PERIODIC REVIEW REPORT
SEPTEMBER 2020 – MARCH 2022

DEPEW VILLAGE LANDFILL SITE
DEPEW, NEW YORK 14043

NYSDEC Site No. 915105
Work Assignment No. D009812-04

Prepared for:

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233

Prepared by:

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

SEPTEMBER 2022

TRC Project No. 386554

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

Executive Summary

Category	Summary/Results
Engineering Control (ECs)	• Cover System consisting of landfill cap • Site fencing to mitigate potential for human contact with contaminants • Sediment and erosion control • Groundwater/Surface Water/Sediment/Biota/Air Quality Monitoring
Institutional Control (ICs)	• Site Management Plan (SMP) – OU-01 and OU-02 (August 2020) • Environmental Easement (EE) – current status is draft, final EE to be incorporated once completed. • Groundwater Use Restriction • Land Use Restriction
Site Classification	Class 2 – to be reclassified as a Class 4 upon finalization of EE submission
Site Management Plan	SMP – August 2020
Certification/Reporting Period	The SMP requires semiannual inspections and monitoring, followed by a Periodic Review Report (PRR) which is to be prepared and submitted on an annual basis.
Inspection	**Frequency**
• Site Inspections	• Semi-annual (see Recommendations) and post-sever weather conditions
Monitoring	**Frequency**
• Groundwater • Surface Water • Sediments/Biota • On-Site/Import Soils • Air/Soil Vapor	• Semi-annual (see Recommendations) • Semi-annual (see Recommendations) • Semi-annual (see Recommendations) • As-needed • During groundwater monitoring or intrusive work
Prior PRR Recommendations	No prior PRR Recommendations.
Site Management Activities	A Site inspection was performed, one round of sediment, surface water, and groundwater samples was collected, and head space monitoring was conducted during this reporting period (September 2020 – March 2022). • 12/21/2021 – Semi-annual Site inspection and Site visit to mark-out/verify sample locations. • 12/30/2022 – Collected sediment/surface water samples from seven locations along the Cayuga Creek embankment on Site. All samples collected were submitted to Pace Analytical Services (Pace) for lab analysis. • 1/3/2022 & 1/4/2022 – Collected groundwater samples from the five monitoring wells on Site. All samples collected were submitted to Pace for analysis. o During the groundwater sampling event, head space monitoring was performed using a photoionization detector (PID) and no measurable organic vapors were detected.

Significant Findings or Concerns	• Seepage and staining was observed in sediment along the creek bank in the immediate vicinity of sediment sampling location SD-02 (downgradient of MW-01).Monitoring well MW-06 had been broken off at the ground surface (potentially hit by a lawn mower). • Concentrations of VOCs, including 1,4-dichlorobenzene, benzene, and chlorobenzene; exceeded their corresponding class GA values in MW-06 (located in close proximity to the closed landfill). • Concentrations of metals, primarily lead and mercury, exceeded the corresponding class GA values in MW-01 and MW-04, respectively. • Concentrations of metals, primarily copper, lead, nickel, silver, and zinc, exceeded the corresponding Class A freshwater sediment guidance values in locations SD-01, SD-02, and SD-04. All concentration were below the Class C Values, however.
Recommendations	1. Schedule repairs on monitoring well MW-06. 2. Schedule land surveyor to establish horizontal and vertical control at the Site. 3. Decrease inspection and groundwater/surface water/sediment monitoring frequencies to annually (15 months), and prepare PRRs following each event. 4. Collect samples of sediment and surface water at the seep location in the vicinity of MW-01/SD-02 to evaluate the need for corrective actions (at the next monitoring event). 5. Collect groundwater samples from MW-04, MW-05, and MW-06 for PFAS constituents (at the next monitoring event). 6. Develop updated groundwater flow potential maps based on the next round of hydraulic monitoring measurements. 7. Develop an SMP addendum/revision to reflect the recommended changes.
Cost Evaluation	The total cost of the Site management activities during this reporting period was $23,400. This cost includes engineering and equipment costs (laboratory services were provided by call-out). It should be noted that this total does not include call-out costs or any additional costs incurred by the NYSDEC in support of the project.

1.0 Introduction

This Periodic Review Report (PRR) has been prepared for the Depew Village Landfill Site, located at Rutherford Place, Depew, Erie County, New York (the Site). This PRR covers the period between September 2020 through March 2022. This PRR was prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation (DER) Work Assignment (WA) No. D009812-04 Notice to Proceed dated February 27, 2020, the NYSDEC-approved amended Scope of Work dated July 20, 2020 (WA No. D009812-04.29) and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (NYSDEC DER-10). This PRR discusses the Site management activities performed by TRC Engineers, Inc., and others during the referenced reporting period. A Site summary and applicable remedial program information are summarized below.

Site Information			
Site Name:	Depew Village Landfill Site	**NYSDEC Site No:**	915105
Site Location:	Rutherford Place, Depew, Erie County, New York	**Remedial Program:**	State Superfund Program
Site Type:	Landfill	**Classification:**	02
Parcel Identification(s):	103.20-1-13.11, 114.08-8-10.1 and 114.08-8-10.2, Erie County Tax Map	**Parcel Acreage / EE Acreage:**	Parcels combined 27.8 acres (9.5, 12.5, 5.8); OU 1 occupies approx. 20 acres; OU 2 occupies approx. 2 acres.
Selected Remedy:	Excavation and cover system; Groundwater, Surface Water, and Sediment Monitoring; Community Protection/Air Monitoring Plan	**Site COC(s):**	• VOCs • Metals • Soil Vapor (Head Space)
Current Remedial Program Phase:	Post-Remedial Action Site Monitoring; Site Management	**Institutional Controls:**	• Land and groundwater use restrictions • Monitoring and maintenance of ECs • Periodic certification of ICs/ECs
Post-Remediation Monitoring and Sampling Frequency:	• Site Inspection: Semi-annual • Groundwater, Surface Water, and Sediment/Biota Monitoring: Semi-annual • Air/Soil Vapor Monitoring: During groundwater monitoring or intrusive work	**Engineering Controls:**	• Landfill Cap • Erosion and Sediment Controls • Groundwater Monitoring • Surface Water Monitoring • Sediment Monitoring • Air Quality Monitoring • Fencing
Monitoring Locations:	• 5 Overburden Monitoring Wells • 7 Embankment Sediment Sample Locations • 7 Creek Surface Water Sample Locations	**Required Reporting:**	Data Submittal: follow each event. PRR: Annual

1.1 Site Location, Ownership, and Description

The Depew Village Landfill Site is situated in a suburban setting in the Village of Depew, New York. The Site is situated adjacent to the Village of Depew Department of Public Works (DPW) facility off Rutherford Place. The Site sits on an oxbow peninsula of Cayuga Creek, a Class C navigable stream that empties into Lake Erie via the Buffalo River. The approximately 22-acre Site all or portions of lots 103.20-1-13.11, 114.08-8-10.1 and 114.08-8-10.2 (section-block-lot), based on examination of the Erie County Tax Map. The Site is currently owned by the Village of Depew. The predominant Site features include: Cayuga Creek, which forms the southern, eastern and western boundaries of the Site; Zurbrick Road across the creek to the south; the Erie County Sewer District #4 -

Overflow Retention Facility (ORF) in the middle of the peninsula; and the Village of Depew DPW operations to the north. Along the perimeter creek bank there are unmanaged trees and brush. The Site is currently inactive with access controlled through the DPW and Erie County ORF via chain-link fencing. The surrounding properties across the creek to the south, east, and west are residential and are not access-limited. The property to the north is opened mowed fields, village or county buildings, and residential properties. The landfill portion of the Site is zoned commercial/industrial. A Site Location Map and a Site Layout Map are included as **Figure 1** and **Figure 2**, respectively.

1.2 Investigation/Remedial History

In 1983, NYSDEC listed the Site as a Class 2a site in the registry of inactive hazardous waste disposal sites. Class 2a was a temporary classification assigned to sites that had inadequate and/or insufficient data for inclusion in the other classifications. Also, in 1983, Erie County acquired 14.5 acres of the peninsula for the ORF project. During ORF construction, approximately 60,000 cubic yards of fill material was removed from the site and disposed of in the BFI Landfill in Tonawanda, New York; however, no chemical analysis of the material was performed. Following ORF construction, the County reconvened the remaining 9.5 acres to the Village of Depew.

The Erie County Department of Environment and Planning prepared a "Hazardous Waste Site Profile Report" in 1985 that concluded no hazardous waste was disposed of at the Site. In 1988, NYSDEC conducted a Phase I Investigation at the Site and recommended conducting a Phase II Investigation. In 1990, NYSDEC delisted the Site from the Registry based on the determination that no hazardous wastes were present.

In 2001, the Village of Depew entered into a Section 14 (1946 Flood Control Act) Project Cooperation Agreement (PCA) with the U.S. Army Corps of Engineers (USACE) to perform an Emergency Streambank Protection Project. The project focused on a section of Cayuga Creek north of Zurbrick Road and south of the Site on the left descending bank. As part of the project, the design called for excavating a section of the stream bank. During the excavation, the USACE contractor noticed the presence of fill materials and conducted sampling and analysis. The analysis indicated total lead concentrations as high as 86,000 parts per million (ppm) in the soils. In addition, the samples failed the U.S. Environmental Protection Agency's (EPA's) Toxicity Characteristics Leaching Procedure (TCLP) for leachable lead. Based on the determination that hazardous waste was present and in accordance with the PCA, the USACE ceased operations on the stream bank stabilization project.

In 2002, the Village of Depew entered NYSDEC's Voluntary Cleanup Program (VCP) and the Site was designated as V00609-9. In 2003, a Site investigation was conducted by the Village's consultant that focused on the 1.3-acre Area 2 at the tip of the peninsula. In 2004, a Site Investigation/Remedial Report (SI/RR) was prepared by Pan American Environmental Inc. and URS Corporation, Inc. This report confirmed the presence of hazardous waste and also indicated that the lead contamination most likely extends to the north, beyond the registry area on the peninsula tip. Due to the estimated volumes of hazardous material thought to be present, the Village of Depew opted out of the VCP. The Voluntary Cleanup Agreement was subsequently terminated, and NYSDEC relisted the Site as a Class 2 site.

In early 2007, NYSDEC finalized a Site Boundary Modification Package, which increased the Site size in the Registry from 1.3 to 20 acres. The Site boundary modification was based on the extent of the lead contamination as determined from the SI/RR results. The modified Site boundary included the majority of the footprint of the original landfill. In addition, the Site was divided into two operable units (OUs). The landfill and surrounding

impacted area was designated OU-01. OU-02 was created based on the fact that the sediments in the stream around the landfill were determined to be contaminated above NYSDEC guidance values for lead. Additionally, since the downstream extent of impacts in OU-02 had not yet been delineated, investigations continued in this operable unit.

An RI/FS for OU-01 was completed in 2006, and a ROD was issued in March of 2008. The ROD selected stream bank soil removal, stream bank stabilization, a soil cover, passive landfill gas venting, monitoring, and ICs as the remedy for OU-01. An RI/FS for OU-02 was completed in June 2009, and a ROD was issued in December 2009. The ROD selected sediment excavation from Cayuga Creek, soil removal from the floodplain and Zurbrick Road slopes, and stream bank remediation and stabilization. Contaminated soils and sediments removed in the process would be excavated and disposed of off-Site.

The Site remediation was undertaken in phases beginning in October 2011. Work Areas, assigned during preparation of the remedial designs, were used to identify varying work scopes in different sections of the creek. The location and approximate extent of each Work Area are illustrated in **Figure 2**. The table below outlines the work scopes applied to each of the areas.

Summary of Work Areas and Associated Remedial Activity Descriptions	
Location	**Description**
Area 1 (OU-02)	Zurbrick Road Stream Bank Remediation and Reconstruction: • Excavation of lead-contaminated soil • Backfill of excavation and installation of riprap, drainage features, and bend-way weirs • Restoration and hydroseeding
Area 2 (OU-01)	Landfill Tip Remediation and Reconstruction: • Excavation of lead-contaminated soils • Japanese knotweed removal, backfill, and installation of riprap • Restoration and hydroseeding
Area 3 (OU-01)	Cayuga Creek Sediment Removal (*east and south sides of the landfill*): • Sediment removal • Restoration and hydroseeding
Area 4 (OU-01)	Landfill Stream Bank Restoration (*2 phases*): • Vegetative stabilization of shoreline • Restoration and hydroseeding
Area 5 (OU-01)	Landfill Stream Bank Restoration: • Japanese knotweed removal and vegetative stabilization • Restoration and hydroseeding
Area 6 (OU-01)	Landfill Excavation and Stream Bank Restoration: • Excavation and backfill • Restoration and hydroseeding
Area 7 (OU-01)	Cayuga Creek Stream Bank Restoration: • Vegetative stabilization of shoreline • Restoration and hydroseeding

Summary of Work Areas and Associated Remedial Activity Descriptions	
Location	**Description**
Area 8 (OU-01)	Landfill Soil Cap (*2 phases*): • Soil and stone capping • Restoration and hydroseeding

Beginning in October 2011, the following actions were completed:

- Contaminated soils were excavated from two lead-contaminated stream bank locations in Area 4;
- Large stones and rock keys were installed along the toe of the stream bank as an erosion prevention measure;
- Excavated areas were backfilled with clean material;
- Coir logs, filter fabric, topsoil, and erosion control blankets (ECBs) were installed to stabilize stream banks;
- Container plants, trees, and hydroseed was planted to restore the site and stabilize the stream bank; and
- Live stakes were installed along the stream bank to stabilize and control erosion and reduce Japanese knotweed propagation on the stream bank.

The following actions were completed during Phase 2 of the Site remediation work:

- Contaminated soil was excavated from the Zurbrick Road slope in Area 1 and placed in Area 8, which was designated for use as a landfill for the remediation-generated wastes. The slope of the embankment was modified to a 1V:3H ratio during reconstruction using clean structural fill and compacted bank run soil. The lower half of the finished slope was armored with heavy riprap to provide protection from seasonal creek flooding and erosion. Live stakes were planted between the riprap into the underlying creek bed to provide additional stability and an emergent buffer for wildlife at the waterline. Above the flood line, clean topsoil, grass seed, and fertilizer were installed under a biodegradable ECB to protect the slope from erosion until a vegetation layer is established.

- Contaminated soil was excavated from Area 2 at the tip of the peninsula and placed in the landfill in Area 8. Invasive species covering Area 2 were eradicated both mechanically and with herbicidal chemical agents. The tip of the peninsula and creek channel were relocated 50 feet to the north to make room for the reconstructed Zurbrick Road slope. The lower portion of the finished streambank was armored with medium-sized riprap to provide protection from seasonal creek flooding. Clean soil, ECB, and topsoil were installed on the reconfigured streambank, and the bank was hydro-seeded. Live stakes were planted between the riprap into the underlying creek bed to provide additional stability and an emergent buffer for wildlife at the waterline. Container plantings were installed on the terrace at the top of the stream bank in Area 2 to provide additional slope stability and a visual buffer.

- The creek bed in Area 3 on the eastern side of the Site was dewatered and cleaned of contaminated sediments. Clean bank run material was installed in the creek bed and large stones moved during remediation were replaced in their original locations.

- Live stakes and container plantings were installed in Area 5 to help stabilize the stream bank and prevent erosion. The stream bank had previously been impacted by invasive species, which had been removed.

- Contaminated soils were excavated in Area 6 and moved to Area 8. Clean soil, ECB, and topsoil were installed on the reconfigured streambank in Area 6, and the bank was hydroseeded. Container plantings and stone armored drains from the adjacent DPW parking area were added to provide additional slope stability.

- Area 7 was cleared of invasive species and planted with live stakes and container plantings to stabilize the streambank and prevent erosion;

- A clean soil landfill cap was installed and hydroseeded on the non-wooded areas in Area 8 in compliance with the ROD. A geotextile segregation barrier with 6-inch-thick proof-rolled stone cap was installed in the DPW parking and material storage areas.

The following actions were completed during Phase 3, the final phase of the Site remediation work:

- Sediments of ½-inch size and smaller were removed from the creek bed to a depth of 1 foot, bank to bank, in Area 3 along the western side of the Site, under the Borden Road Bridge. Sediments ½-inch size and smaller were removed from depositional areas in the creek bed to the west of the Borden Road Bridge. Large stones moved during remediation were replaced in their original locations;

- The western shoreline of the Site was cleared of invasive species and planted with live stakes to stabilize the stream bank and prevent erosion.

A Site history, including the dates and descriptions of significant events and a Custodial Record detailing known and available Site reports, are included in **Appendix A**. Additional details are presented in the OU-01 and OU-02 SMP as well as historic Site documents.

1.3 Remaining Contamination

After completion of the Site remedial work in 2017, some contamination was left in place in the subsurface at the Site ("remaining contamination"). The primary contaminants of concern are metals including lead, mercury, and arsenic in the sediment and soil, methane in soil vapor, and volatile organic compounds (VOCs) including benzene, and metals including mercury and lead in the groundwater. This remaining contamination in the capped landfill, as well as residual contamination in the sediment, soil, soil vapor, and groundwater is being managed under the Site Management Plan.

1.4 Regulatory Requirements/Remedial Controls

The five main remedial goals selected for the Site, as identified in the RODs for OU-01 and OU-02, are to eliminate, to the extent practicable, the following:

- Human exposure to contaminants in the surface, subsurface soils, and creek sediment at or around the Site;

- Exposure of flora or fauna to contaminants in surface and subsurface soils;
- Soil gas migration and potential vapor intrusion/buildup of gases in surrounding buildings, structures, and utilities, which could cause a health and safety concern;
- Impacts on biota from ingestion/direct contact with soil causing toxicity, or impacts from bioaccumulation through the terrestrial and aquatic food chains; and
- Release of contaminants from the Site into the surface water and sediments of Cayuga Creek through erosion.

In addition, the remedy includes monitoring of the designated on- and off-Site locations with respect to the remaining contamination. These monitoring elements include the following:

- Long-term monitoring of the groundwater well network to determine trends in groundwater quality and to determine whether an upgradient source of groundwater contamination exists;
- Long-term monitoring of surface water and sediment to determine whether contaminants are migrating off-Site;
- Long-term biota monitoring to report on wildlife resources, and verify the establishment of vegetation along the stream bank in areas where invasive species were removed and live stakes were installed; and

Long-term monitoring of reconstructed areas of the Site to verify and report integrity of the soil cover system, and stability of the Zurbrick Road slope.

2.0 Institutional and Engineering Control Plan Compliance

2.1 Introduction

ICs and ECs are needed to protect human health and the environment from the residual contamination present in soil and groundwater beneath the Site. This section describes the procedures for managing the ICs and ECs at the Site. The ICs and ECs are components of the SMP, and revisions to the SMP are subject to approval by NYSDEC.

NYSDEC's DER-10: *Technical Guidance for Site Investigation and Remediation* outlines the requirements for the phases of the remediation process. Among these requirements are the ICs and ECs that must be followed upon completion of the remedy and completed under the SMP. **Figures 2 through 5** identify locations of ECs for the Site. The environmental easements which will be filed by the Village of Depew and Erie County provide the ICs at the Site. The environmental easements are included in Appendix B of the SMP.

2.2 Institutional Controls

The ICs at the Site are necessary so that residual contaminated material remains undisturbed. Current and future Site owners will be required to perform soil characterization and disposal/reuse in accordance with NYSDEC regulations if residual contaminated soil is disturbed and/or excavated.

The ICs required by the environmental easements refer to non-physical mechanisms designed to:

- Identify the allowable use or development of the Site;
- Limit human exposure to Site contaminants;
- Prevent actions that would threaten the effectiveness of a remedy at or pertaining to this Site; and
- Implement, maintain, and monitor ECs.

In addition to the ICs identified above, the environmental easement also stipulates the following:

- Compliance with the SMP;
- Restrictions on the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the NYSDOH;
- Periodic certification of ICs by the property owner; and
- Restriction on future property use that is no less restrictive than "commercial or industrial use" as defined by 6 NYCRR Part 375.

Institutional controls may not be discontinued without approval of NYSDEC.

2.3 Engineering Controls

2.3.1 Engineering Control Systems

The ECs established at the Site are designed to mitigate the migration of contaminants by reducing the amount of precipitation infiltrating into the contaminant mass. Groundwater, surface water, and sediment monitoring are conducted to track contaminant trends identify if contaminant migration is occurring. The analytical results for samples collected from the monitoring locations will be used to evaluate the control of contaminants at the site. Media-specific monitoring plans are provided in the SMP.

2.3.1.1 OU-01 (Depew Village Landfill and Creek Sediments) and OU-02 (Zurbrick Road Slope)

During the three phases of remedial activities at the Site, several ECs were installed to limit contaminant migration and prevent contamination from entering Cayuga Creek. The ECs installed during Site remediation and the procedures for inspection and maintenance are summarized below. Refer to **Figure 2** for the location of each area.

- Area 1 (OU-02): The stream bank along the north side of Zurbrick Road was remediated, reconstructed, and stabilized to prevent migration of contaminated soil and collapse of the roadway embankment into Cayuga Creek as a result of erosion. This is intended to be a permanent control, and the stream bank slope and surrounding areas will be inspected during each semi-annual monitoring event. Inspection of this area will focus on the presence of erosion around the edges of riprap and live stakes as well as the detection of significant slope movement. Live stakes are anticipated to grow and further stabilize the stream bank over time. A guiderail that was installed at the northern edge of Zurbrick Road will also be inspected for damage and for the presence of erosion, settlement, or undermining.
- Area 2 (OU-01): The stream bank along the southwestern tip of the peninsula was remediated, reconstructed, and stabilized to prevent erosion of potentially contaminated soil into Cayuga Creek. Semi-annual inspections will focus on the presence of erosion and the growth of live stakes over time.
- Area 3 (OU-01): Contaminated sediment from Cayuga Creek was removed to prevent further migration downstream. Semi-annual monitoring and inspections, as well as sampling of the creek bed sediment and surface water will be conducted to monitor sediment contamination trends.
- Area 4 (OU-01): The stream bank along the eastern edge of the peninsula was remediated and then stabilized with a row of heavy riprap, a rock key, coir logs, filter fabric, topsoil, ECBs, and live stakes. These permanent ECs will be inspected semi-annually. Inspections will focus on the presence of erosion, and displacement of any of the features listed above. Live stakes are anticipated to grow and further stabilize the area over time. Additionally, inspections will focus on the potential presence of ash/fill material from the landfill exposed at the surface due to elevated creek flow.
- Area 5 (OU-01): The stream bank along the western edge of the peninsula was stabilized with container plantings and live stakes as an erosion control measure. Semi-annual inspections will focus on the presence of erosion and the growth of live stakes over time.

- Area 6 (OU-01): The stream bank along the northwestern edge of the peninsula was remediated, reconstructed, and then stabilized with ECB, grass, container plantings, and large trees. These permanent ECs will be inspected semi-annually, focusing on identification of any evidence of erosion and the growth of the trees and containers over time.
- Area 7 (OU-01): The stream bank along the left descending bank of Cayuga Creek, west of Borden Road, was stabilized with live stakes and container plantings as an erosion control measure. Semi-annual inspections will focus on the presence of erosion and the growth of live stakes over time.
- Area 8 (OU-01): The landfill in Area 8 was capped, graded, and seeded to prevent human and/or wildlife exposure contaminants and to mitigate migration of contaminants via wind or soil erosion into Cayuga Creek. This permanent EC will be inspected during each semi-annual monitoring event. Inspections will focus on evidence of erosion along the graded surfaces of the cap, exposure of ash/fill materials from the original and newly landfilled areas at the surface or stream banks, and settlement or ponding of water that may be observed on the cap. Additionally, semi-annual inspections will document areas of the cap that may need filling or reseeding. Inspection procedures and forms are provided in the SMP.

2.3.1.2 Monitored Contaminant Confinement

Groundwater, surface water, sediment, and biota monitoring activities will be performed so that the contamination is not mobilized to the Cayuga Creek environment due to dissolution in the groundwater and/or by direct erosion of the soils.

Semi-annual groundwater sampling shall continue until NYSDEC has determined that residual levels of contaminants in groundwater are consistently within SCGs or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by NYSDEC. If groundwater contaminant levels become asymptotic at levels that are not acceptable to NYSDEC, additional source removal, treatment, and/or control measures may be required and will be evaluated.

2.3.2 Criteria for Completion of Remediation/Termination of Engineering Controls

Generally, remedial processes are considered completed when the effectiveness of the monitoring program indicates that the remedy has achieved the remedial action objectives identified by the ROD or other post-remedial decision documents. The framework for determining when remedial processes are complete is provided in Section 6.5 of NYSDEC's DER-10: *Technical Guidance for Site Investigation and Remediation.*

3.0 Monitoring and Sampling Plan Compliance

The SMP was prepared to manage remaining on-Site contamination and to ensure that the remedy remains effective by restricting Site use, Site development, and soil movement on the property. The table below shows the SMP-specified monitoring and sampling activities for the Site and indicates the dates those activities were completed for this PRR:

Summary of SMP Site Monitoring and Sampling Plan

Site Management Activity	Frequency[1]	Location(s)	Analytical Method[2,3]	Completion Date(s)
Groundwater	Semi-annually	MW-01, MW-02, MW-04, MW-05, MW-06	• SW-846 Methods 6010, 7470A for Inorganic Contaminants (Metals, incl. Lead/Mercury). • SW-846 Method 8260B for VOCs. • Results evaluated against TOGS 1.1.1 Class GA Groundwater Values.	1/3/2022 and 1/4/2022
Surface Water	Semi-annually	SW-01, SW-02, SW-03, SW-04, SW-05, SW-06, SW-07	• SW-846 Method 200.7/245.1 for 13 priority pollutant metals. • Results evaluated against TOGS 1.1.1 Class A H(WS) Surface Water Values.	12/30/2021
Sediments	Semi-annually	SD-01, SD-02, SD-03, SD-04, SD-05, SD-06, SD-07	• SW-846 Methods 6010, 7470A for Inorganic Contaminants (Metals, incl. Lead/Mercury). • Compared to NYSDEC Sediment Guidance Values, Table 5 – Freshwater Sediment Values for Class A.	12/30/2021
On-Site Soils and Imported Soils	As needed[4]	Not Applicable	• SW-846 EPA Methods 6010, 7470A.	N/A

Notes:
[1] The sampling frequency will be as indicated unless otherwise specified by NYSDEC.
[2] Additional analytical parameters may be required under DER-10 for compliance with the Site cleanup objectives.
[3] Lead is analyzed through SW-846 Method 6010. Mercury is analyzed through SW-846 Method 7470A. VOCs are analyzed through SW-846 Method 8260B.
(US)EPA – United States Environmental Protection Agency
VOCs – Volatile organic compounds
[4] When intrusive work is required on Site; also requires Community Air Monitoring.

3.1 Site Inspection

TRC conducted Site inspections during December 2021 and January 2022 in accordance with the SMP. The Site inspections were conducted to document the overall Site conditions, status of the groundwater monitoring system components via the condition of monitoring wells, the condition of the creek embankments, and the condition of the landfill cap.

