/05/2015	11/23/2015	05/13/2016	11/21/2016	07/11/2017	12/14/2018	12/14/2018 (Dup)	03/13/2020	11/12/2020	01/21/2021	5/11/2021	11/19/2021	1/12/2023
Sample Depth (bgs)	Class GA							12 - 1	17 (ft)							
Volatile Organic Compounds (ug/L)																
cis-1,2-Dichloroethene	5	220	14	ND (0.7)	ND (0.7)	19	70	0.77 J	0.9 J	2.7						
Tetrachloroethene	5	5.7	ND (0.18)	ND (0.18)	ND (0.18)	0.55	0.32 J	0.52	0.34 J							
Trichloroethene	5	20.5	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.18)	0.94	ND (0.5)	ND (0.18)	0.33 J						
Vinyl chloride	2	54.9	60	2.8	2.8	ND (0.07)	5	0.64 J	3	2.8	2.9	75	35	0.32 J	1.8	7

#### Notes and Abbreviations:

- 1. "ND" indicates analyte not detected above the method
- 2. Bold values exceed the standard/guidance value.
- 3. Results were compared to the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards and Guidance Class GA dated June 1998 modified per the April 2000 addendum

(TOGS 1.1.1).

PAGE 1 OF 3

TABLE I SUMMARY OF ANALYTICAL RESULTS PAGE 2 OF 3

GROUNDWATER WELLS FORMER AMERICAN LINEN SUPPLY BUFFALO, NEW YORK BCP SITE #C915241

Location							MW-105						
Sample Date	NYSDEC TOGS 1.1.1	12/13/2012	12/27/2013	05/05/2015	11/23/2015	05/13/2016	11/21/2016	07/11/2017	12/14/2018	03/13/2020	11/12/2020	11/19/2021	1/12/2023
Sample Depth (bgs)	Class GA						10.6 - 15.6 (ft	)					
Volatile Organic Compounds (ug/L)													
cis-1,2-Dichloroethene	5	99.2 J	49	37	61	43	59	33	38	23	32	28	19
Tetrachloroethene	5	21.5 J	1	0.49 J	7.1	1.8	3.3	1	0.65	1	2.3	1.8	1.6
Trichloroethene	5	14.1 J	1.3	0.5	4.1	1.8	3.9	1.6	1.4	1.3	2.9	1.6	1.8
Vinyl chloride	2	4.6 J	0.54 J	0.41 J	3	2.8	6.6	6.2	6.6	7.8	8.4	5.2	5.6

#### **Notes and Abbreviations:**

- 1. "ND" indicates analyte not detected above the method
- 2. Bold values exceed the standard/guidance value.
- 3. Results were compared to the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards and Guidance Class GA dated June 1998 modified per the April 2000 addendum (TOGS 1.1.1).

