



**Department of
Environmental
Conservation**

SITE MANAGEMENT

PERIODIC REVIEW REPORT (October 1, 2020 through June 21, 2023)

WORK ASSIGNMENT D009803-31

ROSE VALLEY LANDFILL
RUSSIA (T)

SITE NO. 622017
HERKIMER (C), NY

Prepared for:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York

Basil Seggos, Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION

AECOM USA, Inc.
50 Lakefront Boulevard, Suite 111
Buffalo, NY 14202

OCTOBER 2023



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



Site Details

Box 1

Site No. **622017**

Site Name **Rose Valley Landfill**

Site Address: Rose Valley Road Zip Code: 13431

City/Town: Russia

County: Herkimer

Site Acreage: 91.000

Reporting Period: October 1, 2020 through June 21, 2023

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet. | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. | | |
| 5. Is the site currently undergoing development? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Box 2

- | | YES | NO |
|---|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional ControlsParcelOwnerInstitutional Control**089.1-2-29.2**

CROUCH GERALD

Monitoring Plan
Ground Water Use Restriction
Landuse Restriction

Site Management Plan
O&M Plan
IC/EC Plan

Description of Engineering ControlsParcelEngineering Control**089.1-2-29.2**

Cover System
Fencing/Access Control

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO



2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO



**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 622017

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Michael L. Spera, PE at AECOM, 125 Broad St., New York, NY 10004,
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

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



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

October 9, 2023
Date

**PERIODIC REVIEW REPORT
(OCTOBER 1, 2020 THROUGH JUNE 21, 2023)
ROSE VALLEY LANDFILL
NYSDEC SITE NO. 622017**

WORK ASSIGNMENT NO. D009803-31

**Prepared for:
New York State Department of Environmental Conservation
Albany, New York**

**Prepared by:
AECOM USA, Inc.
Buffalo, NY**

October 2023

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 SITE OVERVIEW	1
2.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS	3
2.1 Site Management Status	3
2.2 Inspection Results	4
2.2.1 Institutional Controls	4
2.2.2 Engineering Controls	5
3.0 CONCLUSIONS AND RECOMMENDATIONS	7
3.1 Institutional Controls	7
3.2 Engineering Controls	7
3.3 Other Site-Related Activities	7
4.0 REFERENCES	8

FIGURES

Figure 1	Site Location
Figure 2	Site Plan
Figure 3	Groundwater Exceedances
Figure 4	Surface Water Exceedances
Figure 5	Potentiometric Surface (Shallow), September, 2021
Figure 6	Potentiometric Surface (Deep), September, 2021
Figure 7	Potentiometric Surface (Deep), October, 2015
Figure 8	Emerging Contaminant Analytical Results

TABLES

Table 1	Groundwater Monitoring Results
Table 2	Mann-Kendall Statistical Analysis
Table 3	Surface Water Monitoring Results
Table 4	Emerging Contaminant Results

ATTACHMENTS

Attachment A	Site Monitoring Report, 2021 Calendar Year
Attachment B	Site Inspection Reports, May 2021 through June 2023

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

1,1-DCA	1,1-Dichloroethane
DWQC	Drinking Water Quality Council
EC	engineering control
FS	Feasibility Study
FRR	Final Remediation Report
IC	institutional control
ng/L	nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
O&M	Operation and Maintenance
OM&MP	Operation, Monitoring and Maintenance Plan
PFAS	per and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PRR	Periodic Review Report
RA	Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SCG	standards, criteria and guidance values
SCO	Soil Cleanup Objective
SIM	selected ion monitoring
SM	site management
SMP	Site Management Plan
SW	Sentry Well
TCA	1,1,1-Trichloroethane
TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations
µg/L	micrograms per liter
URS	URS Corporation – New York
VOC	volatile organic compound

EXECUTIVE SUMMARY

The Rose Valley Landfill (Site No. 622017); hereinafter referred to as the Site, was a privately owned, unlined dump that was open from 1963 to 1985. The site is located in Russia Township in Herkimer County as part of a 91-acre parcel (since subdivided into two parcels in 1986). The site is bounded to the east by Military Road, to the west by Bromley Road, and to the southwest by Rose Valley Road.

This Periodic Review Report (PRR) is the second PRR for the Site. It summarizes the Site Management (SM) activities completed by AECOM during the period of October 1, 2020 up to and including the last mowing and inspection event on June 21, 2023. Subsequent PRRs will be conducted as directed by NYSDEC. This PRR includes required engineering control (EC) and institutional control (IC) certification and summary, and documentation of site-related data to support EC and IC certification.

During the reporting period, SM requirements were met. Based on this review, the remedy continues to be protective of the public health and the environment and is compliant with the ROD.

Sampling for emerging contaminants was conducted in December 2017, October 2019, and September 2021 at site groundwater monitoring wells. 1,4-Dioxane exceeded the current TOGS 1.1.1 Class GA (February 2023) guidance value (0.35 µg/L) in four monitoring wells and perfluorooctanoic acid (PFOA) exceeded the current TOGS 1.1.1 Class GA (February 2023) guidance value (6.7 ng/L) in two groundwater monitoring wells. In February 2022, emerging contaminant sampling took place at a nearby residence (from the kitchen faucet); there were no emerging contaminants detected.

Biennial groundwater monitoring and site inspection will continue in accordance with the SMP and will include monitoring for per- and polyfluoralkyl substances (PFAS) and 1,4-dioxane. As indicated in the July 2021 PRR approved by NYSDEC, surface water monitoring has been discontinued.

Based on the results of the Remedial Investigation/Feasibility Study (RI/FS) and the criteria identified for evaluation of alternatives, the remedy for the Site was selected and a Record of Decision (ROD) was issued in March 2001. The recommended remedy involved on-site disposal of contaminated surface soils into the on-site landfill, installing a new cap on the landfill to reduce infiltration through the wastes, installing a new residential well in a deeper, clean aquifer for the impacted residence, and long-term monitoring of the western groundwater plume, and treatment of the leachate and contaminated groundwater plume by monitoring natural attenuation. The remedial design of the landfill closure was completed in November 2006, and the construction of the landfill cap was completed in 2007.

1.0 SITE OVERVIEW

The Rose Valley Landfill is a privately owned, unlined dump that was open from 1963 to 1985. The site is located in Russia Township in Herkimer County as part of a 91-acre parcel (since subdivided into two parcels in 1986). The site is bounded to the east by Military Road, to the west by Bromley Road, and to the southwest by Rose Valley Road (Figure 1). A New York State Department of Environmental Conservation (NYSDEC) Class C stream locally known as Finch Brook separates the site from Military Road. Finch Brook is a tributary of Hurricane Brook (also a NYSDEC Class C stream).

The landfill (Figure 2) is located on the side of a hill that has approximately 120 feet of relief. A steep, 60-foot-high sand embankment extends above the landfill to the west. The site is characterized by high relief, with sharp drops in elevation from southwest to northeast and a moderate, uniform south to southwest slope. The gradient across the western portion of the property is less severe, sloping in the opposite direction.

The area surrounding the site is sparsely populated, with few known permanent residents.

The last landfill owner/operator was frequently cited for NYSDEC permit violations. Leachate outbreaks were commonly noted and refuse was often left uncovered and uncompacted. The most notable violation was in 1979, which was the documented observation of chlorinated solvents, notably 1,1,1-trichloroethane (TCA), being brought to this landfill and burned.

Improper disposal of TCA and other solvents has resulted in groundwater contamination in excess of NYSDEC's Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1) applicable Class GA drinking water standards, criteria and guidance values (SCG). A residential well adjacent to the landfill was sampled and found to be contaminated with TCA and 1,1-dichloroethane (1,1-DCA).

The Record of Decision (ROD) for the Site was signed in March 2001. The NYSDEC had selected installation of a single layer cover over the major fill area, excavation and disposal of contaminated surface soils, treatment of the leachate by natural attenuation, monitoring of the wetland, replacement of the impacted homeowner well with a deeper well, and monitoring of the western groundwater plume. The components of the remedy are as follows:

- Excavation and disposal of contaminated surface soils from the older septic disposal pit into the on-site landfill;
- Installation of an alternative drinking water supply for the impacted well;
- Long-term monitoring of the western groundwater plume containing low levels of DCA and TCA;
- Treatment of the leachate and contaminated groundwater plume by monitored natural attenuation. (Long term monitoring of the effectiveness of natural attenuation will be conducted and documented); and
- Installation of a single layer Part 360 (1982 regulations) cover over the eight (8) acres of major fill area encircled by a six-foot-high chain link fence.

The remedial design of the landfill closure was completed in November 2006 and the construction of the landfill cap was completed in November 2007. A 6-foot high chain-link fence was constructed to limit access to the landfill cap area. A new replacement drinking water well into the deeper aquifer was installed at the impacted residence; it is being monitored by the Herkimer County Department of Health. The effectiveness of the replacement well remedy is not a component of site monitoring or this PRR. The Final Remediation Report (FRR) was completed in April 2008.

This is the second PRR for the Site. It summarizes the Site Management (SM) activities completed during the period October 1, 2020 to June 21, 2023. Subsequent PRRs will be conducted as directed by NYSDEC. This PRR includes required engineering control (EC) and institutional control (IC) certification and summary, and documentation of site-related data to support EC and IC certification.

2.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

2.1 Site Management Status

A Conceptual Operation, Monitoring and Maintenance Plan (OM&MP) was prepared in 2006. In September 2010, a Site Management Plan (SMP) replaced the OM&MP. The SMP was then updated and reissued in August 2022. The first Site monitoring event was conducted in April 2010. It included groundwater samples from ten monitoring wells and inspection of the monitoring wells, surface water samples from four surface water locations, and inspection of landfill cap and the site stormwater management system. Maintenance performed included landfill cap mowing. Subsequent monitoring, inspection and/or maintenance events took place in July 2011, October 2012, October 2013, October 2014, October 2015, January 2017, December 2017, October 2019, June 2020, May 2021, September 2021 (activities for this event are described in the 2021 Site Monitoring Report), February 2022, August/September 2022 and June 2023. After the December 2017 monitoring event, the frequency of groundwater and surface water monitoring was reduced to every other year. Surface water monitoring was discontinued after the October 2019 sampling event, as recommended in the 2021 PRR.

The most recent Site monitoring was performed by AECOM (formerly URS) on September 7, 2021 and is the tenth sampling event since the OM&MP was implemented. A site monitoring report for the September 2021 event can be found in Attachment A. The most recent site inspections were conducted by AECOM on September 7, 2021, August 31 through September 1, 2022 and June 21, 2023. No changes to the site cover were noted during these inspections.

In February 2022, AECOM staff visited a local residence () to collect a drinking water sample to test for the presence of 1,4-dioxane and PFAS. A letter report documenting this work and discussing the results was submitted to NYSDEC on April 27, 2022. The inspection report for this site visit is included in Attachment B.

This PPR was prepared to confirm that controls established according to the ROD and SMP are operational and effective, that the SMP is being implemented and conducted accordingly, and that the remedy remains protective of the environment and/or public health.

In accordance with the SMP, groundwater samples were collected by AECOM from ten monitoring wells most recently in September 2021, and surface water was collected from four surface water locations for volatile organic compounds (VOCs) most recently in October 2019. The groundwater results are compared to TOGS 1.1.1 Class GA SCGs. Monitoring for semivolatile organic compounds (SVOCs) and metals was required only for the baseline monitoring event in April 2010 as per the Conceptual Operation, Monitoring and Maintenance Plan (URS, January 2008). Groundwater results from all samplings events are provided in Table 1. During the most recent groundwater sampling event, one exceedance for 1,1-DCA [SCG of 5 micrograms per liter (µg/L)] was observed at one downgradient monitoring well (MW-04, 7.6 µg/L) at the eastern edge of the landfill (see Figure 3). The concentration of 1,1-DCA is down from a high of 15 µg/L in October 2012. Using a Mann-Kendall statistical analysis (Table 2), there is a downward trend in the concentrations of 1,1-DCA in MW-03 and MW-04; cis 1,2-DCA is also exhibiting a downward trend in well MW-03. These results suggest that natural attenuation is occurring.

The last PRR submitted in July 2021 recommended that surface water sampling be discontinued. Therefore, surface water samples were not collected during this reporting period. Historically, surface water results were compared to TOGS 1.1.1 Class C SCGs. There were no detections of VOCs above SCGs

in the surface water samples starting with the first (baseline) monitoring event in April 2010. Surface water results from the most recent sampling event are provided in Table 3 and Figure 4.

Potentiometric surface maps based on the water level measurements from the shallow and deep wells, using a 10-foot contour interval, are provided in Figures 5 and 6, respectively. The measurements were taken on September 7 and 8, 2021. The shallow groundwater flow is generally to the east-northeast towards Military Road and is consistent with historical shallow groundwater patterns. The deep groundwater flow is in the same general direction east of MW-02. Because MW-02 could not be measured during this event, the potentiometric surface map does not show the groundwater mounding typically found at MW-02 that results in a flow to the west and south from this area towards Bromley and Rose Valley Roads as shown in the October 2015 potentiometric surface map (Figure 7).

In September 2021 the monitoring wells were sampled for emerging contaminants. Samples were collected for the analysis of 1,4-dioxane by SW846 Method 8270D selected ion monitoring (SIM) and per- and polyfluoralkyl substances (PFAS) by USEPA Method 537-modified. The emerging contaminant results are provided in Table 4 and Figure 8. Results for 1,4-dioxane in MW-04 (4.6 µg/L), MW-16 (0.42 µg/L), SW-01S (5.4 µg/L) and SW-04S (0.51 µg/L) exceeded the TOGS 1.1.1 Addendum (February 2023) level of 0.35 µg/L. Results for perfluorooctanoic acid (PFOA) were greater than the TOGS 1.1.1 Addendum level of 6.7 nanograms per liter (ng/L) in MW-03 (18 ng/L) and MW-04 (7.7 ng/L).

Because these emerging contaminants have been detected in the shallow groundwater sentry wells (SWs), it is recommended that monitoring for these compounds be continued in shallow groundwater.

Contaminant levels in the sentry wells have never exceeded the applicable criteria for VOCs. In addition, the Mann-Kendall statistical analysis (Table 2) has demonstrated a decreasing trend in VOC concentrations. Because of these reasons, it is recommended that NYSDEC consider discontinuing monitoring for VOCs in all groundwater monitoring wells on Site.

2.2 Inspection Results

Since the most recent PRR Report was issued, inspections performed annually resulted in the following maintenance activities:

- Installation of additional jersey barriers to restrict off-road access by all-terrain vehicles and minimize dumping of trash on site;
- Installation of a crash gate at the site entrance to add an additional layer of security for preventing trespassing;
- Regrading and filling of site roads to address erosion; and
- Clearing of woody vegetation from the landfill cap drainage swales.

2.2.1 Institutional Controls

Institutional Controls have been implemented as required by the ROD to:

- Prevent future exposure to remaining contamination by preventing disturbance of the subsurface contamination; and
- Restrict the use and development of the Site.

The ICs in place through a Declaration of Covenants & Restrictions filed in Herkimer County on December 8, 2008 consist of the following:

- Prohibition of the Site from ever being used for any purpose, including but not limited to residential, retail, commercial or industrial purposes, day care, childcare or medical treatment facilities;
- Not to use the Site for any purpose that compromises the integrity of the engineered landfill cap system. No excavation, digging, drilling or other activities that will damage the engineered cap, and no placements of materials, vehicles or equipment within the controlled area;
- No uses of the property which impact the integrity of the closed landfill, the constructed surface water conveyance systems, monitoring wells, or site fencing;
- Any future use of the property must follow the approved Site Management Plan for the Rose Valley Landfill Site and be consistent with the March 2001 ROD and any amendments thereto;
- No use of on-site groundwater for any purposes; and
- No interference with the Department's access, or parties designated by the Department, for the purpose of monitoring and maintenance of the engineered landfill cap system located on the Site to retain its integrity.

Based on inspections conducted during the reporting period, there has not been a change in property use and groundwater beneath the site is not being used. The Site is therefore in compliance with the ICs.

2.2.2 Engineering Controls

ECs have been implemented as required by the ROD to:

- Prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination;
- Maintain the integrity of the engineered landfill cap system; and
- Monitor and maintain the surface water conveyance systems.

The ECs in place consist of the following:

- Engineered landfill cap system;
- Surface water conveyance system; and
- Site fencing, gates, and other security features.

PREVIOUS INSPECTIONS

Previous maintenance activities performed at the site are as follows:

September 22, 2010 maintenance included filling and regrading eroded areas, topsoil placement and seeding of non-road areas and placement of erosion mats in the areas repaired.

August 2012 maintenance activities included the following: Three landfill gas vents damaged by gun shots were repaired; and additional jersey barriers were placed at the entrance to a side access road onto the landfill. The placement of additional jersey barriers were necessary in order to prevent dumping on the site.

In July 2013 the double swing gate panels located at the southwestern corner of the landfill were replaced and secured.

In July and August 2015 maintenance activities included the following:

- A 100-foot length of guardrail was installed at the secondary landfill access point along Rose Valley Road;
- Several tires discarded in the ravine north of the landfill along Military Road were removed and properly disposed offsite;
- A 10-foot long chain-link fence was installed north of the main access in order to block access by all-terrain vehicles to the landfill; and
- A stronger replacement lock was installed on the main access gate. The original lock had been cut off by vandals.

In August 2017, flags on 6-foot fiberglass poles were attached to each stick-up monitoring well on site. A 40-foot fence was installed to the south of the main entrance gate to block access by all-terrain vehicles. Most of the flags were missing when the 2019 monitoring was performed.

On June 26, 2020 a stronger, more vandal-resistant latch and padlock were installed at the main entrance gate. The gate posts were straightened and the gates were readjusted to facilitate installation of the new latch and padlock.

Activities performed on site during 2021 are described in the Site Monitoring Report included in Attachment A and inspection reports are included in Attachment B.

During the August/September 2022 site visit, AECOM and their Subcontractor (Brady Fence) installed concrete Jersey Barriers in an attempt to restrict ATV access to the site. Brady also mowed the landfill cap at this time.

MOST RECENT INSPECTION

The following observations were made during the June 2023 site inspection:

- Trash, including TVs, tires, a couch, and other miscellaneous items continue to be dumped along the northern side of the site, primarily in the ravine between Military Road and the Site perimeter;
- Concrete Jersey Barriers used to prevent ATV access are still in place, however new access points have been created by ATV riders to avoid the concrete barriers;
- Trash and brush have been piled at the Military Road/ATV access entrance at the north side of the site, and there is evidence that the pile has been burned; and
- Headcutting (undermining of stone lining from the bottom of the channel to upstream) in the drainage swale has not advanced since the previous inspection.

Copies of the September 2021, February 2022, August/September 2022 and June 2023 inspection reports are provided in Attachment B.

Based on the 2023 site inspection, the ECs at the site continue to function as designed. However, due to the popularity of ATV use in the area, there are issues with site security despite continued efforts to restrict access.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on this review, the remedy continues to be protective of the public health and the environment and is compliant with the decision document.

3.1 Institutional Controls

Based upon the results of the inspections and monitoring presented in this report, the ICs are currently achieving the objectives of the ROD for protection of human health and the environment.

3.2 Engineering Controls

Based upon the results of the inspections and monitoring presented in this report, the ECs are currently achieving the objectives of the ROD for protection of human health and the environment. However, maintenance of the landfill access roadway is expected in the future as erosion continues. There are issues with site security despite continued efforts to restrict access. It is anticipated that these problems will continue for the foreseeable future, but can be satisfactorily addressed with regular maintenance.