A summary of the Site inspections is presented below:

Summary of Site Activities and Site Monitoring and Sampling
September 2020 to March 2022

Site Management Activity	Summary of Results	Maintenance/ Corrective Measure
Sitewide Inspection	During the inspections it was noted that the well riser and protective casing for MW-06 appeared to have been broken off at the ground surface and was being protected only using a traffic cone. In addition, an area of groundwater seepage was identified in the vicinity of location SD-02. All other inspection items appeared in good condition, and there was no evidence of unusual erosion along the creek bank, or settlement or erosion of the landfill cap.	Recommend repair of the riser at MW-06 for continued use as a monitoring point. Also recommend installation of signage to signify the well location. The location of the seepage was selected for collection of the surface water and sediment sample for location SW-02/SD-02, as well as downstream SW-01/SD-01. Based on the results of these samples which slightly exceeded the Class A Sediment Values, continued monitoring of this area is recommended.
Surface Water Sampling	Surface water grab samples were collected from each of the seven locations along the Cayuga Creek. Surface water samples were analyzed for 13 priority pollutant metals; No exceedances above the respective Class A surface water standards or guidance values were noted.	Recommend continued monitoring of all surface water locations as well as the groundwater seepage in the vicinity of SW-02.

Summary of Site Activities and Site Monitoring and Sampling September 2020 to March 2022		
Site Management Activity	**Summary of Results**	**Maintenance/ Corrective Measure**
Sediment Sampling	• SED-01: concentrations of three metals (Copper: 33.4 mg/kg; Lead: 118 mg/kg; Nickel: 27 mg/kg) exceeded the respective Class A sediment guidance values. • SED-06: concentrations of three metals (Copper: 34.4 mg/kg; Nickel: 34.6 mg/kg; Silver: 1.1 mg/kg) exceeded the respective Class A sediment guidance values. • SED-02: concentrations of five metals (Copper: 43.6 mg/kg; Lead: 39.3 mg/kg; Nickel: 30.9 mg/kg; Silver: 1.1 mg/kg; Zinc: 156 mg/kg) exceeded the respective Class A sediment guidance values.	Recommend continued sampling and monitoring at all sediment locations as well as the sediment in the vicinity of the seepage identified above (near SD-02).
Groundwater Gauging and Sampling	• GW-01: concentration of Lead (37.4 ug/L) exceeded the respective Class GA groundwater standard or guidance value. • GW-04: concentration of Mercury (1.1 ug/L) exceeded the respective Class GA groundwater standard or guidance value. • GW-02: concentrations of three VOCs (1,4-Dichlorobenzene: 5.0 ug/L; Benzene: 3.1 ug/L; Chlorobenzene: 38.2 ug/L) exceeded the respective Class GA groundwater standards or guidance values.	Continued monitoring of all groundwater monitoring points is recommended. Additionally, based upon previous PFAS results in groundwater, these analytes will be added during future monitoring events.

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On January 3 and 4, 2022, all wells, were gauged for depth to groundwater to evaluate potential groundwater flow directions. Additionally, survey data is not available for any of the monitoring wells. The Site monitoring wells are all screened in the overburden hydrogeologic unit. Head space monitoring was also performed using a PID upon opening each monitoring well in coordination with the groundwater sampling event. The groundwater gauging and elevation measurements can be found on **Appendix C**. A summary of the hydrogeologic information is presented below:

January 2022 Hydrogeologic Summary			
Number of Gauged Wells	**Hydrogeologic Units**	**Hydrogeologic Strata**	**Monitoring Wells**
5	1	Overburden	MW-01, MW-02 MW-04, MW-05 MW-06
Overburden Groundwater Elevation Range			
Lowest groundwater elevation[1]: 11.35 feet bgs (MW-01) Highest groundwater elevation[1]: 3.25 feet bgs (MW-05)			
Inferred Overburden Groundwater Flow Direction			
Southwest by West[2]			

Notes:
ft. bgs – Feet below ground surface.
[1] – Measured from top of casings
[2] – To be confirmed following recommended land survey activity

3.2.2 Groundwater Gauging

TRC conducted one semi-annual groundwater sampling events during the reporting period. TRC collected groundwater samples from five on-Site monitoring wells utilizing standard low-flow sampling techniques on January 3 and 4, 2022. Low-flow groundwater sampling was performed in accordance with TRC's June 2020 Generic Field Activities Plan (FAP), and documentation logs can be found in **Appendix C**. All groundwater samples, in addition to QA/QC samples collected at the frequencies specified in TRC's July 2020 Generic Quality Assurance Project Plan (QAPP), were submitted to Pace Labs for analysis of target compound list (TCL) VOCs via SW-846 method 8260B, and inorganics/metals via SW-846 Methods 6010 and 7470A.

A complete table with well construction details is in included in **Appendix A**. A summary of the groundwater sampling information and pertinent well details for each well is presented below:

Summary of Groundwater Monitoring and Sampling Activities January 2022							
Well ID	**Monitoring Well Details**				**Groundwater Sampling Event**		
	Northing	**Easting**	**Screen Zone[1] (ft. bgs)**	**Unit Screened**	**DTW (ft. below TOC)**	**Analytes**	**Notes**
MW-01	NM	NM	4.0 – 14.0	Overburden	9.3 (2006)	NS	DTB[1]: 14.0 ft. bgs
					11.35 (2022)	VOCs & inorganics/metals	DTB[2]: 14.5 ft. bgs
MW-02	NM	NM	7.0 – 17.0	Overburden	NM (2006)	NS	DTB[1]: 17.0 ft. bgs
					8.85 (2022)	VOCs & inorganics/metals	DTB[2]: 16.6 ft. bgs

Summary of Groundwater Monitoring and Sampling Activities January 2022							
Well ID	**Monitoring Well Details**				**Groundwater Sampling Event**		
	Northing	**Easting**	**Screen Zone[1] (ft. bgs)**	**Unit Screened**	**DTW (ft. below TOC)**	**Analytes**	**Notes**
MW-04	NM	NM	8.0 – 13.0	Overburden	3.3 (2006)	NS	DTB[1]: 13.0 ft. bgs
					7.00 (2022)	VOCs & inorganics/metals	DTB[2]: 12.5 ft. bgs
MW-05	NM	NM	3.5 – 8.5	Overburden	1.6 (2006)	NS	DTB[1]: 8.5 ft. bgs
					3.25 (2022)	VOCs & inorganics/metals	DTB[2]: 7.9 ft. bgs
MW-06	NM	NM	10.0 – 20.0	Overburden	6.5 (2006)	NS	DTB[1]: 20.0 ft. bgs
					10.0 (2022)	VOCs & inorganics/metals	DTB[2]: 11.0 ft. bgs

Notes:
DTW – Depth to water.
DTB – Depth to bottom.
ft. bgs – Feet below ground surface.
TOC – Top of casing.
NM – Not measured.
NS – Not sampled.
[1] – Base upon well construction logs.
[2] – Base upon Jan. 2022 field measurements to TOC; suspected obstruction in well.

3.2.3 Groundwater Sample Results

Groundwater analytical data for VOCs and metals can be found in **Table 1**. The Data Usability Summary Reports (DUSR) can be found in **Appendix D**. A summary of the January 2022 groundwater analytical results is presented below:

Exceedances Summary of Laboratory Analytical Results in Groundwater				
Constituent	**SCGs***	**Concentration Range (µg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
VOCs				
1,4-Dichlorobenzene	3	ND – 5.0	MW-06	1 / 5
Benzene	1	ND – 3.1	MW-06	1 / 5
Chlorobenzene	5	ND – 38.2	MW-06	1 / 5
Metals, Total				
Lead	25	ND – 37.4	MW-01	1 / 5
Mercury	0.7	ND – 1.1	MW-04	1 / 5

Notes:
ND - Not detected.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the April 2000 Addendum.

In January 2022, 1,4-dichlorobenzene, benzene, and chlorobenzene (VOCs) were detected at concentrations above the applicable SCG for these compounds in groundwater samples collected from one monitoring well (MW-06). Lead was detected at a concentrations above the applicable SCG in MW-01, and mercury was detected at a concentration above the applicable SCG in MW-04. Detected compounds exceeding their respective SCGs for each well are illustrated on **Figure 3**.

3.2.4 Sediment Sample Results

Sediment sample analytical data for metals can be found in **Table 2**. The laboratory data packages can be found in **Appendix D**.

Exceedances Summary of Laboratory Analytical Results in Sediment

Constituent	SCGs*	Concentration Range (mg/kg)	Location with Highest Detection	Frequency Exceeding SCG
Metals, Total				
Copper	< 32	11.3 – 43.6	SD-02	3 / 7
Lead	< 36	18.1 – 118	SD-01	2 / 7
Nickle	< 23	10.9 – 34.6	SD-04	3 / 7
Silver	< 1	0.53 – 1.1	SD-04	2 / 7
Zinc	< 120	66.3 – 156	SD-02	1 / 7

Notes:
ND - Not detected.
* - New York State Department of Environmental Conservation (NYSDEC), Class A of Freshwater Sediment Guidance Values, Screening and Assessment of Contaminated Sediment, June 24, 2014.

In December 2021, Copper was detected at concentrations above the applicable SCG in sediment samples collected from three creek bank locations (SD-01, SD-02, SD-04). Lead was detected at concentrations above the applicable SCG in sediment samples collected from two locations (SD-01, SD-02), both downgradient of the Site. Nickel was detected at concentrations above the applicable SCG in sediment samples collected from three locations (SD-01, SD-02, SD-04). Silver was detected at concentrations above the applicable SCG in sediment samples collected from two locations (SD-02, SD-04). Zinc was detected at a concentration above the applicable SCG in one sediment sample (SD-02). The sample locations with metals concentrations above the respective SCGs are illustrated on **Figure 4.**

3.2.5 Surface Water Sample Results

Surface water analytical data for the for 13 priority pollutant metals can be found in **Table 3**. The laboratory data packages can be found in **Appendix D**. Although metals were detected in each sample collected in December 2021, none of the concentrations exceeded the respective Class A surface water SCGs.

4.0 Cost Summary

The total estimated cost of TRC's management activities for 2020 and 2022 (September 2020 through March 2022) is approximately $23,400. Site management activities during the reporting period included one semi-annual Site inspection; one sampling event of seven sediment and surface water monitoring locations, with analysis for metals; one sampling event of five monitoring wells with analyses for VOCs and metals; and preparation of this PRR. The total includes engineering costs, as well as expenses associated with the project. Laboratory services were provided under a Department call-out contract with Pace. It should be noted that the total does not include the laboratory costs or other costs incurred by NYSDEC for project support. A summary of the 2020 through 2022 Site's management costs are presented below:

Summary of Site Management Costs
September 2020 through March 2022

Cost Item	Amount Expended	Percent of Total Cost
Engineering Support		
TRC	$22,800	97%
Expenses		
TRC	$600	3%
Total Cost	**$23,400**	----

The following provides a review of each cost item:

- Engineering support includes labor costs associated with project management (e.g., WA Package preparation, monthly invoicing, project scheduling and coordination, etc.), Site inspections, groundwater, sediment, and surface water sampling, data validation, electronic data deliverable preparation, and reporting (i.e., PRR preparation and DUSR).
- Expense costs include travel, equipment, investigation-derived waste disposal, and supplies in support of the Site monitoring and inspection event and routine Site maintenance activities.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Based on groundwater elevations measured in January 2022, groundwater flow in overburden hydrogeologic unit appears to be to the west-southwest. Since vertical control has not been established for the groundwater monitoring wells, this flow direction is estimated. Although this observation is consistent with historical observations, it will need to be confirmed following surveying.
- Lead was detected at concentrations exceeding the applicable SCG in 2 of 7 sediment samples collected in December 2021 (SD-01 and SD-02, both downgradient of the Site) and 1 of 5 groundwater samples collected in January 2022 (MW-01, slightly above the Class GA SCG, also downgradient of the Site, and in close proximity to SD-02).
- Mercury was detected slightly above the respective SCG in 1 of 7 groundwater samples (MW-04) collected in January 2022.
- Site and groundwater use are consistent with the restrictions set forth in the RODs and the SMP. One semi-annual Site inspections and Site inspection report was also completed. The ICs operated as intended during this reporting period.
- The remedy continued to be protective of human health and the environment through this reporting period.

5.2 Recommendations

- Monitoring well MW-06 should be repaired in accordance with NYSDEC protocols. The scope of work should include probing the well to determine if a blockage exists based on the variance between the TRC measurement and the well construction log. If unobstructed, the well riser should be replaced and a new protective well casing should be installed. In addition, a sign post and sign should be installed to prevent future damage by mowers.
- Vertical (and horizontal) control should be established using a land surveyor. The scope of work should include measurements of the location and elevations associated with each groundwater monitoring well (ground surface, top of casing, and top of protective outer casing). Elevations should also be measured at the approximate location of each sediment sampling point (to be marked in the field by TRC). A site benchmark should also be established for future reference.
- Inspection frequency should be decreased to annually (15 months), as well as following severe weather events, to coincide with site monitoring. Inspections shall include completion of inspection reports and verification that the ICs and ECs are in-place and effective at the Site.
- The groundwater, sediment, and surface water monitoring frequency, and the PRR frequency, should be decreased to annually (15 months). The next PRR covering the reporting period beginning April 1, 2022, and ending June 30, 2023, would be due in July/August 2023.
- Samples of sediment and surface water should be collected from the seep location in the vicinity of MW-01 and SD-02 to evaluate the need for corrective actions (at the next monitoring event).

- Groundwater monitoring should include PFAS constituents to evaluate the need for corrective actions relative to PFAS. The recommended sampling locations include MW-04 (downgradient), MW-05 (upgradient), and MW-06 (landfill area).
- Groundwater hydraulic monitoring should continue during subsequent groundwater monitoring events, and groundwater contour maps should be prepared once vertical control is established for the wells.
- An SMP addendum/revision should be prepared to reflect the above changes/modifications if the changes are acceptable to the Department. In addition, the SMP addendum should include details for tracking of climate resiliency metrics going forward.

6.0 Certification of Engineering and Institutional Controls

For each institutional or engineering control identified for the Site, I certify that all the following statements are true:

- The inspections of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program were performed under my direction;
- The institutional and/or engineering controls employed at this Site are unchanged from the date the controls were put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of such control to protect public health and the environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for these controls.
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of the controls;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- 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 practice; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Kevin D. Sullivan, P.E., of TRC Engineers, Inc., am certifying as Owner's/Remedial Party's Designated Site Representative for the Site.

Signature

073712
NYS Professional Engineer No.

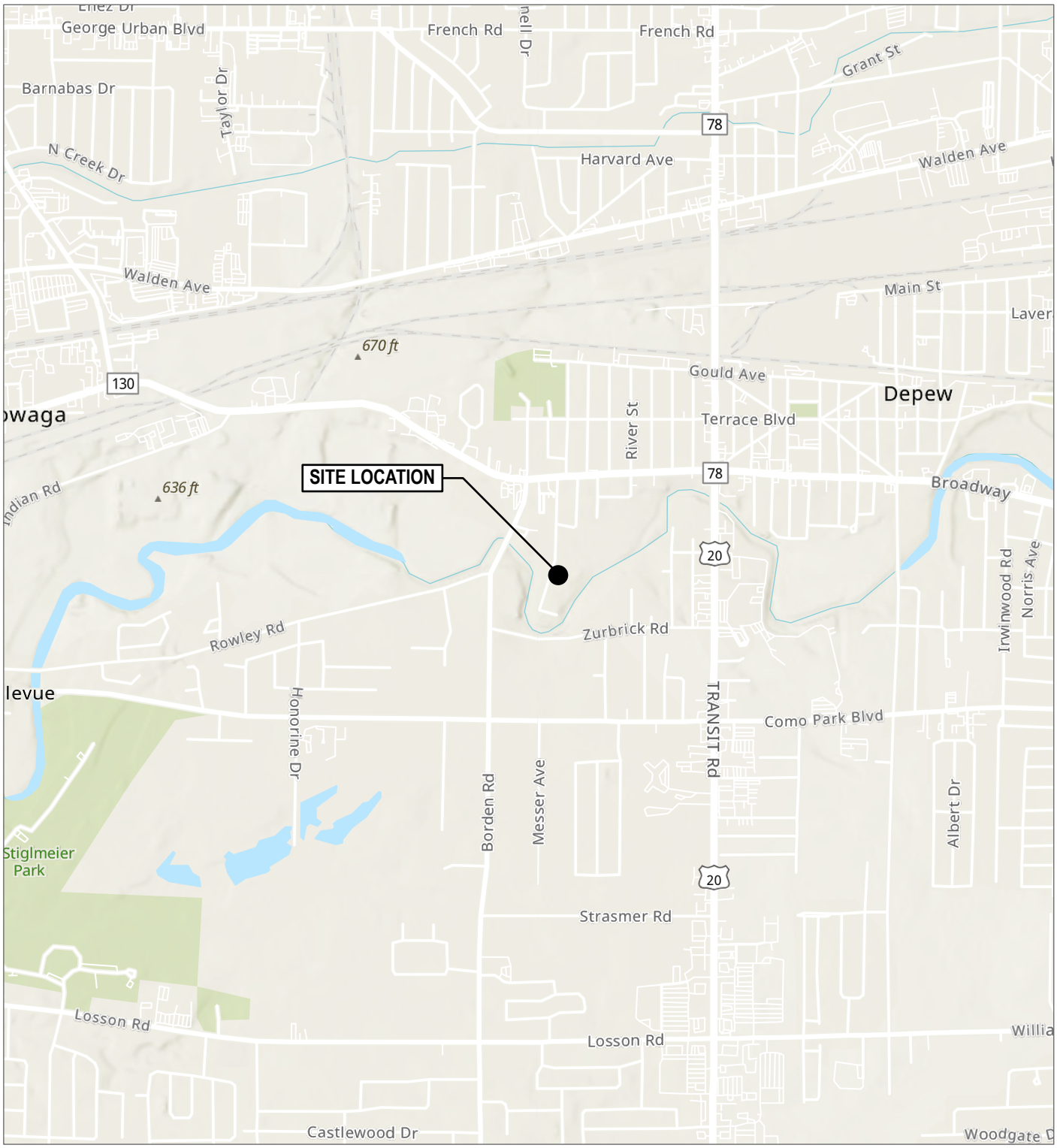
09/28/2022
Date

7.0 Future Site Activities

Based on the recommendations in Section 5, the following Site management activities will be completed during the next PRR reporting period (April 2022 to June 2023):

- Surveying and well repairs (targeting Q2 2023)
- Site Inspections – Annual/15 months (next scheduled: Q2 2023)
- Groundwater/Surface Water/ Sediment/Biota – Annual/15-months (next scheduled: Q2 2023)
- PRR – Annual Report (next scheduled: July/August 2023)

Figures



LEGEND

- SITE LOCATION

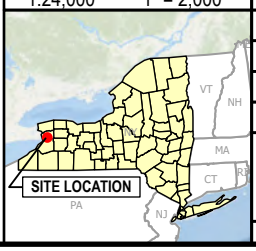
BASE MAP: USGS TOPOGRAPHIC IMAGERY
DATA SOURCES: TRC

N

0 1,000 2,000

FEET

1:24,000 1" = 2,000'



PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEPEW VILLAGE LANDFILL SITE - SITE NO. 915105
RUTHERFORD ROAD
DEPEW, NEW YORK 14043

TITLE:

SITE LOCATION MAP

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 29
CHECKED BY:	J. YAEGER		
APPROVED BY:	K. SULLIVAN		
DATE:	APRIL 2022		

FIGURE 1

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

FILE: DEPEW

LEGEND

- OU-1 BOUNDARY
- OU-2 BOUNDARY
- MONITORING WELL

NOTES:

1. BASE MAP FROM GOOGLE EARTH IMAGERY.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
3. DATA SOURCES: TRC.

1:2,400
1" = 200'
0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEPEW VILLAGE LANDFILL SITE - SITE NO. 915105
RUTHERFORD ROAD
DEPEW, NEW YORK 14043

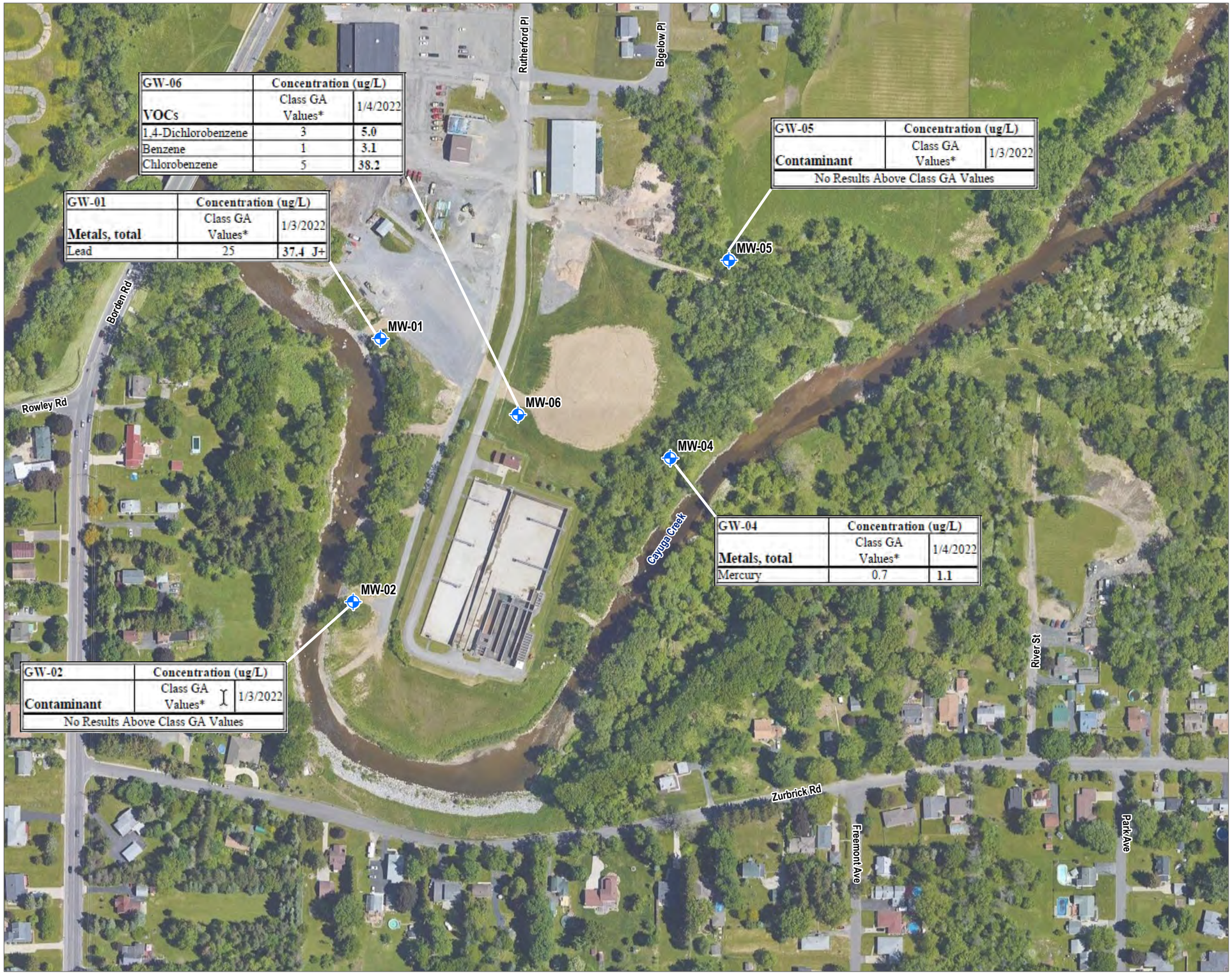
TITLE:
SITE LAYOUT MAP

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 29
CHECKED BY:	J. YAEGER		FIGURE 2
APPROVED BY:	K. SULLIVAN		
DATE:	APRIL 2022		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

FILE: depew.aprx

Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet; Map Rotation: 0
Saved By LLILL on 4/12/2022 - 09:06:55 AM; File Path: T:\PROJECTS\VOL5\EC\386554_29_DepewVillage\F2-APRX\depew\depew.aprx; Layout Name: Figure 2 - Site Layout



GW-06	Concentration (ug/L)	
VOCs	Class GA Values*	1/4/2022
1,4-Dichlorobenzene	3	5.0
Benzene	1	3.1
Chlorobenzene	5	38.2

GW-01	Concentration (ug/L)	
Metals, total	Class GA Values*	1/3/2022
Lead	25	37.4 J+

GW-05	Concentration (ug/L)	
Contaminant	Class GA Values*	1/3/2022
No Results Above Class GA Values		

GW-04	Concentration (ug/L)	
Metals, total	Class GA Values*	1/4/2022
Mercury	0.7	1.1

GW-02	Concentration (ug/L)	
Contaminant	Class GA Values*	1/3/2022
No Results Above Class GA Values		

LEGEND

MONITORING WELL

NOTES:

1. BASE MAP FROM GOOGLE EARTH IMAGERY.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
3. DATA SOURCES: TRC.
4. RESULTS SHOWN ON FIGURE ARE LIMITED TO EXCEEDANCES ONLY.
5. ALL RESULTS IN UNITS OF ug/L.

J+ - ESTIMATED VALUE; BIASED HIGH

ug/L - MICROGRAMS PER LITER

* NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, TOGS 1.1.1., JUNE 1998 WITH THE APRIL 2000 ADDENDUM.