HALEY & ALDRICH OF NEW YORK JUNE 2023

#### TABLE I PAGE 3 OF 3

SUMMARY OF ANALYTICAL RESULTS
GROUNDWATER WELLS

FORMER AMERICAN LINEN SUPPLY BUFFALO, NEW YORK BCP SITE #C915241

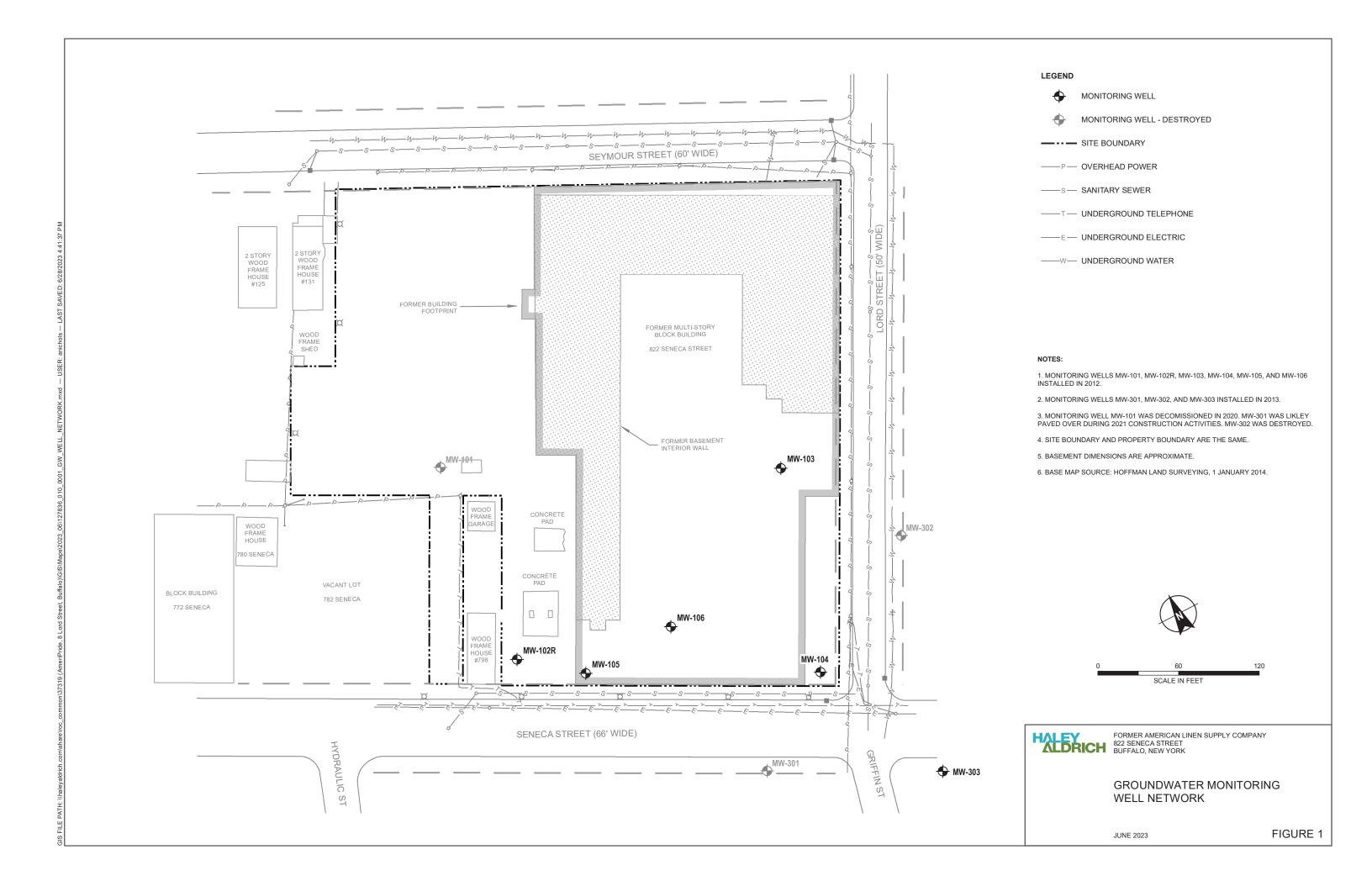
Location											MW-106									
Sample Date	NYSDEC TOGS 1.1.1	12/14/2012	12/26/2013	05/05/2015	11/23/2015	11/23/2015 (Dup)	05/13/2016 (Dup)	05/13/2016	11/21/2016 (Dup)	11/21/2016	07/11/2017	12/14/2018	03/13/2020	03/13/2020 (Dup)	11/12/2020	11/12/2020 (Dup)	11/19/2021	11/19/2021 (Dup)	1/12/2023	1/12/2023 (Dup)
Sample Depth (bgs)	Class GA										14.2 - 19.2 (ft	1)								
Volatile Organic Compounds (ug/L)																				
cis-1,2-Dichloroethene	5	160 J	ND (7)	11	13	12	7.9	8 J+	3.4	4.1	4.9	4.1	1.7 J	1.8 J	1.6 J	1.6 J	2.1 J	2.2 J	2.0 J	2.0 J
Tetrachloroethene	5	58.4	ND (1.8)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)
Trichloroethene	5	47.4	ND (1.7)	0.35 J	0.4 J	0.41 J	0.33 J	0.31 J+	ND (0.18)	ND (0.18)	0.2 J	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)
Vinyl chloride	2	99.7	12	17	26	23	9.2 J	ND (0.07) J	5.8	6.4	8.4	9	4.7	4.9	5	4.8	4	4	2.0 J	5.7

#### Notes and Abbreviations:

- 1. "ND" indicates analyte not detected above the method
- 2. Bold values exceed the standard/guidance value.
- 3. Results were compared to the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards and Guidance Class GA dated June 1998 modified per the April 2000 addendum (TOGS 1.1.1).