3.3 Other Site-Related Activities

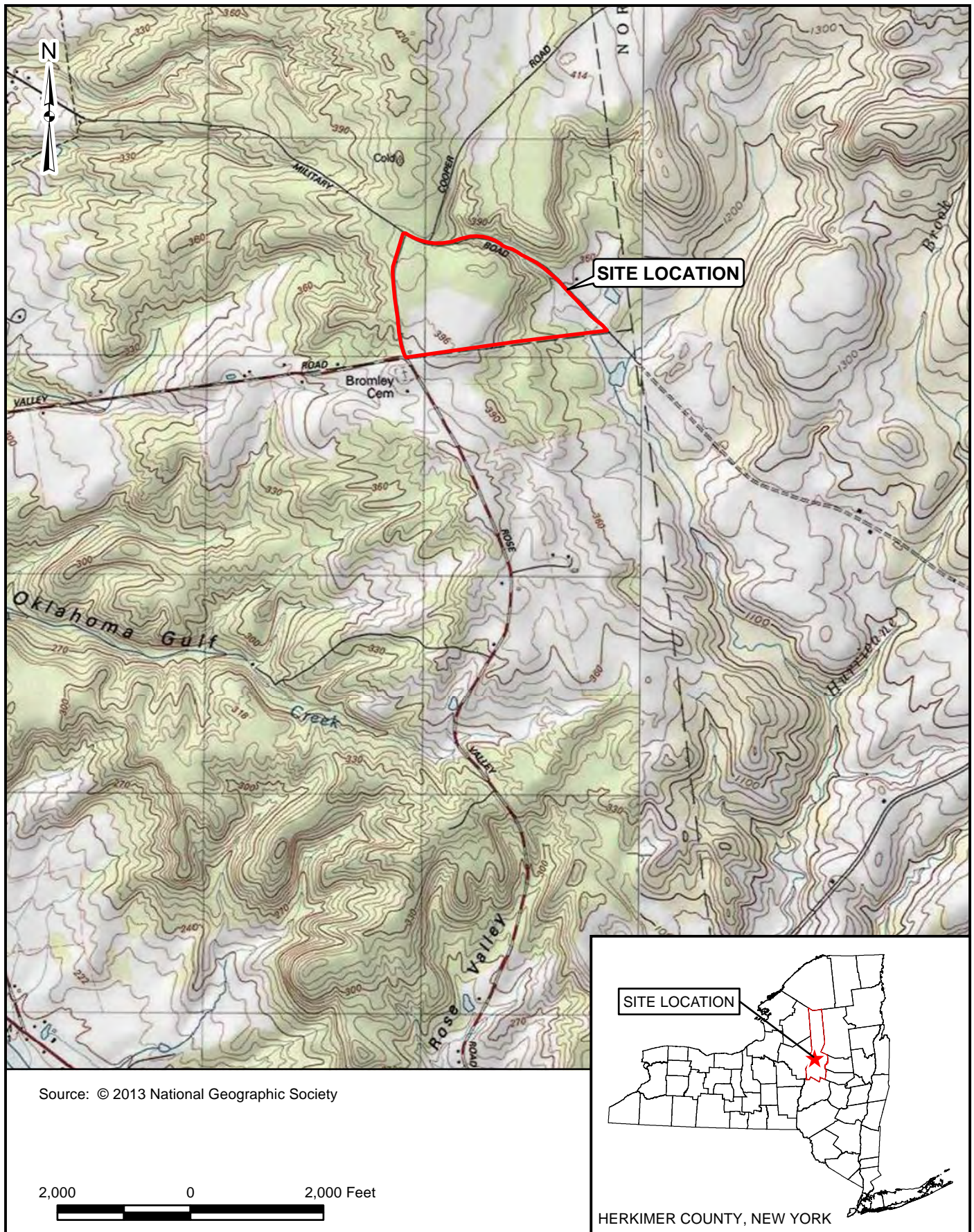
Site inspections and maintenance should be continued as specified in the SMP with the following exception. After the 2017 calendar year monitoring, the NYSDEC approved reduction of the frequency of groundwater and surface water monitoring to biennially. NYSDEC also approved AECOM's recommendation that surface water sampling be discontinued from the monitoring program (as provided in the July 2021 PRR) because site contaminants have not been detected in the surface water since monitoring began. It was also recommended that sampling and analysis of groundwater for PFAS and 1,4-dioxane be included in the biennial monitoring, which was approved by NYSDEC.

Monitoring well MW-02, located on the southern side of the landfill, should be decommissioned because it has been damaged by vandalism. It is not used for groundwater monitoring and was only used for groundwater elevation contour mapping and is no longer required.

Contaminant levels in the sentry wells have never exceeded the applicable criteria for VOCs. In addition, the Mann-Kendall statistical analysis (Table 2) has demonstrated a decreasing trend in VOC concentrations. Because of these reasons, it is recommended that NYSDEC consider discontinuing monitoring for VOCs in all groundwater monitoring wells on Site. It is recommended that monitoring for emerging contaminants continue because they exceed guidance values in the shallow sentry wells.

4.0 REFERENCES


- AECOM 2021. Rose Valley Landfill Periodic Review Report, September 30, 2017 through September 30, 2020. July.
- AECOM 2022a. Rose Valley Landfill Site Management Annual Report, 2021 Calendar Year. January.
- AECOM 2022b. Rose Valley Landfill February 2022 Residential Well Sampling Letter Report. April.
- AECOM 2022c. Rose Valley Landfill Site Management Plan. August.
- New York State Department of Environmental Conservation (NYSDEC). 2001. Record of Decision, Rose Valley Landfill Site, Town of Russia in Herkimer County, Site Number 6-22-017. March.
- NYSDEC. 2006. *Declaration of Covenants & Restrictions, Document Number 2006-00131956*, New York County of Herkimer, recorded December 8, 2006.
- NYSDEC. 2023. TOGS 1.1.1 Addendum. February.
- URS Corporation (URS). 2008 (a). Conceptual Operation, Monitoring and Maintenance Plan, Remedial Design Project, Rose Valley Landfill Site, NYSDEC Site # 6-22-017, Town of Russia, Herkimer County, New York. November 2006, revised January 2008.
- URS. 2008 (b). Final Remediation Report for Contract No. D005569, Rose Valley Landfill Site, NYSDEC Site No. 6-22-017, Russia (T), Herkimer (C), New York. April.
- URS. 2010 (a). Site Management Annual Report, 2010 Calendar Year. August.
- URS. 2010 (b). Site Management Plan, Rose Valley Landfill, Site #6-22-017. September.
- URS. 2011. Site Management Annual Report, 2011 Calendar Year. November.
- URS. 2013. Site Management Annual Report, 2012 Calendar Year. July.
- URS. 2014. Site Management Annual Report, 2013 Calendar Year. March.
- URS. 2015. Site Management Annual Report, 2014 Calendar Year. May.
- URS. 2016. Site Management Annual Report, 2015 Calendar Year. February.
- URS. 2017. Site Management Annual Report, 2016 Calendar Year. August.
- URS. 2018. Site Management Annual Report, 2017 Calendar Year. April.








L:\DCS\Projects\11176167\GIS\PRR 2023\02 SITE PLAN.mxd 6/28/2023

Legend

 Groundwater Monitoring Well

 Surface Water Sampling Location

 Wetlands

 Residential Buildings

Source: ESRI World Imagery

ROSE VALLEY LANDFILL
SITE PLAN


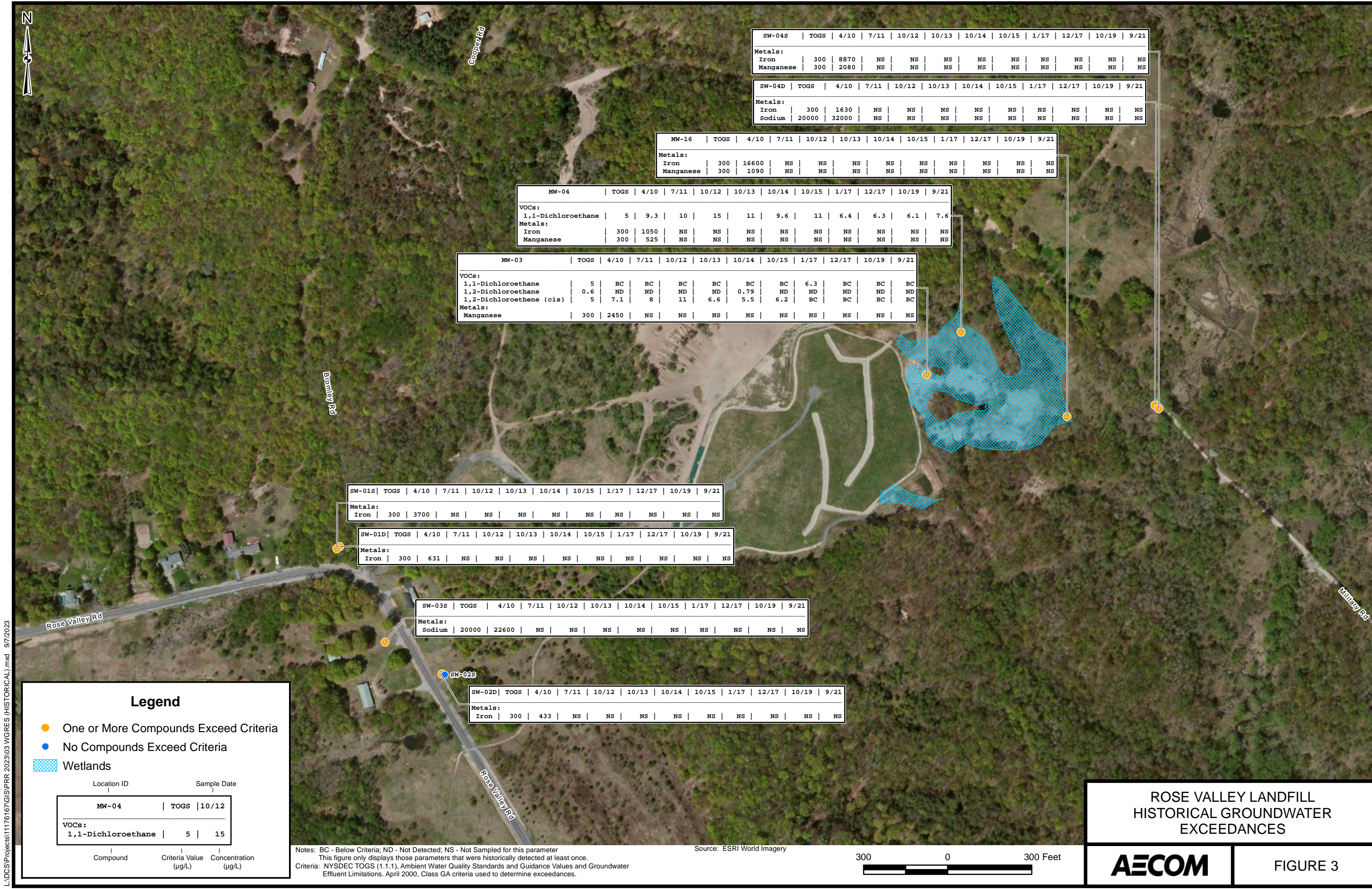


FIGURE 2



SW-04S	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Iron	300	8870	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	2080	NS	NS	NS	NS	NS	NS	NS	NS	NS

SW-04D	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Iron	300	1630	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	20000	32000	NS	NS	NS	NS	NS	NS	NS	NS	NS

MW-16	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Iron	300	16600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	1090	NS	NS	NS	NS	NS	NS	NS	NS	NS

MW-04	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
VOCs:											
1,1-Dichloroethane	5	9.3	10	15	11	9.6	11	6.4	6.3	6.1	7.6
Metals:											
Iron	300	1050	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	300	525	NS	NS	NS	NS	NS	NS	NS	NS	NS

MW-03	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
VOCs:											
1,1-Dichloroethane	5	BC	BC	BC	BC	BC	BC	6.3	BC	BC	BC
1,2-Dichloroethane	0.6	ND	ND	ND	ND	0.79	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis)	5	7.1	8	11	6.6	5.5	6.2	BC	BC	BC	BC
Metals:											
Manganese	300	2450	NS	NS	NS	NS	NS	NS	NS	NS	NS

SW-01S	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Iron	300	3700	NS	NS	NS	NS	NS	NS	NS	NS	NS

SW-01D	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Iron	300	631	NS	NS	NS	NS	NS	NS	NS	NS	NS

SW-03S	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Sodium	20000	22600	NS	NS	NS	NS	NS	NS	NS	NS	NS

SW-02S

SW-02D	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19	9/21
Metals:											
Iron	300	433	NS	NS	NS	NS	NS	NS	NS	NS	NS

Legend

- One or More Compounds Exceed Criteria
- No Compounds Exceed Criteria
- Wetlands

Location ID		Sample Date	
MW-04		TOGS	10/12
VOCs:			
1,1-Dichloroethane	5	15	
Compound	Criteria Value (µg/L)	Concentration (µg/L)	

Notes: BC - Below Criteria; ND - Not Detected; NS - Not Sampled for this parameter
This figure only displays those parameters that were historically detected at least once.
Criteria: NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, April 2000, Class GA criteria used to determine exceedances.

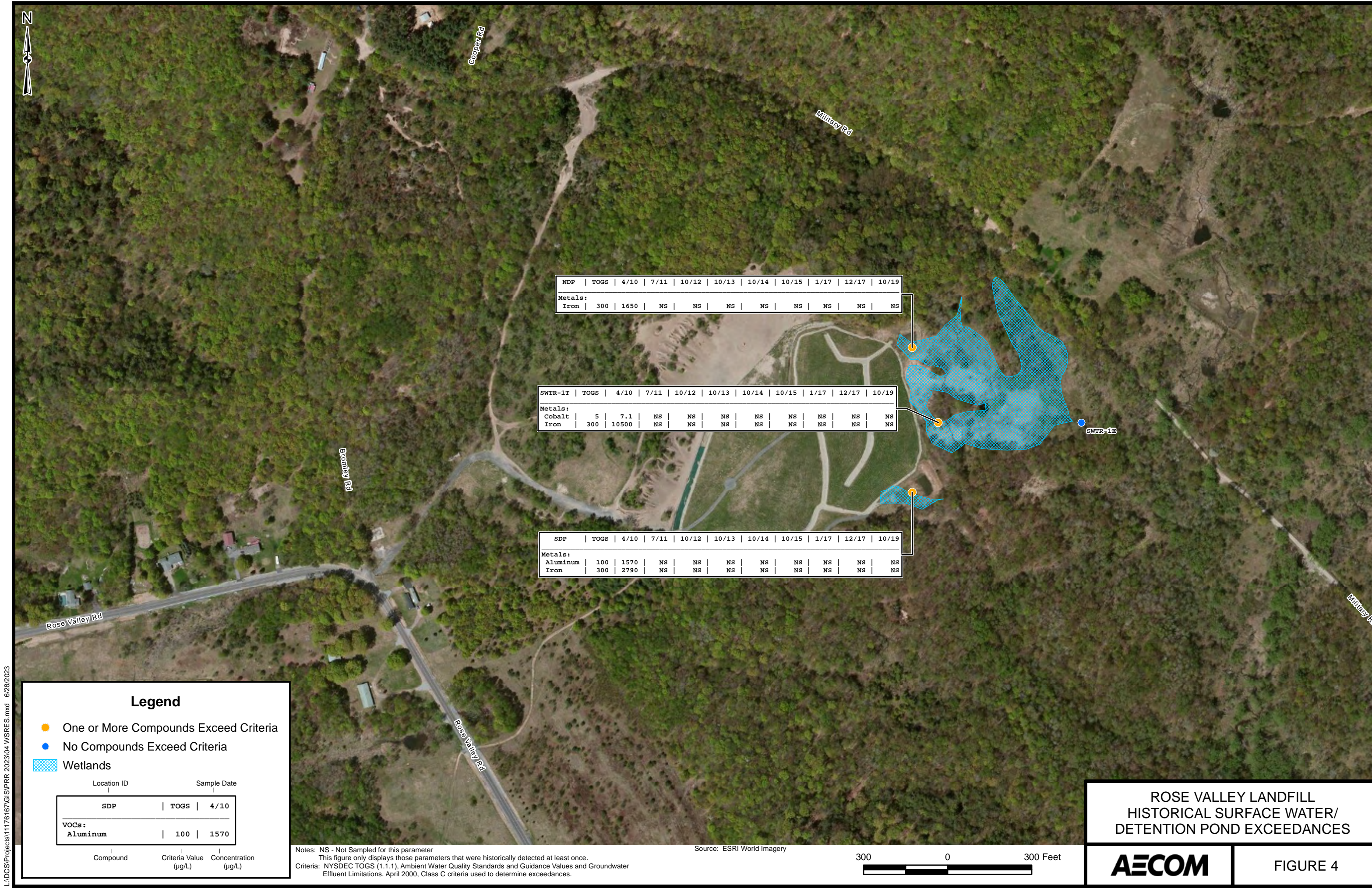
Source: ESRI World Imagery



ROSE VALLEY LANDFILL HISTORICAL GROUNDWATER EXCEEDANCES

AECOM

FIGURE 3



NDP	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19
Metals:										
Iron	300	1650	NS	NS	NS	NS	NS	NS	NS	NS

SWTR-1T	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19
Metals:										
Cobalt	5	7.1	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	10500	NS	NS	NS	NS	NS	NS	NS	NS

SDP	TOGS	4/10	7/11	10/12	10/13	10/14	10/15	1/17	12/17	10/19
Metals:										
Aluminum	100	1570	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	2790	NS	NS	NS	NS	NS	NS	NS	NS

Legend

● One or More Compounds Exceed Criteria

● No Compounds Exceed Criteria

Wetlands

Location ID

Sample Date

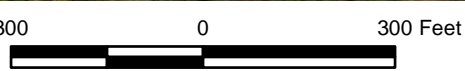
SDP	TOGS	4/10
VOCs:		
Aluminum	100	1570

CompoundCriteria ValueConcentration

(µg/L)(µg/L)

Notes: NS - Not Sampled for this parameter
This figure only displays those parameters that were historically detected at least once.
Criteria: NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, April 2000, Class C criteria used to determine exceedances.