N

1:2,400
1" = 200'
0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEPEW VILLAGE LANDFILL SITE - SITE NO. 915105
RUTHERFORD ROAD
DEPEW, NEW YORK 14043

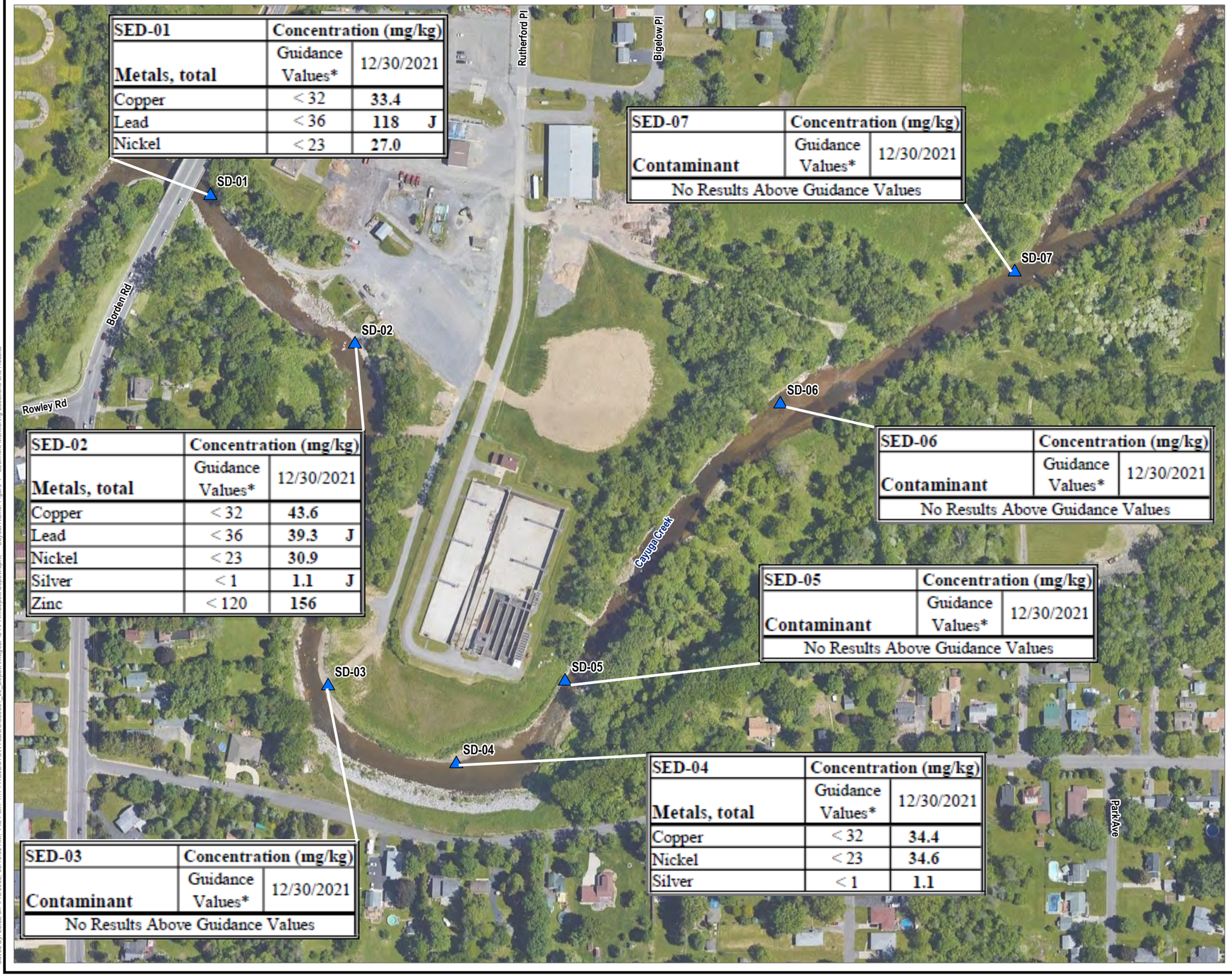
TITLE:
GROUNDWATER MONITORING LOCATIONS AND RESULTS

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 29
CHECKED BY:	J. YAEGER		FIGURE 3
APPROVED BY:	K. SULLIVAN		
DATE:	APRIL 2022		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

FILE: depew.aprx

Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet; Map Rotation: 0
Saved By LLILL on 4/19/2022, 08:09:55 AM; File Path: T:\1-PROJECTS\VOC\386554_29_DepewVillage\LF\2-APRX\depew\depew.aprx; Layout Name: Figure 3 - Groundwater Monitoring Locations and Results



SED-01	Concentration (mg/kg)	
Metals, total	Guidance Values*	12/30/2021
Copper	< 32	33.4
Lead	< 36	118 J
Nickel	< 23	27.0

SED-07	Concentration (mg/kg)	
Contaminant	Guidance Values*	12/30/2021
No Results Above Guidance Values		

SED-02	Concentration (mg/kg)	
Metals, total	Guidance Values*	12/30/2021
Copper	< 32	43.6
Lead	< 36	39.3 J
Nickel	< 23	30.9
Silver	< 1	1.1 J
Zinc	< 120	156

SED-06	Concentration (mg/kg)	
Contaminant	Guidance Values*	12/30/2021
No Results Above Guidance Values		

SED-05	Concentration (mg/kg)	
Contaminant	Guidance Values*	12/30/2021
No Results Above Guidance Values		

SED-04	Concentration (mg/kg)	
Metals, total	Guidance Values*	12/30/2021
Copper	< 32	34.4
Nickel	< 23	34.6
Silver	< 1	1.1

SED-03	Concentration (mg/kg)	
Contaminant	Guidance Values*	12/30/2021
No Results Above Guidance Values		

LEGEND

▲ SEDIMENT SAMPLE LOCATION

NOTES:

1. BASE MAP FROM GOOGLE EARTH IMAGERY.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
3. DATA SOURCES: TRC.
4. ALL RESULTS IN UNITS OF mg/kg.
5. RESULTS ARE LIMITED TO THOSE COMPOUNDS EXCEEDING THE SURFACE WATER STANDARDS IN TOGS 1.1.1.

J - ESTIMATED VALUE

mg/kg - MILLIGRAMS PER KILOGRAM (DRY WEIGHT) OR PARTS PER MILLION (PPM).

* NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC), CLASS A OF FRESHWATER SEDIMENT GUIDANCE VALUE, SCREENING AND ASSESSMENT OF CONTAMINATED SEDIMENT, JUNE 24, 2014.

N

1:2,400
1" = 200'
0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEPEW VILLAGE LANDFILL SITE - SITE NO. 915105
RUTHERFORD ROAD
DEPEW, NEW YORK 14043

TITLE:
SEDIMENT MONITORING LOCATIONS AND RESULTS

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 29
CHECKED BY:	J. YAEGER		FIGURE 4
APPROVED BY:	K. SULLIVAN		
DATE:	APRIL 2022		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

FILE: depew.aprx

Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet; Map Rotation: 0
Saved By: LLILL on 4/19/2022 - 8:56:02 AM; File Path: T:\PROJECTS\YYSDEC\386554_29_DepewVillage\LR2-APRX\depew\depew.aprx; Layout Name: Figure 4 - Sediment Monitoring Locations and Results

LEGEND

▲ SURFACE WATER LOCATION

NOTES:

1. BASE MAP FROM GOOGLE EARTH IMAGERY.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND PROPERTY BOUNDARIES ARE APPROXIMATE.
3. DATA SOURCES: TRC.

* NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS A SURFACE WATER, TOGS 1.1.1., JUNE 1998 WITH THE APRIL ADDENDUM.

1:2,400
1" = 200'
0 100 200 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEPEW VILLAGE LANDFILL SITE - SITE NO. 915105
RUTHERFORD ROAD
DEPEW, NEW YORK 14043

TITLE:
SURFACE WATER MONITORING LOCATIONS AND RESULTS

DRAWN BY:	L. LILL	PROJ. NO.:	386554 PHASE 29
CHECKED BY:	J. YAEGER		FIGURE 5
APPROVED BY:	K. SULLIVAN		
DATE:	APRIL 2022		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190

FILE: depew.aprx

Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet; Map Rotation: 0
Saved By: LLILL on 4/19/2022 - 08:24:16 AM; File Path: T:\PROJECTS\YYSC\386554_29_DepewVillage\LF2-APRX\depew\depew.aprx; Layout Name: Figure 5 - Surface Water Monitoring Locations and Results

Tables

TABLE 1
New York State Department of Environmental Conservation
SMP B - Depew Village Landfill
Depew, New York
Summary of VOCs and Metals in Groundwater - January 2022

			Sample Location:	GW-01		GW-02		GW-04		GW-05		GW-06			
			Sample Name:	DPW-GW-01		DPW-GW-02		DPW-GW-04		DPW-GW-05		DPW-GW-06		DPW-GW-DUPE	
			Lab Sample ID:	70199831001		70199831002		70199831003		70199831004		70199831005		70199831006	
			Sample Date:	1/3/2022		1/3/2022		1/4/2022		1/3/2022		1/4/2022		1/3/2022	
Analysis	Analyte	Unit	Class GA Values*											Field Dup	
VOCs															
	1,1,1-Trichloroethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,1,2,2-Tetrachloroethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,1,2-Trichloroethane	ug/L	1	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	1,1,2-Trichloro- 1,2,2-trifluoroethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,1-Dichloroethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,1-Dichloroethene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,2,3-Trichlorobenzene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,2,4-Trichlorobenzene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	1,2-Dichlorobenzene	ug/L	3	1.0	U	1.0	U	1.0	U	1.0	U	**1.3**		**1.2**	
	1,2-Dichloroethane	ug/L	0.6	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,2-Dichloropropane	ug/L	1	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,3-Dichlorobenzene	ug/L	3	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,4-Dichlorobenzene	ug/L	3	1.0	U	1.0	U	1.0	U	1.0	U	**4.5**		**5.0**	
	2-Butanone (MEK)	ug/L	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
	2-Hexanone	ug/L	50	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
	4-Methyl-2-pentanone	ug/L	NC	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
	Acetone	ug/L	50	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ
	Benzene	ug/L	1	1.0	U	1.0	U	1.0	U	1.0	U	**3.1**		**2.9**	
	Bromochloromethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Bromodichloromethane	ug/L	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Bromoform	ug/L	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Bromomethane	ug/L	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	Carbon disulfide	ug/L	60	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Carbon tetrachloride	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Chlorobenzene	ug/L	5	1.0	U	**1.3**		1.0	U	1.0	U	**37.3**		**38.2**	
	Chloroethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Chloroform	ug/L	7	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Chloromethane	ug/L	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	Cyclohexane	ug/L	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Dibromochloromethane	ug/L	50	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Dichlorodifluoromethane	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Ethylbenzene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	1,2-Dibromoethane	ug/L	0.0006	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Isopropylbenzene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	**1.8**		**1.8**	
	Methyl acetate	ug/L	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Methyl tert-butyl ether	ug/L	10	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Methylcyclohexane	ug/L	NC	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Methylene chloride	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Styrene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Tetrachloroethene	ug/L	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	Toluene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Trichloroethene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Trichlorofluoromethane	ug/L	5	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	Vinyl chloride	ug/L	2	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	Xylenes, total	ug/L	5	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
	cis-1,2-Dichloroethene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	cis-1,3-Dichloropropene	ug/L	0.4(b)	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
	m,p-Xylene	ug/L	5(a)	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
	o-Xylene	ug/L	5(a)	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	trans-1,2-Dichloroethene	ug/L	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
	trans-1,3-Dichloropropene	ug/L	0.4(b)	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ	1.0	UJ
Metals, total															
	Antimony	ug/L	3	60.0	U	60.0	U	60.0	U	60.0	U	60.0	U	60.0	U
	Arsenic	ug/L	25	**7.4**	**J**	**13.7**		**7.0**	**J**	10.0	U	10.0	U	10.0	U
	Beryllium	ug/L	3	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
	Cadmium	ug/L	5	**0.38**	**J**	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Chromium	ug/L	50	**5.4**	**J**	10.0	U	**2.0**	**J**	**1.2**	**J**	**1.3**	**J**	**1.4**	**J**
	Copper	ug/L	200	**16.2**	**J**	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U
	Lead	ug/L	25	**37.4**	**J+**	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ	5.0	UJ
	Mercury	ug/L	0.7	0.20	U	0.20	U	**1.1**		0.20	U	0.20	U	0.20	U
	Nickel	ug/L	100	**21.8**	**J**	**11.5**	**J**	**22.1**	**J**	**11.9**	**J**	**32.5**	**J**	**32.9**	**J**
	Selenium	ug/L	10	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Silver	ug/L	50	10.0	UJ	10.0	UJ	10.0	UJ	10.0	UJ	10.0	UJ	10.0	UJ
	Thallium	ug/L	0.5	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Zinc	ug/L	2,000	**120**		20.0	U	20.0	U	20.0	U	20.0	U	20.0	U

Notes:

ug/L - micrograms per liter.

J - Estimated value.

J+ - Estimated value; biased high.

NC - No standard exists for this analyte.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type exceed the listed Guideline Value.

VOCs - Volatile Organic Compounds.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the April 2000 Addendum.

(a) - criteria applicable to xylene (total), the sum of the xylene isomers.

(b) - criteria applicable to the sum of the cis and trans isomers.

TABLE 2
New York State Department of Environmental Conservation
SMP B - Depew Village Landfill
Depew, New York
Summary of Metals in Sediment - December 2021

			Sample Location:	**SED-01**		**SED-02**		**SED-03**		**SED-04**				**SED-05**		**SED-06**		**SED-07**	
			Sample Name:	DPW-SED-01		DPW-SED-02		DPW-SED-03		DPW-SED-04		DPW-SED-0A		DPW-SED-05		DPW-SED-06		DPW-SED-07	
			Lab Sample ID:	70199829002		70199829004		70199829006		70199829008		70199829012		70199830002		70199830004		70199829010	
			Sample Depth:	0-2 in		0-2 in		0-2 in		0-2 in		0-2 in		0-2 in		0-2 in		0-2 in	
			Sample Date:	12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021	
Analysis	Analyte	Unit	Guidance Values*									Field Dup							
Metals, total																			
	Antimony	mg/kg	NC		R		R		R		R		R		R		R		R
	Arsenic	mg/kg	< 10	**5.8**		**7.6**		**3.2**		**7.2**		**6.5**		**4.2**		**3.8**		**3.7**	
	Beryllium	mg/kg	NC	**0.46**	**J**	**0.51**	**J**	**0.16**	**J**	**0.62**		**0.57**		**0.30**	**J**	**0.27**	**J**	**0.26**	**J**
	Cadmium	mg/kg	< 1	**0.35**		**0.51**		**0.053**	**J**	**0.39**		**0.38**		**0.16**	**J**	**0.10**	**J**	**0.22**	
	Chromium	mg/kg	< 43	**16.5**	**J**	**20.0**	**J**	**6.6**	**J**	**19.9**	**J**	**18.4**	**J**	**12.8**	**J**	**11.3**	**J**	**11.1**	**J**
	Copper	mg/kg	< 32	**33.4**		**43.6**		**11.3**		**34.4**		**33.5**		**26.5**		**17.8**		**18.9**	
	Lead	mg/kg	< 36	**118**	**J**	**39.3**	**J**	**25.1**	**J**	**22.2**	**J**	**21.6**	**J**	**18.1**	**J**	**15.2**	**J**	**19.0**	**J**
	Mercury	mg/kg	< 0.2	**0.059**		**0.054**	**J**	0.045	U	**0.058**	**J**	**0.051**		**0.066**		**0.033**	**J**	**0.036**	**J**
	Nickel	mg/kg	< 23	**27.0**		**30.9**		**10.9**		**34.6**		**32.6**		**19.5**		**16.0**		**16.2**	
	Selenium	mg/kg	NC	1.0	U	1.3	U	0.68	U	**1.4**	**J+**	0.89	U	0.91	U	0.67	U	0.75	U
	Silver	mg/kg	< 1	**0.97**	**J**	**1.1**	**J**	**0.42**	**J**	**1.1**		**1.1**		**0.69**	**J**	**0.60**	**J**	**0.53**	**J**
	Thallium	mg/kg	NC	1.0	U	1.3	U	0.68	U	**0.97**		**1.0**		0.91	U	0.67	U	0.75	U
	Zinc	mg/kg	< 120	**117**		**156**		**66.3**		**120**		**117**		**89.0**		**72.1**		**80.8**	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

J - Estimated value.

J+ - Estimated value; biased high.

NC - No standard exists for this analyte.

R - Rejected data point.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded type exceed the listed Guideline Value.

* - New York State Department of Environmental Conservation (NYSDEC), Class A of Freshwater Sediment Guidance Values, Screening and Assessment of Contaminated Sediment, June 24, 2014.

TABLE 3
New York State Department of Environmental Conservation
SMP B - Depew Village Landfill
Depew, New York
Summary of Metals in Surface Water - December 2021

			Sample Location:	**SW-01**		**SW-02**		**SW-03**		**SW-04**				**SW-05**		**SW-06**		**SW-07**	
			Sample Name:	DPW-SW-01		DPW-SW-02		DPW-SW-03		DPW-SW-04		DPW-SW-0A		DPW-SW-05		DPW-SW-06		DPW-SW-07	
			Lab Sample ID:	70199829001		70199829003		70199829005		70199829007		70199829011		70199830001		70199830003		70199829009	
			Sample Date:	12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021		12/30/2021	
Analysis	Analyte	Unit	Guidance Values*									Field Dup							
Metals, total																			
	Antimony	ug/L	3	60.0	U	60.0	U	60.0	U	60.0	U	60.0	U	60.0	U	60.0	U	60.0	U
	Arsenic	ug/L	50	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Beryllium	ug/L	3	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
	Cadmium	ug/L	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
	Chromium	ug/L	50	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Copper	ug/L	200	25.0	U	**5.2**	**J**	25.0	U	25.0	U	**4.6**	**J**	25.0	U	25.0	U	25.0	U
	Lead	ug/L	50	5.0	U	**3.3**	**J**	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
	Mercury	ug/L	0.7	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
	Nickel	ug/L	100	**5.0**	**J**	**10**	**J**	40.0	U	**4.6**	**J**	**4.9**	**J**	40.0	U	**4.6**	**J**	40.0	U
	Selenium	ug/L	10	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Silver	ug/L	50	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Thallium	ug/L	0.5	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
	Zinc	ug/L	2,000	20.0	U	**11.3**	**J**	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U

Notes:

ug/L - micrograms per liter.

J - Estimated value.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

* - New York State Department of Environmental Conservation, TOGS 1.1.1. Class A and Type H(WS) Surface Water.

Appendix A

SITE HISTORY

DEPEW VILLAGE LANDFILL SITE (NYSDEC SITE NO. 915105)

Date	Description
1940 to 1961	The landfill/incinerator was opened and operated by the Village of Depew; waste disposal by the Village and possibly local industries included paper, dust, wood, foundry sand, general refuse, and incinerator ash.
1983	A portion of the main landfill area was purchased by Erie County for the construction of a storm water Overflow Retention Facility.
1984	During the ORF construction, 60,000 cubic yards of fill material was excavated from the landfill and disposed of off-Site in a permitted landfill. The Village DPW utilizes portions of the Site for materials storage and stockpiling, and in the northern section of the site there are access roads, utility corridors and parking areas associated with both the Village and County facilities.
2002 - 2003	The Village of Depew entered NYSDEC's Voluntary Cleanup Program (VCP) and the site is designated as V00609-9. A site investigation is conducted which focuses on the 1.3 acre area at the tip of the peninsula.
2004	The Village of Depew issues a Site Investigation/Remedial Report confirming the presence of hazardous wastes and identified extended lead contamination to the north, beyond the registry boundary. Based on the expected volume of hazardous waste, the Village of Depew opts out of the VCP and NYSDEC listed the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York.
August 2007	Remedial investigation and feasibility study of Operable Unit No. 2 at the Depew Village Landfill Site, conducted by Ecology and Environment Engineering, P.C. (EEE).
January 2008	NYSDEC propose remedial action plan for Depew Village Landfill Operable Unit No. 01.
March 2008	NYSDEC issues a record of decision (ROD) for Operable Unit No. 01.
June 2009	EEE conducts a follow up remedial investigation and feasibility study for Operable Unit 2 of the Depew Village Landfill Site.
October 2009	NYSDEC propose remedial action plan for Depew Village Landfill Operable Unit No. 02.
November 2009	NYSDEC has a public meeting covering proposed remedial action plan for Depew Village Landfill Operable Unit No. 02.
December 2009	NYSDEC issues a ROD for Operable Unit No. 02.

January 2011	Pre-design investigation plan developed for Zurbrick Road slope soils, Cayuga Creek sediments and the Depew Village Landfill tip.
August 2020	Site management plan (SMP) developed for the Depew Village Landfill Site

CUSTODIAL RECORD/PERTINENT SITE DOCUMENTS

DEPEW VILLAGE LANDFILL SITE (NYSDEC SITE NO. 915105)

Ecology and Environment Engineering, P.C. (EEE), *Technical Work Plan for the Remedial Investigation and Feasibility Study of Operable Unit 2 at the Depew Village Landfill Site*, Depew Village Landfill Site, August 2007

NYSDEC, *Proposed Remedial Action Plan Depew Village Landfill Operable Unit No. 01*, Depew Village Landfill Site, January 2008

NYSDEC, *Record of Decision (ROD) Operable Unit No. 01*, Depew Village Landfill Site, March 2008

EEE, *Remedial Investigation and Feasibility Study for Operable Unit 2 of the Depew Village Landfill Site*, Depew Village Landfill Site, June 2009

NYSDEC, *Proposed Remedial Action Plan Depew Village Landfill Site Operable Unit No. 02*, Depew Village Landfill Site, October 2009

NYSDEC, *Proposed Remedial Action Plan Depew Village Landfill Site Operable Unit No. 02;* Public Meeting Presentation, Depew Village Landfill Site, November 2009

NYSDEC, *Record of Decision (ROD) Operable Unit No. 02*, Depew Village Landfill Site, December 2009

EEE, *Pre-design Investigation Plan for Zurbrick Road Slope Soils, Cayuga Creek Sediments and the Depew Village Landfill Tip*, Depew Village Landfill Site, January 2011

EEE, *Final Site Management Plan (SMP) for the Depew Village Landfill Site*, Depew Village Landfill Site, August 2020

EEE, *Final Engineering Report (FER) for the Depew Village Landfill Site*, Depew Village Landfill Site, August 2020

New York State Department of Environmental Conservation
Depew Village Landfill Site - Site No. 915105
Depew, New York
Monitoring Well Construction Summary

Well ID	Installation Date	Well Dia. (inches)	Well Material	Total Depth (feet bgs)	Screened Formation	*Screen*			*Elevation (feet AMSL)*				*Location*	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Casing Top	Ground Surface	Screen		Northing (feet)	Easting (feet)
											Top	Bottom		
MW-01	2/20/2006	2	PVC	14.0	Overburden	4.0	14.0	10.0						
MW-02	2/24/2006	2	PVC	17.0	Overburden	7.0	17.0	10.0						
MW-04	2/21/2006	2	PVC	13.0	Overburden	8.0	13.0	5.0						
MW-05	2/21/2006	2	PVC	8.5	Overburden	3.5	8.5	5.0						
MW-06	2/20/2006	2	PVC	20.0	Overburden	10.0	20.0	10.0						

Notes
AMSL : above mean sea level
feet bgs : feet below ground surface
PVC : polyvinyl chloride

Appendix B

Inspection Form-Landfills

New York State Department of Environmental Conservation
Inactive Hazardous Waste Site

Site Name: Depew Village Landfill		NYSDEC Site Number: 915105	NYSDEC PM: Justin King
Site Location: Village of Depew Town of Cheektowaga, NY		Site Classification # (circle): 1 (2) 2a 3 4	Primary Site Contact:
Site Inspection Date: 12-~~30~~-2021	Purpose of Inspection: Site visit to markout & locate SW/SD/GW		
Name of Inspector: Josh Yaeger	Title: Env. Eng. I	Agency/Company: TRC Companies	Address: 1090 Union Rd #280 West Seneca, NY 14224
Phone Number: 716-359-9592			

Landfill Cover System

Cover System Onsite?	(Yes)	No (Proceed to next Section)		Cover System Observations: Bright orange/ Sheen liquid seen along west side embankment of landfill peninsula
Vegetative Cover Condition	(Good)	Poor	NA	
Evidence of Vegetative Stress	Yes	(No)	NA	
Mowing Required	Yes	(No)	NA	
Presence of Debris	Yes	(No)	NA	
Evidence of Ponded Water	Yes	(No)	NA	
Exposed Geotextile	Yes	(No)	NA	
Evidence of Erosion Settlement	Yes	(No)	NA	
Engineered Drainage Swale Condition	(Good)	Poor	NA	
Evidence of Leachate Seepage	(Yes)	No	NA	
Evidence of Erosion	Yes	(No)	NA	
Presence of Woody Growth	(Yes)	No	NA	
Animal Burrows	Yes	(No)	NA	

Stormwater Collection and Drainage

Drainage Channel Condition - Cayuga Creek	Good	Poor	NA	Observations: SAA
Sedimentation	(Yes)	No	NA	
Sediment Samples Collected	(Yes)	No	NA	
Debris	Yes	(No)	NA	
Erosion/Slope Loss	Yes	(No)	NA	
Evidence of Leachate Seepage	(Yes)	No	NA	
Rip-Rap Condition	(Good)	Poor	NA	
Condition of Synthetic Liner	(Good)	Poor	NA	
Culvert Condition	Good	Poor	(NA)	
Other Drainage Structures/Pipes	(Good)	Poor	NA	
Condition of Drainage Grates	Good	Poor	(NA)	
Retention Ponds	Good	Poor	(NA)	

Building Structures

Are there any building structures at the site?	(Yes)	No (Proceed to next section)		Building Condition Observations: Did not inspect building interiors
Overall Exterior Condition	(Good)	Poor	NA	
Overall Interior Condition	Good	Poor	(NA)	
Interior Floor	Good	Poor	(NA)	
Vaulted Areas	Good	Poor	(NA)	

Leachate Collection System

Is there a leachate collection system at the site?	Yes	(No) (Proceed to next section)		Collection System Observations:
Collection Trench Condition	Good	Poor	(NA)	
Transfer Flow Pipes	Good	Poor	(NA)	
Condition of Valves	Good	Poor	(NA)	
Leachate Pump Condition	Good	Poor	(NA)	
Holding Tank(s) Condition	Good	Poor	(NA)	
Leachate Transfer/Loading Area	Good	Poor	(NA)	
List other applicable components and their overall condition				

Environmental Monitoring Locations

Is there a monitoring network at the site?	(Yes)	No (Proceed to next section)		Monitoring Network Observations: MW-06 could use riser repairs
Monitoring Wells/Piezometers	(Good)	Poor	NA	
Soil Gas Monitoring Probes	(Good)	Poor	(NA)	
Landfill Gas Vents	Good	Poor	(NA)	
List other applicable location types and their overall condition				

Inspection Form-Landfills

New York State Department of Environmental Conservation
Inactive Hazardous Waste Site

Interviews/Additional Contacts			
Name/Title	Phone:	Company/Entity	Contact Information

Additional Observation Notes:

While the orange/sheen seepage was seen along the western shoreline of the landfill peninsula, no odor was noticed in the vicinity.

Photograph Log: See attached photo log

Photograph 1
Photograph 2
Photograph 3
Photograph 4
Photograph 5
Photograph 6
Photograph 7
Photograph 8
Photograph 9
Photograph 10

Performance Monitoring

Were check samples collected during this visit? (Yes) No — 12/30/2021

Sample type collected *(circle or write in other)* : (Groundwater) (Sediment) Soil Leachate Air (Surface Water)

List Parameters/Methods Collected Per Media:

GW → 1/3 → 1/4/2022
6 samples + MS/msd → SW-846 6010, 7470A, 8260B

SW
8 samples + MS/Msd → 13 priority pollutant metals EPA 200.7/245.1

Sed
8 samples + MS/Msd → SW-846 6010

Analytical Laboratory/Location: Pace Analytical Long Island NY/575 Broad Hollow Rd, Melville, NY 11747

Sample Observations:

Typical conditions, visually & olifactory, as per average operational landfill area

NYSDEC Depew Village Landfill Site
Photograph Log
Date: January 03-04, 2021

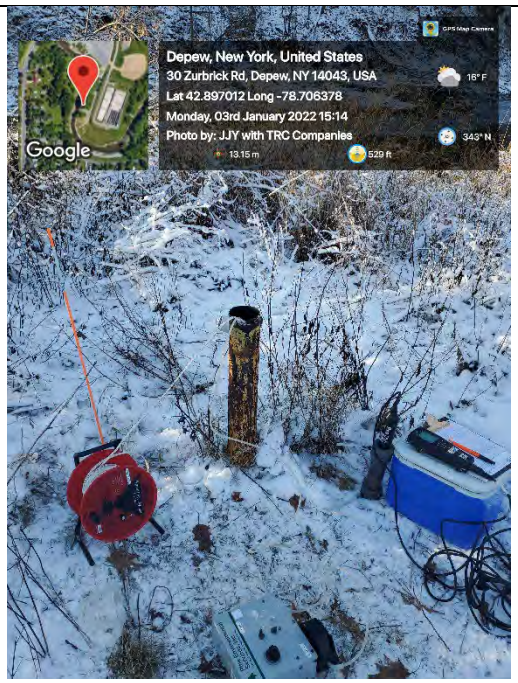


Photo 1: View of the well riser to MW-02.