HALEY & ALDRICH OF NEW YORK





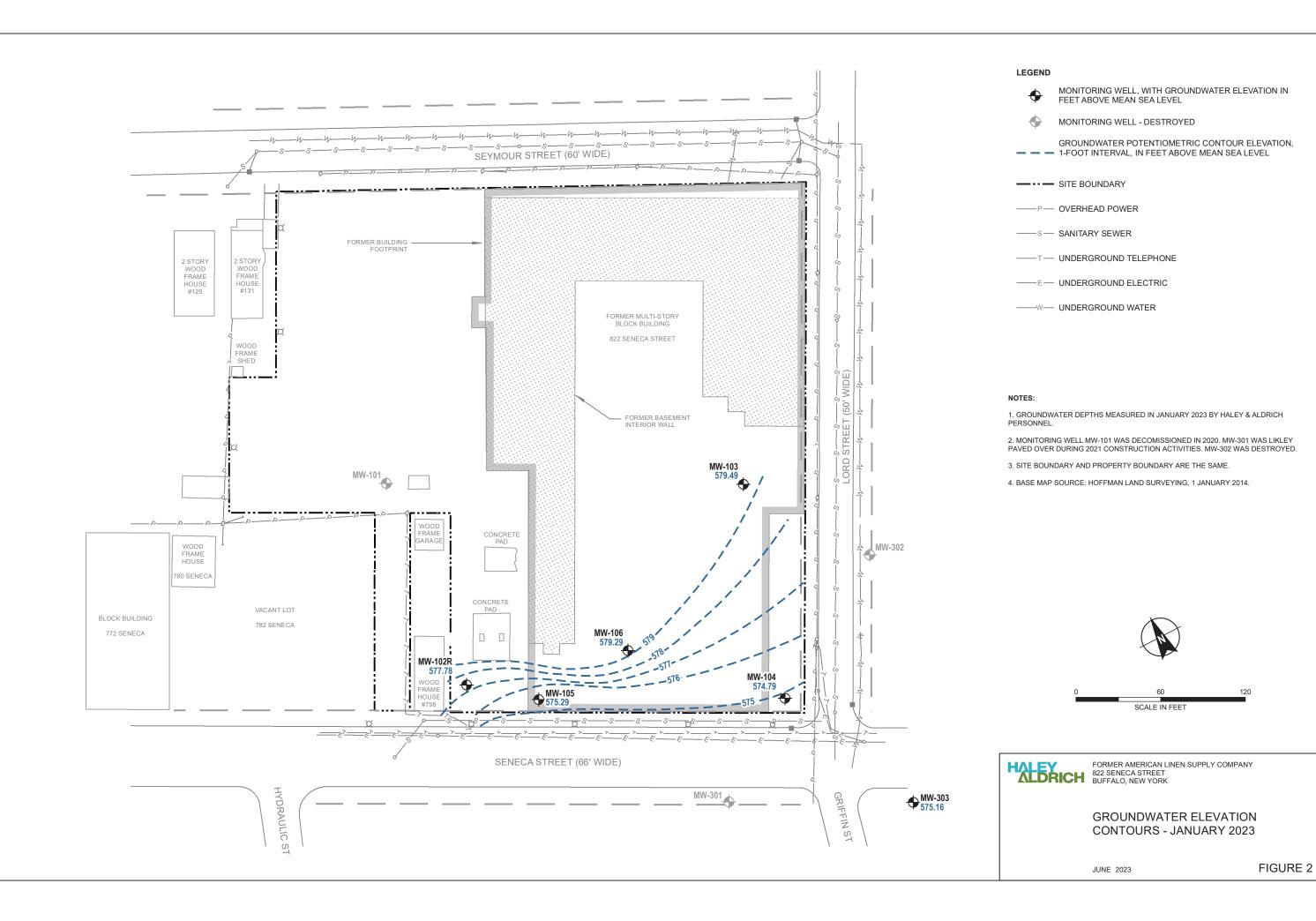


Figure 3 - Groundwater Concentration Trend for MW-102/MW-102R

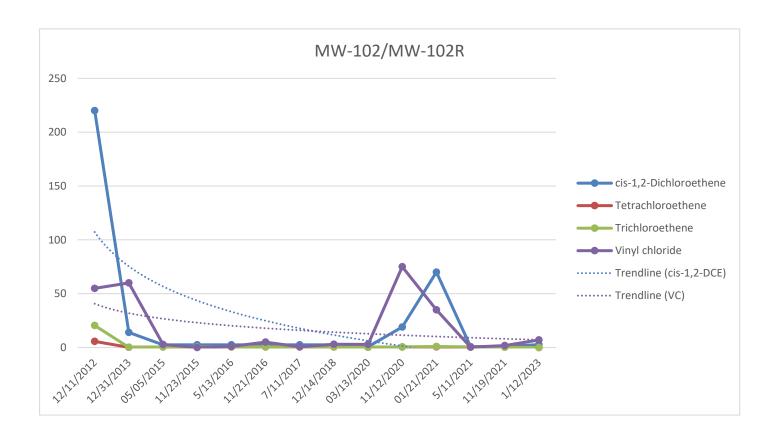
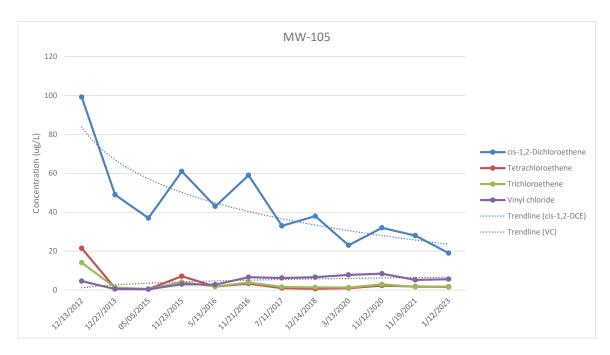
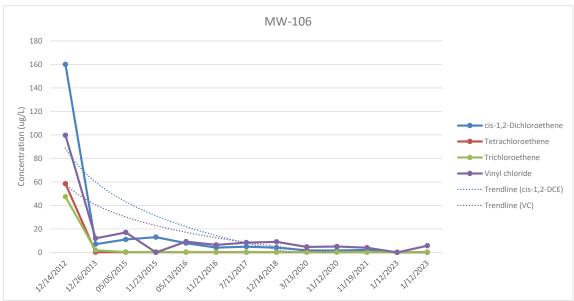