Source: ESRI World Imagery



L:\DCS\Projects\11176167\GIS\PRR 2023\05 GW CONTOURS SHALLOW 0921.mxd 6/28/2023



L:\DCS\Projects\11176167\GIS\PRR 2023\06 GW CONTOURS DEEP 0921.mxd 6/28/2023

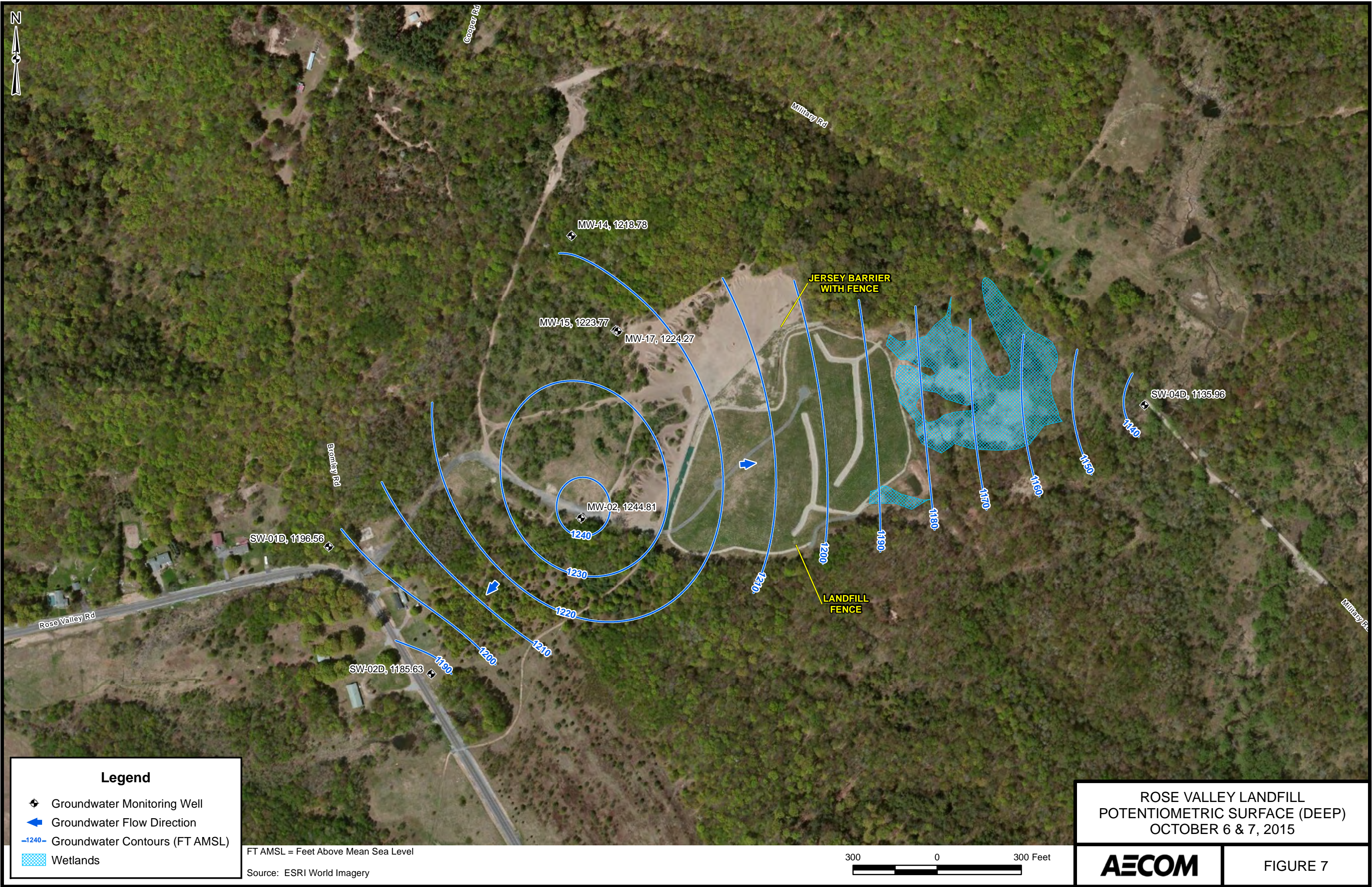


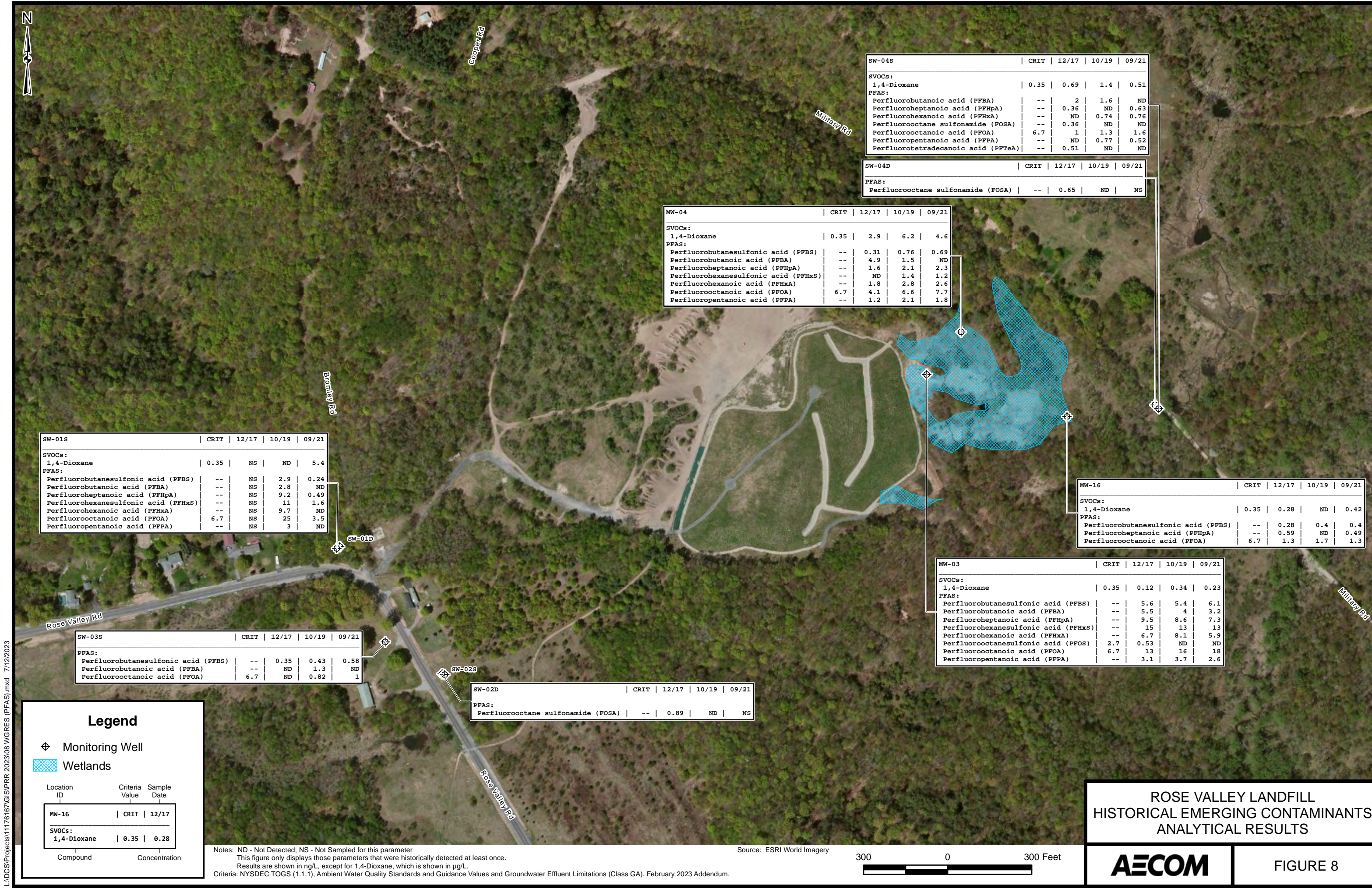
ROSE VALLEY LANDFILL
POTENTIOMETRIC SURFACE (DEEP)
SEPTEMBER 7 - 8, 2021



FIGURE 6

L:\DCS\Projects\11176167\GIS\PRR 2023\07 GW CONTOURS DEEP 10'15.mxd 6/28/2023





SW-01S				
CRIT 12/17 10/19 09/21				
SVOCs:				
1,4-Dioxane	0.35	NS	ND	5.4
PFAS:				
Perfluorobutanesulfonic acid (PFBS)	--	NS	2.9	0.24
Perfluorobutanoic acid (PFBA)	--	NS	2.8	ND
Perfluoroheptanoic acid (PFHpA)	--	NS	9.2	0.49
Perfluorohexanesulfonic acid (PFHxS)	--	NS	11	1.6
Perfluorohexanoic acid (PFHxA)	--	NS	9.7	ND
Perfluorooctanoic acid (PFOA)	6.7	NS	25	3.5
Perfluoropentanoic acid (PFPA)	--	NS	3	ND

SW-03S				
CRIT 12/17 10/19 09/21				
PFAS:				
Perfluorobutanesulfonic acid (PFBS)	--	0.35	0.43	0.58
Perfluorobutanoic acid (PFBA)	--	ND	1.3	ND
Perfluorooctanoic acid (PFOA)	6.7	ND	0.82	1

SW-02D				
CRIT 12/17 10/19 09/21				
PFAS:				
Perfluorooctane sulfonamide (FOSA)	--	0.89	ND	NS

MW-04				
CRIT 12/17 10/19 09/21				
SVOCs:				
1,4-Dioxane	0.35	2.9	6.2	4.6
PFAS:				
Perfluorobutanesulfonic acid (PFBS)	--	0.31	0.76	0.69
Perfluorobutanoic acid (PFBA)	--	4.9	1.5	ND
Perfluoroheptanoic acid (PFHpA)	--	1.6	2.1	2.3
Perfluorohexanesulfonic acid (PFHxS)	--	ND	1.4	1.2
Perfluorohexanoic acid (PFHxA)	--	1.8	2.8	2.6
Perfluorooctanoic acid (PFOA)	6.7	4.1	6.6	7.7
Perfluoropentanoic acid (PFPA)	--	1.2	2.1	1.8

SW-04S				
CRIT 12/17 10/19 09/21				
SVOCs:				
1,4-Dioxane	0.35	0.69	1.4	0.51
PFAS:				
Perfluorobutanoic acid (PFBA)	--	2	1.6	ND
Perfluoroheptanoic acid (PFHpA)	--	0.36	ND	0.63
Perfluorohexanoic acid (PFHxA)	--	ND	0.74	0.76
Perfluorooctane sulfonamide (FOSA)	--	0.36	ND	ND
Perfluorooctanoic acid (PFOA)	6.7	1	1.3	1.6
Perfluoropentanoic acid (PFPA)	--	ND	0.77	0.52
Perfluorotetradecanoic acid (PFTeA)	--	0.51	ND	ND

SW-04D				
CRIT 12/17 10/19 09/21				
PFAS:				
Perfluorooctane sulfonamide (FOSA)	--	0.65	ND	NS

MW-16				
CRIT 12/17 10/19 09/21				
SVOCs:				
1,4-Dioxane	0.35	0.28	ND	0.42
PFAS:				
Perfluorobutanesulfonic acid (PFBS)	--	0.28	0.4	0.4
Perfluoroheptanoic acid (PFHpA)	--	0.59	ND	0.49
Perfluorooctanoic acid (PFOA)	6.7	1.3	1.7	1.3

MW-03				
CRIT 12/17 10/19 09/21				
SVOCs:				
1,4-Dioxane	0.35	0.12	0.34	0.23
PFAS:				
Perfluorobutanesulfonic acid (PFBS)	--	5.6	5.4	6.1
Perfluorobutanoic acid (PFBA)	--	5.5	4	3.2
Perfluoroheptanoic acid (PFHpA)	--	9.5	8.6	7.3
Perfluorohexanesulfonic acid (PFHxS)	--	15	13	13
Perfluorohexanoic acid (PFHxA)	--	6.7	8.1	5.9
Perfluorooctanesulfonic acid (PFOS)	2.7	0.53	ND	ND
Perfluorooctanoic acid (PFOA)	6.7	13	16	18
Perfluoropentanoic acid (PFPA)	--	3.1	3.7	2.6

Monitoring Well

Wetlands

Location ID	Criteria Value	Sample Date
MW-16	CRIT	12/17
SVOCs:		
1,4-Dioxane	0.35	0.28

Compound

Concentration

Notes: ND - Not Detected; NS - Not Sampled for this parameter
This figure only displays those parameters that were historically detected at least once.
Results are shown in ng/L, except for 1,4-Dioxane, which is shown in µg/L.
Criteria: NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (Class GA), February 2023 Addendum.



TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID			MW-03	MW-03	MW-03	MW-03	MW-03
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	2.3	2.2	3 J	1.9	1.6
1,2-Dichloroethane	UG/L	0.6					0.79 J
1,2-Dichloroethene (cis)	UG/L	5	7.1	8.0	11	6.6	5.5
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5	0.75 J				
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-		NA	NA	NA	NA
Barium	UG/L	1000	47.6	NA	NA	NA	NA
Cadmium	UG/L	5		NA	NA	NA	NA
Calcium	UG/L	-	225,000	NA	NA	NA	NA
Chromium	UG/L	50		NA	NA	NA	NA
Iron	UG/L	300	252	NA	NA	NA	NA
Magnesium	UG/L	35000	18,600	NA	NA	NA	NA
Manganese	UG/L	300	2,450	NA	NA	NA	NA
Potassium	UG/L	-	3,320	NA	NA	NA	NA
Sodium	UG/L	20000	3,800	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-		NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID			MW-03	MW-03	MW-3	MW-03	MW-03
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/07/15	01/24/17	12/05/17	10/22/19	09/07/21
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	1.7	6.3	1.4	1.2	0.93 J
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	6.2	0.92 J	4.1	4.8	3.7
Acetone	UG/L	50			2.9 J		
Benzene	UG/L	1			0.26 J		
Carbon disulfide	UG/L	60		0.27 J			
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	1.5	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID			MW-04	MW-04	MW-04	MW-04	MW-04
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	9.3	10	15	11	9.6
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	2.3	2.4	3 J		1.1
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5		0.35 J			
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5	0.86 J		1 J		
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-		NA	NA	NA	NA
Barium	UG/L	1000	16.0	NA	NA	NA	NA
Cadmium	UG/L	5		NA	NA	NA	NA
Calcium	UG/L	-	171,000	NA	NA	NA	NA
Chromium	UG/L	50		NA	NA	NA	NA
Iron	UG/L	300	1,050	NA	NA	NA	NA
Magnesium	UG/L	35000	31,700	NA	NA	NA	NA
Manganese	UG/L	300	525	NA	NA	NA	NA
Potassium	UG/L	-	1,130	NA	NA	NA	NA
Sodium	UG/L	20000	14,100	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-		NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.


Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID			MW-04	MW-04	MW-4	MW-04	MW-04
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/07/15	01/24/17	12/05/17	10/22/19	09/07/21
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5	11	6.4	6.3	6.1 J	7.6
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5	1.5	0.93 J	0.75 J	0.88 J	1.2
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2			0.30 J		
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	0.89 J	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID			MW-16	MW-16	MW-16	MW-16	MW-16
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-		NA	NA	NA	NA
Barium	UG/L	1000	31.0	NA	NA	NA	NA
Cadmium	UG/L	5		NA	NA	NA	NA
Calcium	UG/L	-	77,900	NA	NA	NA	NA
Chromium	UG/L	50		NA	NA	NA	NA
Iron	UG/L	300	16,600	NA	NA	NA	NA
Magnesium	UG/L	35000	8,150	NA	NA	NA	NA
Manganese	UG/L	300	1,090	NA	NA	NA	NA
Potassium	UG/L	-		NA	NA	NA	NA
Sodium	UG/L	20000	5,800	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-		NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.


Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID			MW-16	DUP-02	MW-16	MW-16	MW-16
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/07/15	01/23/17	01/23/17	12/05/17	10/21/19
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50				5.7 J	
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5	0.38 J				
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA			NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-16	SW-01D	SW-01D	SW-01D	SW-01D
Sample ID			MW-16	DUP-2	SW-01D	SW-01D	SW-01D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/07/21	04/21/10	04/21/10	07/12/11	10/17/12
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA			NA	NA
Barium	UG/L	1000	NA	71.2	70.2	NA	NA
Cadmium	UG/L	5	NA			NA	NA
Calcium	UG/L	-	NA	28,600	27,600	NA	NA
Chromium	UG/L	50	NA			NA	NA
Iron	UG/L	300	NA	292 J	631 J	NA	NA
Magnesium	UG/L	35000	NA	14,000	13,500	NA	NA
Manganese	UG/L	300	NA	8.8	11.8	NA	NA
Potassium	UG/L	-	NA	1,940	1,890	NA	NA
Sodium	UG/L	20000	NA	10,200	9,900	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA			NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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 Concentration Exceeds Criteria

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Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-01D	SW-01D	SW-01D	SW-01D	SW-01D
Sample ID			SW-01D	SW-01D	SW-01D	SW-01D	SW-1D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/13	10/14/14	10/06/15	01/24/17	12/05/17
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-01D	SW-01D	SW-01S	SW-01S	SW-01S
Sample ID			SW-01D	SW-01D	SW-01S	FD-071211	SW-01S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/21/19	09/08/21	04/21/10	07/12/11	07/12/11
Parameter	Units	Criteria*				Field Duplicate (1-1)	
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	5,830	NA	NA
Barium	UG/L	1000	NA	NA	33.4	NA	NA
Cadmium	UG/L	5	NA	NA		NA	NA
Calcium	UG/L	-	NA	NA	109,000	NA	NA
Chromium	UG/L	50	NA	NA	6.9	NA	NA
Iron	UG/L	300	NA	NA	3,700	NA	NA
Magnesium	UG/L	35000	NA	NA	4,000	NA	NA
Manganese	UG/L	300	NA	NA	50.5	NA	NA
Potassium	UG/L	-	NA	NA	2,080	NA	NA
Sodium	UG/L	20000	NA	NA	2,100	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	6.6	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-01S	SW-01S	SW-01S	SW-01S	SW-01S
Sample ID			SW-01S	SW-01S	SW-01S	SW-01S	SW-01S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/15/13	10/14/14	10/06/15	01/24/17
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-01S	SW-01S	SW-01S	SW-01S	SW-02D
Sample ID			SW-1S	SW-01S	FD-090821	SW-01S	SW-02D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/05/17	10/22/19	09/08/21	09/08/21	04/22/10
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50	3.5 J				
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	443
Barium	UG/L	1000	NA	NA	NA	NA	65.7
Cadmium	UG/L	5	NA	NA	NA	NA	
Calcium	UG/L	-	NA	NA	NA	NA	62,800
Chromium	UG/L	50	NA	NA	NA	NA	4.1
Iron	UG/L	300	NA	NA	NA	NA	433
Magnesium	UG/L	35000	NA	NA	NA	NA	22,300
Manganese	UG/L	300	NA	NA	NA	NA	10.2
Potassium	UG/L	-	NA	NA	NA	NA	1,870
Sodium	UG/L	20000	NA	NA	NA	NA	7,500
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-02D	SW-02D	SW-02D	SW-02D	SW-02D
Sample ID			SW-02D	FD-101712	SW-02D	FD-101513	SW-02D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/12/11	10/17/12	10/17/12	10/15/13	10/15/13
Parameter	Units	Criteria*		Field Duplicate (1-1)		Field Duplicate (1-1)	
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-02D	SW-02D	SW-02D	SW-02D	SW-02D
Sample ID			FIELD DUP GW	SW-02D	SW-02D	SW-02D	SW-2D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/14/14	10/14/14	10/06/15	01/25/17	12/06/17
Parameter	Units	Criteria*	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					4.0 J
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-02D	SW-02D	SW-02D	SW-02S	SW-02S
Sample ID			DUP-GW-01	SW-02D	SW-02D	SW-02S	SW-02S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/22/19	10/22/19	09/08/21	04/22/10	07/12/11
Parameter	Units	Criteria*	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5				1.9	
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA		NA
Barium	UG/L	1000	NA	NA	NA	2.9	NA
Cadmium	UG/L	5	NA	NA	NA		NA
Calcium	UG/L	-	NA	NA	NA	57,400	NA
Chromium	UG/L	50	NA	NA	NA		NA
Iron	UG/L	300	NA	NA	NA		NA
Magnesium	UG/L	35000	NA	NA	NA	2,240	NA
Manganese	UG/L	300	NA	NA	NA		NA
Potassium	UG/L	-	NA	NA	NA		NA
Sodium	UG/L	20000	NA	NA	NA	1,000	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA		NA

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-02S	SW-02S	SW-02S	SW-02S	SW-02S
Sample ID			SW-02S	SW-02S	SW-02S	FD-100615	SW-02S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/15/13	10/14/14	10/06/15	10/06/15
Parameter	Units	Criteria*				Field Duplicate (1-1)	
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1 J	1.0	1.6	0.91 J	1.1
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-02S	SW-02S	SW-02S	SW-02S	SW-03S
Sample ID			SW-02S	SW-2S	SW-02S	SW-02S	SW-03S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/25/17	12/06/17	10/22/19	09/08/21	04/22/10
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5		1.3	1.1		
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50		3.5 J			
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	
Barium	UG/L	1000	NA	NA	NA	NA	8.8
Cadmium	UG/L	5	NA	NA	NA	NA	
Calcium	UG/L	-	NA	NA	NA	NA	74,400
Chromium	UG/L	50	NA	NA	NA	NA	
Iron	UG/L	300	NA	NA	NA	NA	
Magnesium	UG/L	35000	NA	NA	NA	NA	3,040
Manganese	UG/L	300	NA	NA	NA	NA	
Potassium	UG/L	-	NA	NA	NA	NA	1,910
Sodium	UG/L	20000	NA	NA	NA	NA	22,600
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-03S	SW-03S	SW-03S	SW-03S	SW-03S
Sample ID			SW-03S	SW-03S	SW-03S	SW-03S	SW-03S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/12/11	10/17/12	10/15/13	10/14/14	10/06/15
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

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TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-03S	SW-03S	SW-03S	SW-04D	SW-04D
Sample ID			SW-3S	SW-03S	SW-03S	SW-04D	SW-04D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/06/17	10/22/19	09/08/21	04/21/10	07/13/11
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50	4.4 J				
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	1,800	NA
Barium	UG/L	1000	NA	NA	NA	14.7	NA
Cadmium	UG/L	5	NA	NA	NA	2.4	NA
Calcium	UG/L	-	NA	NA	NA	12,200	NA
Chromium	UG/L	50	NA	NA	NA		NA
Iron	UG/L	300	NA	NA	NA	1,630	NA
Magnesium	UG/L	35000	NA	NA	NA	1,960	NA
Manganese	UG/L	300	NA	NA	NA	38.7	NA
Potassium	UG/L	-	NA	NA	NA	1,170	NA
Sodium	UG/L	20000	NA	NA	NA	32,000	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA		NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-04D	SW-04D	SW-04D	SW-04D	SW-04D
Sample ID			SW-04D	SW-04D	SW-04D	SW-04D	SW-04D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/12	10/16/13	10/14/14	10/07/15	01/23/17
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-04D	SW-04D	SW-04D	SW-04D	SW-04S
Sample ID			DUP-1	SW-4D	SW-04D	SW-04D	SW-04S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/05/17	12/05/17	10/21/19	09/07/21	04/21/10
Parameter	Units	Criteria*	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50	4.7 J	4.3 J			
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5					
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	336
Barium	UG/L	1000	NA	NA	NA	NA	26.1
Cadmium	UG/L	5	NA	NA	NA	NA	
Calcium	UG/L	-	NA	NA	NA	NA	92,700
Chromium	UG/L	50	NA	NA	NA	NA	
Iron	UG/L	300	NA	NA	NA	NA	8,870
Magnesium	UG/L	35000	NA	NA	NA	NA	6,900
Manganese	UG/L	300	NA	NA	NA	NA	2,080
Potassium	UG/L	-	NA	NA	NA	NA	1,940
Sodium	UG/L	20000	NA	NA	NA	NA	4,300
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-04S	SW-04S	SW-04S	SW-04S	SW-04S
Sample ID			SW-04S	SW-04S	SW-04S	SW-04S	SW-04S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/13/11	10/17/12	10/16/13	10/14/14	10/07/15
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5					
1,1-Dichloroethane	UG/L	5					
1,2-Dichloroethane	UG/L	0.6					
1,2-Dichloroethene (cis)	UG/L	5					
Acetone	UG/L	50					
Benzene	UG/L	1					
Carbon disulfide	UG/L	60					
Chloroethane	UG/L	5	0.48 J				
Chloromethane	UG/L	5					
Dichlorodifluoromethane	UG/L	5					
Vinyl chloride	UG/L	2					
Metals							
Aluminum	UG/L	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

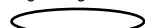
Only Detected Results Reported.

TABLE 1
GROUNDWATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-04S	SW-04S	SW-04S	SW-04S
Sample ID			SW-04S	SW-4S	SW-04S	SW-04S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-
Date Sampled			01/23/17	12/05/17	10/21/19	09/07/21
Parameter	Units	Criteria*				
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	5				
1,1-Dichloroethane	UG/L	5				
1,2-Dichloroethane	UG/L	0.6				
1,2-Dichloroethene (cis)	UG/L	5				
Acetone	UG/L	50		3.8 J		
Benzene	UG/L	1				
Carbon disulfide	UG/L	60				
Chloroethane	UG/L	5				
Chloromethane	UG/L	5				
Dichlorodifluoromethane	UG/L	5				
Vinyl chloride	UG/L	2				
Metals						
Aluminum	UG/L	-	NA	NA	NA	NA
Barium	UG/L	1000	NA	NA	NA	NA
Cadmium	UG/L	5	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA
Chromium	UG/L	50	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA
Magnesium	UG/L	35000	NA	NA	NA	NA
Manganese	UG/L	300	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA
Sodium	UG/L	20000	NA	NA	NA	NA
Uranium	UG/L	30	NA	NA	NA	NA
Vanadium	UG/L	-	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed.

Only Detected Results Reported.