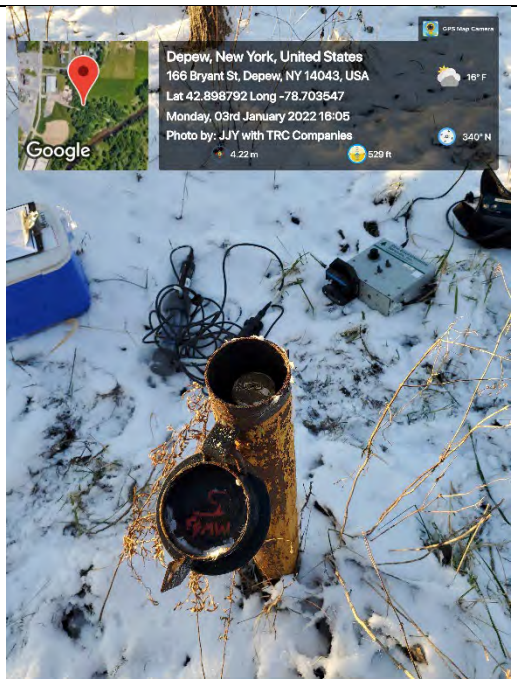


Photo 2: View of the well riser to MW-05.

Photo 3: View of the well riser to MW-04.

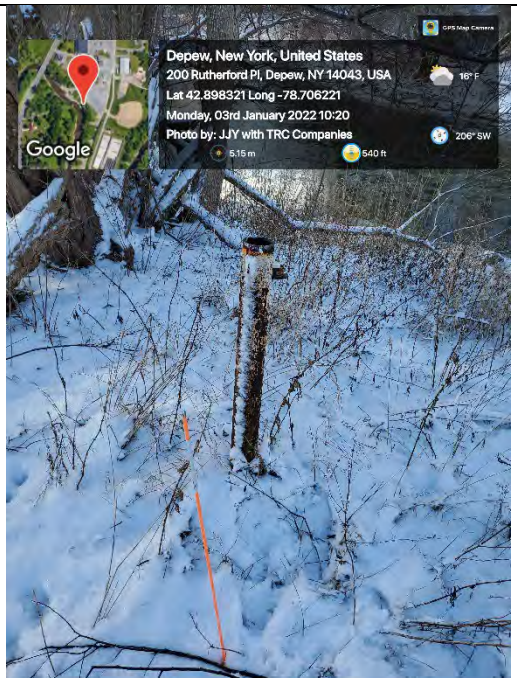


Photo 4: View of the well riser to MW-01.

NYSDEC Depew Village Landfill Site
Photograph Log
Date: January 03-04, 2021

Photo 5: View of MW-01 well riser
.

Photo 6: View of MW-02 well riser.

Photo 7: View of MW-05 well riser.

Photo 8: View of MW-04 well riser
.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
386554.0000 .0000	Josh Yaeger	2 of 3	NYSDEC	Depew Village Landfill Site Depew, NY	TRC

NYSDEC Depew Village Landfill Site
Photograph Log
Date: January 03-04, 2021

Photo 9: View of MW-04 and vicinity during sampling setup.

Photo 10: View of MW-04 during sample collection

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
386554.0000 .0000	Josh Yaeger	3 of 3	NYSDEC	Depew Village Landfill Site Depew, NY	TRC

Report No. 20220103 **Depew Village Landfill - NYSDEC Site No. 915105** Date: 01/03/2022

NYSDEC
Division of Environmental Remediation

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NYSDEC Contract No.

Superintendent: N/A

NYSDEC PM: Brianna Scharf

Consultant PM: Kevin Sullivan

Consultant Site Inspectors:

Josh Yaeger

Site Location: Depew Village Landfill Site

Weather Conditions

General Description	Snow Shower	AM	Partly Cloudy	PM
Temperature	37 deg F	AM	16 deg F	PM
Wind	3 mph from NNW	AM	5 mph from NE	PM

Health & Safety
If any box below is checked "Yes", provide explanation under "Health & Safety Comments".

Were there any changes to the Health & Safety Plan?	*Yes	**No**	NA
Were there any exceedances of the perimeter air monitoring reported on this date?	*Yes	**No**	NA
Were there any nuisance issues reported/observed on this date?	*Yes	**No**	NA

Health & Safety Comments

Tripping/falling near the vicinity of moving water and active heavy/large-scale vehicles from the DPW; Tripping/cuts/injury from vicinity brush/vegetation.

Summary of Work Performed	Arrived at site:	**1015**	Departed Site:	**1815**

During this Site visit the inspector set out to develop, pump, and sample five monitoring wells. Arrived on-Site at 1015 and set up the pump equipment using a battery pack for MW-01. The groundwater samples were collected at MW-01, and work proceeded to MW-02, MW-05, and MW-04. With the mobile battery pack, MW-04 was pumped until dusk where it quickly ran dry. An attempt to finish the remaining wells will be conducted the following morning.

Equipment/Material Tracking
If any box below is checked "Yes", provide explanation under "Material Tracking Comments".

Were there any vehicles which did not display proper D.O.T numbers and placards?	*Yes	No	**NA**
Were there any vehicles which were not tarped?	* Yes	No	**NA**
Were there any vehicles which were not decontaminated prior to exiting the work site?	* Yes	No	**NA**

Personnel and Equipment

Individual	Company	Trade	Total Hours
Josh Yaeger	TRC Companies	Environmental Engineer	8

Equipment Description	Contractor/Vendor	Quantity	Used
Peri-Pump	Pine Environmental	1	Yes, 2 days
12V Rechargeable Battery	Pine Environmental	1	Yes, 2 days
WLM- 100'- Solinst Model 101 P2/M2	Pine Environmental	1	Yes, 2 days
YSI ProDSS Kit	Pine Environmental	1	Yes, 2 days

Material Description	Imported/ Delivered to Site	Exported off Site	Waste Profile (If Applicable)	Source or Disposal Facility (If Applicable)	Daily Loads	Daily Weight (tons)*

*On-Site scale for off-site shipment, delivery ticket for material received

Equipment/Material Tracking Comments:

None – Not applicable

Visitors to Site

Name	Representing	Entered Exclusion/CRZ Zone	
		Yes	**No**
		Yes	**No**
		Yes	**No**
		Yes	**No**

Site Representatives

Name	Representing
Brianna Scharf	NYSDEC
Kevin Sullivan	TRC

Project Schedule Comments

Project is on schedule. No significant schedule issues

Issues Pending

MW-04 ran dry quickly; sampled groundwater directly the next day.

Interaction with Public, Property Owners, Media, etc.

Sign in at Highway Department office. No other interactions noted.

DAILY HEALTH CHECKLIST

Is social distancing being practiced?	Yes ☒	No ☐
Is the tail gate safety meeting held outdoors?	Yes ☒	No ☐
Are remote/call in job meetings being held in lieu of meeting in person where possible?	Yes ☐	No ☒
Were personal protective gloves, masks, and eye protection being used?	Yes ☒	No ☐
Are sanitizing wipes, wash stations or spray available?	Yes ☒	No ☐
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes ☐	No ☒
Comments:		

REMEDIAL ACTIVITIES AT PROPERTIES

1. Have anyone at this location been tested and confirmed to have COVID-19?	Yes ☐	No ☒
2. Is anyone at this location isolated or quarantined for COVID-19?	Yes ☐	No ☒
3. Has anyone at this locaton had contact with anyone known to have COVID-19 in the past 14 days?	Yes ☐	No ☒
4. Does anyone at this locaton have any symptoms of a respiratory infection (e.g., cough, sore throat, fever, or shortness of breath)?	Yes ☐	No ☒
5. Does the Department and its contractors have your permission to enter the property at this time?	Yes ☒	No ☐
If Yes to any of 1-4 above: • If it is not critical that service/entry be carried out immediately and can be postponed until the risk of COVID-19 is lower, or can be accomplished remotely/without entry, postpone or conduct service without entry. • If it is critical that service/entry be carried out immediately, advise occupants that as a precaution and for our own protection, project personnel will be donning appropriate PPE* (including respiratory protection) - and do so prior to entry.	Yes ☐	No ☐
Comments:		

NUISANCE CHECKLIST

Were there any community complaints related to work on this date?	Yes ☐	No ☒	N/A☐
Were there any odors detected on this date?	Yes ☐	No ☒	N/A☐
Was noise outside specification and/or above background on this date?	Yes ☐	No ☒	N/A☐
Were vibration readings outside specification and/or above background on this date?	Yes ☐	No ☒	N/A☐
Any visible dust observed beyond the work perimeter on this date?	Yes ☐	No ☒	N/A☐

Any visible contrast (turbidity) beyond engineering controls observed on this date?	Yes ☐	No ☒	N/A☐
Was turbidity checked at the outfall(s)?	AM ☐	PM ☐	N/A☒
Were any property owners NOT provided advance notice for work performed on this property on this date?	Yes ☐	No ☒	N/A☐
Was the temporary fabric structure closed at the end of the day?	Yes ☐	No ☐	N/A☒
Has Contractor failed to protect all foundations and structures adjacent to and adjoining the site which are affected by the excavations or other operations connected with performance of the Work?	Yes ☐	No ☐	N/A☒
If yes, has Contractor been notified?	Yes ☐	No ☐	N/A☒
Comments:			

RESILIENCE/GREEN REMEDIATION CHECKLIST

Is the site supplied with green power and is it properly installed and/or maintained?	Yes ☐	No ☐	N/A☒
Is the site employing 2007 or newer or retrofitted diesel trucks?	Yes ☐	No ☐	N/A☒
Is vehicle idling adequately reduced per 6NYCRR Part 217-3?	Yes ☒	No ☐	N/A☐
Is equipment properly maintained and operated by trained personnel?	Yes ☒	No ☐	N/A☐
Is work being sequenced to avoid double handling?	Yes ☒	No ☐	N/A☐
Is there an onsite recycling program for CONTRACTOR generated wastes and is it complied with?	Yes ☐	No ☐	N/A☒
Are office trailer heating and cooling systems maintained at efficient set points?	AM ☐	PM ☐	N/A☒
Are products and materials appropriately certified (e.g., LEED, Energy Star, Sustainable Forestry Initiative®, etc.)?	Yes ☐	No ☐	N/A☒
Are resiliency features included in the design or completed remedy properly installed and/or maintained (flood control, storm water controls, erosion measures, etc.)?	Yes ☐	No ☐	N/A☒
Are green remediation elements included in the design or completed remedy properly installed and/or maintained (e.g., porous pavement, geothermal, variable speed drives, native plantings, natural stream bank restoration, etc.)?	Yes ☐	No ☐	N/A☒
Are appropriate metrics documented for inclusion on Form A, Summary of Green Remediation Metrics, by the CONTRACTOR?	Yes ☐	No ☐	N/A☒
Has Contractor been notified of any deficiencies?	Yes ☐	No ☐	N/A☒
Comments:			

Appendix C

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Depew Village Landfill		
PROJECT NUMBER	386554.0000.0000		
SAMPLE ID	DPW-GW-01	**SAMPLE TIME**	1245

LOCATION ID	MW-01	**DATE**	1/3/2022
START TIME	1200	**END TIME**	1300
SITE NAME/NUMBER	915105	**PAGE**	1 OF 1

WELL DIAMETER (INCHES) ☐ 1 ■ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER _____

TUBING ID (INCHES) ☐ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER _____

MEASUREMENT POINT (MP) ☐ TOP OF RISER (TOR) ■ TOP OF CASING (TOC) ☐ OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR			X

INITIAL DTW (BMP)	11.35 FT	**FINAL DTW (BMP)**	FT	**PROT. CASING STICKUP (AGS)**	IN	**TOC/TOR DIFFERENCE**	IN
WELL DEPTH (BMP)	17.00 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	GAL	**DRAWDOWN/ TOTAL PURGED**		**PRESSURE TO PUMP**	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1200	**BEGIN PURGING**									
1210	12.06	250	835	1.767	7.14	1.48	568.24	-15.2		
1220	12.06	250	836	1.603	7.07	1.16	51.58	-60.7		
1230	12.06	250	8	1.567	7.07	1.05	19.04	-66.7		
1235	12.06	250	8.1	1.572	7.07	1.00	18.19	-67.6		
1240	12.06	250	7.9	1.554	7.07	0.99	14.19	-67.6		
1245										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☐								
☐								
☐								
☐								
☐								
☐								
☐								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES ☐ NO ☐

NUMBER OF GALLONS GENERATED _____

NO-PURGE METHOD UTILIZED YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

Sampler Signature: Joshua J Yaeger Print Name: Joshua J Yaeger

Checked By: Date:

SKETCH/NOTES

- MS / MSD taken
- 1 × 40 mL vial broke

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Depew Village Landfill	**LOCATION ID**	MW-02
PROJECT NUMBER	386554.0000.0000	**DATE**	1/3/2022
SAMPLE ID	DPW-GW-02	**START TIME**	1510
SAMPLE TIME	1550	**END TIME**	1605
		SITE NAME/NUMBER	915105
		PAGE	1 OF 1

WELL DIAMETER (INCHES) ☐ 1 ■ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER _____

TUBING ID (INCHES) ☐ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER _____

MEASUREMENT POINT (MP) ☐ TOP OF RISER (TOR) ■ TOP OF CASING (TOC) ☐ OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	8.85 FT	**FINAL DTW (BMP)**	FT	**PROT. CASING STICKUP (AGS)**	IN	**TOC/TOR DIFFERENCE**	IN
WELL DEPTH (BMP)	19.10 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	GAL	**DRAWDOWN/ TOTAL PURGED**		**PRESSURE TO PUMP**	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1510	**BEGIN PURGING**									
1520	9.9	250	10.4	1.277	7.00	1.04	145.63	-53.6		
1530	9.9	250	10.4	1.252	7.00	0.94	140.85	-62.7		
1540	9.9	250	10.5	1.239	7.00	0.88	146.82	-66.4		
1545	9.9	250	10.6	1.232	6.99	0.86	142.36	-66.2		
1550										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☐								
☐								
☐								
☐								
☐								
☐								
☐								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED ☐ YES ☐ NO

NUMBER OF GALLONS GENERATED _____

NO-PURGE METHOD UTILIZED ☐ YES ☐ NO

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

Sampler Signature: Joshua J Yaeger Print Name: Joshua J Yaeger

Checked By: Date:

SKETCH/NOTES

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Depew Village Landfill	**LOCATION ID**	MW-04
PROJECT NUMBER	386554.0000.0000	**DATE**	[See Comments]
SAMPLE ID	DPW-GW-04	**START TIME**	*
SAMPLE TIME	1150	**END TIME**	**
		SITE NAME/NUMBER	915105
		PAGE	1 OF 1

WELL DIAMETER (INCHES) ☐ 1 ■ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER _____

TUBING ID (INCHES) ☐ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER _____

MEASUREMENT POINT (MP) ☐ TOP OF RISER (TOR) ■ TOP OF CASING (TOC) ☐ OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	7.00 FT	**FINAL DTW (BMP)**	FT	**PROT. CASING STICKUP (AGS)**	IN	**TOC/TOR DIFFERENCE**	IN
WELL DEPTH (BMP)	15.00 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	GAL	**DRAWDOWN/ TOTAL PURGED**		**PRESSURE TO PUMP**	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1715	**BEGIN PURGING**									
1725	6.90	250	6.9	1.486	6.86	5.56	96.53	164.8		1/3/2022
1735	6.90	250	3.9	1.487	7.31	10.86	93.46	100.8		1/3/2022
1745										1/3/2022; Dry
0945	**BEGIN PURGING**									
955	13.85	250	10.6	1.736	6.78	2.17	59.64	18.3		1/4/2022
1005										1/4/2022; Dry

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER _____
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☐								
☐								
☐								
☐								
☐								
☐								
☐								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES ☐ NO ☐

NUMBER OF GALLONS GENERATED _____

NO-PURGE METHOD UTILIZED YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

• Sampled on 1/4/22

Sampler Signature: Joshua J Yaeger Print Name: Joshua J Yaeger

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Depew Village Landfill	**LOCATION ID**	MW-05
PROJECT NUMBER	386554.0000.0000	**DATE**	1/3/2022
SAMPLE ID	DPW-GW-05	**START TIME**	1610
SAMPLE TIME	1650	**END TIME**	1705
		SITE NAME/NUMBER	915105
		PAGE	1 OF 1

WELL DIAMETER (INCHES) ☐ 1 ■ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER _____

TUBING ID (INCHES) ☐ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER _____

MEASUREMENT POINT (MP) ☐ TOP OF RISER (TOR) ■ TOP OF CASING (TOC) ☐ OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	3.25 FT	**FINAL DTW (BMP)**	FT	**PROT. CASING STICKUP (AGS)**	IN	**TOC/TOR DIFFERENCE**	IN
WELL DEPTH (BMP)	10.40 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	GAL	**DRAWDOWN/ TOTAL PURGED**		**PRESSURE TO PUMP**	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1610	**BEGIN PURGING**									
1620	3.35	250	6.8	0.689	7.04	1.54	13.48	111.1		
1630	3.32	250	6.8	0.687	7.04	1.28	22.81	115.8		
1640	3.3	250	6.8	0.685	7.03	1.12	22.36	120.0		
1645	3.3	250	6.8	0.687	7.03	1.10	24.47	121.3		
1650										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER _____
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☐								
☐								
☐								
☐								
☐								
☐								
☐								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED ☐ YES ☐ NO

NUMBER OF GALLONS GENERATED _____

NO-PURGE METHOD UTILIZED ☐ YES ☐ NO

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Joshua J Yaeger Print Name: Joshua J Yaeger

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Depew Village Landfill		
PROJECT NUMBER	386554.0000.0000		
SAMPLE ID	DPW-GW-06	**SAMPLE TIME**	1550

LOCATION ID	MW-06	**DATE**	1/4/2022
START TIME	1100	**END TIME**	1150
SITE NAME/NUMBER	915105	**PAGE**	1 OF 1

WELL DIAMETER (INCHES) ☐ 1 ■ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER _____

TUBING ID (INCHES) ☐ 1/8 ☐ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER _____

MEASUREMENT POINT (MP) ☐ TOP OF RISER (TOR) ■ TOP OF CASING (TOC) ☐ OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

INITIAL DTW (BMP)	10.00 FT	**FINAL DTW (BMP)**	FT	**PROT. CASING STICKUP (AGS)**	IN	**TOC/TOR DIFFERENCE**	IN
WELL DEPTH (BMP)	13.50 FT	**SCREEN LENGTH**	FT	**PID AMBIENT AIR**	PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	GAL	**PID WELL MOUTH**	PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	GAL	**DRAWDOWN/ TOTAL PURGED**		**PRESSURE TO PUMP**	PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1100	**BEGIN PURGING**									
1110	10.4	250	11	1.069	6.52	0.92	12.12	-35.3		
1120	10.4	250	11.2	1.061	6.51	0.82	16.51	-44.7		
1130	10.4	250	11.1	1.054	6.51	0.8	17.74	-50.0		
1135										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☐ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER _____
- ☐ WATTERA
- ☐ OTHER _____
- ☐ OTHER _____

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☐ OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- ☐ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER _____
- ☐ OTHER _____
- ☐ OTHER _____

EQUIPMENT USED
- ☐ WL METER _____
- ☐ PID _____
- ☐ WQ METER _____
- ☐ TURB. METER _____
- ☐ PUMP _____
- ☐ OTHER _____
- ☐ FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☐								
☐								
☐								
☐								
☐								
☐								
☐								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES ☐ NO ☐

NUMBER OF GALLONS GENERATED _____

NO-PURGE METHOD UTILIZED YES ☐ NO ☐

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Joshua J Yaeger Print Name: Joshua J Yaeger

Checked By: Date:

Appendix D

Data Usability Summary Report

Site: Depew Landfill
Laboratory: Pace Analytical Services – Melville, NY
SDG No.: 70199829 (revised 3/11/22)
Parameters: Metals
Data Reviewer: Jeanette Daniels/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: March 14, 2022

Sample Reviewed and Evaluation Summary

6 Surface Water Samples: DPW-SW-01, DPW-SW-02, DPW-SW-03, DPW-SW-04, DPW-SW-07, DPW-SW-0A[1]

6 Sediment Samples: DPW-SED-01, DPW-SED-02, DPW-SED-03, DPW-SED-04, DPW-SED-07, DPW-SED-0A[2]

[1]Field duplicate of DPW-SW-04
[2]Field duplicate of DPW-SED-04

The above-listed surface water and sediment samples were collected on December 30, 2021 and were analyzed for metals by EPA Methods 200.7/245.1 (surface water samples) or SW-846 Methods 6010C/7471B (sediment samples).

The data validation was performed in accordance with *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-542-R-20-006),* November 2020, modified for the SW-846 and EPA methodologies utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
- Initial and Continuing Calibrations
* • Interference Check Sample (ICS) Results
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
* • Serial Dilution Results
- Laboratory Control Sample (LCS) Results
* • Field Duplicate Results
* • Moisture Content
- Sample Results and Reported Quantitation Limits (QLs)

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives with the exception of antimony in all sediment samples due to significantly low recovery in the LCS analysis. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical

error are discussed below.

- Potential uncertainty exists for select metals results that were detected between the method detection limit (MDL) and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for antimony were rejected (R) in all sediment samples due to significantly low (<30%) recovery in the LCS analysis. These results cannot be used for project objectives which has a major impact on the data usability.

- The positive result for lead in sample DPW-SW-02 was qualified as estimated (J) due to high recovery in the low-level standard and detection between the MDL and QL. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

- The positive results for selenium in samples DPW-SED-01, DPW-SED-02, DPW-SED-07 and DPW-SED-0A were qualified as nondetect at the QL (U) due to calibration blank contamination. These results can be used for project objectives as nondetect results, which may have a minor impact on the data usability.

- The positive result for selenium in sample DPW-SED-04 was qualified as estimated with a potential high bias (J+) due to calibration blank contamination. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

- The positive results for lead were qualified as estimated (J) in all sediment samples due to high recovery in the MS analysis. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive results for chromium and lead were qualified as estimated (J) in all sediment samples due to laboratory duplicate variability. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with one exception. The correlation coefficients were missing for the 6010C/200.7 initial calibration. The laboratory was contacted during validation and provided a revised report to correct this issue. No validation actions were required.

Holding Times and Sample Preservation

All holding time and sample preservation method criteria were met for the metals analyses. It should be noted that samples were collected on 12/30/21 but were not shipped to the laboratory until 01/04/21, five days after collection. The samples were stored in coolers and on ice until delivered to the laboratory with no signs of the ice melting observed by the field staff during this time. Since the samples were stored on ice and were within the temperature acceptance range when received by the laboratory, no validation actions were taken on this basis.

Initial and Continuing Calibrations

The initial calibration verification and continuing calibration verification percent recoveries (%Rs) met the method acceptance limits for the metals analyses. All initial calibration coefficients were >0.995.

The table below summarizes the low-level standard %R that did not meet the acceptance limits of 80-120% for metals (except mercury which has acceptance limits of 70-130%), the associated samples, and the validation actions.

Low-Level Standard	Analyte	%R	%R limits	Validation Actions
01/17/2022 @22:29	Lead	129.2	80-120	The positive result for lead in sample DPW-SW-02 was qualified as estimated with a potential high bias (J+) since it was <10x the QL. However, this result was also qualified as estimated due to detection between the MDL and QL. The overall qualification for lead in this sample was J. No qualifications were required for the remaining associated samples since the results for lead were either nondetect or were >10x the QL.
Associated samples: All samples in this data set.				

ICS Results

All spiked analytes recovered within the acceptance limits in the ICSAB sample analyses. There were several analytes detected as positive and/or negative interference in the ICSA analyses. However, the interferents, aluminum, calcium, iron and magnesium, were not reported as target analytes in the samples in this data set. Therefore, ICS interferences were not further evaluated.

Blanks

The laboratory reported instrument blank results to the instrument detection limit (IDL) for metals and mercury; the IDL was lower than the MDL. Instrument calibration results were only evaluated to the sample MDLs during validation since sample results were reported to the MDL. Results between the IDL and MDL are not summarized below.

Metals were not detected in the method blanks and mercury was not detected in the calibration blanks. The following table summarizes the calibration blank contaminants, the concentrations detected, and the resulting validation actions.

Calibration Blank	Analyte	Blank Concentration	Validation Actions
01/17/2022 @16:55	Selenium	8.6 J µg/L	Qualification was not required for the associated samples since selenium was not detected.
01/17/2022 @17:28		8.7 J µg/L	
Associated samples: DPW-SW-01, DPW-SW-02, DPW-SW-03			
01/17/2022 @17:28	Selenium	8.7 J µg/L	Qualification was not required for the associated samples since selenium was not detected.
01/17/2022 @18:00		8.9 J µg/L	
Associated samples: DPW-SW-04, DPW-SW-07, DPW-SW-0A			
01/17/2022 @18:32	Selenium	8.6 J µg/L	The positive results for selenium in samples DPW-SED-01 and DPW-SED-02 were qualified as nondetect at the QL (U) since the

Calibration Blank	Analyte	Blank Concentration	Validation Actions
01/17/2022 @19:04		6.9 J µg/L	results were < the QL. Qualification was not required for sample DPW-SED-03 since selenium was not detected.
Associated samples: DPW-SED-01, DPW-SED-02, DPW-SED-03			
01/17/2022 @19:04	Selenium	6.9 J µg/L	The positive results for selenium in sample DPW-SED-07 and DPW-SED-0A were qualified as nondetect at the QL (U) since the results were < the QL. The positive result for selenium in sample DPW-SED-04 was qualified as estimated with a potential high bias (J+) since the result was greater than the QL but <10x the blank.
01/17/2022 @19:37		8.1 J µg/L	
Associated samples: DPW-SED-04, DPW-SED-07, DPW-SED-0A			

MS/MSD Results

MS and post-digestion spike (PDS) analyses were performed as follows:

- MS on sediment sample DPW-SED-03 for all metals; PDS for metals (non-mercury)
- MS and PDS on surface water sample DPW-SW-03 for metals (non-mercury)

The table below summarizes the %Rs that did not meet the acceptance criteria (75-125% for MS, 80-120% for PDS), the associated samples, and the validation actions.