Figure 4 - Groundwater Concentration Trends (MW-105 and MW-106)





# APPENDIX A Field Forms and Inspection Records

#### **Static Water Levels**

Location (Site/Facility Name): Location (Address):

Client:

EZZ SENELA ST Buffalo, NY Aramark

Date:

Performed By: Job Number:

1/12/22 Kim Bartlett 27836-009

Well ID	Riser Elevation* (NAVD 1988)	Water Level (from Top of Riser)	Well Condition/Notes	Repairs Needed?
MW-102R	582.13	4.35	Soft Bottom/ Bent Inner pvc pipe	Yes
MW-103	582.64	3.15	Soft Bottom	NO
MW-104	582.00	7.21	Hard Bottom	NO
MW-105	582.41	7.12	Hard Bottom	NO
MW-106	582.42	3.13	Soft Bottom	NO
MW-301	582.14	e-Can	not Locat	e ->
MW-303	581.79	6.63	Hard Bottom	yes, flush maint & invi- ring Brokel

<sup>\* -</sup> Riser elevations for MW-301 and MW-303 last surveyed in 2014.

- Riser elevation for MW-102R last surveyed in 2021.

cemented over

<sup>-</sup> Riser elevations for MW-103, MW-104, MW-105 and MW-106 last surveyed in 2016.

HALEY **GROUNDWATER SAMPLING RECORD** PROJECT Framack 622 Seneca H&A FILE NO. 127836-009 LOCATION PROJECT MGR. CLIENT FIELD REP Bartlett CONTRACTOR DATE GROUNDWATER SAMPLING INFORMATION Well ID Depth Of Well (ft.) per Log 7.12 Reference Mark Depth to Water from Reference Mark (ft.) 1:30 am 2:30PM Depth to Product (ft.) Field Measured Depth Of Well (ft.) Inside Diameter (in.) Standing Water Depth (ft.) Volume Of Water In Well (gallons/liters) **Purging Device** Volume of Bailer/Pump Capacity Cleaning Procedure redicated Bails Removed/ Volume volumes removed volumes remarkd Removed Time Purging Started Time Purging Stopped Instrument Used to Monitor La Motte a Motto Field Parameters Sampling Device Bailer Cleaning Procedure Brown to clear Brown to clear Color Odor VOA ABN SAMPLES Metals TIME Time Temp, C Conductivity, us/cm Dissolved Oxygen, mg/L (+/- 10%) pH (+#0.1) ORP/eH, mv Turbidity, NTU overrange 19 (<\$ NTU) Volume purged, gallons 50 Remarks: (ie: field filtrations, persons communicated with at site, etc.)

x0.16)

H	EY DRICH	GROUNDWA	ATER SAMPLING	RECORD	Page of
PROJE	CCT	Arramark		H&A FILE NO. 1278	
LOCA'	TION	622 Seneca	42	PROJECT MGR.	
CLIEN	Т			FIELD REP	Barriett
CONT	RACTOR			DATE 1/17	23
	<u> </u>	GROUND	WATER SAMPLING INFO	RMATION '	
Well ID		MW 1010			
Depth C	Of Well (ft.) per Log	313	* * *		
	nce Mark			740	
	o Water from nce Mark (ft.)				
Time		12:40 01	n		
Depth t	o Product (ft.)			<u> </u>	
	easured Depth Of Well	10,70			
(ft.) Inside (	Diameter (in.)	71.0			
	ng Water Depth (ft.)	212-	<u> </u>		·
	Of Water In Well	7, 3			
(gallons		2.00		` '	
	Device of Bailer/Pump	paller			
Capaci	ty				
	ng Procedure	Dedicate			
Remov	emoved/ Volume red	3 volumes	pemoved		
Time P	urging Started	31(5001	M.		
	urging Stopped	4:1000	7		
	nent Used to Monitor arameters	YSI LA M	lotte		
Sampli	ng Device	· Boiler			
Cleani	ng Procedure	Dedicated	7		
Color		Idin Brown	to clear		
Odor		Sulfa	1		
	VOA	14:100	m		
TIME SAMPLES TAKEN	ABN	31,100	, , ,		
S TA	Metals			<del> </del>	
1 1 1	Metals				
SAN					
I ME					
Ľ					
	Time	3:50 4:00 4:10			
	Temp, C (+/-3%)	104 111 115			
	Conductivity, us/cm	118 13 13	1		
ERS	Dissolved Oxygen, mg/L (+/- 10%)	1.101.401.82			
PARAMETERS	pH (9-0.1)	119 7.74 7.74			
PAR	ORP/eH, mv	114 -462 540			
	Turbidity, NTU	175 198 100			<del></del>
	(<5 NTU)  Volume purged, gallons	500110		District Control of the Control of t	
	Drawdown, ft	11797 00 110		8 878	
Remo		persons communicated with at s	ita etc.)	20146	
- Vente	no. po. new myauuris,	poratina communicated with at s	nie, 610.)	7.25.2	