TABLE 2
MANN-KENDALL STATISTICAL ANALYSIS
GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS
ROSE VALLEY LANDFILL

LOCID: MW-03

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1-Dichloroethane	WG	VOA	10	10	-27	0.0083	Downward Trend
1,2-Dichloroethane	WG	VOA	10	1	-1	0.5	No Trend
1,2-Dichloroethene (cis)	WG	VOA	10	10	-29	0.0046	Downward Trend
Acetone	WG	VOA	10	1	5	0.364	No Trend
Benzene	WG	VOA	10	1	5	0.364	No Trend
Carbon disulfide	WG	VOA	10	1	3	0.431	No Trend
Dichlorodifluoromethane	WG	VOA	10	1	-9	0.242	No Trend
1,4-Dioxane	WG	SVOA	3	3		Insufficient Data *	
Perfluorobutanesulfonic acid (PFBS)	WG	PFC	3	3		Insufficient Data *	
Perfluorobutanoic acid (PFBA)	WG	PFC	3	3		Insufficient Data *	
Perfluoroheptanoic acid (PFHpA)	WG	PFC	3	3		Insufficient Data *	
Perfluorohexanesulfonic acid (PFHx)	WG	PFC	3	3		Insufficient Data *	
Perfluorohexanoic acid (PFHxA)	WG	PFC	3	3		Insufficient Data *	
Perfluorooctanesulfonic acid (PFOS)	WG	PFC	3	1		Insufficient Data *	
Perfluorooctanoic acid (PFOA)	WG	PFC	3	3		Insufficient Data *	
Perfluoropentanoic acid (PFPA)	WG	PFC	3	3		Insufficient Data *	

LOCID: MW-04

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1-Dichloroethane	WG	VOA	10	10	-20	0.054	Downward Trend
1,2-Dichloroethene (cis)	WG	VOA	10	9	-15	0.108	No Trend
Chloroethane	WG	VOA	10	1	-7	0.3	No Trend
Dichlorodifluoromethane	WG	VOA	10	2	-13	0.146	No Trend
Vinyl chloride	WG	VOA	10	1	5	0.364	No Trend
1,4-Dioxane	WG	SVOA	3	3		Insufficient Data *	
Perfluorobutanesulfonic acid (PFBS)	WG	PFC	3	3		Insufficient Data *	
Perfluorobutanoic acid (PFBA)	WG	PFC	3	2		Insufficient Data *	
Perfluoroheptanoic acid (PFHpA)	WG	PFC	3	3		Insufficient Data *	
Perfluorohexanesulfonic acid (PFHx)	WG	PFC	3	2		Insufficient Data *	
Perfluorohexanoic acid (PFHxA)	WG	PFC	3	3		Insufficient Data *	
Perfluorooctanoic acid (PFOA)	WG	PFC	3	3		Insufficient Data *	
Perfluoropentanoic acid (PFPA)	WG	PFC	3	3		Insufficient Data *	

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

* - Number of observations too small to calculate probabilities.

** - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.

Only Detected Results Reported.

TABLE 2
MANN-KENDALL STATISTICAL ANALYSIS
GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS
ROSE VALLEY LANDFILL

LOCID: MW-16

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
Chloromethane	WG	VOA	10	1	1	0.5	No Trend
1,4-Dioxane	WG	SVOA	3	2		Insufficient Data *	
Perfluorobutanesulfonic acid (PFBS)	WG	PFC	3	3		Insufficient Data *	
Perfluoroheptanoic acid (PFHpA)	WG	PFC	3	2		Insufficient Data *	
Perfluorooctanoic acid (PFOA)	WG	PFC	3	3		Insufficient Data *	

LOCID: NDP

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WS	VOA	9	2	7	0.306	No Trend

LOCID: SDP

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WS	VOA	9	1	0	0.54	No Trend

LOCID: SW-01S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
1,4-Dioxane	WG	SVOA	2	1		Insufficient Data *	
Perfluorobutanesulfonic acid (PFBS)	WG	PFC	2	2		Insufficient Data *	
Perfluorobutanoic acid (PFBA)	WG	PFC	2	1		Insufficient Data *	
Perfluoroheptanoic acid (PFHpA)	WG	PFC	2	2		Insufficient Data *	
Perfluorohexanesulfonic acid (PFHx)	WG	PFC	2	2		Insufficient Data *	
Perfluorohexanoic acid (PFHxA)	WG	PFC	2	1		Insufficient Data *	
Perfluorooctanoic acid (PFOA)	WG	PFC	2	2		Insufficient Data *	
Perfluoropentanoic acid (PFPA)	WG	PFC	2	1		Insufficient Data *	

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

* - Number of observations too small to calculate probabilities.

** - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.

Only Detected Results Reported.

TABLE 2
MANN-KENDALL STATISTICAL ANALYSIS
GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS
ROSE VALLEY LANDFILL

LOCID: SW-02D

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
Perfluorooctane sulfonamide (FOSA)	WG	PFC	2	1		Insufficient Data *	

LOCID: SW-02S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1,1-Trichloroethane	WG	VOA	10	7	-5	0.364	No Trend
Acetone	WG	VOA	10	1	5	0.364	No Trend

LOCID: SW-03S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	9	1	4	0.381	No Trend
Perfluorobutanesulfonic acid (PFBS)	WG	PFC	3	3		Insufficient Data *	
Perfluorobutanoic acid (PFBA)	WG	PFC	3	1		Insufficient Data *	
Perfluorooctanoic acid (PFOA)	WG	PFC	3	2		Insufficient Data *	

LOCID: SW-04D

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
Perfluorooctane sulfonamide (FOSA)	WG	PFC	2	1		Insufficient Data *	

LOCID: SW-04S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
Chloroethane	WG	VOA	10	1	-7	0.3	No Trend
1,4-Dioxane	WG	SVOA	3	3		Insufficient Data *	
Perfluorobutanoic acid (PFBA)	WG	PFC	3	2		Insufficient Data *	

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

* - Number of observations too small to calculate probabilities.

** - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.

Only Detected Results Reported.

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6/23/2023

WHERE (LOGDATE) >= #4/20/2010# AND ([MATRIX] = 'WG' OR [MATRIX] = 'WS') AND ([PRCCODE] = 'VOA' OR [PRCCODE] = 'PFC' OR [PRCCODE] = 'SVOA');

TABLE 2
MANN-KENDALL STATISTICAL ANALYSIS
GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS
ROSE VALLEY LANDFILL

LOCID: SW-04S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Perfluoroheptanoic acid (PFHpA)	WG	PFC	3	2		Insufficient Data *	
Perfluorohexanoic acid (PFHxA)	WG	PFC	3	2		Insufficient Data *	
Perfluorooctane sulfonamide (FOSA)	WG	PFC	3	1		Insufficient Data *	
Perfluorooctanoic acid (PFOA)	WG	PFC	3	3		Insufficient Data *	
Perfluoropentanoic acid (PFPA)	WG	PFC	3	2		Insufficient Data *	
Perfluorotetradecanoic acid (PFTeA)	WG	PFC	3	1		Insufficient Data *	

LOCID: SWTR-1E

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WS	VOA	9	1	6	0.306	No Trend

LOCID: SWTR-1T

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WS	VOA	9	7	3	0.46	No Trend
Benzene	WS	VOA	9	3	-3	0.46	No Trend
Chlorobenzene	WS	VOA	9	3	-9	0.238	No Trend

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

* - Number of observations too small to calculate probabilities.

** - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			NDP	NDP	NDP	NDP	NDP
Sample ID			NDP	FD-071311	NDP-WS	NDP-WS	FD-101613
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			04/20/10	07/13/11	07/13/11	10/18/12	10/16/13
Parameter	Units	Criteria*		Field Duplicate (1-1)			Field Duplicate (1-1)
Volatile Organic Compounds							
Acetone	UG/L	-					
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic		NA	NA	NA	NA
Barium	UG/L	-	32.5	NA	NA	NA	NA
Calcium	UG/L	-	123,000	NA	NA	NA	NA
Cobalt	UG/L	5		NA	NA	NA	NA
Iron	UG/L	300	1,650	NA	NA	NA	NA
Magnesium	UG/L	-	15,900	NA	NA	NA	NA
Manganese	UG/L	-	720	NA	NA	NA	NA
Nickel	UG/L	calc, diss		NA	NA	NA	NA
Potassium	UG/L	-	3,700	NA	NA	NA	NA
Sodium	UG/L	-	4,000	NA	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	373	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			NDP	NDP	NDP	NDP	NDP
Sample ID			NDP	NDP	FD-100715	NDP	NDP
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/13	10/15/14	10/07/15	10/07/15	01/24/17
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
Acetone	UG/L	-		4.1 J			
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic	NA	NA	NA	NA	NA
Barium	UG/L	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Cobalt	UG/L	5	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	-	NA	NA	NA	NA	NA
Manganese	UG/L	-	NA	NA	NA	NA	NA
Nickel	UG/L	calc, diss	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	-	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			NDP	NDP	SDP	SDP	SDP
Sample ID			NDP	NDP	DUP-1	SDP	SDP-WS
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/05/17	10/22/19	04/20/10	04/20/10	07/13/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
Acetone	UG/L	-	6.0 J				
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic	NA	NA	1,570	1,460	NA
Barium	UG/L	-	NA	NA	51.8	49.7	NA
Calcium	UG/L	-	NA	NA	77,200	74,600	NA
Cobalt	UG/L	5	NA	NA			NA
Iron	UG/L	300	NA	NA	2,790	2,360	NA
Magnesium	UG/L	-	NA	NA	16,200	15,800	NA
Manganese	UG/L	-	NA	NA	101 J	71.3 J	NA
Nickel	UG/L	calc, diss	NA	NA			NA
Potassium	UG/L	-	NA	NA	7,760	7,650	NA
Sodium	UG/L	-	NA	NA	6,200	6,100	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	259	251	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SDP	SDP	SDP	SDP	SDP
Sample ID			FD-101812	SDP-WS	SDP	SDP	SDP
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/18/12	10/18/12	10/16/13	10/15/14	10/07/15
Parameter	Units	Criteria*	Field Duplicate (1-1)				
Volatile Organic Compounds							
Acetone	UG/L	-				3.7 J	
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic	NA	NA	NA	NA	NA
Barium	UG/L	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Cobalt	UG/L	5	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	-	NA	NA	NA	NA	NA
Manganese	UG/L	-	NA	NA	NA	NA	NA
Nickel	UG/L	calc, diss	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	-	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SDP	SDP	SDP	SWTR-1E	SWTR-1E
Sample ID			SDP	SDP	SDP	SWTR-1E	SWTR-1E
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/24/17	12/05/17	10/22/19	04/20/10	07/13/11
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Acetone	UG/L	-					
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic	NA	NA	NA		NA
Barium	UG/L	-	NA	NA	NA	22.3	NA
Calcium	UG/L	-	NA	NA	NA	88,400	NA
Cobalt	UG/L	5	NA	NA	NA		NA
Iron	UG/L	300	NA	NA	NA	230	NA
Magnesium	UG/L	-	NA	NA	NA	12,800	NA
Manganese	UG/L	-	NA	NA	NA	25.4	NA
Nickel	UG/L	calc, diss	NA	NA	NA		NA
Potassium	UG/L	-	NA	NA	NA	5,570	NA
Sodium	UG/L	-	NA	NA	NA	6,600	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	NA	273	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SWTR-1E	SWTR-1E	SWTR-1E	SWTR-1E	SWTR-1E
Sample ID			SWTR-1E	SWTR-1E	FIELD DUP SW	SWTR-1E	SWTR-1E
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/18/12	10/16/13	10/15/14	10/15/14	10/07/15
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
Acetone	UG/L	-					
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic	NA	NA	NA	NA	NA
Barium	UG/L	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Cobalt	UG/L	5	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	-	NA	NA	NA	NA	NA
Manganese	UG/L	-	NA	NA	NA	NA	NA
Nickel	UG/L	calc, diss	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	-	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SWTR-1E	SWTR-1E	SWTR-1E	SWTR-1E	SWTR-1E
Sample ID			DUP-01	SWTR-1E	DUP-2	SWTR-1E	DUP-SW-01
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/23/17	01/23/17	12/05/17	12/05/17	10/21/19
Parameter	Units	Criteria*	Field Duplicate (1-1)		Field Duplicate (1-1)		Field Duplicate (1-1)
Volatile Organic Compounds							
Acetone	UG/L	-			5.0 J	4.6 J	
Benzene	UG/L	10					
Chlorobenzene	UG/L	5					
Metals							
Aluminum	UG/L	100 ionic	NA	NA	NA	NA	NA
Barium	UG/L	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Cobalt	UG/L	5	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	-	NA	NA	NA	NA	NA
Manganese	UG/L	-	NA	NA	NA	NA	NA
Nickel	UG/L	calc, diss	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	-	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SWTR-1E	SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T
Sample ID			SWTR-1E	SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/21/19	04/21/10	07/13/11	10/18/12	10/16/13
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Acetone	UG/L	-		9.4	20 J		
Benzene	UG/L	10			1.8 J		2.1 J
Chlorobenzene	UG/L	5		0.75 J	3.3 J		
Metals							
Aluminum	UG/L	100 ionic	NA		NA	NA	NA
Barium	UG/L	-	NA	117	NA	NA	NA
Calcium	UG/L	-	NA	122,000	NA	NA	NA
Cobalt	UG/L	5	NA	7.1	NA	NA	NA
Iron	UG/L	300	NA	10,500	NA	NA	NA
Magnesium	UG/L	-	NA	26,100	NA	NA	NA
Manganese	UG/L	-	NA	385	NA	NA	NA
Nickel	UG/L	calc, diss	NA	12.0	NA	NA	NA
Potassium	UG/L	-	NA	70,800	NA	NA	NA
Sodium	UG/L	-	NA	65,400	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	412	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed


Only Detected Results Reported.

TABLE 3
SURFACE WATER MONITORING RESULTS
ROSE VALLEY LANDFILL

Location ID			SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T
Sample ID			SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T	SWTR-1T
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/14	10/07/15	01/24/17	12/05/17	10/22/19
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Acetone	UG/L	-	11	4.0 J	5.4 J	4.7 J	16 J
Benzene	UG/L	10				0.22 J	
Chlorobenzene	UG/L	5				0.37 J	
Metals							
Aluminum	UG/L	100 ionic	NA	NA	NA	NA	NA
Barium	UG/L	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	NA	NA	NA	NA	NA
Cobalt	UG/L	5	NA	NA	NA	NA	NA
Iron	UG/L	300	NA	NA	NA	NA	NA
Magnesium	UG/L	-	NA	NA	NA	NA	NA
Manganese	UG/L	-	NA	NA	NA	NA	NA
Nickel	UG/L	calc, diss	NA	NA	NA	NA	NA
Potassium	UG/L	-	NA	NA	NA	NA	NA
Sodium	UG/L	-	NA	NA	NA	NA	NA
Miscellaneous Parameters							
Hardness (calculated)	MG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class C.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

- = No standard or guidance value. Calc - Criteria calculated based on hardness.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value. NA - Not analyzed

Only Detected Results Reported.

TABLE 4
EMERGING CONTAMINANT RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-03	MW-03	MW-03	MW-04	MW-04
Sample ID			MW-3	MW-03	MW-03	MW-4	MW-04
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/05/17	10/22/19	09/07/21	12/05/17	10/22/19
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	0.35	0.12 J	0.34	0.23	2.9	6.2
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	5.6	5.4	6.1	0.31 J	0.76 J
Perfluorobutanoic acid (PFBA)	NG/L	-	5.5	4.0	3.2 J	4.9	1.5 J
Perfluoroheptanoic acid (PFHpA)	NG/L	-	9.5	8.6	7.3	1.6 J	2.1
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	15	13	13		1.4 J
Perfluorohexanoic acid (PFHxA)	NG/L	-	6.7	8.1	5.9	1.8 J	2.8
Perfluorooctane sulfonamide (FOSA)	NG/L	-					
Perfluorooctanesulfonic acid (PFOS)	NG/L	2.7	0.53 J				
Perfluorooctanoic acid (PFOA)	NG/L	6.7	13	16	18	4.1	6.6
Perfluoropentanoic acid (PFPA)	NG/L	-	3.1	3.7	2.6	1.2 J	2.1
Perfluorotetradecanoic acid (PFTeA)	NG/L	-					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

TABLE 4
EMERGING CONTAMINANT RESULTS
ROSE VALLEY LANDFILL

Location ID			MW-04	MW-16	MW-16	MW-16	SW-01D
Sample ID			MW-04	MW-16	MW-16	MW-16	SW-01D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/07/21	12/05/17	10/21/19	09/07/21	10/21/19
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	0.35	4.6	0.28 J		0.42	
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	0.69 J	0.28 J	0.40 J	0.40 J	
Perfluorobutanoic acid (PFBA)	NG/L	-					
Perfluoroheptanoic acid (PFHpA)	NG/L	-	2.3	0.59 J		0.49 J	
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	1.2 J				
Perfluorohexanoic acid (PFHxA)	NG/L	-	2.6 NJ				
Perfluorooctane sulfonamide (FOSA)	NG/L	-					
Perfluorooctanesulfonic acid (PFOS)	NG/L	2.7					
Perfluorooctanoic acid (PFOA)	NG/L	6.7	7.7	1.3 J	1.7	1.3 J	
Perfluoropentanoic acid (PFPA)	NG/L	-	1.8				
Perfluorotetradecanoic acid (PFTeA)	NG/L	-					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

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[MATRIX] = 'WG' AND [LOGDATE] >= #4/20/2010# AND ([PARNAME] = '1,4-Dioxane' OR [PRCODE] = 'PFC')

TABLE 4
EMERGING CONTAMINANT RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-01S	SW-01S	SW-01S	SW-02D	SW-02D
Sample ID			SW-01S	FD-090821	SW-01S	SW-2D	DUP-GW-01
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/22/19	09/08/21	09/08/21	12/06/17	10/22/19
Parameter	Units	Criteria*		Field Duplicate (1-1)			Field Duplicate (1-1)
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	0.35		5.4 J			
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	2.9	0.24 J	0.18 J		
Perfluorobutanoic acid (PFBA)	NG/L	-	2.8				
Perfluoroheptanoic acid (PFHpA)	NG/L	-	9.2	0.36 J	0.49 J		
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	11	1.6 J	1.4 J		
Perfluorohexanoic acid (PFHxA)	NG/L	-	9.7				
Perfluorooctane sulfonamide (FOSA)	NG/L	-				0.89 J	
Perfluorooctanesulfonic acid (PFOS)	NG/L	2.7					
Perfluorooctanoic acid (PFOA)	NG/L	6.7	25	3.5	3.3		
Perfluoropentanoic acid (PFPA)	NG/L	-	3.0				
Perfluorotetradecanoic acid (PFTeA)	NG/L	-					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

TABLE 4
EMERGING CONTAMINANT RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-02D	SW-02S	SW-02S	SW-03S	SW-03S
Sample ID			SW-02D	SW-02S	SW-02S	SW-3S	SW-03S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/22/19	10/22/19	09/08/21	12/06/17	10/22/19
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	0.35					
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-				0.35 J	0.43 J
Perfluorobutanoic acid (PFBA)	NG/L	-					1.3 J
Perfluoroheptanoic acid (PFHpA)	NG/L	-					
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-					
Perfluorohexanoic acid (PFHxA)	NG/L	-					
Perfluorooctane sulfonamide (FOSA)	NG/L	-					
Perfluorooctanesulfonic acid (PFOS)	NG/L	2.7					
Perfluorooctanoic acid (PFOA)	NG/L	6.7					0.82 J
Perfluoropentanoic acid (PFPA)	NG/L	-					
Perfluorotetradecanoic acid (PFTeA)	NG/L	-					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

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[MATRIX] = 'WG' AND [LOGDATE] >= #4/20/2010# AND ([PARNAME] = '1,4-Dioxane' OR [PRCODE] = 'PFC')

TABLE 4
EMERGING CONTAMINANT RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-03S	SW-04D	SW-04D	SW-04D	SW-04S
Sample ID			SW-03S	DUP-1	SW-4D	SW-04D	SW-4S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/08/21	12/05/17	12/05/17	10/21/19	12/05/17
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	0.35					0.69
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	0.58 J				
Perfluorobutanoic acid (PFBA)	NG/L	-					2.0
Perfluoroheptanoic acid (PFHpA)	NG/L	-					0.36 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-					
Perfluorohexanoic acid (PFHxA)	NG/L	-					
Perfluorooctane sulfonamide (FOSA)	NG/L	-		0.65 J	0.64 J		0.36 J
Perfluorooctanesulfonic acid (PFOS)	NG/L	2.7					
Perfluorooctanoic acid (PFOA)	NG/L	6.7	1.0 J				1.0 J
Perfluoropentanoic acid (PFPA)	NG/L	-					
Perfluorotetradecanoic acid (PFTeA)	NG/L	-					0.51 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

TABLE 4
EMERGING CONTAMINANT RESULTS
ROSE VALLEY LANDFILL

Location ID			SW-04S	SW-04S
Sample ID			SW-04S	SW-04S
Matrix			Groundwater	Groundwater
Depth Interval (ft)			-	-
Date Sampled			10/21/19	09/07/21
Parameter	Units	Criteria*		
Semivolatile Organic Compounds				
1,4-Dioxane	UG/L	0.35	1.4	0.51
Per- and Polyfluoroalkyl Substances				
Perfluorobutanesulfonic acid (PFBS)	NG/L	-		
Perfluorobutanoic acid (PFBA)	NG/L	-	1.6 J	
Perfluoroheptanoic acid (PFHpA)	NG/L	-		0.63 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-		
Perfluorohexanoic acid (PFHxA)	NG/L	-	0.74 J	0.76 J
Perfluorooctane sulfonamide (FOSA)	NG/L	-		
Perfluorooctanesulfonic acid (PFOS)	NG/L	2.7		
Perfluorooctanoic acid (PFOA)	NG/L	6.7	1.3 J	1.6 J
Perfluoropentanoic acid (PFPA)	NG/L	-	0.77 J	0.52 J
Perfluorotetradecanoic acid (PFTeA)	NG/L	-		

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. February 2023, Class GA, and USEPA MCL for uranium. December 2000.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

Only Detected Results Reported.