MS/MSD Sample ID	Analyte	MS %R	PDS %R	Validation Action
DPW-SED-03	Lead	400	Met Criteria	The positive results for lead were qualified as estimated (J) in all sediment samples.
	Silver	Met Criteria	74.4	Qualification of the data was not required on this basis since the MS %R for silver was within the acceptance limits; thus, the PDS %R by itself was not used to evaluate sample results.
Associated samples: DPW-SED-01, DPW-SED-02, DPW-SED-03, DPW-SED-04, DPW-SED-07, DPW-SED-0A				
DPW-SW-03	Silver	Met Criteria	71.2	Qualification of the data was not required on this basis since the MS %R for silver was within the acceptance limits; thus, the PDS %R by itself was not used to evaluate sample results.
Associated samples: DPW-SW-01, DPW-SW-02, DPW-SW-03, DPW-SW-04, DPW-SW-07, DPW-SW-0A				

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on surface water sample DPW-SW-03 for metals (non-mercury) and sediment sample DPW-SED-03 for all metals. The table below summarizes the relative percent differences (RPDs) that did not meet the QC acceptance criteria of 35% in the laboratory duplicate analysis performed on sediment sample DPW-SED-03 and the validation actions; all criteria were met in the laboratory duplicate analysis performed on surface water sample DPW-SW-03.

Duplicate Sample ID	Analyte	RPD	Validation Action
DPW-SED-03	Chromium	162	Although the positive result for chromium was <5x the QL in one of the two samples, the absolute difference between the two results was >2x the QL. Therefore, the positive results for chromium in all sediment samples were qualified as estimated (J).
	Lead	71	The positive results for lead in all sediment samples were qualified as estimated (J).

Duplicate Sample ID	Analyte	RPD	Validation Action
Associated samples: DPW-SED-01, DPW-SED-02, DPW-SED-03, DPW-SED-04, DPW-SED-07, DPW-SED-0A			

Serial Dilution Results

Serial dilution analyses were performed on surface water sample DPW-SW-03 and sediment sample DPW-SED-03 for metals (non-mercury). All percent differences (%Ds) met the acceptance criteria of 20%.

LCS Results

The %Rs for all metals met the laboratory acceptance criteria in the surface water LCS analyses.

The table below summarizes the sediment LCS %R that did not meet the laboratory acceptance criteria, the associated samples, and the validation actions.

LCS ID	Analyte	LCS %R	LCS %R QC Limits	Validation Actions
1215776 SRM	Antimony	17	30*-96	The nondetect results for antimony were rejected (R) in all sediment samples.
Associated samples: DPW-SED-01, DPW-SED-02, DPW-SED-03, DPW-SED-04, DPW-SED-07, DPW-SED-0A				
*The lower LCS %R acceptance limit for antimony was set to 10% by the laboratory; however, professional judgment was used and a lower acceptance limit of 30% was used to evaluate the associated sample results.				

Field Duplicate Results

Samples DPW-SW-04/DPW-SW-0A and DPW-SED-04/DPW-SED-0A were submitted as the field duplicate pairs with this data set.

The following tables summarize the RPDs and/or absolute differences (AbsD), where applicable, of the detected results. All criteria were met.

Analyte	QLs (µg/L)	DPW-SW-04 (µg/L)	DPW-SW-0A (µg/L)	AbsD (µg/L)	Validation Action
Copper	25	25 U	4.6 J	20.4	None; all criteria were met.
Nickel	40	4.6 J	4.9 J	0.3	

Field duplicate criteria for surface water samples are as follows:

- RPD ≤ 30 when positive results for both samples are ≥ 5× QL
- AbsD < QL when both results are < 5× QL

Analyte	QLs (mg/kg)	DPW-SED-04 (mg/kg)	DPW-SED-0A (mg/kg)	RPD (%) or AbsD (mg/kg)	Validation Action
Arsenic	0.88/0.89	7.2	6.5	RPD: 10.2	None; all criteria were met.
Beryllium	0.44/0.45	0.62	0.57	AbsD: 0.05	
Cadmium	0.22/0.22	0.39	0.38	AbsD: 0.01	
Chromium	0.88/0.89	19.9	18.4	RPD: 7.8	
Copper	2.2/2.2	34.4	33.5	RPD: 2.7	

Analyte	QLs (mg/kg)	DPW-SED-04 (mg/kg)	DPW-SED-0A (mg/kg)	RPD (%) or AbsD (mg/kg)	Validation Action
Lead	0.44/0.45	22.2	21.6	RPD: 2.7	
Nickel	3.5/3.6	34.6	32.6	RPD: 6.0	
Selenium	0.88/0.89	1.4	0.89 U	AbsD: 0.51	
Silver	0.88/0.89	1.1	1.1	AbsD: 0.0	
Thallium	0.88/0.89	0.97	1.0	AbsD: 0.03	
Zinc	1.8/1.8	120	117	RPD: 2.5	
Mercury	0.060/0.046	0.058 J	0.051	AbsD: 0.007	

Field duplicate criteria for sediment samples are as follows:

- RPD ≤ 50 when positive results for both samples are ≥ 5× QL
- AbsD < 2× QL when both results are < 5× QL

Moisture Content

All criteria were met.

Sample Results and Reported Quantitation Limits

Select metal results were reported between the MDL and QL. These results were qualified as estimated (J) in the associated samples by the laboratory. Sample calculations were spot-checked; there were no errors noted.

There were no dilutions performed on any samples in this data set.

The laboratory used approximately 0.3 grams for the digestion of sediment samples for mercury analysis although the method calls for 0.5-0.6 grams. The representativeness of the sediment sample results may be affected due to the smaller sample size. No data were qualified on this basis.

QUALIFIED FORM 1s

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SW-01 **Lab ID: 70199829001** Collected: 12/30/21 09:20 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:09	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:09	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:09	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:09	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:09	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:09	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:09	7439-92-1	
Nickel	**5.0J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:09	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:09	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:09	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:09	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:09	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/12/22 10:52	01/12/22 14:42	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SED-01 **Lab ID: 70199829002** Collected: 12/30/21 09:20 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	~~ND~~ R	mg/kg	~~6.0~~	~~1.8~~	1	01/14/22 11:35	01/17/22 18:46	7440-36-0	
Arsenic	**5.8**	mg/kg	1.0	0.47	1	01/14/22 11:35	01/17/22 18:46	7440-38-2	
Beryllium	**0.46J**	mg/kg	0.50	0.037	1	01/14/22 11:35	01/17/22 18:46	7440-41-7	
Cadmium	**0.35**	mg/kg	0.25	0.028	1	01/14/22 11:35	01/17/22 18:46	7440-43-9	
Chromium	**16.5** J	mg/kg	1.0	0.40	1	01/14/22 11:35	01/17/22 18:46	7440-47-3	
Copper	**33.4**	mg/kg	2.5	1.1	1	01/14/22 11:35	01/17/22 18:46	7440-50-8	
Lead	**118** J	mg/kg	0.50	0.26	1	01/14/22 11:35	01/17/22 18:46	7439-92-1	
Nickel	**27.0**	mg/kg	4.0	0.33	1	01/14/22 11:35	01/17/22 18:46	7440-02-0	
Selenium	~~**0.88J**~~ U	mg/kg	1.0	0.58	1	01/14/22 11:35	01/17/22 18:46	7782-49-2	
Silver	**0.97J**	mg/kg	1.0	0.12	1	01/14/22 11:35	01/17/22 18:46	7440-22-4	
Thallium	ND	mg/kg	1.0	0.92	1	01/14/22 11:35	01/17/22 18:46	7440-28-0	
Zinc	**117**	mg/kg	2.0	1.2	1	01/14/22 11:35	01/17/22 18:46	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.059**	mg/kg	0.056	0.036	1	01/13/22 09:45	01/13/22 12:33	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**51.9**	%	0.10	0.10	1		01/11/22 15:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SW-02 **Lab ID: 70199829003** Collected: 12/30/21 09:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:11	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:11	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:11	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:11	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:11	7440-47-3	
Copper	**5.2J**	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:11	7440-50-8	
Lead	**3.3J**	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:11	7439-92-1	
Nickel	**10J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:11	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:11	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:11	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:11	7440-28-0	
Zinc	**11.3J**	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:11	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/12/22 10:52	01/12/22 14:43	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SED-02 **Lab ID: 70199829004** Collected: 12/30/21 09:00 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	~~ND~~ R	mg/kg	~~8.0~~	~~2.4~~	1	01/14/22 11:35	01/17/22 18:48	7440-36-0	
Arsenic	**7.6**	mg/kg	1.3	0.62	1	01/14/22 11:35	01/17/22 18:48	7440-38-2	
Beryllium	**0.51J**	mg/kg	0.66	0.049	1	01/14/22 11:35	01/17/22 18:48	7440-41-7	
Cadmium	**0.51**	mg/kg	0.33	0.038	1	01/14/22 11:35	01/17/22 18:48	7440-43-9	
Chromium	**20.0** J	mg/kg	1.3	0.54	1	01/14/22 11:35	01/17/22 18:48	7440-47-3	
Copper	**43.6**	mg/kg	3.3	1.4	1	01/14/22 11:35	01/17/22 18:48	7440-50-8	
Lead	**39.3** J	mg/kg	0.66	0.34	1	01/14/22 11:35	01/17/22 18:48	7439-92-1	
Nickel	**30.9**	mg/kg	5.3	0.44	1	01/14/22 11:35	01/17/22 18:48	7440-02-0	
Selenium	~~**1.0J**~~ U	mg/kg	1.3	0.78	1	01/14/22 11:35	01/17/22 18:48	7782-49-2	
Silver	**1.1J**	mg/kg	1.3	0.16	1	01/14/22 11:35	01/17/22 18:48	7440-22-4	
Thallium	ND	mg/kg	1.3	1.2	1	01/14/22 11:35	01/17/22 18:48	7440-28-0	
Zinc	**156**	mg/kg	2.7	1.6	1	01/14/22 11:35	01/17/22 18:48	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.054J**	mg/kg	0.082	0.053	1	01/13/22 09:45	01/13/22 12:34	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**63.1**	%	0.10	0.10	1		01/11/22 15:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SW-03 **Lab ID: 70199829005** Collected: 12/30/21 09:40 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
	Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:14	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:14	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:14	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:14	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:14	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:14	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:14	7439-92-1	
Nickel	ND	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:14	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:14	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:14	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:14	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:14	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
	Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/12/22 10:52	01/12/22 14:45	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SED-03 **Lab ID: 70199829006** Collected: 12/30/21 09:40 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	~~ND~~ R	mg/kg	~~4.1~~	~~1.2~~	1	01/14/22 11:35	01/17/22 18:51	7440-36-0	
Arsenic	**3.2**	mg/kg	0.68	0.32	1	01/14/22 11:35	01/17/22 18:51	7440-38-2	
Beryllium	**0.16J**	mg/kg	0.34	0.025	1	01/14/22 11:35	01/17/22 18:51	7440-41-7	
Cadmium	**0.053J**	mg/kg	0.17	0.019	1	01/14/22 11:35	01/17/22 18:51	7440-43-9	
Chromium	**6.6** J	mg/kg	0.68	0.27	1	01/14/22 11:35	01/17/22 18:51	7440-47-3	D6
Copper	**11.3**	mg/kg	1.7	0.73	1	01/14/22 11:35	01/17/22 18:51	7440-50-8	D6
Lead	**25.1** J	mg/kg	0.34	0.17	1	01/14/22 11:35	01/17/22 18:51	7439-92-1	D6,M1
Nickel	**10.9**	mg/kg	2.7	0.22	1	01/14/22 11:35	01/17/22 18:51	7440-02-0	
Selenium	ND	mg/kg	0.68	0.40	1	01/14/22 11:35	01/17/22 18:51	7782-49-2	
Silver	**0.42J**	mg/kg	0.68	0.084	1	01/14/22 11:35	01/17/22 18:51	7440-22-4	
Thallium	ND	mg/kg	0.68	0.63	1	01/14/22 11:35	01/17/22 18:51	7440-28-0	
Zinc	**66.3**	mg/kg	1.4	0.84	1	01/14/22 11:35	01/17/22 18:51	7440-66-6	D6
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	ND	mg/kg	0.045	0.029	1	01/13/22 09:45	01/13/22 12:35	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**29.9**	%	0.10	0.10	1		01/11/22 15:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SW-04 **Lab ID: 70199829007** Collected: 12/30/21 09:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:33	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:33	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:33	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:33	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:33	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:33	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:33	7439-92-1	
Nickel	**4.6J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:33	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:33	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:33	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:33	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:33	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/12/22 10:52	01/12/22 14:52	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SED-04 **Lab ID: 70199829008** Collected: 12/30/21 09:50 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	~~ND~~ R	mg/kg	~~5.3~~	~~1.6~~	1	01/14/22 11:35	01/17/22 19:10	7440-36-0	
Arsenic	**7.2**	mg/kg	0.88	0.41	1	01/14/22 11:35	01/17/22 19:10	7440-38-2	
Beryllium	**0.62**	mg/kg	0.44	0.033	1	01/14/22 11:35	01/17/22 19:10	7440-41-7	
Cadmium	**0.39**	mg/kg	0.22	0.025	1	01/14/22 11:35	01/17/22 19:10	7440-43-9	
Chromium	**19.9** J	mg/kg	0.88	0.36	1	01/14/22 11:35	01/17/22 19:10	7440-47-3	
Copper	**34.4**	mg/kg	2.2	0.95	1	01/14/22 11:35	01/17/22 19:10	7440-50-8	
Lead	**22.2** J	mg/kg	0.44	0.23	1	01/14/22 11:35	01/17/22 19:10	7439-92-1	
Nickel	**34.6**	mg/kg	3.5	0.29	1	01/14/22 11:35	01/17/22 19:10	7440-02-0	
Selenium	**1.4** J+	mg/kg	0.88	0.51	1	01/14/22 11:35	01/17/22 19:10	7782-49-2	
Silver	**1.1**	mg/kg	0.88	0.11	1	01/14/22 11:35	01/17/22 19:10	7440-22-4	
Thallium	**0.97**	mg/kg	0.88	0.81	1	01/14/22 11:35	01/17/22 19:10	7440-28-0	
Zinc	**120**	mg/kg	1.8	1.1	1	01/14/22 11:35	01/17/22 19:10	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.058J**	mg/kg	0.060	0.039	1	01/13/22 09:45	01/13/22 12:42	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**45.0**	%	0.10	0.10	1		01/11/22 15:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SW-07 **Lab ID: 70199829009** Collected: 12/30/21 10:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:36	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:36	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:36	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:36	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:36	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:36	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:36	7439-92-1	
Nickel	ND	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:36	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:36	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:36	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:36	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:36	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/12/22 10:52	01/12/22 14:53	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SED-07 **Lab ID: 70199829010** Collected: 12/30/21 10:00 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	~~ND~~ R	mg/kg	~~4.5~~	~~1.3~~	1	01/14/22 11:35	01/17/22 19:13	7440-36-0	
Arsenic	**3.7**	mg/kg	0.75	0.35	1	01/14/22 11:35	01/17/22 19:13	7440-38-2	
Beryllium	**0.26J**	mg/kg	0.37	0.028	1	01/14/22 11:35	01/17/22 19:13	7440-41-7	
Cadmium	**0.22**	mg/kg	0.19	0.021	1	01/14/22 11:35	01/17/22 19:13	7440-43-9	
Chromium	**11.1** J	mg/kg	0.75	0.30	1	01/14/22 11:35	01/17/22 19:13	7440-47-3	
Copper	**18.9**	mg/kg	1.9	0.81	1	01/14/22 11:35	01/17/22 19:13	7440-50-8	
Lead	**19.0** J	mg/kg	0.37	0.19	1	01/14/22 11:35	01/17/22 19:13	7439-92-1	
Nickel	**16.2**	mg/kg	3.0	0.25	1	01/14/22 11:35	01/17/22 19:13	7440-02-0	
Selenium	~~**0.60J**~~ U	mg/kg	0.75	0.44	1	01/14/22 11:35	01/17/22 19:13	7782-49-2	
Silver	**0.53J**	mg/kg	0.75	0.093	1	01/14/22 11:35	01/17/22 19:13	7440-22-4	
Thallium	ND	mg/kg	0.75	0.69	1	01/14/22 11:35	01/17/22 19:13	7440-28-0	
Zinc	**80.8**	mg/kg	1.5	0.93	1	01/14/22 11:35	01/17/22 19:13	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.036J**	mg/kg	0.053	0.034	1	01/13/22 09:45	01/13/22 12:44	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**38.9**	%	0.10	0.10	1		01/11/22 15:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SW-0A **Lab ID: 70199829011** Collected: 12/30/21 12:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:38	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:38	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:38	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:38	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:38	7440-47-3	
Copper	**4.6J**	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:38	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:38	7439-92-1	
Nickel	**4.9J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:38	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:38	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:38	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:38	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:38	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/12/22 10:52	01/12/22 14:55	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199829

Sample: DPW-SED-0A **Lab ID: 70199829012** Collected: 12/30/21 12:00 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	~~ND~~ R	mg/kg	~~5.4~~	~~1.6~~	1	01/14/22 11:35	01/17/22 19:15	7440-36-0	
Arsenic	**6.5**	mg/kg	0.89	0.42	1	01/14/22 11:35	01/17/22 19:15	7440-38-2	
Beryllium	**0.57**	mg/kg	0.45	0.033	1	01/14/22 11:35	01/17/22 19:15	7440-41-7	
Cadmium	**0.38**	mg/kg	0.22	0.025	1	01/14/22 11:35	01/17/22 19:15	7440-43-9	
Chromium	**18.4** J	mg/kg	0.89	0.36	1	01/14/22 11:35	01/17/22 19:15	7440-47-3	
Copper	**33.5**	mg/kg	2.2	0.97	1	01/14/22 11:35	01/17/22 19:15	7440-50-8	
Lead	**21.6** J	mg/kg	0.45	0.23	1	01/14/22 11:35	01/17/22 19:15	7439-92-1	
Nickel	**32.6**	mg/kg	3.6	0.30	1	01/14/22 11:35	01/17/22 19:15	7440-02-0	
Selenium	~~**0.65J**~~ U	mg/kg	0.89	0.52	1	01/14/22 11:35	01/17/22 19:15	7782-49-2	
Silver	**1.1**	mg/kg	0.89	0.11	1	01/14/22 11:35	01/17/22 19:15	7440-22-4	
Thallium	**1.0**	mg/kg	0.89	0.82	1	01/14/22 11:35	01/17/22 19:15	7440-28-0	
Zinc	**117**	mg/kg	1.8	1.1	1	01/14/22 11:35	01/17/22 19:15	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.051**	mg/kg	0.046	0.029	1	01/13/22 09:45	01/13/22 12:45	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**45.1**	%	0.10	0.10	1		01/11/22 15:06		

REPORT OF LABORATORY ANALYSIS

QC NONCONFORMANCE DOCUMENTATION

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract: DEPEW LANDFILL SITE # 915105

CRDL Check Standard Source: 122193 Analysis Date/Time: 01/17/2022 22:29

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R 80-120
Antimony	60	61.7	102.8	70-130
Arsenic	10.0	10.2	102.0	70-130
Beryllium	5.0	5.0	100.6	70-130
Cadmium	2.5	2.6	106.0	70-130
Chromium	10.0	10.1	101.0	70-130
Copper	25	25.8	103.2	70-130
Lead	5.0	6.5	129.2	70-130
Nickel	40	41.6	104.0	70-130
Selenium	10.0	9.4	94.5	70-130
Silver	10.0	8.8	87.8	70-130
Thallium	10.0	8.8	88.5	70-130
Zinc	20	21.0	105.0	70-130

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract : DEPEW LANDFILL SITE # 915105

Method Blank Matrix: Water Instrument ID: 70ICP3

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	01/17/2022 16:37	C	01/17/2022 16:55	C	01/17/2022 17:28	C	01/17/2022 18:00	C	1215769	C
Antimony	5.1	U	5.1	U	5.1	U	5.1	U	ND	U
Arsenic	3.5	U	4.3	J	4.2	J	3.7	J	<MDL	U
Beryllium	0.024	U	0.024	U	0.024	U	0.024	U	ND	U
Cadmium	0.098	U	0.098	U	0.098	U	0.098	U	ND	U
Chromium	0.21	U	0.21	U	0.21	U	0.21	U	ND	U
Copper	0.95	U	0.95	U	0.95	U	0.95	U	ND	U
Lead	1.6	U	1.6	U	1.6	U	1.6	U	ND	U
Nickel	0.92	U	0.92	U	0.92	U	0.92	U	ND	U
Selenium	3.7	U	8.6	J	8.7	J	8.9	J	ND	U
Silver	0.26	U	0.26	J	0.26	U	0.26	U	ND	U
Thallium	2.9	U	2.9	U	2.9	U	2.9	U	ND	U
Zinc	0.43	U	0.43	U	0.43	U	0.43	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract : DEPEW LANDFILL SITE # 915105

Method Blank Matrix: Solid Instrument ID: 70ICP3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	01/17/2022 18:32	C	01/17/2022 19:04	C	01/17/2022 19:37	C	1215775	C
Antimony			5.1	U	5.1	U	5.1	U	ND	U
Arsenic			3.5	U	3.6	J	4.4	J	<MDL	U
Beryllium			0.024	U	0.024	U	0.024	U	ND	U
Cadmium			0.098	U	0.098	U	0.098	U	ND	U
Chromium			0.21	U	0.21	U	0.21	U	ND	U
Copper			0.95	U	0.95	U	0.95	U	ND	U
Lead			1.6	U	1.6	U	1.6	U	ND	U
Nickel			0.92	U	0.92	U	0.92	U	ND	U
Selenium			8.6	J	6.9	J	8.1	J	ND	U
Silver			0.26	J	0.26	U	0.26	U	ND	U
Thallium			2.9	U	2.9	U	2.9	U	ND	U
Zinc			0.43	U	0.43	U	0.43	U	ND	U

SAMPLE NO.

1215778MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract: DEPEW LANDFILL SITE #

Matrix: Solid Basis: Dry Parent Sample ID: DPW-SED-03

Percent Moisture: 29.9

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	55.0	ND	67.6	81
Arsenic	mg/kg	75-125	36.3	3.2	33.8	98
Beryllium	mg/kg	75-125	32.7	0.16J	33.8	96
Cadmium	mg/kg	75-125	31.7	0.053J	33.8	93
Chromium	mg/kg	75-125	43.3	6.6	33.8	108
Copper	mg/kg	75-125	43.0	11.3	33.8	94
Lead	mg/kg	75-125	160	25.1	33.8	400*
Nickel	mg/kg	75-125	42.7	10.9	33.8	94
Selenium	mg/kg	75-125	32.0	ND	33.8	94
Silver	mg/kg	75-125	13.7	0.42J	17.0	78
Thallium	mg/kg	75-125	17.2	ND	17.0	101
Zinc	mg/kg	75-125	108	66.3	33.8	122

* Spike Recovery outside QC Limits

SAMPLE NO.

1216050PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Water Parent Sample ID: DPW-SW-03

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	85-115	1	1060	1	20.8U	1000	106.0
Arsenic	ug/L	85-115	1	517	1	5.3U	500	103.4
Beryllium	ug/L	85-115	1	524	1	0.33U	500	104.8
Cadmium	ug/L	85-115	1	512	1	0.31U	500	102.4
Chromium	ug/L	85-115	1	528	1	1.1U	500	105.6
Copper	ug/L	85-115	1	531	1	3.7U	500	106.2
Lead	ug/L	85-115	1	479	1	2.2U	500	95.8
Nickel	ug/L	85-115	1	523	1	4.4U	500	104.6
Selenium	ug/L	85-115	1	493	1	7.1U	500	98.6
Silver	ug/L	85-115	1	178	1	1.2U	250	71.2*
Thallium	ug/L	85-115	1	243	1	5.3U	250	97.3
Zinc	ug/L	85-115	1	521	1	8.6U	500	104.2

SAMPLE NO.

1216082PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Solid Parent Sample ID: DPW-SED-03

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	85-115	1	1080	1	18.1U	1000	108.0
Arsenic	ug/L	85-115	1	582	1	47.8	500	106.8
Beryllium	ug/L	85-115	1	545	1	2.3J	500	108.5
Cadmium	ug/L	85-115	1	499	1	0.78J	500	99.6
Chromium	ug/L	85-115	1	635	1	97.3	500	107.5
Copper	ug/L	85-115	1	676	1	166	500	102.0
Lead	ug/L	85-115	1	838	1	370	500	93.6
Nickel	ug/L	85-115	1	692	1	160	500	106.4
Selenium	ug/L	85-115	1	509	1	5.9U	500	101.8
Silver	ug/L	85-115	1	192	1	6.1J	250	74.4*
Thallium	ug/L	85-115	1	263	1	9.2U	250	105.2
Zinc	ug/L	85-115	1	1480	1	976	500	100.8

SAMPLE NO.

1215777DUP

FORM VI INORGANIC-1

DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract: DEPEW LANDFILL SITE #

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 29.9 Basis: Dry

DPW-SED-03
SDG 70199829

Analyte	RPD Control Limit	Sample	Duplicate	RPD	
Antimony	20	ND	ND		
Arsenic	20	3.2	3.9	19	
Beryllium	20	0.16J	0.17J		
Cadmium	20	0.053J	0.12J		
Chromium	20	6.6	63.2	162*	
Copper	20	11.3	14.8	27*	OK; <35%
Lead	20	25.1	12.0	71*	
Nickel	20	10.9	12.6	15	
Selenium	20	ND	0.83		
Silver	20	0.42J	0.53J		
Thallium	20	ND	ND		
Zinc	20	66.3	51.5	25*	OK; <35%

* RPD outside QC Limits

SAMPLE NO.

1215776SRM

FORM VII INORGANIC-1

LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 70199829 Contract: DEPEW LANDFILL SITE #

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	217	37.9	17	30 ~~10~~	96
Arsenic	mg/kg	157	128	82	73	105
Beryllium	mg/kg	51.2	43.2	84	67	99
Cadmium	mg/kg	125	94.0	75	63	94
Chromium	mg/kg	70.7	58.0	82	69	102
Copper	mg/kg	134	116	86	75	107
Lead	mg/kg	57.2	53.0	93	82	116
Nickel	mg/kg	195	151	77	62	94
Selenium	mg/kg	41.7	34.2	82	66	104
Silver	mg/kg	22.3	18.2	82	73	111
Thallium	mg/kg	81.9	71.8	88	67	102
Zinc	mg/kg	216	176	82	68	104

Data Usability Summary Report

Site: Depew Landfill
Laboratory: Pace Analytical Services – Melville, NY
SDG No.: 70199830 (revised 3/11/22)
Parameters: Metals
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: March 11, 2022

Sample Reviewed and Evaluation Summary

2 Surface Water Samples: DPW-SW-05, DPW-SW-06
2 Sediment Samples: DPW-SED-05, DPW-SED-06

The above-listed surface water and sediment samples were collected on December 30, 2021 and were analyzed for metals by EPA Methods 200.7/245.1 (surface water samples) or SW-846 Methods 6010C/7471B (sediment samples).