APPENDIX B
Laboratory Analytical Data Reports



#### ANALYTICAL REPORT

Lab Number: L2302237

Client: Haley & Aldrich

200 Town Centre Drive

0127836-006-009

Suite 2

Rochester, NY 14623-4264

ATTN: Janice Szucs
Phone: (585) 321-4211

Project Name: ARAMARK

Report Date: 01/18/23

Project Number:

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: ARAMARK

**Project Number:** 0127836-006-009

**Lab Number:** L2302237 **Report Date:** 01/18/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2302237-01	4444-230112-0001	WATER	BUFFALO, NY	01/12/23 00:00	01/13/23
L2302237-02	MW102R-230112-1500	WATER	BUFFALO, NY	01/12/23 15:00	01/13/23
L2302237-03	MW105-230112-1535	WATER	BUFFALO, NY	01/12/23 15:35	01/13/23
L2302237-04	MW106-230112-1610	WATER	BUFFALO, NY	01/12/23 16:10	01/13/23
L2302237-05	4444-230112-0002	WATER	BUFFALO, NY	01/12/23 16:45	01/13/23



**Project Name: ARAMARK** Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name:ARAMARKLab Number:L2302237Project Number:0127836-006-009Report Date:01/18/23

#### **Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2302237-05: The Client ID was specified by the client.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Leley Welf Kelly O'Neill

Authorized Signature:

Title: Technical Director/Representative

Date: 01/18/23



### **ORGANICS**



### **VOLATILES**



Project Name: ARAMARK Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

**SAMPLE RESULTS** 

Lab ID: L2302237-01 Date Collected: 01/12/23 00:00

Client ID: 4444-230112-0001 Date Received: 01/13/23 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/16/23 11:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab					
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Trichloroethene	ND		ug/l	0.50	0.18	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	99		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	96		70-130	
Dibromofluoromethane	99		70-130	



Project Name: ARAMARK Lab Number: L2302237

**SAMPLE RESULTS** 

Lab ID: L2302237-02 Date Collected: 01/12/23 15:00

Client ID: MW102R-230112-1500 Date Received: 01/13/23 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 10:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - W	estborough Lab						
G ,							
Tetrachloroethene	0.34	J	ug/l	0.50	0.18	1	
Vinyl chloride	7.0		ug/l	1.0	0.07	1	
Trichloroethene	0.33	J	ug/l	0.50	0.18	1	
cis-1,2-Dichloroethene	2.7		ua/l	2.5	0.70	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	100	70-130	
Toluene-d8	93	70-130	
4-Bromofluorobenzene	99	70-130	
Dibromofluoromethane	108	70-130	



Project Name: ARAMARK Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

**SAMPLE RESULTS** 

Lab ID: L2302237-03 Date Collected: 01/12/23 15:35

Client ID: MW105-230112-1535 Date Received: 01/13/23
Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 11:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westb	orough Lab						
Tetrachloroethene	1.6		ug/l	0.50	0.18	1	
Vinyl chloride	5.6		ug/l	1.0	0.07	1	
Trichloroethene	1.8		ug/l	0.50	0.18	1	
cis-1,2-Dichloroethene	19		ug/l	2.5	0.70	1	

•			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	98		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	97		70-130	
Dibromofluoromethane	108		70-130	



Project Name: ARAMARK Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

**SAMPLE RESULTS** 

Lab ID: L2302237-04 Date Collected: 01/12/23 16:10

Client ID: MW106-230112-1610 Date Received: 01/13/23 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 11:23

Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westbo	rough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1	
Vinyl chloride	5.7		ug/l	1.0	0.07	1	
Trichloroethene	ND		ug/l	0.50	0.18	1	
cis-1,2-Dichloroethene	2.0	J	ug/l	2.5	0.70	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	96	70-130
Dibromofluoromethane	111	70-130



Project Name: ARAMARK Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

**SAMPLE RESULTS** 

Lab ID: L2302237-05 Date Collected: 01/12/23 16:45

Client ID: 4444-230112-0002 Date Received: 01/13/23 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 11:43

Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westbo	rough Lab						
Tetrachloroethene	ND		ug/l	0.50	0.18	1	
Vinyl chloride	5.6		ug/l	1.0	0.07	1	
Trichloroethene	ND		ug/l	0.50	0.18	1	
cis-1,2-Dichloroethene	2.0	J	ug/l	2.5	0.70	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	99	70-130	
Toluene-d8	93	70-130	
4-Bromofluorobenzene	97	70-130	
Dibromofluoromethane	111	70-130	



Project Name: ARAMARK Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D Analytical Date: 01/16/23 10:39

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by GC/MS - Westk	orough Lab	for sampl	e(s): 01	Batch: V	VG1734299-5	
Tetrachloroethene	ND		ug/l	0.50	0.18	
Vinyl chloride	ND		ug/l	1.0	0.07	
Trichloroethene	ND		ug/l	0.50	0.18	
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	

		Acceptance	
Surrogate	%Recovery Qualifie	•	
1,2-Dichloroethane-d4	97	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	95	70-130	
Dibromofluoromethane	99	70-130	



Project Name: ARAMARK Lab Number: L2302237

**Project Number:** 0127836-006-009 **Report Date:** 01/18/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D Analytical Date: 01/17/23 08:18