ATTACHMENT A

ROSE VALLEY LANDFILL

SITE MONITORING REPORT

**for
2021**

SITE # 622017

TOWN OF RUSSIA, HERKIMER COUNTY, NEW YORK

PREPARED FOR:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEPARTMENT OF ENVIRONMENTAL REMEDIATION

WORK ASSIGNMENT D009803-31

PREPARED BY:

AECOM USA, INC.

1 JOHN JAMES AUDUBON PARKWAY, SUITE 210

AMHERST, NEW YORK 14228

JANUARY 2022

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 INTRODUCTION	1-1
1.1 General.....	1-1
1.2 Project Background	1-1
2.0 SITE DESCRIPTION	2-1
3.0 MONITORING ACTIVITIES	3-1
3.1 Groundwater Hydraulic Monitoring	3-1
3.2 Groundwater Sampling	3-2
3.3 Analytical Results	3-2
4.0 SITE INSPECTIONS AND MAINTENANCE	4-1
4.1 Monitoring Well Inspections	4-1
4.2 Landfill Inspection.....	4-1
4.3 Maintenance Performed.....	4-2
4.3.1 Monitoring Well Maintenance.....	4-2
4.3.2 Routine Maintenance.....	4-2
4.3.3 Intermittent Maintenance.....	4-3
5.0 CORRESPONDENCE WITH LOCAL RESIDENTS AND LAW ENFORCEMENT	5-1
6.0 SUMMARY AND RECOMMENDATIONS	6-1
6.1 Trespassing and Vandalism	6-1
6.2 Groundwater Hydraulic Monitoring	6-1
6.3 Groundwater Quality Monitoring	6-1
6.4 Monitoring Well Maintenance.....	6-2
6.5 Landfill Maintenance.....	6-2

TABLES

Table 1	Groundwater Elevation Measurements
Table 2	Summary of Detected Compounds in 2021 Groundwater Monitoring Event
Table 3	Summary of Historically Detected Compounds in Groundwater Samples
Table 4	Mann-Kendall Statistical Analysis - Groundwater Analytical Results

FIGURES

Figure 1	Site Location
Figure 2	Site Plan
Figure 3	Potentiometric Surface (Shallow) – September 7-8, 2021
Figure 4	Potentiometric Surface (Deep) – September 7-8, 2021
Figure 5	Historical Groundwater Exceedances

APPENDICES

Appendix A	Field Notes and Weigh Tickets
Appendix B	Monitoring Well Purge Logs
Appendix C	Data Usability Summary Report
Appendix D	Monitoring Well Inspection Forms
Appendix E	Landfill Inspection Forms
Appendix F	Photographic Log
Appendix G	Email Correspondence with Local Residents and Law Enforcement

1.0 INTRODUCTION

1.1 General

This Site Monitoring Report for the calendar year 2021 has been prepared by AECOM USA, Inc. (AECOM) under New York State Department of Environmental Conservation (NYSDEC) Work Assignment No. D009803-31 for the Rose Valley Landfill site (Figure 1). The purpose of this report is to provide a record of the long-term maintenance of the cap, wells, and stormwater management features associated with remediation of the Rose Valley Landfill and to monitor the effectiveness of natural attenuation. This report is the tenth report as called for by Section 6.3 of the Conceptual Operation, Monitoring and Maintenance Plan (COMMP) (URS, November 2006). At the request of the NYSDEC, the COMMP was modified and re-titled as the Site Management Plan (SMP) (URS, September 2010). On November 24, 2021, AECOM submitted a new Draft SMP in accordance with DER-10 to NYSDEC for their review.

In July 2021, AECOM submitted a Periodic Review Report (PRP) which summarized Site Management (SM) activities completed during the period of April 21, 2010 to October 22, 2019. Since then, AECOM performed site visits on June 26, 2020, May 4, 2021, and September 7 and 8, 2021. The September 7 and 8, 2021 site visit included groundwater monitoring in accordance with the new SMP. This report covers activities from June 26, 2020 through September 2021, and was prepared in accordance with the November 2021 Draft SMP.

The purpose of the site management as presented in the Record of Decision (ROD) is to provide guidance for the operation and maintenance of the site relative to:

- Maintaining the capped area,
- Long-term monitoring of the natural attenuation of the groundwater plume by and within the downslope wetlands, and
- Documenting the effectiveness of natural attenuation.

1.2 Project Background

The NYSDEC proposed a remedy in the ROD dated March 30, 2001. The proposed remedy involved:

- On-site disposal of contaminated surface soils from the older septic disposal pit into the landfill;
- Installation of a new cap on the landfill to reduce infiltration through the wastes;

- Installation of a new residential water supply well in a deeper, clean aquifer for the impacted residence; and

Treatment of the leachate and contaminated groundwater plume by monitored natural attenuation, including long-term monitoring of the effectiveness of natural attenuation.

2.0 SITE DESCRIPTION

The Rose Valley Landfill was a privately owned, unlined dump that was open from 1963 to 1985. The site is located in Russia Township in Herkimer County as part of a 91-acre parcel (since subdivided into two parcels in 1986). The site is bounded to the east by Military Road, to the west by Bromley Road, and to the southwest by Rose Valley Road (Figure 2). A NYSDEC Class C stream, locally known as Finch Brook, separates the site from Military Road. Finch Brook is a tributary of Hurricane Brook (also a NYSDEC Class C stream).

The landfill is located on the side of a hill that has approximately 120 feet of relief. A steep, 60-foot-high sand embankment extends above the landfill to the west. The site is characterized by high relief, with sharp drops in elevation from southwest to northeast and a moderate south to southwest slope. The gradient across the western portion of the property is less severe, sloping in the opposite direction.

The area surrounding the site is sparsely populated, with few permanent residents. At the time that the ROD was issued, a private well immediately adjacent to the landfill entrance on Rose Valley Road (and downgradient of the landfill) was found to be contaminated with site-related contaminants. A new replacement drinking water well into the deeper aquifer has since been installed at the residence and is being monitored by the Herkimer County Department of Health.

The remedial design of the landfill closure was prepared, and the construction of the landfill cap was completed in 2007. A 6-foot high chain-link fence was constructed to limit access to the landfill cap area.

3.0 MONITORING ACTIVITIES

The site monitoring activities described in this report were performed in September 2021, in accordance with the November 2021 Draft SMP. Site monitoring consists of:

- groundwater hydraulic monitoring at 14 well locations; and
- collection of groundwater samples from ten wells.

Per the 2020 Periodic Review Report, collection of surface water samples was discontinued at four locations [SWTR-1T, SWTR-1E, the North Detention Pond (NDP), and the South Detention Pond (SDP)].

Seven of the groundwater wells shown on Figure 2 are “Sentry Wells” (i.e., SW-01S, SW-01D, SW-02S, SW-02D, SW-03S, SW-04S and SW-04D) and seven are monitoring wells (MW-02, MW-03, MW-04, MW-14, MW-15, MW-16, and MW-17). All seven sentry wells and three monitoring wells (i.e., MW-03, MW-04 and MW-16) are sampled for groundwater quality. Sentry wells are constructed the same as monitoring wells but are called sentry wells because they are located between the landfill and nearby residential drinking water wells or a surface water body. The monitoring wells are located within the wetland, east of the landfill.

A copy of the September 2021 field notes is provided in Appendix A.

3.1 Groundwater Hydraulic Monitoring

On September 7 and 8, 2021, groundwater level measurements were obtained only from the wells sampled (all seven sentry wells, and monitoring wells MW-03, MW-04, and MW-16). The water level measurements are provided in Table 1. One of the deep wells east of the landfill is an artesian well (i.e., SW-04D). The water column of SW-04D was measured using a pressure gauge. On September 7, 2021, the pressure gauge reading was 7.0 pounds per square inch (psi), which calculates to a column height of 15.8 feet above ground. Deep monitoring well MW-02 is damaged - the locking cover and J-plug are missing and there is a blockage approximately 2 feet below the top of casing. It is suspected that objects (e.g., beer cans or bottles) were dropped into the well casing. MW-14, MW-15 and MW-17 were not measured.

A potentiometric surface map, using a 10-foot contour interval, based on the September 7 and 8, 2021 water level measurements from the shallow wells is provided in Figure 3. A potentiometric surface map based on the water level measurements from the deep wells, using a 10-foot contour interval, is provided in Figure 4.

The shallow groundwater flow is generally to the east-northeast towards Military Road and is consistent with historical shallow groundwater patterns. The deep groundwater flow is in the same general direction east of MW-02.

3.2 Groundwater Sampling

On September 7 and 8, 2021, AECOM collected groundwater samples from the seven sentry wells and three monitoring wells plus quality control (QC) samples using low-flow sampling procedures.

Prior to sample collection, standing water was purged from each well with either a GeoPump2 peristaltic pump or Grundfos Redi-Flow 2 submersible pump using dedicated/disposable high-density polyethylene (HDPE) tubing. Wells were purged at a rate of 1.1 liters per minute or less with the purge rates adjusted to minimize draw down. During purging, water quality parameters (i.e., pH, specific conductivity, temperature, dissolved oxygen, turbidity) were measured using a Horiba U-52-2 Multi-parameter instrument with a flow-through cell. The water quality parameters were documented on purge logs. Samples were collected after the water quality parameters stabilized. Well purge logs are provided in Appendix B. Purge water was disposed of on the ground upgradient of the well locations, as per the direction of the NYSDEC.

The samples were transported under chain of custody (COC) to the NYSDEC's callout laboratory, Eurofins TestAmerica, Buffalo (Eurofins TestAmerica), a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) accredited laboratory. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) following United States Environmental Protection Agency (USEPA) SW846 Method 8260C. All shallow well samples were also analyzed for the emerging contaminants per- and polyfluoroalkyl substances (PFASs) by USEPA Method 537 (modified), and 1,4-dioxane by USEPA Method 8270D select ion monitoring (SIM) at the TestAmerica Sacramento, CA and Buffalo, NY laboratories, respectively.

3.3 Analytical Results

NYSDEC Analytical Services Protocol (ASP) Category B data deliverables were received and validated by AECOM. The data was reviewed in accordance with the requirements outlined in *Guidance for Data Deliverables and the Development of Data Usability Summary Reports (DUSR)*, *Appendix 2B*, *DER-10/Technical Guidance for Site Investigation and Remediation*

(NYSDEC, May 2010). Data summary tables and Form I's are provided in the DUSR and include the reporting limit for each non-detected compound. A copy of the DUSR may be found in Appendix C.

A summary of the detected compounds in the groundwater samples is provided in Table 2. Results exceeding NYSDEC, Division of Water, Technical and Operational Guidance Series (1.1.1), *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (TOGS 1.1.1), Class GA groundwater standards or guidance values are indicated with a circle. PFAS and 1,4-dioxane results are compared to *Recommended Screening Level - New York State Drinking Water Quality Council (DWQC)*, January 2019. Results exceeding DWQC recommended screening levels are indicated with a rectangle. The locations of detected compounds that have exceeded their respective criteria are shown on Figure 5.

- Only one VOC, 1,1-dichloroethane detected at 7.6 micrograms per liter (µg/L) in MW-04, was detected above TOGS 1.1.1 Class GA limits in the September 2021 groundwater samples. No VOCs exceeded TOGS No. 1.1.1 standards or guidance values in the samples from sentry wells (i.e., SW-01D, SW-01S, SW-02D, SW-02S, SW-03S, SW-04D and SW-04S) or monitoring wells MW-03 and MW-16.

Results for the emerging contaminant parameters (i.e., PFASs and 1,4-dioxane) for the 2021 monitoring event are as follows:

- Perfluorooctanoic acid (PFOA) was detected in three of the four shallow sentry wells and all three monitoring wells sampled for PFAS as follows: 18 nanograms per liter (ng/L) (MW-03); 7.7 ng/L (MW-04); 1.3 ng/L (MW-16); 3.5 ng/L (SW-01S), 1.0 ng/L (SW-03S) and 1.6 ng/L (SW-04S). PFOA in MW-03 is above the DWQC recommended screening level of 10 ng/L.
- Perfluorooctanesulfonic acid (PFOS) was not detected any groundwater samples. Several other PFAS compounds were detected, but all individual and total concentrations were below DWQC recommended screening levels of 100 ng/L and 500 ng/L, respectively.
- 1,4-Dioxane was detected in two of four sentry wells and all three monitoring wells sampled, with concentrations of 0.23 µg/L (MW-03), 4.6 µg/L (MW-04), 0.42 µg/L (MW-16), 5.4 µg/L (SW-01S) and 0.51 µg/L (SW-04S). MW-04 and SW-01S exceeded the DWQC recommended screening levels of 1 µg/L 1,4-dioxane (5.4 µg/L)

was detected in the field duplicate of SW-01S, but not detected above the method detection limit (0.1 µg/L) in the parent sample SW-01S. It was not detected in this well during the 2019 sampling event.

A summary of historical detected results in groundwater is provided in Table 3 and shown on Figure 5. TCL VOC results date back to 2010; emerging contaminants were previously analyzed in 2017 and 2019. TCL VOC analytical results from the September 2021 sampling event are consistent with the 2010 to 2019 sampling events and emerging contaminant results are consistent with the 2017 and 2019 sampling events, with the exception of recent detection of 1,4-dioxane in the SW-01S field duplicate.

A Mann-Kendall statistical analysis, provided on Table 4, was performed to identify any trends in groundwater analytical results. The concentrations of 1,1-dichloroethane and 1,2-dichloroethene (cis) are exhibiting downward trends in MW-03 and MW-04. The remaining detected VOCs exhibit no trends. There are an insufficient number of samples for trend analysis of the emerging contaminants.

4.0 SITE INSPECTIONS AND MAINTENANCE

4.1 Monitoring Well Inspections

Well inspections were performed only at the monitoring and sentry wells sampled during the September 2021 groundwater sampling event.

Monitoring well inspection forms are provided in Appendix D.

4.2 Landfill Inspection

A landfill inspection was performed by AECOM on May 4, 2021 and confirmed the need for landfill maintenance. From September 7 through 9, 2021, AECOM performed landfill maintenance activities. A copy of the landfill inspection form for the May 2021 inspection can be found in Appendix E. Photographs from both the May 2021 site visit and the September 2021 event can be found in Appendix F.

Observations made during these site visits are described below:

- The main access road has experienced erosion/wash outs making navigation difficult. It appears ATV traffic in this area has altered the surface water flow patterns and ultimately caused the erosion and wash outs.
- During the September 2021 site visit, AECOM had to cut a padlock to gain access to the landfill.
- A portion of the landfill access road on top of the landfill has started to erode and requires repair.
- Two landfill methane vents were found to have been damaged by gun shots and need to be repaired to prevent damage to the cap and to prevent water intrusion into the landfill.
- As initially noted in the August 9, 2012 and subsequent site inspections, the diversion channel around the north side of the landfill is head cutting. As noted in the 2012 inspections, there is an approximately 6-foot high vertical discontinuity in the channel bottom at about the mid-point of the landfill. There appeared to be no significant change to the extent of the head cutting since the August 9, 2012 inspection. As noted in the 2015 inspections, it appears that the head cutting has been stopped by the geotextile fabric that

underlies the downstream end of the channel armor. A length of about 10 feet of channel armor has failed. It is unclear if this equilibrium will persist as the geotextile degrades. It is also unclear, even assuming that the head cutting has stopped, if the adjacent sides of the landfill will hold during run-off events. It was observed that the north bank of the channel appears to be eroding. Thus, the erosion is occurring on the side of the channel away from the landfill. If the head cutting continues, there could be significant erosion of, and damage to, the landfill cap.

- As noted in the 2015 inspections, erosion near the eastern gate to the landfill from Military Road is so severe that the road is no longer usable for motor vehicles.
- Dumping has occurred in the ravine along the south side of Military Road north of the landfill. As noted in the 2017 inspection, tires and televisions were among the items present; this material was removed following the 2017 inspection. During the May 2021 inspection, additional dumping was noted in the same location. Additional dumping of two empty drums and other miscellaneous debris has occurred at the front gate area.

4.3 Maintenance Performed

The following subsections describe site maintenance activities.

4.3.1 Monitoring Well Maintenance

WD-40 is typically used to lubricate monitoring well locks. To minimize the potential for introducing PFAS contaminants into the wells, the monitoring well locks were not sprayed with WD-40 during the September 2021 sampling event. No well maintenance was performed.

4.3.2 Routine Maintenance

Brady Fence reported that they began mowing with a brush hog on October 10, 2021, but due a personnel issue, it was not completed. Brady Fence reported that they completed mowing on October 23, 2021.

Trees and vines growing in the drainage channels were removed or cut on September 7, 2021 by AECOM. AECOM also applied herbicide to the remaining weeds in the drainage channels. No other routine maintenance was performed by AECOM in 2021.

4.3.3 Intermittent Maintenance

Beginning on September 8, 2021, Brad Weakley Excavating was making repairs to the site access road and landfill road. These repairs included regrading to control surface water and the placement and compaction of 8 truckloads (approximately 180 tons) of No. 2 crusher run and 2 truckloads (approximately 45 tons) of No. 4 stone. Weigh tickets are provided in Appendix A. Brad Weakley Excavating placed, graded, and compacted one tandem dump truck of No. 2 crusher run to repair an eroded portion of the landfill road. No fabric was placed.

Brady Fence reported that they repaired the two damaged landfill methane vents on September 10, 2021. The repairs included the removal of the damaged PVC pipe and installation of new PVC pipe and screen in kind.

A crash gate was fabricated and installed at the site entrance on September 8 and 9, 2021 by Brady Fence. Brady Fence then installed three new hardened, keyed-alike locks: two for the front entrance (one for the crash gate and one for the main access gate), and one for the landfill gate.

There was no other intermittent maintenance completed in 2021.

5.0 CORRESPONDENCE WITH LOCAL RESIDENTS AND LAW ENFORCEMENT

In response to the frequent trespassing and vandalism, NYSDEC requested that AECOM contact local law enforcement (the New York State Police) and request that they patrol the area around the landfill. AECOM contacted the New York State Police and a local resident to make observations of the front site access gate and report any evidence of trespassing or vandalism. Email correspondence between AECOM and the New York State Police, and between AECOM and the resident is provided in Appendix G.

On occasion, the local resident contacted AECOM and/or NYSDEC to report that the gate had been opened.

The New York State Police reported that on July 20, 2021 they found that the gate was opened, so they temporarily fastened it. In addition, they completed a stationary post where they were able to communicate with ATV riders and issue tickets to riders that were operating ATVs on roads where ATV use is not permitted.

During the September 2021 site visit, AECOM personnel spoke with several ATV riders and communicated to them that they are not to ride on the landfill, but areas adjacent to the landfill can be used. They risk losing access to the entire site if they continue to ride on the landfill.

6.0 SUMMARY AND RECOMMENDATIONS

A summary of the annual monitoring and recommendations are provided below.

6.1 Trespassing and Vandalism

AECOM will continue to coordinate with local residents and law enforcement to monitor trespassing and vandalism. Intermittent repairs will continue as necessary.

6.2 Groundwater Hydraulic Monitoring

Shallow and deep groundwater generally flows in an east-northeast direction towards Military Road. Four deep wells (i.e., MW-02, MW-14, MW-15 and MW-17) were not measured during the 2021 monitoring event. Groundwater mounding, typically shown at MW-02 was not visible in the 2019 deep groundwater contours because the well was damaged and could not be measured. In the past, when the mounding was apparent, the deep groundwater contours west of MW-02 showed flow to the west/southwest. Damage to MW-02 prevents use of this well for hydraulic monitoring.

6.3 Groundwater Quality Monitoring

In September 2021, one VOC, 1,1-dichloroethane, slightly exceeded TOGS 1.1.1 Class GA standards and guidance value in one location (monitoring well MW-04). There were no VOC exceedances in the sentry wells or the other monitoring wells sampled (i.e., MW-03 and MW-16). The concentrations of VOCs detected in the September 2021 sampling event are consistent when compared with the 2010 to 2019 results. Based on the Mann-Kendall statistical analysis provided in Table 4, with the exception of a downward trend for 1,1-dichloroethane and/or 1,2-dichloroethene (cis) in MW-03 and MW-04, no trends have been identified in the groundwater analytical results.

Emerging contaminant parameters (i.e., PFASs and 1,4-dioxane) were analyzed for in the four shallow sentry wells and all three monitoring wells sampled in the September 2021 sampling event. The concentration of PFOA in monitoring well MW-03, at 18 ng/L, exceeded the DWQC advisory limit of 10 ng/L. 1,4-Dioxane exceeded the DWQC advisory limit of 1 µg/L in monitoring well MW-04 (4.6 µg/L) and sentry well SW-01S (5.4 µg/L).

Biennial (every other year) groundwater monitoring and sampling will continue with the next sampling event scheduled to occur in 2023. Continued monitoring is recommended because emerging contaminants are present, and concentrations of some contaminants of concern have remained consistent since site monitoring commenced in 2010.

6.4 Monitoring Well Maintenance

Monitoring well MW-02 was vandalized in 2015 or 2016 and should be decommissioned or replaced.

6.5 Landfill Maintenance

All landfill cap components appeared to be sound. The landfill was mowed in October 2021. Erosion has been noted on the north side of the site, north of the stone-lined drainage channel. Continued monitoring of this area is recommended to ensure there is no significant erosion of, or damage to, the landfill cap. Vines and trees growing in drainage channels should be monitored and removed or cut back as necessary.