The data validation was performed in accordance with *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-542-R-20-006),* November 2020, modified for the SW-846 and EPA methodologies utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
- Initial and Continuing Calibrations
* • Interference Check Sample (ICS) Results
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
* • Serial Dilution Results
- Laboratory Control Sample (LCS) Results
* • Field Duplicate Results
* • Moisture Content
- Sample Results and Reported Quantitation Limits (QLs)

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives with the exception of antimony in sediment samples DPW-SED-05 and DPW-SED-06 due to significantly low recovery in the LCS analysis. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select metals results that were detected between the method detection limit (MDL) and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for antimony were rejected (R) in sediment samples DPW-SED-05 and DPW-SED-06 due to significantly low (<30%) recovery in the LCS analysis. These results cannot be used for project objectives which has a major impact on the data usability.

- The positive results for selenium in sediment samples DPW-SED-05 and DPW-SED-06 were qualified as nondetect at the QL (U) due to calibration blank contamination. These results can be used for project objectives as nondetect results, which may have a minor impact on the data usability.

- The positive results for lead were qualified as estimated (J) in sediment samples DPW-SED-05 and DPW-SED-06 due to high recovery in the MS analysis. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive results for chromium and lead were qualified as estimated (J) in sediment samples DPW-SED-05 and DPW-SED-06 due to laboratory duplicate variability. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with one exception. The correlation coefficients were missing for the 6010C/200.7 initial calibration. The laboratory was contacted during validation and provided a revised report to correct this issue. No validation actions were required.

Holding Times and Sample Preservation

All holding time and sample preservation method criteria were met for the metals analyses. It should be noted that samples were collected on 12/30/21 but were not shipped to the laboratory until 01/04/21, five days after collection. The samples were stored on ice, in coolers until delivered to the laboratory with no signs of the ice melting observed by the field staff during this time. Since the samples were stored on ice and were within the temperature acceptance range when received by the laboratory, no validation actions were taken on this basis.

Initial and Continuing Calibrations

The associated initial calibration verification and continuing calibration verification percent recoveries (%Rs) met the method acceptance limits for the metals analyses. All initial calibration coefficients were >0.995.

The table below summarizes the low-level standard %R that did not meet the acceptance limits of 80-120% for metals (except mercury which has acceptance limits of 70-130%), the associated samples, and the validation actions.

Low-Level Standard	Analyte	%R	%R limits	Validation Actions
01/17/2022 @22:29	Lead	129.2	80-120	No qualifications were required for the associated samples since the results for lead were either nondetect or were >10x the QL.
Associated samples: All samples in this data set.				

ICS Results

All spiked analytes recovered within the acceptance limits in the ICSAB sample analyses. There were several analytes detected as positive and/or negative interference in the ICSA analyses. However, the interferents, aluminum, calcium, iron and magnesium, were not reported as target analytes in the samples in this data set. Therefore, ICS interferences were not further evaluated.

Blanks

The laboratory reported instrument blank results to the instrument detection limit (IDL) for metals and mercury; the IDL was lower than the MDL. Instrument calibration results were only evaluated to the MDLs during validation since sample results were reported to the MDL. Results between the IDL and MDL are not summarized below.

Metals were not detected in the method blanks and mercury was not detected in the calibration blanks. The following table summarizes the metals calibration blank contaminants, the concentrations detected, and the resulting validation actions.

Calibration Blank	Analyte	Blank Concentration	Validation Actions
01/17/2022 @17:28	Selenium	8.7 J µg/L	Qualification was not required for the associated samples since selenium was not detected.
01/17/2022 @18:00		8.9 J µg/L	
Associated samples: DPW-SW-05, DPW-SW-06			
01/17/2022 @19:04	Selenium	6.9 J µg/L	The positive results for selenium in samples DPW-SED-05 and DPW-SED-06 were qualified as nondetect at the QL (U) since the results were < the QL.
01/17/2022 @19:37		8.1 J µg/L	
Associated samples: DPW-SED-05, DPW-SED-06			

MS/MSD Results

MS/MSD and post-digestion spike (PDS) analyses were not performed on a sample from this data set. However, MS and/or PDS analyses were performed on project samples from a different SDG (70199829) as summarized below:

- MS on sediment sample DPW-SED-03 for all metals; PDS for metals (non-mercury)
- MS and PDS on surface water sample DPW-SW-03 for metals (non-mercury)

These samples were not validated with this data set but were used to evaluate the sample results in this data set. The table below summarizes the %Rs that did not meet the acceptance criteria (75-125% for MS and 80-120% for PDS), the associated samples, and the validation actions.

MS/MSD Sample ID	Analyte	MS %R	PDS %R	Validation Actions
DPW-SED-03	Lead	400	-	The positive results for lead were qualified as estimated (J) in the associated samples, DPW-SED-05 and DPW-SED-06.
	Silver	-	74.4	Qualification of the data was not required on this basis since the MS %R for silver was within the acceptance limits; thus, the PDS %R by itself was not used to evaluate sample results.
Associated samples: DPW-SED-05, DPW-SED-06				
DPW-SW-03	Silver	-	71.2	Qualification of the data was not required on this basis since the MS %R for silver was within the acceptance limits; thus, the PDS %R by itself was not used to evaluate sample results.

MS/MSD Sample ID	Analyte	MS %R	PDS %R	Validation Actions
Associated samples: DPW-SW-05, DPW-SW-06				
-: Met criteria				

Laboratory Duplicate Results

Laboratory duplicate analyses were not performed on any samples in this data set. However, laboratory duplicate analyses were performed on sediment sample DPW-SED-03 for all metals and surface water sample DPW-SW-03 for metals (non-mercury) in SDG 70199829; these samples were not validated with this data set but were used to evaluate the sample results in this data set.

The table below summarizes the relative percent differences (RPDs) that did not meet the QC acceptance criteria of 35% in the laboratory duplicate analysis performed on sediment sample DPW-SED-03 and the validation actions; all criteria were met in the laboratory duplicate analysis performed on surface water sample DPW-SW-03.

Duplicate Sample ID	Analyte	RPD (%)	Validation Actions
DPW-SED-03	Chromium	162	Although the positive result for chromium was <5x the QL in one of the two samples, the absolute difference between the two results was >2x the QL. Therefore, the positive results for chromium in samples DPW-SED-05 and DPW-SED-06 were qualified as estimated (J).
	Lead	71	The positive lead in samples DPW-SED-05 and DPW-SED-06 were qualified as estimated (J).
Associated samples: DPW-SED-05, DPW-SED-06			

Serial Dilution Results

Serial dilution analyses were not performed on any samples in this data set. However, serial dilution analyses were performed on sediment sample DPW-SED-03 for metals (non-mercury), and surface water sample DPW-SW-03 for metals (non-mercury) in SDG 70199829; these samples were not validated with this data set but were used to evaluate the sample results in this data set. All percent differences (%Ds) met the QC acceptance criteria of 20%.

LCS Results

The %Rs for all metals met the laboratory acceptance criteria in the surface water LCS analyses.

The table below summarizes the sediment LCS %R that did not meet the laboratory acceptance criteria, the associated samples, and the validation actions.

LCS ID	Analyte	LCS %R	LCS %R QC Limits	Validation Actions
1215776 SRM	Antimony	17	30*-96	The nondetect results for antimony were rejected (R) in sediment samples DPW-SED-05 and DPW-SED-06.
Associated samples: DPW-SED-05, DPW-SED-06				
*The lower LCS %R acceptance limit for antimony was set to 10% by the laboratory; however, professional judgment was used and a lower acceptance limit of 30% was used to evaluate the associated sample results.				

Field Duplicate Results

No field duplicate pairs were submitted with the samples in this data set. However, field duplicates were collected and submitted with project samples in SDG 70199829: DPW-SW-04/DPW-SW-0A and DPW-SED-04/DPW-SED-0A; these samples were not validated with this data set but were used to evaluate the sample results in this data set.

The following tables summarize the RPDs and/or absolute differences (AbsD), where applicable, of the detected results. All criteria were met.

Analyte	QLs (µg/L)	DPW-SW-04 (µg/L)	DPW-SW-0A (µg/L)	AbsD (µg/L)	Validation Action
Copper	25	25 U	4.6 J	20.4	None; all criteria were met.
Nickel	40	4.6 J	4.9 J	0.3	

Field duplicate criteria for surface water samples are as follows:

- RPD ≤ 30 when positive results for both samples are ≥ 5× QL
- AbsD < QL when both results are < 5× QL

Analyte	QLs (mg/kg)	DPW-SED-04 (mg/kg)	DPW-SED-0A (mg/kg)	RPD (%) or AbsD (mg/kg)	Validation Action
Arsenic	0.88/0.89	7.2	6.5	RPD: 10.2	None; all criteria were met.
Beryllium	0.44/0.45	0.62	0.57	AbsD: 0.05	
Cadmium	0.22/0.22	0.39	0.38	AbsD: 0.01	
Chromium	0.88/0.89	19.9	18.4	RPD: 7.8	
Copper	2.2/2.2	34.4	33.5	RPD: 2.7	
Lead	0.44/0.45	22.2	21.6	RPD: 2.7	
Nickel	3.5/3.6	34.6	32.6	RPD: 6.0	
Selenium	0.88/0.89	1.4	0.89 U	AbsD: 0.51	
Silver	0.88/0.89	1.1	1.1	AbsD: 0.0	
Thallium	0.88/0.89	0.97	1.0	AbsD: 0.03	
Zinc	1.8/1.8	120	117	RPD: 2.5	
Mercury	0.060/0.046	0.058 J	0.051	AbsD: 0.007	

Field duplicate criteria for sediment samples are as follows:

- RPD ≤ 50 when positive results for both samples are ≥ 5× QL
- AbsD < 2× QL when both results are < 5× QL

Moisture Content

All criteria were met.

Sample Results and Reported Quantitation Limits

Select metal results were reported between the MDL and QL. These results were qualified as estimated (J) in the associated samples by the laboratory. Sample calculations were spot-checked; there were no errors noted.

There were no dilutions performed on any samples in this data set.

The laboratory used approximately 0.3 grams for the digestion of sediment samples for mercury analysis although the method calls for 0.5-0.6 grams. The representativeness of the sediment sample results may be affected due to the smaller sample size. No data were qualified on this basis.

QUALIFIED FORM 1s

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199830

Sample: DPW-SW-05 **Lab ID: 70199830001** Collected: 12/30/21 09:55 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:41	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:41	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:41	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:41	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:41	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:41	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:41	7439-92-1	
Nickel	ND	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:41	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:41	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:41	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:41	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:41	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:38	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199830

Sample: DPW-SED-05 **Lab ID: 70199830002** Collected: 12/30/21 09:55 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	R ~~ND~~	~~mg/kg~~	~~5.5~~	~~1.6~~	~~1~~	~~01/14/22 11:35~~	~~01/17/22 19:18~~	~~7440-36-0~~	
Arsenic	**4.2**	mg/kg	0.91	0.43	1	01/14/22 11:35	01/17/22 19:18	7440-38-2	
Beryllium	**0.30J**	mg/kg	0.46	0.034	1	01/14/22 11:35	01/17/22 19:18	7440-41-7	
Cadmium	**0.16J**	mg/kg	0.23	0.026	1	01/14/22 11:35	01/17/22 19:18	7440-43-9	
Chromium	**12.8** J	mg/kg	0.91	0.37	1	01/14/22 11:35	01/17/22 19:18	7440-47-3	
Copper	**26.5**	mg/kg	2.3	0.99	1	01/14/22 11:35	01/17/22 19:18	7440-50-8	
Lead	**18.1** J	mg/kg	0.46	0.23	1	01/14/22 11:35	01/17/22 19:18	7439-92-1	
Nickel	**19.5**	mg/kg	3.7	0.30	1	01/14/22 11:35	01/17/22 19:18	7440-02-0	
Selenium	ND/0.91 U ~~**0.89J**~~	mg/kg	0.91	0.53	1	01/14/22 11:35	01/17/22 19:18	7782-49-2	
Silver	**0.69J**	mg/kg	0.91	0.11	1	01/14/22 11:35	01/17/22 19:18	7440-22-4	
Thallium	ND	mg/kg	0.91	0.84	1	01/14/22 11:35	01/17/22 19:18	7440-28-0	
Zinc	**89.0**	mg/kg	1.8	1.1	1	01/14/22 11:35	01/17/22 19:18	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.066**	mg/kg	0.046	0.030	1	01/13/22 09:45	01/13/22 12:47	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**46.3**	%	0.10	0.10	1		01/11/22 15:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199830

Sample: DPW-SW-06 **Lab ID: 70199830003** Collected: 12/30/21 10:10 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:44	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:44	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:44	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:44	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:44	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:44	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:44	7439-92-1	
Nickel	**4.6J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:44	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:44	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:44	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:44	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:44	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:40	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199830

Sample: DPW-SED-06 **Lab ID: 70199830004** Collected: 12/30/21 10:10 Received: 01/05/22 11:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3050B Pace Analytical Services - Melville								
Antimony	R ~~ND~~	~~mg/kg~~	~~4.0~~	~~1.2~~	~~1~~	~~01/14/22 11:35~~	~~01/17/22 19:21~~	~~7440-36-0~~	
Arsenic	**3.8**	mg/kg	0.67	0.32	1	01/14/22 11:35	01/17/22 19:21	7440-38-2	
Beryllium	**0.27J**	mg/kg	0.34	0.025	1	01/14/22 11:35	01/17/22 19:21	7440-41-7	
Cadmium	**0.10J**	mg/kg	0.17	0.019	1	01/14/22 11:35	01/17/22 19:21	7440-43-9	
Chromium	**11.3** J	mg/kg	0.67	0.27	1	01/14/22 11:35	01/17/22 19:21	7440-47-3	
Copper	**17.8**	mg/kg	1.7	0.73	1	01/14/22 11:35	01/17/22 19:21	7440-50-8	
Lead	**15.2** J	mg/kg	0.34	0.17	1	01/14/22 11:35	01/17/22 19:21	7439-92-1	
Nickel	**16.0**	mg/kg	2.7	0.22	1	01/14/22 11:35	01/17/22 19:21	7440-02-0	
Selenium	ND/0.67 U ~~**0.66J**~~	mg/kg	0.67	0.39	1	01/14/22 11:35	01/17/22 19:21	7782-49-2	
Silver	**0.60J**	mg/kg	0.67	0.084	1	01/14/22 11:35	01/17/22 19:21	7440-22-4	
Thallium	ND	mg/kg	0.67	0.62	1	01/14/22 11:35	01/17/22 19:21	7440-28-0	
Zinc	**72.1**	mg/kg	1.3	0.84	1	01/14/22 11:35	01/17/22 19:21	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Melville								
Mercury	**0.033J**	mg/kg	0.042	0.027	1	01/13/22 09:45	01/13/22 12:48	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2216-05M Pace Analytical Services - Melville								
Percent Moisture	**32.5**	%	0.10	0.10	1		01/11/22 15:06		

REPORT OF LABORATORY ANALYSIS

QC NONCONFORMANCE DOCUMENTATION

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract: DEPEW LANDFILL SITE # 915105

CRDL Check Standard Source: 122193 Analysis Date/Time: 01/17/2022 22:29

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	60	61.7	102.8	70-130 80-120
Arsenic	10.0	10.2	102.0	70-130
Beryllium	5.0	5.0	100.6	70-130
Cadmium	2.5	2.6	106.0	70-130
Chromium	10.0	10.1	101.0	70-130
Copper	25	25.8	103.2	70-130
Lead	5.0	6.5	129.2	70-130
Nickel	40	41.6	104.0	70-130
Selenium	10.0	9.4	94.5	70-130
Silver	10.0	8.8	87.8	70-130
Thallium	10.0	8.8	88.5	70-130
Zinc	20	21.0	105.0	70-130

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract : DEPEW LANDFILL SITE # 915105

Method Blank Matrix: Water Instrument ID: 70ICP3

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	01/17/2022 16:37	C	01/17/2022 16:55	C	01/17/2022 17:28	C	01/17/2022 18:00	C	1215769	C
Antimony	5.1	U	5.1	U	5.1	U	5.1	U	ND	U
Arsenic	3.5	U	4.3	J	4.2	J	3.7	J	<MDL	U
Beryllium	0.024	U	0.024	U	0.024	U	0.024	U	ND	U
Cadmium	0.098	U	0.098	U	0.098	U	0.098	U	ND	U
Chromium	0.21	U	0.21	U	0.21	U	0.21	U	ND	U
Copper	0.95	U	0.95	U	0.95	U	0.95	U	ND	U
Lead	1.6	U	1.6	U	1.6	U	1.6	U	ND	U
Nickel	0.92	U	0.92	U	0.92	U	0.92	U	ND	U
Selenium	3.7	U	8.6	J	8.7	J	8.9	J	ND	U
Silver	0.26	U	0.26	J	0.26	U	0.26	U	ND	U
Thallium	2.9	U	2.9	U	2.9	U	2.9	U	ND	U
Zinc	0.43	U	0.43	U	0.43	U	0.43	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract : DEPEW LANDFILL SITE # 915105

Method Blank Matrix: Solid Instrument ID: 70ICP3

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	01/17/2022 18:32	C	01/17/2022 19:04	C	01/17/2022 19:37	C	1215775	C
Antimony			5.1	U	5.1	U	5.1	U	ND	U
Arsenic			3.5	U	3.6	J	4.4	J	<MDL	U
Beryllium			0.024	U	0.024	U	0.024	U	ND	U
Cadmium			0.098	U	0.098	U	0.098	U	ND	U
Chromium			0.21	U	0.21	U	0.21	U	ND	U
Copper			0.95	U	0.95	U	0.95	U	ND	U
Lead			1.6	U	1.6	U	1.6	U	ND	U
Nickel			0.92	U	0.92	U	0.92	U	ND	U
Selenium			3.6	J	6.9	J	8.1	J	ND	U
Silver			0.26	J	0.26	U	0.26	U	ND	U
Thallium			2.9	U	2.9	U	2.9	U	ND	U
Zinc			0.43	U	0.43	U	0.43	U	ND	U

SAMPLE NO.

1215778MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract: DEPEW LANDFILL SITE #

Matrix: Solid Basis: Dry Parent Sample ID: 70199829006 DPW-SED-03

Percent Moisture: 29.9

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	55.0	ND	67.6	81
Arsenic	mg/kg	75-125	36.3	3.2	33.8	98
Beryllium	mg/kg	75-125	32.7	0.16J	33.8	96
Cadmium	mg/kg	75-125	31.7	0.053J	33.8	93
Chromium	mg/kg	75-125	43.3	6.6	33.8	108
Copper	mg/kg	75-125	43.0	11.3	33.8	94
Lead	mg/kg	75-125	160	25.1	33.8	400*
Nickel	mg/kg	75-125	42.7	10.9	33.8	94
Selenium	mg/kg	75-125	32.0	ND	33.8	94
Silver	mg/kg	75-125	13.7	0.42J	17.0	78
Thallium	mg/kg	75-125	17.2	ND	17.0	101
Zinc	mg/kg	75-125	108	66.3	33.8	122

* Spike Recovery outside QC Limits

02/28/2022 10:00

SAMPLE NO.

1216050PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Water Parent Sample ID: 70199829005 DPW-SW-03

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	85-115	1	1060	1	20.8U	1000	106.0
Arsenic	ug/L	85-115	1	517	1	5.3U	500	103.4
Beryllium	ug/L	85-115	1	524	1	0.33U	500	104.8
Cadmium	ug/L	85-115	1	512	1	0.31U	500	102.4
Chromium	ug/L	85-115	1	528	1	1.1U	500	105.6
Copper	ug/L	85-115	1	531	1	3.7U	500	106.2
Lead	ug/L	85-115	1	479	1	2.2U	500	95.8
Nickel	ug/L	85-115	1	523	1	4.4U	500	104.6
Selenium	ug/L	85-115	1	493	1	7.1U	500	98.6
Silver	ug/L	85-115	1	178	1	1.2U	250	71.2*
Thallium	ug/L	85-115	1	243	1	5.3U	250	97.3
Zinc	ug/L	85-115	1	521	1	8.6U	500	104.2

SAMPLE NO.

1216082PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Solid Parent Sample ID: 70199829006 DPW-SED-03

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	85-115	1	1080	1	18.1U	1000	108.0
Arsenic	ug/L	85-115	1	582	1	47.8	500	106.8
Beryllium	ug/L	85-115	1	545	1	2.3J	500	108.5
Cadmium	ug/L	85-115	1	499	1	0.78J	500	99.6
Chromium	ug/L	85-115	1	635	1	97.3	500	107.5
Copper	ug/L	85-115	1	676	1	166	500	102.0
Lead	ug/L	85-115	1	838	1	370	500	93.6
Nickel	ug/L	85-115	1	692	1	160	500	106.4
Selenium	ug/L	85-115	1	509	1	5.9U	500	101.8
Silver	ug/L	85-115	1	192	1	6.1J	250	74.4*
Thallium	ug/L	85-115	1	263	1	9.2U	250	105.2
Zinc	ug/L	85-115	1	1480	1	976	500	100.8

SAMPLE NO.

1215777DUP

FORM VI INORGANIC-1

DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract: DEPEW LANDFILL SITE #

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 29.9 Basis: Dry

DPW-SED-03
SDG 70199829

Analyte	RPD Control Limit	Sample	Duplicate	RPD	
Antimony	20	ND	ND		
Arsenic	20	3.2	3.9	19	
Beryllium	20	0.16J	0.17J		
Cadmium	20	0.053J	0.12J		
Chromium	20	6.6	63.2	162*	
Copper	20	11.3	14.8	27*	OK; <35%
Lead	20	25.1	12.0	71*	
Nickel	20	10.9	12.6	15	
Selenium	20	ND	0.83		
Silver	20	0.42J	0.53J		
Thallium	20	ND	ND		
Zinc	20	66.3	51.5	25*	OK; <35%

* RPD outside QC Limits

02/28/2022 10:00

SAMPLE NO.

1215776SRM

FORM VII INORGANIC-1

LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 70199830 Contract: DEPEW LANDFILL SITE #

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	217	37.9	17	30 ~~10~~	96
Arsenic	mg/kg	157	128	82	73	105
Beryllium	mg/kg	51.2	43.2	84	67	99
Cadmium	mg/kg	125	94.0	75	63	94
Chromium	mg/kg	70.7	58.0	82	69	102
Copper	mg/kg	134	116	86	75	107
Lead	mg/kg	57.2	53.0	93	82	116
Nickel	mg/kg	195	151	77	62	94
Selenium	mg/kg	41.7	34.2	82	66	104
Silver	mg/kg	22.3	18.2	82	73	111
Thallium	mg/kg	81.9	71.8	88	67	102
Zinc	mg/kg	216	176	82	68	104

Data Usability Summary Report

Site: Depew Landfill
Laboratory: Pace Analytical Services – Melville, NY
SDG No.: 70199831
Parameters: Volatile Organic Compounds (VOCs)
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: March 23, 2022

Samples Reviewed and Evaluation Summary

6 Groundwater Samples: DPW-GW-01, DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-06, DPW-GW-DUPE*

*Field duplicate of DPW-GW-06

1 Trip Blank Sample: TRIP BLANK

The above-listed groundwater and trip blank samples were collected on January 3 and 4, 2022 and were analyzed for VOCs by SW-846 Method 8260C. The data validation was performed in accordance with *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005),* November 2020, modified for the SW-846 methodology utilized.

The data were evaluated based on the following parameters:

	• Overall Evaluation of Data and Potential Usability Issues
	• Data Completeness
*	• Holding Times and Sample Preservation
*	• Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
	• Initial and Continuing Calibrations
*	• Blanks
*	• Surrogate Recoveries
	• Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
NA	• Laboratory Duplicate Results
	• Laboratory Control Sample (LCS) Results
*	• Field Duplicate Results
*	• Internal Standard Performance
*	• Sample Results and Reported Quantitation Limits (QLs)
*	• Target Compound Identification

* All criteria were met.
NA A laboratory duplicate analysis was not performed on a sample in this data set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- The nondetect results for select VOCs in all samples were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for cis-1,3-dichloropropene and trans-1,3-dichloropropene were qualified as estimated (UJ) with a potential low bias in sample DPW-GW-01 due to low MS recoveries. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for 1,1,2-trichloroethane, cis-1,3-dichloropropene, and trans-1,3-dichloropropene were qualified as estimated (UJ) with a potential low bias in all samples due to low LCS recoveries. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with the following notes/exceptions.

- The trip blank sample was submitted to and analyzed by the laboratory but was not listed on the chain-of-custody (COC).
- The Sample Conditions fields on the COC were not completed by the laboratory. The information provided on the Sample Condition Upon Receipt form was evaluated instead.

No validation actions were required on this basis.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All relative response factors (RRFs), correlation coefficients, and percent relative standard deviations were within the acceptance criteria in the initial calibration associated with the samples in this data set.

Initial calibration verification (ICV) standard results were not reviewed or summarized in this report since the ICV did not immediately precede any sample analyses.

The RRFs were within the acceptance criteria in the continuing claibration (CC) standard associated with the samples in this data set. The following table summarizes the percent differences (%Ds) that did not meet the method acceptance criteria in the CC standard associated with the samples in this data set and the validation actions.

Instrument/ CC Date	Compound	%D	Validation Actions
70MSV5/ 01/06/2022	Acetone	64.4585	The nondetect results for these VOCs were qualified as estimated (UJ) in the associated samples.
	Bromomethane	-39.1435	
	Chloromethane	-24.2968	
	1,2-Dibromo-3-chloropropane	-24.9554	
	cis-1,3-Dichloropropene	-25.3551	
	trans-1,3-Dichloropropene	-30.2322	
	Tetrachloroethene	-28.7227	
	Trichlorofluoromethane	36.8566	
Associated samples: All samples in this data set			

Blanks

Target compounds were not detected in the laboratory method blank or trip blank.

Surrogate Recoveries

The surrogate percent recoveries (%Rs) met the laboratory acceptance criteria.

MS/MSD Results

MS/MSD analyses were performed on sample DPW-GW-01. The following table summarizes the %Rs and relative percent differences (RPDs) that did not meet the laboratory acceptance criteria and the validation actions.

MS/MSD Parent Sample ID	Compound	MS/ MSD %Rs	RPD (%)	MS/MSD %R Limits	RPD Limit (%)	Validation Actions
DPW-GW-01	Carbon tetrachloride	-/-	21	-	20	No qualification was required since carbon tetrachloride and trichlorofluoromethane were not detected in sample DPW-GW-01.
	Trichlorofluoro-methane	144/153	-	59-129	-	
	cis-1,3-Dichloropropene	65/-	-	67-130	-	The nondetect results for cis-1,3-dichloropropene and trans-1,3-dichloropropene were qualified as estimated (UJ) with a potential low bias in sample DPW-GW-01.
	trans-1,3-Dichloropropene	60/-	-	61-130	-	
-: Met criteria						

Laboratory Duplicate Results

A laboratory duplicate analysis was not performed on a sample in this data set.

LCS Results

An LCS was analyzed prior to samples. The following table summarizes the %Rs that did not meet the laboratory acceptance criteria and the validation actions.