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westl	oorough Lat	o for sample(	(s): 02-05	Batch:	WG1734489-5
Tetrachloroethene	ND		ug/l	0.50	0.18
Vinyl chloride	ND		ug/l	1.0	0.07
Trichloroethene	ND		ug/l	0.50	0.18
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70

		Acceptance	
Surrogate	%Recovery Qualifi	-	
1,2-Dichloroethane-d4	96	70-130	
Toluene-d8	96	70-130	
4-Bromofluorobenzene	98	70-130	
Dibromofluoromethane	104	70-130	



## Lab Control Sample Analysis Batch Quality Control

Project Name: ARAMARK

**Project Number:** 0127836-006-009

Lab Number: L2302237

**Report Date:** 01/18/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s): 01	Batch: WG	1734299-3	WG1734299-4			
Tetrachloroethene	100		100		70-130	0		20
Vinyl chloride	110		110		55-140	0		20
Trichloroethene	94		92		70-130	2		20
cis-1,2-Dichloroethene	100		100		70-130	0		20

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qual	%Recovery Qual	Criteria	
1,2-Dichloroethane-d4	102	101	70-130	
Toluene-d8	100	101	70-130	
4-Bromofluorobenzene	94	96	70-130	
Dibromofluoromethane	98	98	70-130	



## Lab Control Sample Analysis Batch Quality Control

Project Name: ARAMARK

**Project Number:** 

0127836-006-009

Lab Number:

L2302237

Report Date:

01/18/23

<u>Parameter</u>	LCS %Recovery	Qual	_	LCSD ecovery		%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02-05	Batch:	WG1734489-3	WG1734489-4				
Tetrachloroethene	110			110		70-130	0	1	20	
Vinyl chloride	110			110		55-140	0		20	
Trichloroethene	99			100		70-130	1		20	
cis-1,2-Dichloroethene	98			100		70-130	2		20	

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qual	%Recovery Qual	Criteria	
1,2-Dichloroethane-d4	89	91	70-130	
Toluene-d8	100	101	70-130	
4-Bromofluorobenzene	95	98	70-130	
Dibromofluoromethane	98	99	70-130	



Project Name: ARAMARK Lab Number: L2302237 **Project Number:** 0127836-006-009

**Report Date:** 01/18/23

#### Sample Receipt and Container Information

YES Were project specific reporting limits specified?

**Cooler Information** 

Custody Seal Cooler

Α Absent

Container Information			Initial	Final	Temp			Frozen		
Container ID	Container Type	Cooler	рН			deg C Pres	Seal	Date/Time	Analysis(*)	
L2302237-01A	Vial HCI preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-01B	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-02A	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-02B	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-02C	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-03A	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-03B	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-03C	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-04A	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-04B	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-04C	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-05A	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-05B	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	
L2302237-05C	Vial HCl preserved	Α	NA		4.6	Υ	Absent		NYTCL-8260-R2(14)	



**Project Name:** Lab Number: ARAMARK L2302237 **Project Number:** 0127836-006-009 **Report Date:** 01/18/23

#### GLOSSARY

#### Acronyms

LOD

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

**EDL** - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated

values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

**EMPC** - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration. **EPA** 

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD Laboratory Control Sample Duplicate: Refer to LCS.

Environmental Protection Agency.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

MDI - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile NR

Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name:ARAMARKLab Number:L2302237Project Number:0127836-006-009Report Date:01/18/23

#### **Footnotes**

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benza(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A -Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit
   (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: ARAMARK Lab Number: L2302237

Project Number: 0127836-006-009 Report Date: 01/18/23

#### Data Qualifiers

Identified Compounds (TICs).

- $\label{eq:main_eq} \textbf{M} \qquad \text{-Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.}$
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- ${f P}$  The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Serial\_No:01182314:19

Project Name: ARAMARK Lab Number: L2302237

Project Number: 0127836-006-009 Report Date: 01/18/23

#### **REFERENCES**

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## **LIMITATION OF LIABILITIES**

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Serial\_No:01182314:19

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 19

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# Certification Information

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene;

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

## **Mansfield Facility**

**SM 2540D:** TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

## Mansfield Facility:

## **Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522, EPA 537.1.

#### Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

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FAX: 508-898-9193	FAX: 508-822-3288	Project Location:		Bu	ffalo, NY			10	EQu	IS (1	File)	2	EQui	S (4 Fil	le)	PO#	
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Maria de la Carta	na@haleyaldrich.com	Rush (only if pre approv	ed) 🗌	# of Days	60.			Note	Selec	t State	from m	enu & i	dentify	criteria.		Other:	
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03		12-1535	1/12/2022	15:35	WG	KB		×	x	×	×						3
04	MW106-23011	2-1610	1/12/2022	16:10	WG	КВ		x	×	x	x						3
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Preservative Code: A = None B = HCI C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub>	Container Code P = Plastic A = Amber Glass V = Vial G = Glass	Westboro: Certification Mansfield: Certification				ntainer Typ	W	v	v	v	v					Please print clearly, legibly completely. Samples can no in and turnaround time cloc start until any ambiguities a Alpha Analytical's services un	ot be logge ik will not are resolve ader this
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APPENDIX C
Data Usability Summary Reports