Monitoring and maintenance of erosion will continue during the next monitoring event as necessary. Corrective actions may be necessary to mitigate any erosion that occurs in the future.

Removal of the dumped debris in the ravine is recommended, although access to and removal of the debris may be challenging because of the steep terrain.

TABLES

TABLE 1
GROUNDWATER ELEVATION MEASUREMENTS
ROSE VALLEY LANDFILL

Location ID / Type	Northing	Easting	Meas.point (Riser) Elev.(ft)	Geol. Zone	Date /Time	Depth to Water (ft)	Water Elev. (ft)	Remark
MW-02	1601925.82	356255.39	1305.15	B	7/12/2011 1313	57.55	1247.60	
					10/17/2012 1028	60.59	1244.56	
					10/16/2013 0814	58.89	1246.26	
					10/15/2014 0000	NM	-	Not measured
					10/6/2015 1607	60.34	1244.81	
MW-03	1602437.498	357450.2192	1175.58	A	4/21/2010 0000	3.03	1172.55	
					7/12/2011 1335	3.01	1172.57	
					10/17/2012 1223	2.85	1172.73	
					10/16/2013 1412	2.84	1172.74	
					10/15/2014 1603	2.75	1172.83	
					10/7/2015 1343	2.85	1172.73	
					1/24/2017 0000	2.62	1172.96	
					12/5/2017 1210	2.54	1173.04	
					10/22/2019 1000	2.56	1173.02	
MW-04	1602588.989	357572.8098	1172.46	A	9/7/2021 1502	2.68	1172.90	
					4/21/2010 0000	2.63	1169.83	
					7/12/2011 1345	2.54	1169.92	
					10/17/2012 1234	2.40	1170.06	
					10/16/2013 1318	2.50	1169.96	
					10/15/2014 1510	2.53	1169.93	
					10/7/2015 1245	2.53	1169.93	
					1/24/2017 0000	2.61	1169.85	
					12/5/2017 1124	1.56	1170.90	
MW-14	1602932.523	356221.9497	1317.83	B	10/22/2019 0900	2.46	1170.00	
					9/7/2021 1330	2.39	1170.07	
					7/12/2011 1520	98.55	1219.28	
					10/17/2012 1129	98.42	1219.41	
					10/16/2013 0827	95.34	1222.49	
MW-15	1602594.762	356379.221	1312.36	B	10/15/2014 0000	97.25	1220.58	
					10/6/2015 1625	99.05	1218.78	
					7/12/2011 1507	87.76	1224.60	
					10/17/2012 1123	88.07	1224.29	
					10/16/2013 0822	88.32	1224.04	
MW-16	1602287.308	357950.8887	1152.58	A	10/15/2014 0000	86.69	1225.67	
					10/6/2015 1619	88.59	1223.77	
					4/21/2010 0000	3.00	1149.58	
					7/12/2011 1400	3.56	1149.02	
					10/16/2013 1143	3.01	1149.57	
					10/15/2014 1335	3.04	1149.54	
					10/7/2015 1135	3.02	1149.56	
					1/23/2017 0000	2.30	1150.28	
MW-17	1602592.476	356386.6381	1311.72	B	12/5/2017 1515	2.86	1149.72	
					10/21/2019 1600	2.85	1149.73	
					9/7/2021 1831	3.20	1149.38	
					7/12/2011 1505	86.69	1225.03	
					10/17/2012 1121	87.06	1224.66	
SW-01D	1601823.93	355356.06	1264.70	B	10/16/2013 0820	87.15	1224.57	
					10/15/2014 0000	85.63	1226.09	
					10/6/2015 1617	87.45	1224.27	
					4/21/2010 0000	67.13	1197.57	
					7/12/2011 1437	67.37	1197.33	
					10/17/2012 1048	68.71	1195.99	
					10/15/2013 1500	67.89	1196.81	
					10/14/2014 1356	68.14	1196.56	
					10/6/2015 1422	68.14	1196.56	
					1/24/2017 0000	62.60	1202.10	
					12/5/2017 0944	66.67	1198.03	
					10/21/2019 1100	65.00	1199.70	
					9/8/2021 1105	67.80	1196.90	

TABLE 1
GROUNDWATER ELEVATION MEASUREMENTS
ROSE VALLEY LANDFILL

Location ID / Type	Northing	Easting	Meas.point (Riser) Elev.(ft)	Geol. Zone	Date /Time	Depth to Water (ft)	Water Elev. (ft)	Remark
SW-01S	1601817.02	355346.13	1263.17	A	4/21/2010 0000	19.05	1244.12	
					7/12/2011 1435	18.56	1244.61	
					10/17/2012 1045	20.82	1242.35	
					10/15/2013 1610	19.55	1243.62	
					10/14/2014 1245	19.61	1243.56	
					10/6/2015 1503	20.61	1242.56	
					1/24/2017 0000	20.54	1242.63	
					12/5/2017 0826	19.24	1243.93	
					10/22/2019 1440	19.23	1243.94	
					9/8/2021 0945	20.21	1242.96	
SW-02D	1601370.34	355721.25	1257.00	B	4/21/2010 0000	70.10	1186.90	
					7/12/2011 1450	70.73	1186.27	
					10/17/2012 1106	70.97	1186.03	
					10/15/2013 1357	70.42	1186.58	
					10/14/2014 1149	70.87	1186.13	
					10/6/2015 1316	71.37	1185.63	
					1/25/2017 0000	69.76	1187.24	
					12/6/2017 1036	69.85	1187.15	
					10/22/2019 1600	69.57	1187.43	
					9/8/2021 1408	70.82	1186.18	
SW-02S	1601367.21	355730.86	1257.20	A	4/21/2010 0000	12.36	1244.84	
					7/12/2011 1448	11.30	1245.90	
					10/17/2012 1108	13.95	1243.25	
					10/15/2013 1239	12.40	1244.80	
					10/14/2014 1044	12.55	1244.65	
					10/6/2015 1233	13.77	1243.43	
					1/25/2017 0000	13.61	1243.59	
					12/6/2017 0936	12.00	1245.20	
					10/22/2019 1640	11.89	1245.31	
					9/8/2021 1314	13.41	1243.79	
SW-03S	1601483.4	355518.17	1257.67	A	4/21/2010 0000	12.81	1244.86	
					7/12/2011 1440	11.85	1245.82	
					10/17/2012 1058	14.52	1243.15	
					10/15/2013 1137	19.96	1237.71	
					10/14/2014 0945	13.16	1244.51	
					10/6/2015 1130	14.28	1243.39	
					12/6/2017 0803	12.57	1245.10	
					10/22/2019 1730	12.53	1245.14	
					9/8/2021 1202	13.74	1243.93	
SW-04D	1602328.65	358265.16	1148.65	B	4/21/2010 0000	NM	-	Artesian well
					7/12/2011 1415	NM	-	Artesian well
					10/17/2012 1152	NM	-	Artesian well
					10/17/2012 1208	3.30	1145.35	
					10/16/2013 0910	-19.38	1168.03	8.4 psi at wellhead
					10/14/2014 1648	-20.07	1168.72	8.7 psi at wellhead
					10/7/2015 1017	-12.69	1161.34	5.5 psi at wellhead
					1/23/2017 0000	-10.96	1159.61	4.75 psi at wellhead
					12/5/2017 1427	-11.53	1160.18	5.0 psi at wellhead
					10/21/2019 1500	-12.68	1161.33	5.5 psi at wellhead
SW-04S	1602315.5	358278.21	1148.00	A	9/7/2021 1750	-16.15	1164.80	7.0 psi at wellhead
					4/21/2010 0000	2.83	1145.17	
					7/12/2011 1420	3.40	1144.60	
					10/17/2012 1153	3.20	1144.80	
					10/16/2013 1018	3.35	1144.65	
					10/14/2014 1543	3.13	1144.87	
					10/7/2015 0920	3.26	1144.74	
					1/23/2017 0000	2.83	1145.17	
					12/5/2017 1506	3.10	1144.90	
					10/21/2019 1400	2.87	1145.13	
					9/7/2021 1649	2.95	1145.05	

NM - No Measurement

Geologic Zone: A - Shallow Unconfined Aquifer. B - Deep Unconfined Aquifer.

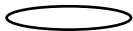
TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2021 GROUNDWATER MONITORING EVENT
ROSE VALLEY LANDFILL

Location ID				MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID				MW-03	MW-04	MW-16	SW-01D	FD-090821
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/07/21	09/07/21	09/07/21	09/08/21	09/08/21
Parameter	Units	Criteria (1)	Criteria (2)					Field Duplicate (1-1)
Volatile Organic Compounds								
1,1-Dichloroethane	UG/L	5	-	0.93 J	7.6			
1,2-Dichloroethene (cis)	UG/L	5	-	3.7	1.2			
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	0.23	4.6	0.42	NA	5.4 J
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	6.1	0.69 J	0.40 J	NA	0.24 J
Perfluorobutanoic acid (PFBA)	NG/L	-	100	3.2 J			NA	
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	7.3	2.3	0.49 J	NA	0.36 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	13	1.2 J		NA	1.6 J
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	5.9	2.6 NJ		NA	
Perfluorooctanoic acid (PFOA)	NG/L	-	10	18	7.7	1.3 J	NA	3.5
Perfluoropentanoic acid (PFPA)	NG/L	-	100	2.6	1.8		NA	
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	56.1	16.29	2.19	NA	5.7

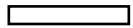
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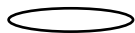
TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2021 GROUNDWATER MONITORING EVENT
ROSE VALLEY LANDFILL

Location ID				SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID				SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/08/21	09/08/21	09/08/21	09/08/21	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1		NA			NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	0.18 J	NA		0.58 J	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100		NA			NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	0.49 J	NA			NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	1.4 J	NA			NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100		NA			NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	3.3	NA		1.0 J	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	100		NA			NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	5.37	NA	ND	1.58	NA

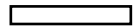
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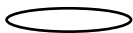
TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN 2021 GROUNDWATER MONITORING EVENT
ROSE VALLEY LANDFILL

Location ID		SW-04S		
Sample ID		SW-04S		
Matrix		Groundwater		
Depth Interval (ft)		-		
Date Sampled		09/07/21		
Parameter	Units	Criteria (1)	Criteria (2)	
Volatile Organic Compounds				
1,1-Dichloroethane	UG/L	5	-	
1,2-Dichloroethene (cis)	UG/L	5	-	
Semivolatile Organic Compounds				
1,4-Dioxane	UG/L	-	1	0.51
Per- and Polyfluoroalkyl Substances				
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	
Perfluorobutanoic acid (PFBA)	NG/L	-	100	
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	0.63 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	0.76 J
Perfluorooctanoic acid (PFOA)	NG/L	-	10	1.6 J
Perfluoropentanoic acid (PFPA)	NG/L	-	100	0.52 J
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	3.51

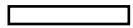
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID				MW-03	MW-03	MW-03	MW-03	MW-03
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-	2.3	2.2	3 J	1.9	1.6
1,2-Dichloroethane	UG/L	0.6	-					0.79 J
1,2-Dichloroethene (cis)	UG/L	5	-	7.1	8.0	11	6.6	5.5
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-	0.75 J				
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-		NA	NA	NA	NA
Barium	UG/L	1000	-	47.6	NA	NA	NA	NA
Cadmium	UG/L	5	-		NA	NA	NA	NA
Calcium	UG/L	-	-	225,000	NA	NA	NA	NA
Chromium	UG/L	50	-		NA	NA	NA	NA
Iron	UG/L	300	-	252	NA	NA	NA	NA

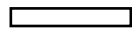
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID				MW-03	MW-03	MW-03	MW-03	MW-03
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	18,600	NA	NA	NA	NA
Manganese	UG/L	300	-	2,450	NA	NA	NA	NA
Potassium	UG/L	-	-	3,320	NA	NA	NA	NA
Sodium	UG/L	20000	-	3,800	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-		NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

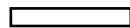
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID				MW-03	MW-03	MW-3	MW-03	MW-03
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/07/15	01/24/17	12/05/17	10/22/19	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-	1.7	6.3	1.4	1.2	0.93 J
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-	6.2	0.92 J	4.1	4.8	3.7
Acetone	UG/L	50	-			2.9 J		
Benzene	UG/L	1	-			0.26 J		
Carbon disulfide	UG/L	60	-		0.27 J			
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	0.12 J	0.34	0.23
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

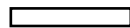
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID				MW-03	MW-03	MW-3	MW-03	MW-03
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/07/15	01/24/17	12/05/17	10/22/19	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	1.5	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	5.6	5.4	6.1
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	5.5	4.0	3.2 J
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	9.5	8.6	7.3
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	15	13	13
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	6.7	8.1	5.9
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA			
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	0.53 J		
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	13	16	18
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	3.1	3.7	2.6
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA			
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	58.93	58.8	56.1

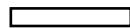
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID				MW-04	MW-04	MW-04	MW-04	MW-04
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-	9.3	10	15	11	9.6
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-	2.3	2.4	3 J		1.1
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-		0.35 J			
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-	0.86 J		1 J		
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-		NA	NA	NA	NA
Barium	UG/L	1000	-	16.0	NA	NA	NA	NA
Cadmium	UG/L	5	-		NA	NA	NA	NA
Calcium	UG/L	-	-	171,000	NA	NA	NA	NA
Chromium	UG/L	50	-		NA	NA	NA	NA
Iron	UG/L	300	-	1,050	NA	NA	NA	NA

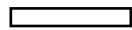
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ROSE VALLEY LANDFILL

Location ID				MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID				MW-04	MW-04	MW-04	MW-04	MW-04
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	31,700	NA	NA	NA	NA
Manganese	UG/L	300	-	525	NA	NA	NA	NA
Potassium	UG/L	-	-	1,130	NA	NA	NA	NA
Sodium	UG/L	20000	-	14,100	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-		NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

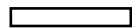
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID				MW-04	MW-04	MW-4	MW-04	MW-04
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/07/15	01/24/17	12/05/17	10/22/19	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-	11	6.4	6.3	6.1 J	7.6
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-	1.5	0.93 J	0.75 J	0.88 J	1.2
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-			0.30 J		
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	2.9	6.2	4.6
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

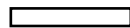
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID				MW-04	MW-04	MW-4	MW-04	MW-04
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/07/15	01/24/17	12/05/17	10/22/19	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	0.89 J	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	0.31 J	0.76 J	0.69 J
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	4.9	1.5 J	
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	1.6 J	2.1	2.3
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA		1.4 J	1.2 J
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	1.8 J	2.8	2.6 NJ
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA			
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA			
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	4.1	6.6	7.7
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	1.2 J	2.1	1.8
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA			
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	13.91	17.26	16.29

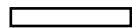
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID				MW-16	MW-16	MW-16	MW-16	MW-16
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-		NA	NA	NA	NA
Barium	UG/L	1000	-	31.0	NA	NA	NA	NA
Cadmium	UG/L	5	-		NA	NA	NA	NA
Calcium	UG/L	-	-	77,900	NA	NA	NA	NA
Chromium	UG/L	50	-		NA	NA	NA	NA
Iron	UG/L	300	-	16,600	NA	NA	NA	NA

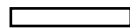
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ROSE VALLEY LANDFILL

Location ID				MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID				MW-16	MW-16	MW-16	MW-16	MW-16
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				04/21/10	07/13/11	10/18/12	10/16/13	10/15/14
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	8,150	NA	NA	NA	NA
Manganese	UG/L	300	-	1,090	NA	NA	NA	NA
Potassium	UG/L	-	-		NA	NA	NA	NA
Sodium	UG/L	20000	-	5,800	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-		NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

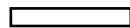
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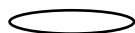
TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID				MW-16	DUP-02	MW-16	MW-16	MW-16
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/07/15	01/23/17	01/23/17	12/05/17	10/21/19
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-				5.7 J	
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-	0.38 J				
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	0.28 J	
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

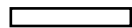
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID				MW-16	DUP-02	MW-16	MW-16	MW-16
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/07/15	01/23/17	01/23/17	12/05/17	10/21/19
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA			NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	0.28 J	0.40 J
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA		
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	0.59 J	
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA		
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA		
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA		
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA		
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	1.3 J	1.7
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA		
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA		
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	2.17	2.1

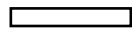
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				MW-16	SW-01D	SW-01D	SW-01D	SW-01D
Sample ID				MW-16	DUP-2	SW-01D	SW-01D	SW-01D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/07/21	04/21/10	04/21/10	07/12/11	10/17/12
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	0.42	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA			NA	NA
Barium	UG/L	1000	-	NA	71.2	70.2	NA	NA
Cadmium	UG/L	5	-	NA			NA	NA
Calcium	UG/L	-	-	NA	28,600	27,600	NA	NA
Chromium	UG/L	50	-	NA			NA	NA
Iron	UG/L	300	-	NA	292 J	631 J	NA	NA

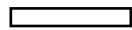
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ROSE VALLEY LANDFILL

Location ID				MW-16	SW-01D	SW-01D	SW-01D	SW-01D
Sample ID				MW-16	DUP-2	SW-01D	SW-01D	SW-01D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/07/21	04/21/10	04/21/10	07/12/11	10/17/12
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)			
Metals								
Magnesium	UG/L	35000	-	NA	14,000	13,500	NA	NA
Manganese	UG/L	300	-	NA	8.8	11.8	NA	NA
Potassium	UG/L	-	-	NA	1,940	1,890	NA	NA
Sodium	UG/L	20000	-	NA	10,200	9,900	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA			NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	0.40 J	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100		NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	0.49 J	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100		NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100		NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-		NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10		NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	1.3 J	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-		NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100		NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	2.19	NA	NA	NA	NA

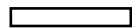
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-01D	SW-01D	SW-01D	SW-01D	SW-01D
Sample ID				SW-01D	SW-01D	SW-01D	SW-01D	SW-1D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/15/13	10/14/14	10/06/15	01/24/17	12/05/17
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

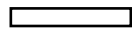
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-01D	SW-01D	SW-01D	SW-01D	SW-01D
Sample ID				SW-01D	SW-01D	SW-01D	SW-01D	SW-1D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/15/13	10/14/14	10/06/15	01/24/17	12/05/17
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

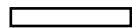
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-01D	SW-01D	SW-01S	SW-01S	SW-01S
Sample ID				SW-01D	SW-01D	SW-01S	FD-071211	SW-01S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/21/19	09/08/21	04/21/10	07/12/11	07/12/11
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1		NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	5,830	NA	NA
Barium	UG/L	1000	-	NA	NA	33.4	NA	NA
Cadmium	UG/L	5	-	NA	NA		NA	NA
Calcium	UG/L	-	-	NA	NA	109,000	NA	NA
Chromium	UG/L	50	-	NA	NA	6.9	NA	NA
Iron	UG/L	300	-	NA	NA	3,700	NA	NA

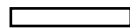
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TABLE 3
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ROSE VALLEY LANDFILL

Location ID				SW-01D	SW-01D	SW-01S	SW-01S	SW-01S
Sample ID				SW-01D	SW-01D	SW-01S	FD-071211	SW-01S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/21/19	09/08/21	04/21/10	07/12/11	07/12/11
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Metals								
Magnesium	UG/L	35000	-	NA	NA	4,000	NA	NA
Manganese	UG/L	300	-	NA	NA	50.5	NA	NA
Potassium	UG/L	-	-	NA	NA	2,080	NA	NA
Sodium	UG/L	20000	-	NA	NA	2,100	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	6.6	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100		NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100		NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100		NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100		NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100		NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-		NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10		NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10		NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-		NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100		NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	ND	NA	NA	NA	NA

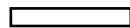
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-01S	SW-01S	SW-01S	SW-01S	SW-01S
Sample ID				SW-01S	SW-01S	SW-01S	SW-01S	SW-01S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/17/12	10/15/13	10/14/14	10/06/15	01/24/17
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

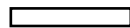
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ROSE VALLEY LANDFILL

Location ID				SW-01S	SW-01S	SW-01S	SW-01S	SW-01S
Sample ID				SW-01S	SW-01S	SW-01S	SW-01S	SW-01S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/17/12	10/15/13	10/14/14	10/06/15	01/24/17
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

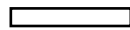
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-01S	SW-01S	SW-01S	SW-01S	SW-02D
Sample ID				SW-1S	SW-01S	FD-090821	SW-01S	SW-02D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				12/05/17	10/22/19	09/08/21	09/08/21	04/22/10
Parameter	Units	Criteria (1)	Criteria (2)			Field Duplicate (1-1)		
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-	3.5 J				
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA		5.4 J		NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	443
Barium	UG/L	1000	-	NA	NA	NA	NA	65.7
Cadmium	UG/L	5	-	NA	NA	NA	NA	
Calcium	UG/L	-	-	NA	NA	NA	NA	62,800
Chromium	UG/L	50	-	NA	NA	NA	NA	4.1
Iron	UG/L	300	-	NA	NA	NA	NA	433

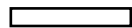
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-01S	SW-01S	SW-01S	SW-01S	SW-02D
Sample ID				SW-1S	SW-01S	FD-090821	SW-01S	SW-02D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				12/05/17	10/22/19	09/08/21	09/08/21	04/22/10
Parameter	Units	Criteria (1)	Criteria (2)			Field Duplicate (1-1)		
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	22,300
Manganese	UG/L	300	-	NA	NA	NA	NA	10.2
Potassium	UG/L	-	-	NA	NA	NA	NA	1,870
Sodium	UG/L	20000	-	NA	NA	NA	NA	7,500
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	2.9	0.24 J	0.18 J	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	2.8			NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	9.2	0.36 J	0.49 J	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	11	1.6 J	1.4 J	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	9.7			NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA				NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA				NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	25	3.5	3.3	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	3.0			NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA				NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	63.6	5.7	5.37	NA

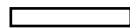
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02D	SW-02D	SW-02D	SW-02D	SW-02D
Sample ID				SW-02D	FD-101712	SW-02D	FD-101513	SW-02D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				07/12/11	10/17/12	10/17/12	10/15/13	10/15/13
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)		Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

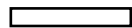
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ROSE VALLEY LANDFILL

Location ID				SW-02D	SW-02D	SW-02D	SW-02D	SW-02D
Sample ID				SW-02D	FD-101712	SW-02D	FD-101513	SW-02D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				07/12/11	10/17/12	10/17/12	10/15/13	10/15/13
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)		Field Duplicate (1-1)	
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

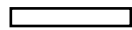
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SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02D	SW-02D	SW-02D	SW-02D	SW-02D
Sample ID				FIELD DUP GW	SW-02D	SW-02D	SW-02D	SW-2D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/14/14	10/14/14	10/06/15	01/25/17	12/06/17
Parameter	Units	Criteria (1)	Criteria (2)	Field Duplicate (1-1)				
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					4.0 J
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

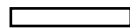
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

Criteria (2)- Recommended Screening Level - New York State Drinking Water Quality Council (DWQC), January 2019

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

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Only Detected Results Reported.

TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02D	SW-02D	SW-02D	SW-02D	SW-02D
Sample ID				FIELD DUP GW	SW-02D	SW-02D	SW-02D	SW-2D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/14/14	10/14/14	10/06/15	01/25/17	12/06/17
Parameter	Units	Criteria (1)	Criteria (2)	Field Duplicate (1-1)				
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	0.89 J
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	0.89

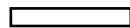
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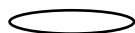
TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02D	SW-02D	SW-02D	SW-02S	SW-02S
Sample ID				DUP-GW-01	SW-02D	SW-02D	SW-02S	SW-02S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/22/19	10/22/19	09/08/21	04/22/10	07/12/11
Parameter	Units	Criteria (1)	Criteria (2)	Field Duplicate (1-1)				
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-				1.9	
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1			NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA		NA
Barium	UG/L	1000	-	NA	NA	NA	2.9	NA
Cadmium	UG/L	5	-	NA	NA	NA		NA
Calcium	UG/L	-	-	NA	NA	NA	57,400	NA
Chromium	UG/L	50	-	NA	NA	NA		NA
Iron	UG/L	300	-	NA	NA	NA		NA

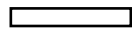
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

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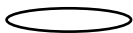
TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02D	SW-02D	SW-02D	SW-02S	SW-02S
Sample ID				DUP-GW-01	SW-02D	SW-02D	SW-02S	SW-02S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/22/19	10/22/19	09/08/21	04/22/10	07/12/11
Parameter	Units	Criteria (1)	Criteria (2)	Field Duplicate (1-1)				
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	2,240	NA
Manganese	UG/L	300	-	NA	NA	NA		NA
Potassium	UG/L	-	-	NA	NA	NA		NA
Sodium	UG/L	20000	-	NA	NA	NA	1,000	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA		NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100			NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100			NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100			NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100			NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100			NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-			NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10			NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10			NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-			NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100			NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	ND	ND	NA	NA	NA

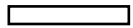
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

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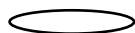
TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02S	SW-02S	SW-02S	SW-02S	SW-02S
Sample ID				SW-02S	SW-02S	SW-02S	FD-100615	SW-02S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/17/12	10/15/13	10/14/14	10/06/15	10/06/15
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-	1 J	1.0	1.6	0.91 J	1.1
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

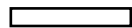
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02S	SW-02S	SW-02S	SW-02S	SW-02S
Sample ID				SW-02S	SW-02S	SW-02S	FD-100615	SW-02S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/17/12	10/15/13	10/14/14	10/06/15	10/06/15
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

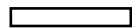
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-02S	SW-02S	SW-02S	SW-02S	SW-03S
Sample ID				SW-02S	SW-2S	SW-02S	SW-02S	SW-03S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/25/17	12/06/17	10/22/19	09/08/21	04/22/10
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-		1.3	1.1		
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-		3.5 J			
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA			NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	
Barium	UG/L	1000	-	NA	NA	NA	NA	8.8
Cadmium	UG/L	5	-	NA	NA	NA	NA	
Calcium	UG/L	-	-	NA	NA	NA	NA	74,400
Chromium	UG/L	50	-	NA	NA	NA	NA	
Iron	UG/L	300	-	NA	NA	NA	NA	

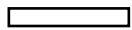
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ROSE VALLEY LANDFILL

Location ID				SW-02S	SW-02S	SW-02S	SW-02S	SW-03S
Sample ID				SW-02S	SW-2S	SW-02S	SW-02S	SW-03S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/25/17	12/06/17	10/22/19	09/08/21	04/22/10
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	3,040
Manganese	UG/L	300	-	NA	NA	NA	NA	
Potassium	UG/L	-	-	NA	NA	NA	NA	1,910
Sodium	UG/L	20000	-	NA	NA	NA	NA	22,600
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA			NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA			NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA			NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA			NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA			NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA			NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA			NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA			NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA			NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA			NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	ND	ND	NA

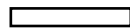
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-03S	SW-03S	SW-03S	SW-03S	SW-03S
Sample ID				SW-03S	SW-03S	SW-03S	SW-03S	SW-03S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				07/12/11	10/17/12	10/15/13	10/14/14	10/06/15
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

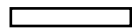
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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-03S	SW-03S	SW-03S	SW-03S	SW-03S
Sample ID				SW-03S	SW-03S	SW-03S	SW-03S	SW-03S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				07/12/11	10/17/12	10/15/13	10/14/14	10/06/15
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

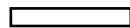
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, April 2000, Class GA, and USEPA MCL for uranium, December

Criteria (2)- Recommended Screening Level - New York State Drinking Water Quality Council (DWQC), January 2019

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TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-03S	SW-03S	SW-03S	SW-04D	SW-04D
Sample ID				SW-3S	SW-03S	SW-03S	SW-04D	SW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				12/06/17	10/22/19	09/08/21	04/21/10	07/13/11
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-	4.4 J				
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1				NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	1,800	NA
Barium	UG/L	1000	-	NA	NA	NA	14.7	NA
Cadmium	UG/L	5	-	NA	NA	NA	2.4	NA
Calcium	UG/L	-	-	NA	NA	NA	12,200	NA
Chromium	UG/L	50	-	NA	NA	NA		NA
Iron	UG/L	300	-	NA	NA	NA	1,630	NA

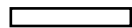
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ROSE VALLEY LANDFILL

Location ID				SW-03S	SW-03S	SW-03S	SW-04D	SW-04D
Sample ID				SW-3S	SW-03S	SW-03S	SW-04D	SW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				12/06/17	10/22/19	09/08/21	04/21/10	07/13/11
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	1,960	NA
Manganese	UG/L	300	-	NA	NA	NA	38.7	NA
Potassium	UG/L	-	-	NA	NA	NA	1,170	NA
Sodium	UG/L	20000	-	NA	NA	NA	32,000	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA		NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	0.35 J	0.43 J	0.58 J	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100		1.3 J		NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100				NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100				NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100				NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-				NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10				NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10		0.82 J	1.0 J	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-				NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100				NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	0.35	2.55	1.58	NA	NA

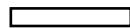
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ROSE VALLEY LANDFILL

Location ID				SW-04D	SW-04D	SW-04D	SW-04D	SW-04D
Sample ID				SW-04D	SW-04D	SW-04D	SW-04D	SW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/17/12	10/16/13	10/14/14	10/07/15	01/23/17
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

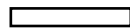
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Location ID				SW-04D	SW-04D	SW-04D	SW-04D	SW-04D
Sample ID				SW-04D	SW-04D	SW-04D	SW-04D	SW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				10/17/12	10/16/13	10/14/14	10/07/15	01/23/17
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

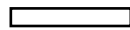
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ROSE VALLEY LANDFILL

Location ID				SW-04D	SW-04D	SW-04D	SW-04D	SW-04S
Sample ID				DUP-1	SW-4D	SW-04D	SW-04D	SW-04S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				12/05/17	12/05/17	10/21/19	09/07/21	04/21/10
Parameter	Units	Criteria (1)	Criteria (2)	Field Duplicate (1-1)				
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-	4.7 J	4.3 J			
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-					
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1				NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	336
Barium	UG/L	1000	-	NA	NA	NA	NA	26.1
Cadmium	UG/L	5	-	NA	NA	NA	NA	
Calcium	UG/L	-	-	NA	NA	NA	NA	92,700
Chromium	UG/L	50	-	NA	NA	NA	NA	
Iron	UG/L	300	-	NA	NA	NA	NA	8,870

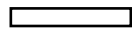
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ROSE VALLEY LANDFILL

Location ID				SW-04D	SW-04D	SW-04D	SW-04D	SW-04S
Sample ID				DUP-1	SW-4D	SW-04D	SW-04D	SW-04S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				12/05/17	12/05/17	10/21/19	09/07/21	04/21/10
Parameter	Units	Criteria (1)	Criteria (2)	Field Duplicate (1-1)				
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	6,900
Manganese	UG/L	300	-	NA	NA	NA	NA	2,080
Potassium	UG/L	-	-	NA	NA	NA	NA	1,940
Sodium	UG/L	20000	-	NA	NA	NA	NA	4,300
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100				NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100				NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100				NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100				NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100				NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	0.65 J	0.64 J		NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10				NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10				NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-				NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100				NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	0.65	0.64	ND	NA	NA

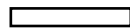
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Location ID				SW-04S	SW-04S	SW-04S	SW-04S	SW-04S
Sample ID				SW-04S	SW-04S	SW-04S	SW-04S	SW-04S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				07/13/11	10/17/12	10/16/13	10/14/14	10/07/15
Parameter	Units	Criteria (1)	Criteria (2)					
Volatile Organic Compounds								
1,1,1-Trichloroethane	UG/L	5	-					
1,1-Dichloroethane	UG/L	5	-					
1,2-Dichloroethane	UG/L	0.6	-					
1,2-Dichloroethene (cis)	UG/L	5	-					
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chloroethane	UG/L	5	-	0.48 J				
Chloromethane	UG/L	5	-					
Dichlorodifluoromethane	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,4-Dioxane	UG/L	-	1	NA	NA	NA	NA	NA
Metals								
Aluminum	UG/L	-	-	NA	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA	NA

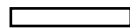
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Sample ID				SW-04S	SW-04S	SW-04S	SW-04S	SW-04S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				07/13/11	10/17/12	10/16/13	10/14/14	10/07/15
Parameter	Units	Criteria (1)	Criteria (2)					
Metals								
Magnesium	UG/L	35000	-	NA	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances								
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA	NA	NA	NA	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	NA	NA	NA	NA
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	NA	NA	NA	NA

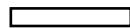
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Location ID				SW-04S	SW-04S	SW-04S	SW-04S
Sample ID				SW-04S	SW-4S	SW-04S	SW-04S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-
Date Sampled				01/23/17	12/05/17	10/21/19	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)				
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	-				
1,1-Dichloroethane	UG/L	5	-				
1,2-Dichloroethane	UG/L	0.6	-				
1,2-Dichloroethene (cis)	UG/L	5	-				
Acetone	UG/L	50	-		3.8 J		
Benzene	UG/L	1	-				
Carbon disulfide	UG/L	60	-				
Chloroethane	UG/L	5	-				
Chloromethane	UG/L	5	-				
Dichlorodifluoromethane	UG/L	5	-				
Vinyl chloride	UG/L	2	-				
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	1	NA	0.69	1.4	0.51
Metals							
Aluminum	UG/L	-	-	NA	NA	NA	NA
Barium	UG/L	1000	-	NA	NA	NA	NA
Cadmium	UG/L	5	-	NA	NA	NA	NA
Calcium	UG/L	-	-	NA	NA	NA	NA
Chromium	UG/L	50	-	NA	NA	NA	NA
Iron	UG/L	300	-	NA	NA	NA	NA

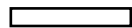
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

Criteria (2)- Recommended Screening Level - New York State Drinking Water Quality Council (DWQC), January 2019

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

NJ - Tentative identification with an estimated concentration.

Only Detected Results Reported.

TABLE 3
SUMMARY OF HISTORICALLY DETECTED COMPOUNDS IN GROUNDWATER
ROSE VALLEY LANDFILL

Location ID				SW-04S	SW-04S	SW-04S	SW-04S
Sample ID				SW-04S	SW-4S	SW-04S	SW-04S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-
Date Sampled				01/23/17	12/05/17	10/21/19	09/07/21
Parameter	Units	Criteria (1)	Criteria (2)				
Metals							
Magnesium	UG/L	35000	-	NA	NA	NA	NA
Manganese	UG/L	300	-	NA	NA	NA	NA
Potassium	UG/L	-	-	NA	NA	NA	NA
Sodium	UG/L	20000	-	NA	NA	NA	NA
Uranium	UG/L	30	-	NA	NA	NA	NA
Vanadium	UG/L	-	-	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	100	NA			
Perfluorobutanoic acid (PFBA)	NG/L	-	100	NA	2.0	1.6 J	
Perfluoroheptanoic acid (PFHpA)	NG/L	-	100	NA	0.36 J		0.63 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	100	NA			
Perfluorohexanoic acid (PFHxA)	NG/L	-	100	NA		0.74 J	0.76 J
Perfluorooctane sulfonamide (FOSA)	NG/L	-	-	NA	0.36 J		
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	NA			
Perfluorooctanoic acid (PFOA)	NG/L	-	10	NA	1.0 J	1.3 J	1.6 J
Perfluoropentanoic acid (PFPA)	NG/L	-	-	NA		0.77 J	0.52 J
Perfluorotetradecanoic acid (PFTeA)	NG/L	-	100	NA	0.51 J		
Total Per- and Polyfluoroalkyl Substances	NG/L	-	500	NA	4.23	4.41	3.51

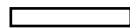
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA, and USEPA MCL for uranium. December

Criteria (2)- Recommended Screening Level - New York State Drinking Water Quality Council (DWQC), January 2019

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

- = No standard or guidance value.

Empty cell or ND - Not detected. J - The reported concentration is an estimated value.

NJ - Tentative identification with an estimated concentration.

Only Detected Results Reported.

TABLE 4
MANN-KENDALL STATISTICAL ANALYSIS
GROUNDWATER ANALYTICAL RESULTS
ROSE VALLEY LANDFILL

LOCID: MW-03

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1-Dichloroethane	WG	VOA	10	10	-27	0.0083	Downward Trend
1,2-Dichloroethane	WG	VOA	10	1	-1	0.5	No Trend
1,2-Dichloroethene (cis)	WG	VOA	10	10	-29	0.0046	Downward Trend
Acetone	WG	VOA	10	1	5	0.364	No Trend
Benzene	WG	VOA	10	1	5	0.364	No Trend
Carbon disulfide	WG	VOA	10	1	3	0.431	No Trend
Dichlorodifluoromethane	WG	VOA	10	1	-9	0.242	No Trend

LOCID: MW-04

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1-Dichloroethane	WG	VOA	10	10	-20	0.054	Downward Trend
1,2-Dichloroethene (cis)	WG	VOA	10	9	-15	0.108	No Trend
Chloroethane	WG	VOA	10	1	-7	0.3	No Trend
Dichlorodifluoromethane	WG	VOA	10	2	-13	0.146	No Trend
Vinyl chloride	WG	VOA	10	1	5	0.364	No Trend

LOCID: MW-16

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
Chloromethane	WG	VOA	10	1	1	0.5	No Trend

LOCID: SW-01S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend

LOCID: SW-02D

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

* - Number of observations too small to calculate probabilities.

** - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.

TABLE 4
MANN-KENDALL STATISTICAL ANALYSIS
GROUNDWATER ANALYTICAL RESULTS
ROSE VALLEY LANDFILL

LOCID: SW-02S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
1,1,1-Trichloroethane	WG	VOA	10	7	-5	0.364	No Trend
Acetone	WG	VOA	10	1	5	0.364	No Trend

LOCID: SW-03S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	9	1	4	0.381	No Trend

LOCID: SW-04D

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend

LOCID: SW-04S

Parameter	Matrix	Class	Num of Data Points	Num of Data Point Detections	Mann-Kendall Statistic S	Probabilities (1)	Trend (2)
Acetone	WG	VOA	10	1	5	0.364	No Trend
Chloroethane	WG	VOA	10	1	-7	0.3	No Trend

For multiple observations per time period, the Mann-Kendall test to the median was used.

Data reported as less than the detection limit were used by assigning a common value to the data that was smaller than the smallest measurement in the data set.

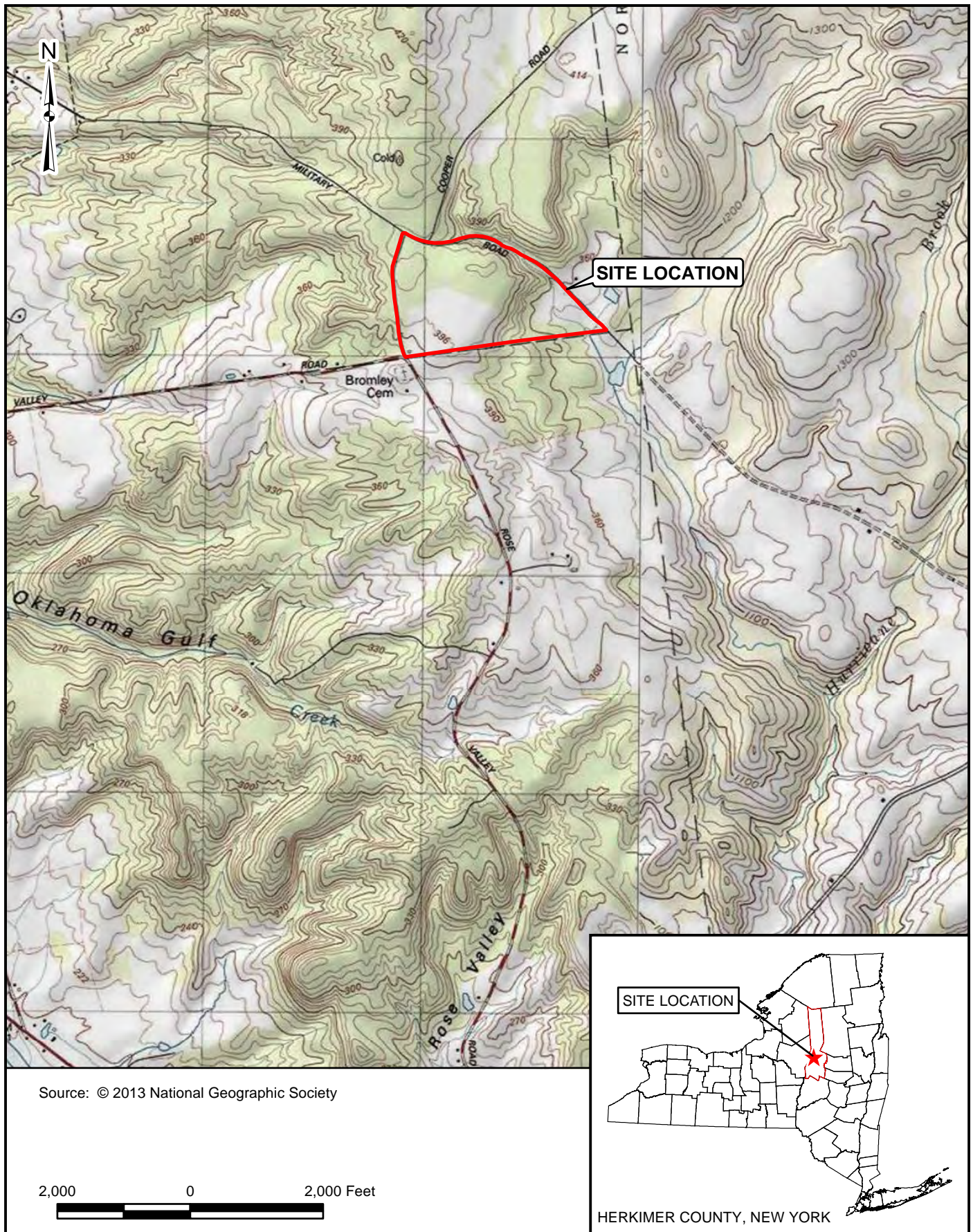
(1) - Probabilities for Mann-Kendall Nonparametric Test for Trend (Gilbert R.O. 1987, Table A18).

(2) - Assuming a probability of error of 10% in the analysis method and/or data, then the probability of no trend as calculated by the Mann-Kendall statistic is less than 10%, then it is assumed that there is a trend.

* - Number of observations too small to calculate probabilities.