LCS ID	Compound	LCS %R	LCS %R Limits	Validation Actions
1211183	1,1,2-Trichloroethane	80	81-119	The nondetect results for 1,1,2-trichloroethane, cis-1,3-dichloropropene, and trans-1,3-dichloropropene were qualified as estimated (UJ) with a potential low bias in the associated samples.
	cis-1,3-Dichloropropene	72	78-131	
	trans-1,3-Dichloropropene	69	73-135	
Associated samples: All samples in this data set				

Field Duplicate Results

Samples DPW-GW-06 and DPW-GW-DUPE were submitted as the field duplicate pair with this data set. The following table summarizes the RPDs or absolute differences (AbsDs), where applicable, of the detected analytes in the field duplicate pair. All criteria were met.

Compound	QL (ug/L)	DPW-GW-06 (ug/L)	DPW-GW-DUPE (ug/L)	RPD (%) or AbsD (ug/L)
1,2-Dichlorobenzene	1.0	1.3	1.2	AbsD = 0.1
1,4-Dichlorobenzene	1.0	4.5	5.0	AbsD = 0.5
Benzene	1.0	3.1	2.9	AbsD = 0.2
Chlorobenzene	1.0	37.3	38.2	RPD = 2.4
Isopropylbenzene	1.0	1.8	1.8	AbsD = 0
Criteria: When both results are ≥5x the QL, RPDs must be ≤30%. When one or both results are <5x the QL, AbsD must be < the QL.				

Internal Standard Performance

All criteria were met.

Sample Results and Reported Quantitation Limits

Sample calculations were spot-checked; there were no errors noted. No dilutions were performed on the samples in this data set.

Target Compound Identification

All criteria were met.

QUALIFIED FORM 1s

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-01 **Lab ID: 70199831001** Collected: 01/03/22 12:45 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 17:48	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 17:48	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 17:48	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 17:48	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 17:48	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 17:48	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 17:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 17:48	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 17:48	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 17:48	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.58	1		01/06/22 17:48	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 17:48	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 17:48	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 17:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.48	1		01/06/22 17:48	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 17:48	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 17:48	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 17:48	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 17:48	67-64-1	
Benzene	ND	ug/L	1.0	0.58	1		01/06/22 17:48	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 17:48	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 17:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 17:48	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 17:48	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 17:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 17:48	56-23-5	~~R1~~

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-01 **Lab ID: 70199831001** Collected: 01/03/22 12:45 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Chlorobenzene	ND	ug/L	1.0	0.57	1		01/06/22 17:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 17:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 17:48	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 17:48	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 17:48	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 17:48	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 17:48	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 17:48	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.40	1		01/06/22 17:48	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 17:48	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 17:48	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 17:48	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 17:48	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 17:48	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 17:48	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 17:48	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 17:48	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 17:48	75-69-4	~~M1~~
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 17:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 17:48	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 17:48	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 17:48	10061-01-5	~~L2~~,M0, ~~v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 17:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 17:48	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 17:48	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 17:48	10061-02-6	~~L2,M0~~, ~~v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	118	%	81-122		1		01/06/22 17:48	17060-07-0	
4-Bromofluorobenzene (S)	91	%	79-118		1		01/06/22 17:48	460-00-4	
Toluene-d8 (S)	90	%	82-122		1		01/06/22 17:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-02 **Lab ID: 70199831002** Collected: 01/03/22 15:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 18:06	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 18:06	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 18:06	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 18:06	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 18:06	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 18:06	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 18:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 18:06	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 18:06	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 18:06	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.58	1		01/06/22 18:06	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 18:06	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 18:06	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 18:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.48	1		01/06/22 18:06	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 18:06	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 18:06	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 18:06	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 18:06	67-64-1	
Benzene	ND	ug/L	1.0	0.58	1		01/06/22 18:06	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 18:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 18:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 18:06	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 18:06	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 18:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 18:06	56-23-5	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-02 **Lab ID: 70199831002** Collected: 01/03/22 15:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Chlorobenzene	**1.3**	ug/L	1.0	0.57	1		01/06/22 18:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 18:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 18:06	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 18:06	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 18:06	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 18:06	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 18:06	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 18:06	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.40	1		01/06/22 18:06	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 18:06	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 18:06	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 18:06	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 18:06	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 18:06	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 18:06	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 18:06	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 18:06	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 18:06	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 18:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 18:06	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 18:06	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 18:06	10061-01-5	~~L2,v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 18:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 18:06	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 18:06	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 18:06	10061-02-6	~~L2,v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	115	%	81-122		1		01/06/22 18:06	17060-07-0	
4-Bromofluorobenzene (S)	91	%	79-118		1		01/06/22 18:06	460-00-4	
Toluene-d8 (S)	89	%	82-122		1		01/06/22 18:06	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-04 **Lab ID: 70199831003** Collected: 01/04/22 11:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 18:24	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 18:24	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 18:24	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 18:24	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 18:24	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 18:24	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 18:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 18:24	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 18:24	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 18:24	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.58	1		01/06/22 18:24	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 18:24	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 18:24	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 18:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.48	1		01/06/22 18:24	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 18:24	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 18:24	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 18:24	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 18:24	67-64-1	
Benzene	ND	ug/L	1.0	0.58	1		01/06/22 18:24	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 18:24	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 18:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 18:24	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 18:24	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 18:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 18:24	56-23-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-04 **Lab ID: 70199831003** Collected: 01/04/22 11:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Chlorobenzene	ND	ug/L	1.0	0.57	1		01/06/22 18:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 18:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 18:24	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 18:24	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 18:24	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 18:24	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 18:24	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 18:24	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.40	1		01/06/22 18:24	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 18:24	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 18:24	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 18:24	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 18:24	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 18:24	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 18:24	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 18:24	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 18:24	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 18:24	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 18:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 18:24	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 18:24	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 18:24	10061-01-5	~~L2;v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 18:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 18:24	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 18:24	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 18:24	10061-02-6	~~L2;v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	117	%	81-122		1		01/06/22 18:24	17060-07-0	
4-Bromofluorobenzene (S)	93	%	79-118		1		01/06/22 18:24	460-00-4	
Toluene-d8 (S)	91	%	82-122		1		01/06/22 18:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-05 **Lab ID: 70199831004** Collected: 01/03/22 16:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 18:42	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 18:42	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 18:42	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 18:42	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 18:42	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 18:42	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 18:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 18:42	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 18:42	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 18:42	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.58	1		01/06/22 18:42	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 18:42	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 18:42	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 18:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.48	1		01/06/22 18:42	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 18:42	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 18:42	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 18:42	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 18:42	67-64-1	
Benzene	ND	ug/L	1.0	0.58	1		01/06/22 18:42	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 18:42	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 18:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 18:42	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 18:42	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 18:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 18:42	56-23-5	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-05 **Lab ID: 70199831004** Collected: 01/03/22 16:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Chlorobenzene	ND	ug/L	1.0	0.57	1		01/06/22 18:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 18:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 18:42	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 18:42	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 18:42	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 18:42	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 18:42	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 18:42	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.40	1		01/06/22 18:42	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 18:42	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 18:42	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 18:42	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 18:42	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 18:42	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 18:42	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 18:42	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 18:42	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 18:42	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 18:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 18:42	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 18:42	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 18:42	10061-01-5	~~L2,v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 18:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 18:42	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 18:42	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 18:42	10061-02-6	~~L2,v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	117	%	81-122		1		01/06/22 18:42	17060-07-0	
4-Bromofluorobenzene (S)	88	%	79-118		1		01/06/22 18:42	460-00-4	
Toluene-d8 (S)	91	%	82-122		1		01/06/22 18:42	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-06 **Lab ID: 70199831005** Collected: 01/04/22 11:35 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 19:01	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 19:01	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 19:01	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 19:01	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 19:01	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 19:01	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 19:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 19:01	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 19:01	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 19:01	106-93-4	
1,2-Dichlorobenzene	**1.3**	ug/L	1.0	0.58	1		01/06/22 19:01	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 19:01	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 19:01	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 19:01	541-73-1	
1,4-Dichlorobenzene	**4.5**	ug/L	1.0	0.48	1		01/06/22 19:01	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 19:01	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 19:01	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 19:01	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 19:01	67-64-1	
Benzene	**3.1**	ug/L	1.0	0.58	1		01/06/22 19:01	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 19:01	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 19:01	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 19:01	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 19:01	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 19:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 19:01	56-23-5	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-06 **Lab ID: 70199831005** Collected: 01/04/22 11:35 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Chlorobenzene	**37.3**	ug/L	1.0	0.57	1		01/06/22 19:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 19:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 19:01	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 19:01	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 19:01	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 19:01	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 19:01	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 19:01	100-41-4	
Isopropylbenzene (Cumene)	**1.8**	ug/L	1.0	0.40	1		01/06/22 19:01	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 19:01	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 19:01	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 19:01	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 19:01	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 19:01	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 19:01	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 19:01	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 19:01	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 19:01	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 19:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 19:01	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 19:01	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 19:01	10061-01-5	~~L2;v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 19:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 19:01	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 19:01	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 19:01	10061-02-6	~~L2;v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	114	%	81-122		1		01/06/22 19:01	17060-07-0	
4-Bromofluorobenzene (S)	91	%	79-118		1		01/06/22 19:01	460-00-4	
Toluene-d8 (S)	87	%	82-122		1		01/06/22 19:01	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-DUPE **Lab ID: 70199831006** Collected: 01/03/22 08:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 19:19	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 19:19	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 19:19	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 19:19	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 19:19	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 19:19	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 19:19	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 19:19	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 19:19	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 19:19	106-93-4	
1,2-Dichlorobenzene	**1.2**	ug/L	1.0	0.58	1		01/06/22 19:19	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 19:19	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 19:19	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 19:19	541-73-1	
1,4-Dichlorobenzene	**5.0**	ug/L	1.0	0.48	1		01/06/22 19:19	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 19:19	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 19:19	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 19:19	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 19:19	67-64-1	
Benzene	**2.9**	ug/L	1.0	0.58	1		01/06/22 19:19	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 19:19	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 19:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 19:19	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 19:19	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 19:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 19:19	56-23-5	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-DUPE **Lab ID: 70199831006** Collected: 01/03/22 08:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Chlorobenzene	**38.2**	ug/L	1.0	0.57	1		01/06/22 19:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 19:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 19:19	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 19:19	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 19:19	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 19:19	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 19:19	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 19:19	100-41-4	
Isopropylbenzene (Cumene)	**1.8**	ug/L	1.0	0.40	1		01/06/22 19:19	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 19:19	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 19:19	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 19:19	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 19:19	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 19:19	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 19:19	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 19:19	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 19:19	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 19:19	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 19:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 19:19	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 19:19	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 19:19	10061-01-5	~~L2;v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 19:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 19:19	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 19:19	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 19:19	10061-02-6	~~L2;v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	115	%	81-122		1		01/06/22 19:19	17060-07-0	
4-Bromofluorobenzene (S)	91	%	79-118		1		01/06/22 19:19	460-00-4	
Toluene-d8 (S)	90	%	82-122		1		01/06/22 19:19	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: TRIP BLANK **Lab ID: 70199831007** Collected: 01/04/22 00:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
1,1,1-Trichloroethane	ND	ug/L	1.0	0.32	1		01/06/22 17:29	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.39	1		01/06/22 17:29	79-34-5	
1,1,2-Trichloroethane	~~ND~~ UJ	ug/L	1.0	0.49	1		01/06/22 17:29	79-00-5	~~L2~~
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.31	1		01/06/22 17:29	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.58	1		01/06/22 17:29	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	0.54	1		01/06/22 17:29	75-35-4	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.87	1		01/06/22 17:29	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.72	1		01/06/22 17:29	120-82-1	
1,2-Dibromo-3-chloropropane	~~ND~~ UJ	ug/L	1.0	0.66	1		01/06/22 17:29	96-12-8	~~v3~~
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.40	1		01/06/22 17:29	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.58	1		01/06/22 17:29	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	0.40	1		01/06/22 17:29	107-06-2	
1,2-Dichloropropane	ND	ug/L	1.0	0.45	1		01/06/22 17:29	78-87-5	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.46	1		01/06/22 17:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.48	1		01/06/22 17:29	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	0.51	1		01/06/22 17:29	78-93-3	
2-Hexanone	ND	ug/L	5.0	0.74	1		01/06/22 17:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.36	1		01/06/22 17:29	108-10-1	
Acetone	~~ND~~ UJ	ug/L	5.0	1.9	1		01/06/22 17:29	67-64-1	
Benzene	ND	ug/L	1.0	0.58	1		01/06/22 17:29	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.43	1		01/06/22 17:29	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.48	1		01/06/22 17:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.61	1		01/06/22 17:29	75-25-2	
Bromomethane	~~ND~~ UJ	ug/L	1.0	0.74	1		01/06/22 17:29	74-83-9	~~v3~~
Carbon disulfide	ND	ug/L	1.0	0.57	1		01/06/22 17:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.33	1		01/06/22 17:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.57	1		01/06/22 17:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.64	1		01/06/22 17:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.56	1		01/06/22 17:29	67-66-3	
Chloromethane	~~ND~~ UJ	ug/L	1.0	0.63	1		01/06/22 17:29	74-87-3	~~v3~~
Cyclohexane	ND	ug/L	1.0	0.54	1		01/06/22 17:29	110-82-7	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/06/22 17:29	124-48-1	
Dichlorodifluoromethane	ND	ug/L	1.0	0.37	1		01/06/22 17:29	75-71-8	
Ethylbenzene	ND	ug/L	1.0	0.52	1		01/06/22 17:29	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.40	1		01/06/22 17:29	98-82-8	
Methyl acetate	ND	ug/L	1.0	0.99	1		01/06/22 17:29	79-20-9	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.51	1		01/06/22 17:29	1634-04-4	
Methylcyclohexane	ND	ug/L	1.0	0.48	1		01/06/22 17:29	108-87-2	
Methylene Chloride	ND	ug/L	1.0	0.77	1		01/06/22 17:29	75-09-2	
Styrene	ND	ug/L	1.0	0.57	1		01/06/22 17:29	100-42-5	
Tetrachloroethene	~~ND~~ UJ	ug/L	1.0	0.53	1		01/06/22 17:29	127-18-4	~~v3~~
Toluene	ND	ug/L	1.0	0.57	1		01/06/22 17:29	108-88-3	
Trichloroethene	ND	ug/L	1.0	0.47	1		01/06/22 17:29	79-01-6	
Trichlorofluoromethane	~~ND~~ UJ	ug/L	1.0	0.23	1		01/06/22 17:29	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.48	1		01/06/22 17:29	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: TRIP BLANK **Lab ID: 70199831007** Collected: 01/04/22 00:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville								
Xylene (Total)	ND	ug/L	3.0	0.47	1		01/06/22 17:29	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/06/22 17:29	156-59-2	
cis-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.46	1		01/06/22 17:29	10061-01-5	~~L2,v3~~
m&p-Xylene	ND	ug/L	2.0	0.93	1		01/06/22 17:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.47	1		01/06/22 17:29	95-47-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.56	1		01/06/22 17:29	156-60-5	
trans-1,3-Dichloropropene	~~ND~~ UJ	ug/L	1.0	0.50	1		01/06/22 17:29	10061-02-6	~~L2,v3~~
Surrogates									
1,2-Dichloroethane-d4 (S)	117	%	81-122		1		01/06/22 17:29	17060-07-0	
4-Bromofluorobenzene (S)	92	%	79-118		1		01/06/22 17:29	460-00-4	
Toluene-d8 (S)	89	%	82-122		1		01/06/22 17:29	2037-26-5	

REPORT OF LABORATORY ANALYSIS

QC NONCONFORMANCE DOCUMENTATION

SAMPLE NO.

16123942CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 01/06/2022 Time: 14:43

Instrument ID: 70MSV5 GC Column: Col 1 Init. Calib. Date(s): 08/17/2021 08/17/2021

Lab File ID: 010622.B\H35739.D Init. Calib. Time(s): 14:13 16:36

SDG No.: 70199831

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.15926	0.26192	0.0100	64.4585*	20.0000
Benzene	Averaged	1.76141	1.73308	0.2000	-1.6082	20.0000
Bromochloromethane	Averaged	0.33339	0.29364	0.1000	-11.9221	20.0000
Bromodichloromethane	Averaged	0.41345	0.42812	0.3000	3.5502	20.0000
Bromoform	Linear	50	40.56811	0.1000	-18.8638	20.0000
Bromomethane	Averaged	0.47848	0.29119	0.0100	-39.1435	20.0000
2-Butanone (MEK)	Averaged	0.54565	0.50211	0.0100	-7.9802	20.0000
Carbon disulfide	Averaged	1.55228	1.58993	0.1000	2.4255	20.0000
Carbon tetrachloride	Averaged	0.31774	0.34532	0.1000	8.6778	20.0000
Chlorobenzene	Averaged	1.96081	1.78341	0.4000	-9.0473	20.0000
Chloroethane	Averaged	0.54618	0.46628	0.0100	-14.6287	20.0000
Chloroform	Averaged	1.30036	1.40205	0.3000	7.8201	20.0000
Chloromethane	Averaged	1.15226	0.87230	0.0100	-24.2968	20.0000
Cyclohexane	Averaged	1.77233	1.62504	0.0100	-8.3109	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.11366	0.08530	0.0100	-24.9554	20.0000
Dibromochloromethane	Linear	50	45.53035	0.2000	-8.9393	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.29521	0.25616	0.2000	-13.2262	20.0000
1,2-Dichlorobenzene	Averaged	1.58098	1.38911	0.6000	-12.1361	20.0000
1,3-Dichlorobenzene	Averaged	1.75099	1.62569	0.5000	-7.1560	20.0000
1,4-Dichlorobenzene	Averaged	1.76319	1.62446	0.6000	-7.8677	20.0000
Dichlorodifluoromethane	Averaged	0.83202	0.96688	0.0100	16.2087	20.0000
1,1-Dichloroethane	Averaged	1.33979	1.41561	0.3000	5.6593	20.0000
1,2-Dichloroethane	Averaged	0.92929	0.98504	0.0700	5.9997	20.0000
1,1-Dichloroethene	Averaged	0.56503	0.52544	0.0600	-7.0078	20.0000
cis-1,2-Dichloroethene	Averaged	0.85137	0.80158	0.2000	-5.8484	20.0000
trans-1,2-Dichloroethene	Averaged	0.68962	0.71420	0.1000	3.5643	20.0000
1,2-Dichloropropane	Averaged	0.47762	0.43783	0.2000	-8.3308	20.0000
cis-1,3-Dichloropropene	Averaged	0.61388	0.45823	0.3000	-25.3551	20.0000
trans-1,3-Dichloropropene	Averaged	0.46261	0.32275	0.3000	-30.2322	20.0000
Ethylbenzene	Averaged	1.14645	1.00636	0.4000	-12.2198	20.0000
2-Hexanone	Averaged	0.36731	0.41855	0.0100	13.9474	20.0000
Isopropylbenzene (Cumene)	Averaged	4.92075	4.93192	0.4000	0.2271	20.0000
Methyl acetate	Averaged	0.65489	0.67869	0.1000	3.6339	20.0000
Methylcyclohexane	Averaged	0.82146	0.73943	0.0500	-9.9865	20.0000
Methylene Chloride	Averaged	0.73865	0.67366	0.0100	-8.7978	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

16123942CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 01/06/2022 Time: 14:43

Instrument ID: 70MSV5 GC Column: Col 1 Init. Calib. Date(s): 08/17/2021 08/17/2021

Lab File ID: 010622.B\H35739.D Init. Calib. Time(s): 14:13 16:36

SDG No.: 70199831

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
4-Methyl-2-pentanone (MIBK)	Averaged	0.31311	0.28170	0.0100	-10.0319	20.0000
Methyl-tert-butyl ether	Averaged	1.79584	1.66386	0.1000	-7.3496	20.0000
Styrene	Averaged	2.14624	1.96796	0.2000	-8.3067	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.97322	0.82544	0.2000	-15.1845	20.0000
Tetrachloroethene	Averaged	0.87035	0.62036	0.1000	-28.7227	20.0000
Toluene	Averaged	1.86495	1.70785	0.3000	-8.4236	20.0000
1,2,3-Trichlorobenzene	Averaged	0.59683	0.61897	0.4000	3.7094	20.0000
1,2,4-Trichlorobenzene	Averaged	0.74119	0.75138	0.4000	1.3755	20.0000
1,1,1-Trichloroethane	Averaged	0.48744	0.49276	0.0500	1.0932	20.0000
1,1,2-Trichloroethane	Averaged	0.30590	0.24547	0.2000	-19.7554	20.0000
Trichloroethene	Averaged	0.42980	0.42020	0.2000	-2.2356	20.0000
Trichlorofluoromethane	Averaged	0.83777	1.14655	0.0100	36.8566*	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.56686	0.61358	0.0500	8.2425	20.0000
Vinyl chloride	Averaged	0.97226	0.82821	0.0100	-14.8160	20.0000
m&p-Xylene	Averaged	1.35215	1.23257	0.2000	-8.8433	20.0000
o-Xylene	Averaged	1.34200	1.17755	0.2000	-12.2536	20.0000
4-Bromofluorobenzene (S)	Averaged	0.82097	0.75131	0.0100	-8.4848	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.33352	0.37516	0.0100	12.4850	20.0000
Toluene-d8 (S)	Averaged	2.29829	2.10288	0.0100	-8.5024	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1211625 1211626

Parameter	Units	DPW-GW-01 70199831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	42.4	45.2	85	90	78-121	6	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	45.8	46.8	92	94	75-120	2	20	
1,2-Dichloroethane	ug/L	ND	50	50	57.5	59.6	115	119	58-138	4	20	
1,2-Dichloropropane	ug/L	ND	50	50	46.6	48.6	93	97	74-122	4	20	
1,3-Dichlorobenzene	ug/L	ND	50	50	48.4	50.0	97	100	78-119	3	20	
1,4-Dichlorobenzene	ug/L	ND	50	50	48.7	49.0	97	98	76-118	1	20	
2-Butanone (MEK)	ug/L	ND	50	50	36.7	38.4	73	77	33-148	5	20	
2-Hexanone	ug/L	ND	50	50	44.7	45.4	89	91	49-124	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	45.7	46.1	91	92	60-136	1	20	
Acetone	ug/L	ND	50	50	47.6	47.6	95	95	35-112	0	20	v1
Benzene	ug/L	ND	50	50	51.8	53.9	104	108	70-130	4	20	
Bromochloromethane	ug/L	ND	50	50	46.0	46.7	92	93	70-122	2	20	
Bromodichloromethane	ug/L	ND	50	50	46.4	52.0	93	104	74-122	11	20	
Bromoform	ug/L	ND	50	50	30.8	34.0	62	68	39-139	10	20	
Bromomethane	ug/L	ND	50	50	27.5	32.8	55	66	10-130	17	20	v3
Carbon disulfide	ug/L	ND	50	50	53.9	56.8	108	114	60-129	5	20	
Carbon tetrachloride	ug/L	ND	50	50	45.3	55.9	91	112	56-143	21	20	R1
Chlorobenzene	ug/L	ND	50	50	47.3	47.5	95	95	74-122	1	20	
Chloroethane	ug/L	ND	50	50	46.9	48.8	94	98	35-146	4	20	
Chloroform	ug/L	ND	50	50	56.8	59.3	114	119	71-129	4	20	
Chloromethane	ug/L	ND	50	50	39.5	44.1	79	88	29-112	11	20	v3
cis-1,2-Dichloroethene	ug/L	ND	50	50	48.3	49.8	97	100	73-129	3	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	32.5	36.8	65	74	67-130	12	20	M0,v3
Cyclohexane	ug/L	ND	50	50	51.5	52.5	103	105	46-146	2	20	
Dibromochloromethane	ug/L	ND	50	50	38.1	42.1	76	84	55-126	10	20	
Dichlorodifluoromethane	ug/L	ND	50	50	57.8	59.4	116	119	10-123	3	20	
Ethylbenzene	ug/L	ND	50	50	45.3	47.6	91	95	70-126	5	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	54.8	56.5	110	113	68-127	3	20	
m&p-Xylene	ug/L	ND	100	100	95.7	95.6	96	96	79-123	0	20	
Methyl acetate	ug/L	ND	50	50	52.2	62.2	104	124	10-260	17	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	48.0	50.0	96	100	60-140	4	20	
Methylcyclohexane	ug/L	ND	50	50	48.9	51.3	98	103	66-135	5	20	
Methylene Chloride	ug/L	ND	50	50	42.3	46.4	85	93	69-117	9	20	
o-Xylene	ug/L	ND	50	50	45.2	46.2	90	92	57-139	2	20	
Styrene	ug/L	ND	50	50	47.1	48.3	94	97	79-123	3	20	
Tetrachloroethene	ug/L	ND	50	50	37.7	38.2	75	76	64-124	1	20	v3
Toluene	ug/L	ND	50	50	47.9	49.4	96	99	76-123	3	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	51.4	53.8	103	108	69-127	5	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	30.2	33.8	60	68	61-130	11	20	M0,v3
Trichloroethene	ug/L	ND	50	50	51.6	53.5	103	107	73-125	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	72.2	76.4	144	153	59-129	6	20	M1,v1
Vinyl chloride	ug/L	ND	50	50	46.3	48.0	93	96	33-127	4	20	
Xylene (Total)	ug/L	ND	150	150	141	142	94	95	78-123	1	20	
1,2-Dichloroethane-d4 (S)	%						114	115	81-122		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

METHOD BLANK: 1211182 Matrix: Water
Associated Lab Samples: 70199831001, 70199831002, 70199831003, 70199831004, 70199831005, 70199831006, 70199831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methylcyclohexane	ug/L	ND	1.0	0.48	01/06/22 15:38	
Methylene Chloride	ug/L	ND	1.0	0.77	01/06/22 15:38	
o-Xylene	ug/L	ND	1.0	0.47	01/06/22 15:38	
Styrene	ug/L	ND	1.0	0.57	01/06/22 15:38	
Tetrachloroethene	ug/L	ND	1.0	0.53	01/06/22 15:38	v3
Toluene	ug/L	ND	1.0	0.57	01/06/22 15:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.56	01/06/22 15:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.50	01/06/22 15:38	v3
Trichloroethene	ug/L	ND	1.0	0.47	01/06/22 15:38	
Trichlorofluoromethane	ug/L	ND	1.0	0.23	01/06/22 15:38	
Vinyl chloride	ug/L	ND	1.0	0.48	01/06/22 15:38	
Xylene (Total)	ug/L	ND	3.0	0.47	01/06/22 15:38	
1,2-Dichloroethane-d4 (S)	%	115	81-122		01/06/22 15:38	
4-Bromofluorobenzene (S)	%	91	79-118		01/06/22 15:38	
Toluene-d8 (S)	%	93	82-122		01/06/22 15:38	