# **Data Usability Summary Report**

**Project Name: Aramark** 

**Project Description: Groundwater Samples** 

Sample Date: 12 January 2023

Analytical Laboratory: Alpha Analytical – Westborough, MA

Validation Performed by: Santa McKenna Validation Reviewed by: Katherine Miller

Validation Date: 15 February 2023

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group (SDG) listed. This DUSR is organized into the following sections:

- 1. Sample Delivery Group Number L2302237
- 2. **Explanations**
- 3. **Glossary**
- **Abbreviations** 4.
- 5. **Qualifiers**

#### References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

National Functional Guidelines (NFG) for Organic Data Review.

Data reported in this sampling event were reported to the laboratory reporting limit (RL) [OR] the laboratory method detection limit (MDL). Results found between the MDL and RL are flagged J as estimated.

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOP). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQO) for the project and therefore usable; any exceptions are noted in the following pages.



# 1. Sample Delivery Group Number L2302237

#### 1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number L2302237, dated 18 January 2023. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the COC.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods	Holding Time
4444-230112-0001	ТВ	L2302237-01	1/12/2023	QW		
MW102R-230112- 1500	N	L2302237-02	1/12/2023	GW	VOCs by	7 days
MW105-230112- 1535	N	L2302237-03	1/12/2023	GW	VOCs by USEPA 8260D	unpreserved; 14 days
MW106-230112- 1610	N	L2302237-04	1/12/2023	GW	620UD	preserved
4444-230112-0002	FD	L2302237-05	1/12/2023	GW		

## 1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

#### 1.3 REPORTING LIMITS AND SAMPLE DILUTIONS

No sample dilutions were performed for the analysis of the samples in this report.

# 1.4 SURROGATE RECOVERY COMPLIANCE

Refer to section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified quality control (QC) limits.

## 1.5 LABORATORY CONTROL SAMPLES

<u>Refer to section E 1.3</u>. Compounds associated with the laboratory control samples/laboratory control sample duplicates (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits.

#### 1.6 MATRIX SPIKE SAMPLES

Refer to section E 1.4. The laboratory did not analyze any matrix spike/matrix spike duplicate (MS/MSD) analysis in this SDG.

## 1.7 BLANK SAMPLE ANALYSIS

<u>Refer to section E 1.5.</u> Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.



The analysis of the blank samples for field quality control was free of target compounds.

# 1.8 DUPLICATE SAMPLE ANALYSIS

Refer to section E 1.6. The laboratory did not analyze any laboratory duplicates as per the method or laboratory SOP.

The following sample(s) were used for field duplicate analysis. The RPD comparison for detections in either the parent or duplicate sample(s) is shown below. RPDs were all below 35 percent for water (or the absolute difference rule was satisfied if detects were less than 5 times the RL).

Primary Sample ID	Duplicate Sample ID	Method(s)
MW106-230112-1610	4444-230112-0002	EPA 8260D

## 1.9 PRECISION AND ACCURACY

<u>Refer to section E 1.7.</u> Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

# 1.10 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objectives for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable as no data was rejected. No qualifiers were applied to any data in this report.



# 2. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds.
- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
  - Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
  - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a post digestion spike (PDS) is performed.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
  - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
  - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The relative percent difference (RPD) or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the relative percent difference (RPD) found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.



Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the percent recovery (%R) of certain spiked compounds. This can be assessed using LCS, blank spike (BS), MS, and/or surrogate recoveries.



# 3. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

Sample Types:

EB Equipment Blank Sample
 FB Field Blank Sample
 FD Field Duplicate Sample
 N Primary Sample
 TB Trip Blank Sample

Units:

μg/kg microgram per kilogram
 μg/L microgram per liter
 μg/m³ microgram per cubic meter
 mg/kg milligram per kilogram
 mg/L milligram per liter

ppb v/v parts per billion volume/volume

pCi/L picocuries per literpg/g picograms per gram

Matrices:

AA Ambient Air
GS Soil Gas
GW/WG Groundwater
QW Water Quality
IA Indoor Air
SE Sediment
SO Soil

WQ Water Quality control matrix

WS Surface Water

Table Footnotes:

NA Not applicableND Non-detectNR Not reported

Common Symbols:

- % percent- < less than</li>

– ≤ less than or equal to

– > greater than

– ≥ greater than or equal to

- = equal

C degrees Celsius
± plus or minus
~ approximately
- x times (multiplier)



# 4. Abbreviations

%D	Percent Difference	mg/kg	milligrams per kilogram
%R	Percent Recovery	MS/MSD	Matrix Spike/Matrix Spike Duplicate
%RSD	Percent Relative Standard Deviation	NA	not applicable
%v/v	Percent volume by volume	ND	Non-Detect
μg/L	micrograms per liter	NFG	National Functional Guidelines
μ <sub>8</sub> / L 2s	2 sigma	NH <sub>3</sub>	Ammonia
4,4-DDT	4 4-dichlorodiphenyltrichloroethane	NYSDEC	
Abs Diff	Absolute Difference	INTODEC	New York State Department of Environmental Conservation
	atomic mass unit	PAH	
amu BPJ	Best Professional Judgement	PCB	polycyclic aromatic hydrocarbon
	<u> </u>		Polychlorinated Biphenyl
BS	Blank Spike	PDS	Post Digestion Spike
CCB	Continuing Calibration Blank	PEM	Performance Evaluation Mixture
CCV	Continuing Calibration Verification	PFAS	Per- and Polyfluoroalkyl Substances
CCVL	Continuing Calibration Verification	PFBA	Perfluorbutanoic Acid
606	Low	PFD	Perfluorodecalin
COC	Chain of Custody	PFOA	Perfluorooctanoic Acid
COM	Combined Isotope Calculation	PFOS	Perfluorooctane sulfonate
Cr (VI)	Hexavalent Chromium	PFPeA	Perfluoropentanoic Acid
CRI	Collision Reaction Interface	QAPP	Quality Assurance Project Plan
DoD	Department of Defense	QC	Quality Control
DQO	data quality objective	QSM	Quality Systems Manual
DUSR	Data Usability Summary Report	$R^2$	R-squared value
EMPC	Estimated Maximum Possible	Ra-226	Radium-226
	Concentration	Ra-228	Radium-228
FBK	Field Blank Contamination	RESC	Resolution Check Measure
FDP	Field Duplicate	RL	Laboratory Reporting Limit
GC	Gas Chromatograph	RPD	Relative Percent Difference
GC/MS	Gas Chromatography/Mass	RRF	Relative Response Factors
	Spectrometry	RT	Retention Time
GPC	Gel Permeation Chromatography	SAP	sampling analysis plan
H2	Hydrogen gas	SDG	Sample Delivery Group
HCl	Hydrochloric Acid	SIM	Selected ion monitoring
ICAL	Initial Calibration	SOP	Laboratory Standard Operating
ICB	Initial Calibration Blank		Procedures
ICP/MS	Inductively Coupled Plasma/ Mass	SPE	Solid Phase Extraction
	Spectrometry	SVOC	Semi-Volatile Organic Compounds
ICV	Initial Calibration Verification	TIC	Tentatively Identified Compound
ICVL	Initial Calibration Verification Low	TKN	Total Kjeldahl Nitrogen
IPA	Isopropyl Alcohol	TPH	Total Petroleum Hydrocarbon
LC	Laboratory Control	TPU	Total Propagated Uncertainty
LCS/LCSD	Laboratory Control Sample/Laboratory	amu	atomic mass unit
	Control Sample Duplicate	USEPA	U.S. Environmental Protection Agency
MBK	Method Blank Contamination	VOC	Volatile Organic Compounds
MDC	Minimum Detectable Concentration	WP	Work Plan
MDL	Laboratory Method Detection Limit		



# 5. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

## Concentration (C) Qualifiers:

- U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".
- B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

# Quantitation (Q) Qualifiers:

- E The compound was quantitated above the calibration range.
- D The concentration is based on a diluted sample analysis.

# Validation Qualifiers:

- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.
- UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.
- NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.
- R The sample results were rejected as unusable; the compound may or may not be present in the sample.
- S Result is suspect. See DUSR for details.



# References

1.	United States Environmental Protection Agency, 2020b. National Functional Guidelines for
	Organic Superfund Methods Data Review, FPA-540-R-20-005, November 2020.



# APPENDIX D Waste Disposal Documentation

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13. Special Handling ERG: 1 - 2 - 3 - 4 - 14. GENERATOR'S Generator's/Offeror's 15. International Ship Transporter Signatur 16. Transporter Ackr Transporter 1 Printe Transporter 2 Printe 17. Discrepancy 17a. Discrepancy Ind 17b. Alternate Facility Facility's Phone: 17c. Signature of Alternate 17c. Signature of Alternate	CERTIFICATION: 10 S Printed/Typed Name COY OY Ipments Interest (for exports only): Interest (for export	certify the materials de- te  Confidence of the certain of the certai	agent of	1 - No 2 - 3 - 4 - s manifest are not subje GENEY 9 to 11 s	ect to federal regulations ignature  July a Port of Date I	for reporting pro	pper disposal of H	lazardous W	Vaste.  7 + of Month 3  Month	Day  Full Rejection

DESIGNATED FACILITY'S COPY

From: <u>Laura Atkin</u>
To: <u>McKenna, Santa</u>

**Subject:** RE: Cost Estimate for drum pickup and disposal

**Date:** Monday, June 26, 2023 2:03:59 PM

Attachments: <u>image002.png</u>

#### **CAUTION: External Email**

Hello Santa,

American Recyclers Company (ARC) is The Environmental Service Group (ESG) transfer facility. The material comes into ARC and ARC takes ownership of the waste. The material is then bulked under ARC's non-hazardous liquids approval and sent into Covanta Niagara for Incineration.

Sorry for the confusion.



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