LABORATORY CONTROL SAMPLE: 1211183

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.7	101	72-126	
1,1,2,2-Tetrachloroethane	ug/L	50	43.9	88	70-127	
1,1,2-Trichloroethane	ug/L	50	39.9	80	81-119	L2
1,1,2-Trichlorotrifluoroethane	ug/L	50	55.2	110	54-133	
1,1-Dichloroethane	ug/L	50	52.4	105	72-126	
1,1-Dichloroethene	ug/L	50	46.4	93	66-133	
1,2,3-Trichlorobenzene	ug/L	50	49.4	99	50-143	
1,2,4-Trichlorobenzene	ug/L	50	52.0	104	56-141	
1,2-Dibromo-3-chloropropane	ug/L	50	35.2	70	47-133	v3
1,2-Dibromoethane (EDB)	ug/L	50	42.2	84	81-123	
1,2-Dichlorobenzene	ug/L	50	45.6	91	80-117	
1,2-Dichloroethane	ug/L	50	51.4	103	69-134	
1,2-Dichloropropane	ug/L	50	44.7	89	75-125	
1,3-Dichlorobenzene	ug/L	50	48.9	98	82-116	
1,4-Dichlorobenzene	ug/L	50	48.4	97	80-117	
2-Butanone (MEK)	ug/L	50	37.5	75	33-165	
2-Hexanone	ug/L	50	47.1	94	50-128	
4-Methyl-2-pentanone (MIBK)	ug/L	50	44.9	90	62-131	
Acetone	ug/L	50	43.5	87	14-156	v1
Benzene	ug/L	50	49.3	99	78-117	
Bromochloromethane	ug/L	50	43.0	86	77-122	
Bromodichloromethane	ug/L	50	50.0	100	80-123	
Bromoform	ug/L	50	37.2	74	49-138	
Bromomethane	ug/L	50	29.4	59	10-143	v3
Carbon disulfide	ug/L	50	52.1	104	66-133	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

LABORATORY CONTROL SAMPLE: 1211183

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	52.5	105	64-135	
Chlorobenzene	ug/L	50	45.9	92	79-117	
Chloroethane	ug/L	50	43.8	88	31-156	
Chloroform	ug/L	50	52.9	106	79-123	
Chloromethane	ug/L	50	38.3	77	39-116	v3
cis-1,2-Dichloroethene	ug/L	50	45.3	91	77-125	
cis-1,3-Dichloropropene	ug/L	50	36.0	72	78-131	L2,v3
Cyclohexane	ug/L	50	46.8	94	53-130	
Dibromochloromethane	ug/L	50	45.6	91	65-123	
Dichlorodifluoromethane	ug/L	50	56.5	113	13-149	
Ethylbenzene	ug/L	50	44.9	90	79-115	
Isopropylbenzene (Cumene)	ug/L	50	53.0	106	74-118	
m&p-Xylene	ug/L	100	92.8	93	80-118	
Methyl acetate	ug/L	50	57.4	115	10-214	
Methyl-tert-butyl ether	ug/L	50	44.8	90	69-118	
Methylcyclohexane	ug/L	50	46.1	92	63-124	
Methylene Chloride	ug/L	50	41.4	83	67-123	
o-Xylene	ug/L	50	44.1	88	80-119	
Styrene	ug/L	50	46.5	93	82-121	
Tetrachloroethene	ug/L	50	36.5	73	65-120	v3
Toluene	ug/L	50	45.2	90	80-114	
trans-1,2-Dichloroethene	ug/L	50	47.3	95	74-123	
trans-1,3-Dichloropropene	ug/L	50	34.3	69	73-135	L2,v3
Trichloroethene	ug/L	50	49.1	98	79-115	
Trichlorofluoromethane	ug/L	50	68.2	136	51-136	v1
Vinyl chloride	ug/L	50	44.8	90	49-118	
Xylene (Total)	ug/L	150	137	91	80-118	
1,2-Dichloroethane-d4 (S)	%			115	81-122	
4-Bromofluorobenzene (S)	%			92	79-118	
Toluene-d8 (S)	%			92	82-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1211625 1211626

Parameter	Units	70199831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	45.3	52.8	91	106	72-123	15	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	43.1	42.5	86	85	64-133	1	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	41.7	45.3	83	91	78-120	8	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	58.7	62.6	117	125	56-136	6	20	
1,1-Dichloroethane	ug/L	ND	50	50	55.4	58.3	111	117	70-124	5	20	
1,1-Dichloroethene	ug/L	ND	50	50	48.8	50.3	98	101	61-139	3	20	
1,2,3-Trichlorobenzene	ug/L	ND	50	50	46.2	47.0	92	94	48-140	2	20	
1,2,4-Trichlorobenzene	ug/L	ND	50	50	46.8	48.9	94	98	53-138	4	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	50	26.6	29.4	53	59	32-137	10	20	v3

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Data Usability Summary Report

Site: Depew Landfill
Laboratory: Pace Analytical Services – Melville, NY
SDG No.: 70199831 (revised 02/22/2022)
Parameters: Metals
Data Reviewer: Jeanette Daniels/TRC
Peer Reviewer: Kristen Morin/TRC
Date: March 23, 2022

Sample Reviewed and Evaluation Summary

6 Ground Water Samples: DPW-GW-01, DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-06, DPW-GW-DUPE[1]

[1]Field duplicate of DPW-GW-06

The above-listed groundwater samples were collected January 3-4, 2022 and were analyzed for metals by EPA Methods 200.7/245.1.

The data validation was performed in accordance with *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-542-R-20-006),* November 2020, modified for the GW-846 and EPA methodologies utilized.

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
- Initial and Continuing Calibrations
* • Interference Check Sample (ICS) Results
- Blanks
- Matrix Spike (MS) Results
- Laboratory Duplicate Results
- Serial Dilution Results
* • Laboratory Control Sample (LCS) Results
* • Field Duplicate Results
- Sample Results and Reported Quantitation Limits (QLs)

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select metals results that were detected between the method detection limit (MDL) and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive result for lead in sample DPW-GW-01 was qualified as estimated (J+) with a potential high bias due to high recovery in the low-level standard. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

- The positive result for selenium in sample DPW-GW-02 was qualified as nondetect (U) at the QL due to calibration blank contamination. This result can be used for project objectives as a nondetect, which may have a minor impact on the data usability.

- The nondetect results for silver in samples DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-06, and DPW-GW-DUPE were qualified as estimated (UJ) with a potential low bias due to low MS and post-digestion spike (PDS) recoveries. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for lead in all samples in this data set except DPW-GW-01 were qualified as estimated (UJ) due to laboratory duplicate variability. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with one exception. A discrepancy was noted on the sample condition upon receipt form regarding samples requiring preservation. It was confirmed during validation that all samples were properly preserved; no validation actions were required on this basis.

Holding Times and Sample Preservation

All holding time and sample preservation method criteria were met for the metals analyses.

Initial and Continuing Calibrations

The initial calibration verification and continuing calibration verification percent recoveries (%Rs) met the method acceptance limits for the metals analyses. All initial calibration coefficients were >0.995.

The table below summarizes the low-level standard %R that did not meet the acceptance limits of 80-120% for metals (except mercury which has acceptance limits of 70-130%), the associated samples, and the validation action.

Low-Level Standard	Analyte	%R	%R limits	Validation Action
01/17/2022 @22:29	Lead	129.2	80-120	The positive result for lead in sample DPW-GW-01 was qualified as estimated with a potential high bias (J+) since it was <10x the QL. No qualifications were required for the remaining associated samples since the results for lead were nondetect.
Associated samples: All samples in this data set.				

ICS Results

All spiked analytes recovered within the acceptance limits in the ICSAB sample analyses. There were several analytes detected as positive and/or negative interference in the ICSA analyses. However, the interferents, aluminum, calcium, iron and magnesium, were not reported as target analytes in the samples in this data set. Therefore, ICS interferences were not further evaluated.

Blanks

The laboratory reported instrument blank results to the instrument detection limit (IDL) for metals and mercury; the IDL was lower than the MDL. Instrument calibration results were only evaluated to the sample MDLs during validation since sample results were reported to the MDL. Results between the IDL and MDL are not summarized below.

Metals (including mercury) were not detected in the method blanks and mercury was not detected in the calibration blanks. The following table summarizes the calibration blank contaminants, the concentrations detected, and the resulting validation action.

Calibration Blank	Analyte	Blank Concentration	Validation Action
01/17/2022 @17:28	Selenium	8.7 J µg/L	Qualification was not required for the associated sample since selenium was not detected.
01/17/2022 @18:00		8.9 J µg/L	
Associated sample: DPW-GW-01			
01/17/2022 @18:00	Selenium	8.9 J µg/L	The positive result for selenium in sample DPW-GW-02 was qualified as nondetect (U) at the QL since the result was < the QL. Qualification was not required for samples DPW-GW-04 and DPW-GW-05 since selenium was not detected.
01/17/2022 @18:32		8.6 J µg/L	
Associated samples: DPW-GW-02, DPW-GW-04, DPW-GW-05			
01/17/2022 @20:09	Selenium	7.8 J µg/L	Qualification was not required for the associated samples since selenium was not detected.
Associated samples: DPW-GW-06, DPW-GW-DUPE			

MS Results

MS and/or PDS analyses were performed as follows:

- MS on samples DPW-GW-01 for all metals and DPW-GW-06 for metals (non-mercury)
- PDS on samples DPW-GW-01 for metals (non-mercury) and DPW-GW-06 for metals (non-mercury)

The table below summarizes the %Rs that did not meet the acceptance criteria (75-125% for MS, 80-120% for PDS), the associated samples, and the validation actions.

MS Sample ID	Analyte	MS %R	PDS %R	Validation Action
DPW-GW-06	Silver	70	68	The nondetect results for silver in samples DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-06, and DPW-GW-DUPE were qualified as estimated (UJ) with a potential low bias.
Associated samples: DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-06, DPW-GW-DUPE				

MS Sample ID	Analyte	MS %R	PDS %R	Validation Action
DPW-GW-01	Antimony	Met Criteria	127.0	Qualification of the data was not required on this basis since the MS %Rs for antimony, arsenic, beryllium, chromium, copper, and nickel were within the acceptance limits; thus, the PDS %Rs by themselves were not used to evaluate sample results.
	Arsenic	Met Criteria	123.3	
	Beryllium	Met Criteria	125.0	
	Chromium	Met Criteria	124.3	
	Copper	Met Criteria	124.4	
	Nickel	Met Criteria	124.2	
Associated samples: DPW-GW-01, DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-DUPE				

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on samples DPW-GW-01 for all metals and DPW-GW-06 for metals (non-mercury). All criteria were met in sample DPW-GW-01. Lead was not detected in sample DPW-GW-06 and was detected >QL in the laboratory duplicate; the absolute difference (AbsD) (8.5 µg/L) was > the QL (5.0 µg/L). Therefore, the nondetect results for lead in all samples in this data set except DPW-GW-01 were qualified as estimated (UJ).

Serial Dilution Results

Serial dilution analyses were performed on samples DPW-GW-01 and DPW-GW-06. All percent differences (%Ds) met the acceptance criteria of 20% except those shown in the table below.

Sample ID	Analyte	%D	Validation Action
DPW-GW-01	Arsenic	317.2	No qualifications were required on this basis since the results for arsenic in sample DPW-GW-01 and the serial dilution analysis were < the QL.
Associated samples: DPW-GW-01, DPW-GW-02, DPW-GW-04, DPW-GW-05, DPW-GW-DUPE			

LCS Results

The %Rs for all metals met the laboratory acceptance criteria of 80-120%.

Field Duplicate Results

Samples DPW-GW-06/DPW-GW-DUPE were submitted as the field duplicate pair with this data set. The following table summarizes the AbsDs of the detected results. All criteria were met.

Analyte	QLs (µg/L)	DPW-GW-06 (µg/L)	DPW-GW-DUPE (µg/L)	AbsD (µg/L)	Validation Action
Chromium	10	1.3J	1.4 J	0.1	None; all criteria were met.
Nickel	40	32.5 J	32.9 J	0.4	

Field duplicate criteria are as follows:

- RPD ≤ 30 when positive results for both samples are ≥ 5× QL
- AbsD < QL when both results are < 5× QL

Sample Results and Reported Quantitation Limits

Select metal results were reported between the MDL and QL. These results were qualified as estimated (J) in the associated samples by the laboratory. Sample calculations were spot-checked; there were no errors noted.

There were no dilutions performed on any samples in this data set.

QUALIFIED FORM 1s

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-01 **Lab ID: 70199831001** Collected: 01/03/22 12:45 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 17:46	7440-36-0	
Arsenic	**7.4J**	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:46	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 17:46	7440-41-7	
Cadmium	**0.38J**	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 17:46	7440-43-9	
Chromium	**5.4J**	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 17:46	7440-47-3	
Copper	**16.2J**	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 17:46	7440-50-8	
Lead	**37.4**J+	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 17:46	7439-92-1	
Nickel	**21.8J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 17:46	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 17:46	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 17:46	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 17:46	7440-28-0	
Zinc	**120**	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 17:46	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:43	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-02 **Lab ID: 70199831002** Collected: 01/03/22 15:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 18:05	7440-36-0	
Arsenic	**13.7**	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 18:05	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 18:05	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 18:05	7440-43-9	
Chromium	ND	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 18:05	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 18:05	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 18:05	7439-92-1	UJ
Nickel	**11.5J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 18:05	7440-02-0	
Selenium	~~9.3J~~	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 18:05	7782-49-2	U
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 18:05	7440-22-4	UJ
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 18:05	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 18:05	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:45	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-04 **Lab ID: 70199831003** Collected: 01/04/22 11:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 18:08	7440-36-0	
Arsenic	**7.0J**	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 18:08	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 18:08	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 18:08	7440-43-9	
Chromium	**2.0J**	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 18:08	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 18:08	7440-50-8	
Lead	ND UJ	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 18:08	7439-92-1	
Nickel	**22.1J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 18:08	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 18:08	7782-49-2	
Silver	NDUJ	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 18:08	7440-22-4	
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 18:08	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 18:08	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	**1.1**	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:47	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-05 **Lab ID: 70199831004** Collected: 01/03/22 16:50 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/14/22 09:30	01/17/22 18:11	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 18:11	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/14/22 09:30	01/17/22 18:11	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/14/22 09:30	01/17/22 18:11	7440-43-9	
Chromium	**1.2J**	ug/L	10.0	1.1	1	01/14/22 09:30	01/17/22 18:11	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/14/22 09:30	01/17/22 18:11	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/14/22 09:30	01/17/22 18:11	7439-92-1	UJ
Nickel	**11.9J**	ug/L	40.0	4.4	1	01/14/22 09:30	01/17/22 18:11	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/14/22 09:30	01/17/22 18:11	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/14/22 09:30	01/17/22 18:11	7440-22-4	UJ
Thallium	ND	ug/L	10.0	5.3	1	01/14/22 09:30	01/17/22 18:11	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/14/22 09:30	01/17/22 18:11	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:48	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-06 **Lab ID: 70199831005** Collected: 01/04/22 11:35 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/17/22 09:50	01/17/22 20:14	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/17/22 09:50	01/17/22 20:14	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/17/22 09:50	01/17/22 20:14	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/17/22 09:50	01/17/22 20:14	7440-43-9	
Chromium	**1.3J**	ug/L	10.0	1.1	1	01/17/22 09:50	01/17/22 20:14	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/17/22 09:50	01/17/22 20:14	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/17/22 09:50	01/17/22 20:14	7439-92-1	UJ
Nickel	**32.5J**	ug/L	40.0	4.4	1	01/17/22 09:50	01/17/22 20:14	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/17/22 09:50	01/17/22 20:14	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/17/22 09:50	01/17/22 20:14	7440-22-4	UJ
Thallium	ND	ug/L	10.0	5.3	1	01/17/22 09:50	01/17/22 20:14	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/17/22 09:50	01/17/22 20:14	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:52	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

Sample: DPW-GW-DUPE **Lab ID: 70199831006** Collected: 01/03/22 08:00 Received: 01/05/22 11:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville								
Antimony	ND	ug/L	60.0	20.8	1	01/17/22 09:50	01/17/22 20:28	7440-36-0	
Arsenic	ND	ug/L	10.0	5.3	1	01/17/22 09:50	01/17/22 20:28	7440-38-2	
Beryllium	ND	ug/L	5.0	0.33	1	01/17/22 09:50	01/17/22 20:28	7440-41-7	
Cadmium	ND	ug/L	2.5	0.31	1	01/17/22 09:50	01/17/22 20:28	7440-43-9	
Chromium	**1.4J**	ug/L	10.0	1.1	1	01/17/22 09:50	01/17/22 20:28	7440-47-3	
Copper	ND	ug/L	25.0	3.7	1	01/17/22 09:50	01/17/22 20:28	7440-50-8	
Lead	ND	ug/L	5.0	2.2	1	01/17/22 09:50	01/17/22 20:28	7439-92-1	UJ
Nickel	**32.9J**	ug/L	40.0	4.4	1	01/17/22 09:50	01/17/22 20:28	7440-02-0	
Selenium	ND	ug/L	10.0	7.1	1	01/17/22 09:50	01/17/22 20:28	7782-49-2	
Silver	ND	ug/L	10.0	1.2	1	01/17/22 09:50	01/17/22 20:28	7440-22-4	UJ
Thallium	ND	ug/L	10.0	5.3	1	01/17/22 09:50	01/17/22 20:28	7440-28-0	
Zinc	ND	ug/L	20.0	8.6	1	01/17/22 09:50	01/17/22 20:28	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville								
Mercury	ND	ug/L	0.20	0.10	1	01/14/22 10:20	01/17/22 12:54	7439-97-6	

REPORT OF LABORATORY ANALYSIS

QC NONCONFORMANCE DOCUMENTATION

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 70199831 Contract: DEPEW LANDFILL SITE # 915105

CRDL Check Standard Source: 122193 Analysis Date/Time: 01/17/2022 22:29

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	60	61.7	102.8	70-130
Arsenic	10.0	10.2	102.0	70-130
Beryllium	5.0	5.0	100.6	70-130
Cadmium	2.5	2.6	106.0	70-130
Chromium	10.0	10.1	101.0	70-130
Copper	25	25.8	103.2	70-130
Lead	5.0	6.5	129.2	70-130
Nickel	40	41.6	104.0	70-130
Selenium	10.0	9.4	94.5	70-130
Silver	10.0	8.8	87.8	70-130
Thallium	10.0	8.8	88.5	70-130
Zinc	20	21.0	105.0	70-130

80-120

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70199831 Contract : DEPEW LANDFILL SITE # 915105

Method Blank Matrix: Water Instrument ID: 70ICP3

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	01/17/2022 16:37	C	01/17/2022 16:55	C	01/17/2022 17:28	C	01/17/2022 18:00	C	1215769	C
Antimony	5.1	U	5.1	U	5.1	U	5.1	U	ND	U
Arsenic	3.5	U	4.3	J	4.2	J	3.7	J	<MDL	U
Beryllium	0.024	U	0.024	U	0.024	U	0.024	U	ND	U
Cadmium	0.098	U	0.098	U	0.098	U	0.098	U	ND	U
Chromium	0.21	U	0.21	U	0.21	U	0.21	U	ND	U
Copper	0.95	U	0.95	U	0.95	U	0.95	U	ND	U
Lead	1.6	U	1.6	U	1.6	U	1.6	U	ND	U
Nickel	0.92	U	0.92	U	0.92	U	0.92	U	ND	U
Selenium	3.7	U	8.6	J	8.7	J	8.9	J	ND	U
Silver	0.26	U	0.26	J	0.26	U	0.26	U	ND	U
Thallium	2.9	U	2.9	U	2.9	U	2.9	U	ND	U
Zinc	0.43	U	0.43	U	0.43	U	0.43	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70199831 Contract : DEPEW LANDFILL SITE # 915105

Method Blank Matrix: Water Instrument ID: 70ICP3

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	01/17/2022 18:32	C	01/17/2022 19:37	C	01/17/2022 20:09	C	1216945	C
Antimony			5.1	U	5.1	U	5.1	U	ND	U
Arsenic			3.5	U	4.4	J	3.5	U	<MDL	U
Beryllium			0.024	U	0.024	U	0.024	U	ND	U
Cadmium			0.098	U	0.098	U	0.098	U	ND	U
Chromium			0.21	U	0.21	U	0.21	U	ND	U
Copper			0.95	U	0.95	U	0.95	U	ND	U
Lead			1.6	U	1.6	U	1.6	U	ND	U
Nickel			0.92	U	0.92	U	0.92	U	ND	U
Selenium			8.6	J	8.1	J	7.8	J	ND	U
Silver			0.26	J	0.26	U	0.37	J	ND	U
Thallium			2.9	U	2.9	U	2.9	U	ND	U
Zinc			0.43	U	0.43	U	0.43	U	ND	U

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

MATRIX SPIKE SAMPLE: 1216948

Parameter	Units	70199831005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	ND	500	492	98	70-130	
Lead	ug/L	ND	500	450	90	70-130	
Nickel	ug/L	32.5J	500	539	101	70-130	
Selenium	ug/L	ND	500	472	94	70-130	
Silver	ug/L	ND	250	176	70	70-130	
Thallium	ug/L	ND	250	267	107	70-130	
Zinc	ug/L	ND	500	496	98	70-130	

MATRIX SPIKE SAMPLE: 1216950 DPW-GW-06

Parameter	Units	70200272002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<60.0	1000	1060	106	70-130	
Arsenic	ug/L	10.5	500	520	102	70-130	
Beryllium	ug/L	<5.0	500	511	102	70-130	
Cadmium	ug/L	<2.5	500	486	97	70-130	
Chromium	ug/L	<10.0	500	515	103	70-130	
Copper	ug/L	<25.0	500	502	100	70-130	
Lead	ug/L	<5.0	500	452	89	70-130	
Nickel	ug/L	<40.0	500	522	103	70-130	
Selenium	ug/L	<10.0	500	482	96	70-130	
Silver	ug/L	<10.0	250	174	70	~~70-130~~	75-125
Thallium	ug/L	<10.0	250	252	100	70-130	
Zinc	ug/L	<20.0	500	503	101	70-130	

SAMPLE DUPLICATE: 1216947

Parameter	Units	70199831005 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		20	
Arsenic	ug/L	ND	ND		20	
Beryllium	ug/L	ND	ND		20	
Cadmium	ug/L	ND	ND		20	
Chromium	ug/L	1.3J	1.3J		20	
Copper	ug/L	ND	ND		20	
Lead	ug/L	ND	13.5		20	
Nickel	ug/L	32.5J	32.6J		20	
Selenium	ug/L	ND	ND		20	
Silver	ug/L	ND	ND		20	
Thallium	ug/L	ND	ND		20	
Zinc	ug/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

SAMPLE NO.

1216052PDS

FORM V INORGANIC-2

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199831 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Water Parent Sample ID: DPW-GW-01

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	85-115	1	1270	1	20.8U	1000	127.0*
Arsenic	ug/L	85-115	1	624	1	7.4J	500	123.3*
Beryllium	ug/L	85-115	1	625	1	0.33U	500	125.0*
Cadmium	ug/L	85-115	1	592	1	0.38J	500	118.3*
Chromium	ug/L	85-115	1	627	1	5.4J	500	124.3*
Copper	ug/L	85-115	1	638	1	16.2J	500	124.4*
Lead	ug/L	85-115	1	588	1	37.4	500	110.1
Nickel	ug/L	85-115	1	643	1	21.8J	500	124.2*
Selenium	ug/L	85-115	1	587	1	7.1U	500	117.4*
Silver	ug/L	85-115	1	216	1	1.2U	250	86.4
Thallium	ug/L	85-115	1	291	1	5.3U	250	116.3*
Zinc	ug/L	85-115	1	714	1	120	500	118.8*

* Spike Recovery outside QC Limits

SAMPLE NO.

1217175PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70199831 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Water Parent Sample ID: DPW-GW-06

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	85-115	1	1070	1	20.8U	1000	107.0
Arsenic	ug/L	85-115	1	519	1	5.3U	500	103.8
Beryllium	ug/L	85-115	1	520	1	0.33U	500	104.0
Cadmium	ug/L	85-115	1	491	1	0.31U	500	98.2
Chromium	ug/L	85-115	1	523	1	1.3J	500	104.3
Copper	ug/L	85-115	1	505	1	3.7U	500	101.0
Lead	ug/L	85-115	1	454	1	2.2U	500	90.8
Nickel	ug/L	85-115	1	552	1	32.5J	500	103.9
Selenium	ug/L	85-115	1	482	1	7.1U	500	96.4
Silver	ug/L	85-115	1	170	1	1.2U	250	68.0*
Thallium	ug/L	85-115	1	238	1	5.3U	250	95.3
Zinc	ug/L	85-115	1	509	1	8.6U	500	101.8

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: DEPEW LANDFILL SITE # 915105
Pace Project No.: 70199831

MATRIX SPIKE SAMPLE: 1216948

Parameter	Units	70199831005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	ND	500	492	98	70-130	
Lead	ug/L	ND	500	450	90	70-130	
Nickel	ug/L	32.5J	500	539	101	70-130	
Selenium	ug/L	ND	500	472	94	70-130	
Silver	ug/L	ND	250	176	70	70-130	
Thallium	ug/L	ND	250	267	107	70-130	
Zinc	ug/L	ND	500	496	98	70-130	

MATRIX SPIKE SAMPLE: 1216950

Parameter	Units	70200272002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<60.0	1000	1060	106	70-130	
Arsenic	ug/L	10.5	500	520	102	70-130	
Beryllium	ug/L	<5.0	500	511	102	70-130	
Cadmium	ug/L	<2.5	500	486	97	70-130	
Chromium	ug/L	<10.0	500	515	103	70-130	
Copper	ug/L	<25.0	500	502	100	70-130	
Lead	ug/L	<5.0	500	452	89	70-130	
Nickel	ug/L	<40.0	500	522	103	70-130	
Selenium	ug/L	<10.0	500	482	96	70-130	
Silver	ug/L	<10.0	250	174	70	70-130	
Thallium	ug/L	<10.0	250	252	100	70-130	
Zinc	ug/L	<20.0	500	503	101	70-130	

SAMPLE DUPLICATE: 1216947

Parameter	Units	DPW-GW-06 70199831005 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		20	
Arsenic	ug/L	ND	ND		20	
Beryllium	ug/L	ND	ND		20	
Cadmium	ug/L	ND	ND		20	
Chromium	ug/L	1.3J	1.3J		20	
Copper	ug/L	ND	ND		20	
Lead	ug/L	ND	13.5		20	
Nickel	ug/L	32.5J	32.6J		20	
Selenium	ug/L	ND	ND		20	
Silver	ug/L	ND	ND		20	
Thallium	ug/L	ND	ND		20	
Zinc	ug/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

SAMPLE NO.

1216053SD

FORM VIII INORGANIC-2

SERIAL DILUTIONS

Lab Name: Pace Analytical - New York SDG No. : 70199831 Contract: DEPEW LANDFILL SITE # 915105

Matrix: Water Parent Sample ID: DPW-GW-01

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Antimony	ug/L	20.8U	104U		10
Arsenic	ug/L	7.4J	30.8J	317.2*	10
Beryllium	ug/L	0.33U	1.7U		10
Cadmium	ug/L	0.38J	1.5U		10
Chromium	ug/L	5.4J	5.6U		10
Copper	ug/L	16.2J	18.4U		10
Lead	ug/L	37.4	36.4	2.5	10
Nickel	ug/L	21.8J	22.1U		10
Selenium	ug/L	7.1U	63.5		10
Silver	ug/L	1.2U	6.2U		10
Thallium	ug/L	5.3U	26.4U		10
Zinc	ug/L	120	118	1.2	10

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

02/28/2022 10:54