** - Probability Undefined for S=0 and N=6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, or 35.

FIGURES

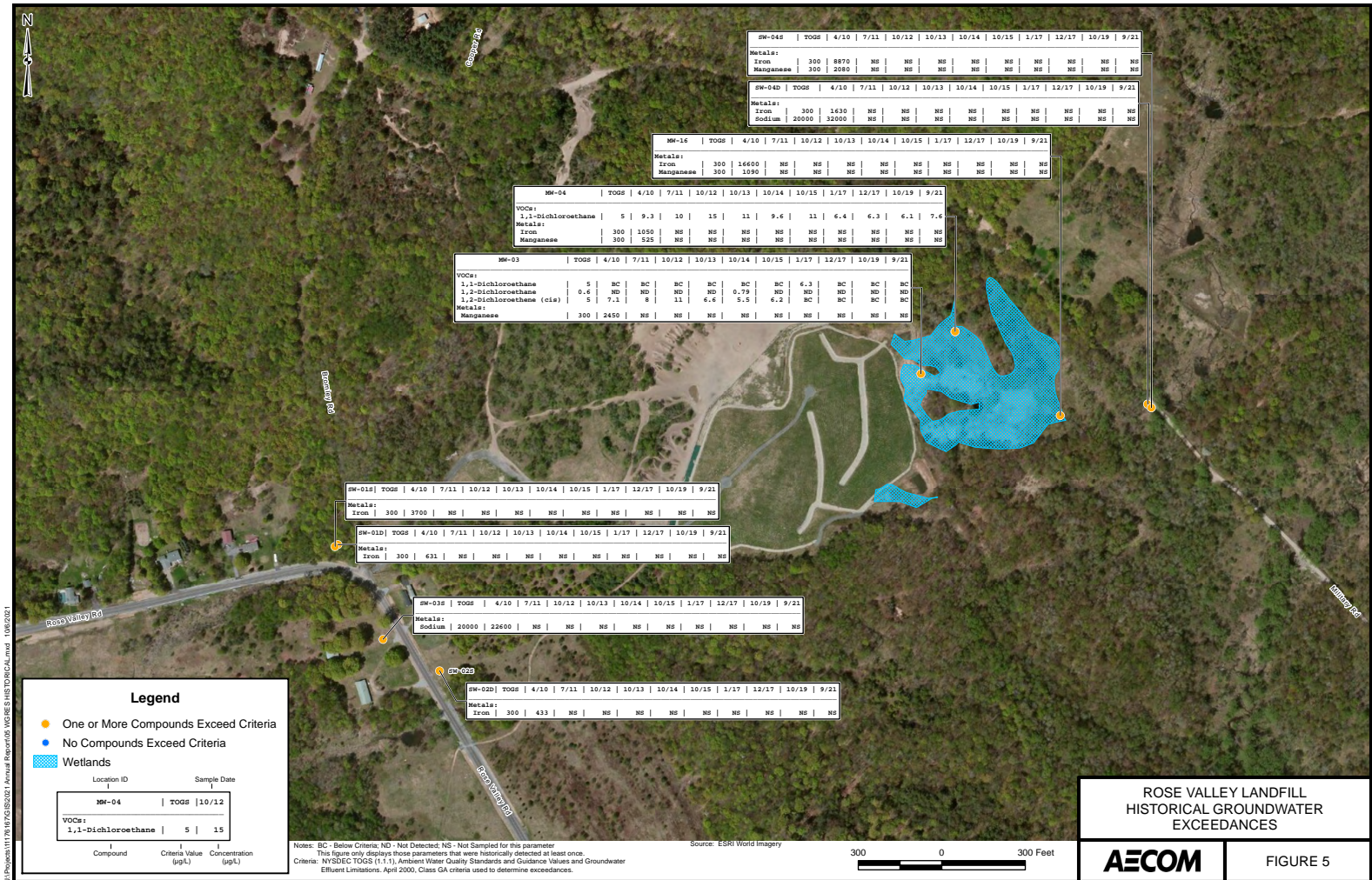


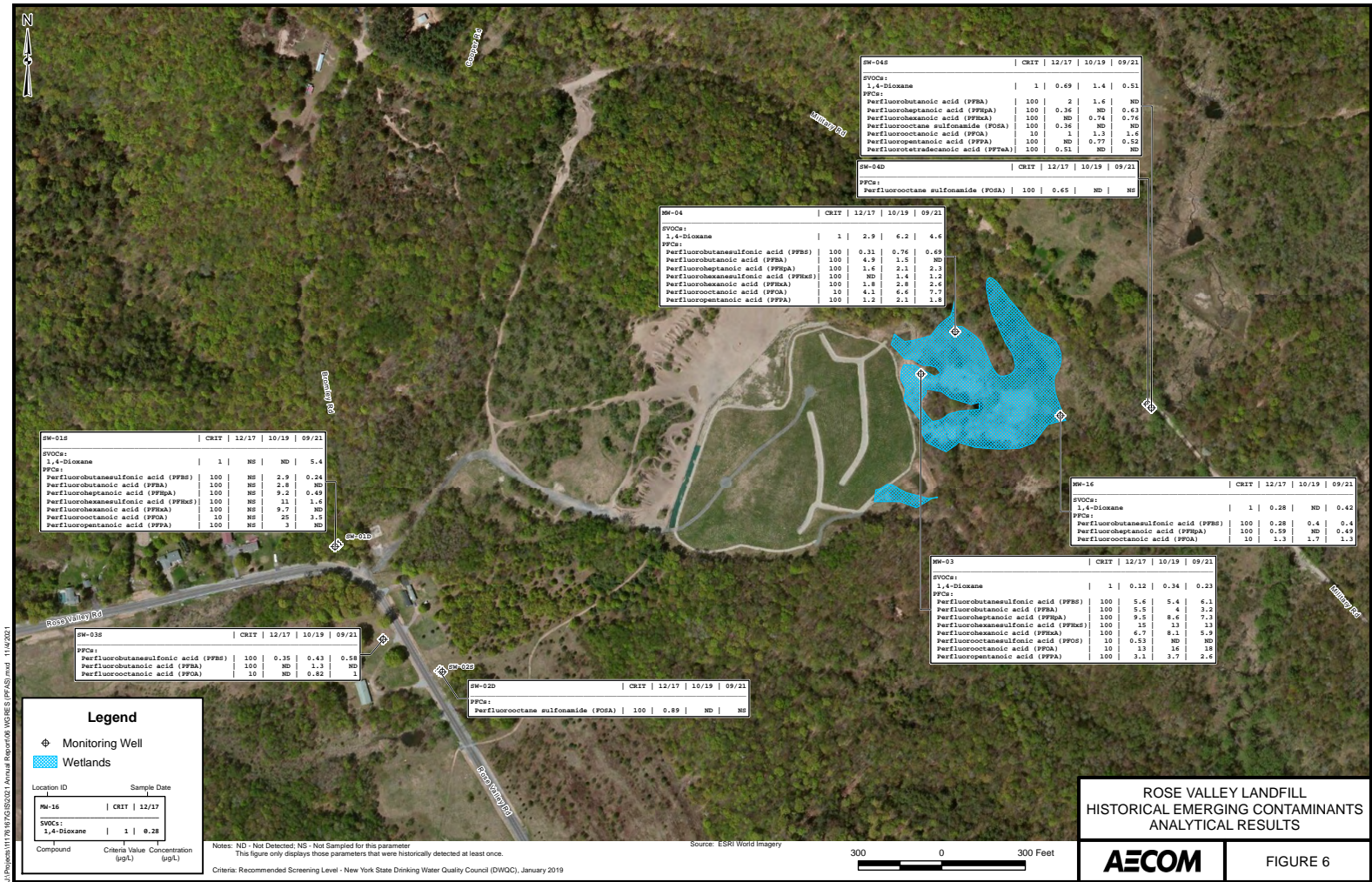






J:\Projects\11178\16\PG&E\2021 Annual Report\04 GW CONTOURS DEEP 0921.mxd 10/9/2021





APPENDIX A
FIELD NOTES AND WEIGH TICKETS

left SL
6:35

10:30

RM on site

2/7/21
Tues.

10:45

CD on site

~~access~~ access due to
eroded road poor -

CD/RM - cleared free branches
w/ copping shears

had to cut mortar lock @
LF gate - 1 lock still good

Clear ^{brush @} gate area in order
to drive truck on LF

12:45 - 1:30

pumped + sampled MW-04 =

Very hard time finding MW-03
Very thick vegetation Phytomorphies -

2:30 - 3:30 MW-03 sampled
moved to Military Road well
and sampled SW-04S and SW-04D

started CD 5:15 pm

artesian pressure after
 after \approx 20 min. of stabilization at 75 psi
 time

Moved to MW-16 - sampled

left site \approx 7:15 for hotel

partly sunny \approx 75°F humid

Wed. 9/8/21

Brad Weakley
 owner

CD on site 8:18 am. 1st

Brad Weakley excavating already on site -

dozer

Doe - operator. walked entire length

will regrade as at roadway to repair

Necessary to promote proper drainage

we agreed on flow direction, etc

6 loads will not go very
 far.

Mr. Romell (Sharon's husband) on site

\sim 8:20

will get 3 New handed Royal alkie
 locks.

3

1/1/51

John Deer
650 J
LGP
G

(9)

2 for crash gate + main gate
locks

1 for C.F. gate.

Need @ least 5 Keys.

1 - Brady

2 - AELcom

1 - DEC

1 - Mower

will add to gate Bill -

talked to seven separate
vendors. some mult.

explained deal - stuff. LI
rough pricing

am Dale working in from

RULF Pool working up toward LF

using existing material

rework

crusher Run

will compact nicely

Moved brush piles

Rob say hel SW. OLD and @ SW. OS
w/ generator + grand for submersible
pump

(5)

~ 11:30 moved to fresh mount SW-035

~ 12:30 moved to

SW-02D and SW-02S
drive truck across residential
property since pine battery stopped working

RM to leave site by ~ 2:00 pm

Things to do!

rough grade

Wed.
✓

Thurs.

place stone

x fu stone? cost. Yes. (3-4 loads)

fine grade / compact

- repair LF access road ✓

- Brush hog - (scheduled Friday)

- Gas vents -

dope
9/9

- clear swales - ✓ Lopping shears.

- look @ MW-02 still there?

Crash gate

✓

6

Brady Fence Co. on site

owner

welder + helper 3 guys

2:00 pm ish

installed coach gate

posted signs

~~Fence~~ Taroni idea
to sign

~
= "this access closed
use Military road
entirely"

~ 3:30 - 4:00 left site

9/9

Thursday

check out of hotel - paperwork ①
~ 9:00 on site (onsite)

9:15
ish

3rd load of stone being dumped
Crescent Run
do place near LF gate area

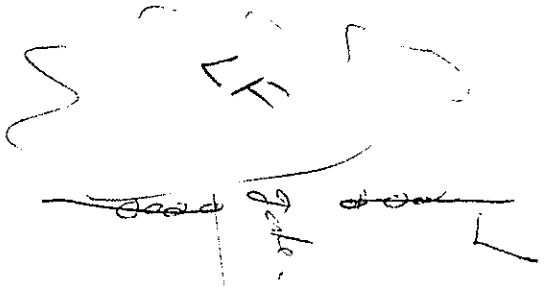
2 loads of stone in puddle area

- Dale did not use fabric

- Taroni hauling ~ 40 min RT

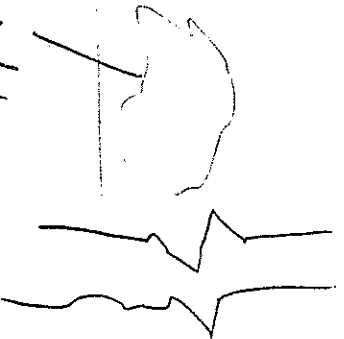
②

100 yd



chain link fence

1 load of
crusher
run



pull
over

2 loads
of #4
stone



(8)

~ 10:00 am to 12:00 noon

- CD cleared all small trees & brush from stone lined swale, also used 1 entire gal. of roundup
- placed $\frac{1}{2}$ ton bag of crusher run down @ bottom of C.F. Road dumped as he drove up hill -
- Brad owner of exc. Co. driving truck -
- Will fix ^{two/both} methane vents and send me photos -

ATV Rider told me he saw fence broke posts about skidding off Road Road

- Material Sand & Gravel

9

Site
M/S

plate map

sent two letters, they
came back

Curious would like to stop ATU,

I left after 10th load

Brad will send me wt tickets

and take photos

- Potter

- Rithl Rod

Mary

gas vent
repair.

left site ~ 3:15 pm

Location ROSE VALLEY LANDFILL Date 9/7/21
Project / Client NYSDOC

- CD/AM - DRIVE TO SITE WX 75°F
1030 AM ON SITE. PARTLY SUNNY
1045 CD ON SITE. HUMID
- CLEAR BRANCHES ALONG ROAD w/ LOPPING SHOARS
 - Access poor due to GRADED ROAD
 - CUT MASTERLOCK @ LF GATE, NO KEY
 - cleared brush by gate area + drove through + along landfill road
 - MOBE EQUIPMENT TO MW-04
 - 1245 START PURGE @ MW-04
 - 1330 collect sample @ MW-04 VOCs, PFAS ^{1/4-DRAW}
 - SPEND A LONG TIME LOOKING FOR MW-03. VERT HARD TO FIND IN DENSE VEGETATION - ~~AT~~ ^{AT} ~~LAB~~ ^{LAB} MITEs
 - 1437 - START PURGE @ MW-03
 - 1502 - SAMPLE MW-03 for VOCs, 1/4 DRAW ^{PFAS}
 - MOBE TO MILITARY ROAD
 - 1619 - START PURGE SW-04S
 - 1649 - SAMPLE SW-04S - VOCs, 1/4-DRAW, PFAS
 - 1720 - START PURGE SW-04D
 - 1750 - SAMPLE SW-04D VOCs
 - MOBE TO MW-16
 - 1811 START PURGE @ MW-16

Location ROSE VALLEY LANDFILL Date 9/7/21
Project / Client NYSDOC

- 1831 - SAMPLE MW-16, VOCs + 1/4 DRAW, ^{PFAS}
CLEAN UP
~1915 - AM + CD DEPART SITE FOR HOTEL



Location ROSE VALLEY LANDFILL Date 9/8/21
Project / Client NYSDOC

0845-⁰⁸³⁰ KIMBERLY & C. DUSEZ ON SITE
BRADY FENCE ON SITE w/ DOZER.
- DISCUSS ACTIVITIES w/ MONA
MOVE TO SW-015 / SW-01D

Cal check Florin Line # 25360

pH - 3.96	vs. 4.0	} OK!
Cond - 4.36	vs. 4.49	
NTU - 50 NTU	vs. 0.0	

0915- START PURGE @ SW-01S

0945- Collect Sample @ SW-01S, VOCs, 1,4-Dioxane
Collected Duplicate (FD-090821) ~~MONA~~ PFAS.

1030- START PURGE SW-01D

1105- Collect Sample @ SW-01D

1137- START PURGE @ SW-03S

1202- Collect Sample SW-03S, VOCs, 1,4-Dioxane, PFAS

- Plus MS/MSD

MOVE TO SW-02S / 02D FAIR.

1239 - START PURGE @ SW-02S

1250 BATTERY DIED ON GEOPUMP. GET
PERMISSION FROM PROPERTY OWNER
TO DRIVE ACROSS LAWN.

1254 - RESTART PURGE

Location ROSE VALLEY LANDFILL Date 9/8/21
Project / Client NYSDOC

1314 - Collect Sample @ SW-02S for
VOCs, 1,4-Dioxane, and PFAS

1343- START PURGE @ SW-02D

1408- COLLECT SAMPLE @ SW-02D for
VOCs -

- Clean up all EQUIPMENT.

- STARTS TO RAIN.

- CD to stay onsite + work w/
BRADY FENCE.

PM - DEPARTS AND DRIVES BACK TO
BUFFALO.

CD KORTE NOTES RE: ROAD / GRADING

9/9/21 @ 1040 DROP SAMPLES @ LAB.

R. Mung

MATERIAL SAND AND GRAVEL CO.

Quarry Address: 172 Hinckley Road
Poland, NY 13431

Phone: 315-896-5170

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ASTM C33 Material Conformance



501-230188

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE <i>Rose valley</i>			ORDER # 8059		
						DATE 09/09/21		
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT			
	WEAK03	000001	72760.00	28100.00	44660.00			
TRUCK	DRIVER	OWNER	HAULER		CODE			
WEEW4			BRAD WEAKLEY		0			
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT			
L 3&4	3 & 4 LEDGE ROCK STONE		22.33					
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL			
FOB	CHARGE	07:02 AM						
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)					
22.33	1		<i>[Signature]</i>					

1 1/2% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

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						DATE 09/09/21		
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT			
	WEAK03	000001	74020.00	28100.00	45920.00			
TRUCK	DRIVER	OWNER	HAULER		CODE			
WEEW4			BRAD WEAKLEY		0			
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT			
L 3&4	3 & 4 LEDGE ROCK STONE		22.96					
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL			
FOB	CHARGE	07:47 AM						
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)					
45.29	2		<i>[Signature]</i>					

1 1/2% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

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501-230216

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE Rose valley			ORDER # 8059		
						DATE 09/09/21		
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT			
	WEAK03	000001	73900.00	28100.00	45800.00			
TRUCK	DRIVER	OWNER	HAULER		CODE			
WEEW4			BRAD WEAKLEY		0			
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY		UNIT PRICE		AMOUNT	
L CR	SUBBASE TYPE2 CRUSHER RUN		22.90					
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING		TAX TOTAL		
FOB	CHARGE	08:35 AM						
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)					
22.90	3		[Signature]					

1 1/2% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

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501-230240

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE Rose valley			ORDER # 8059		
						DATE 09/09/21		
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT			
	WEAK03	000001	74020.00	28100.00	45920.00			
TRUCK	DRIVER	OWNER	HAULER		CODE			
WEEW4			BRAD WEAKLEY		0			
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY		UNIT PRICE		AMOUNT	
L CR	SUBBASE TYPE2 CRUSHER RUN		22.96					
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING		TAX TOTAL		
FOB	CHARGE	09:37 AM						
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)					
45.86	4		[Signature]					

1 1/2% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

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NO. 330987

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ASTM C33 Material Conformance

501-230267



SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE Rose Valley			ORDER # 8059 DATE 09/09/21	
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT		
	WEAK03	000001	71380.00	28100.00	43280.00		
TRUCK	DRIVER	OWNER	HAULER		CODE		
WEEW4			BRAD WEAKLEY		0		
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT		
L CR	SUBBASE TYPE2 CRUSHER RUN		21.64				
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL		
FOB	CHARGE	10:49 AM					
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)				
67.50	5		Paul				

1 1/2% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

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MATERIAL SAND AND GRAVEL CO.

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NO. 330995

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ASTM C33 Material Conformance

501-230275



SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE Rose Valley			ORDER # 8059 DATE 09/09/21	
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT		
	WEAK03	000001	72300.00	28100.00	44200.00		
TRUCK	DRIVER	OWNER	HAULER		CODE		
WEEW4			BRAD WEAKLEY		0		
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT		
L CR	SUBBASE TYPE2 CRUSHER RUN		22.10				
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL		
FOB	CHARGE	11:29 AM					
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)				
89.60	6		Paul				

1 1/2% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

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West Sand Lake, NY 12196

NO. 331005

Quarry Address: 172 Hinckley Road
Poland, NY 13431

Phone: 315-896-5170

Washed & Processed NYS DOT Approved Materials
ASTM C33 Material Conformance



501-230285

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE <i>Rose Valley</i>			ORDER # 8059 DATE 09/09/21	
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT		
	WEAK03	000001	72620.00	28100.00	44520.00		
TRUCK WEEW4	DRIVER	OWNER	HAULER		CODE		
			BRAD WEAKLEY		0		
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT		
L CR	SUBBASE TYPE2 CRUSHER RUN		22.26				
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL		
FOB	CHARGE	12:10 PM					
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)				
111.86	7		<i>[Signature]</i>				

1% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

TRUCKER'S COPY

MATERIAL SAND AND GRAVEL CO.

Mail Payment To: P.O. Box 8
West Sand Lake, NY 12196

NO. 331015

Quarry Address: 172 Hinckley Road
Poland, NY 13431

Phone: 315-896-5170

Washed & Processed NYS DOT Approved Materials
ASTM C33 Material Conformance



501-230295

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE <i>Rose Valley</i>			ORDER # 8059 DATE 09/09/21	
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT		
	WEAK03	000001	73480.00	28100.00	45380.00		
TRUCK WEEW4	DRIVER	OWNER	HAULER		CODE		
			BRAD WEAKLEY		0		
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT		
L CR	SUBBASE TYPE2 CRUSHER RUN		22.69				
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL		
FOB	CHARGE	01:05 PM					
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)				
134.55	8		<i>[Signature]</i>				

1% PER MONTH WILL BE CHARGED ON ACCOUNTS OVER 30 DAYS OLD. ANNUAL PERCENTAGE RATE 18%.

TRUCKER'S COPY

MATERIAL SAND AND GRAVEL CO.

Mail Payment To: 172 Hinckley Road
West Sand Lake, NY 12196
Quarry Address: 172 Hinckley Road
Poland, NY 13431
Phone: 315-896-5170
Washed & Processed NYS DOT Approved Materials
ASTM C33 Material Conformance

NO. 331025

501-230305

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE <i>Rice Valley</i>			ORDER # 8059		
						DATE 09/09/21		
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT			
	WEAK03	000001	72680.00	28100.00	44580.00			
TRUCK	DRIVER	OWNER	HAULER	CODE				
WEEW4				BRAD WEAKLEY 0				
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT			
L CR	SUBBASE TYPE2 CRUSHER RUN		22.29					
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL			
FOB	CHARGE	01:48 PM						
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)					
171.37	10		<i>[Signature]</i>					

TRUCKER'S COPY

MATERIAL SAND AND GRAVEL CO.

Mail Payment To: P.O. Box 8
West Sand Lake, NY 12196
Quarry Address: 172 Hinckley Road
Poland, NY 13431
Phone: 315-896-5170
Washed & Processed NYS DOT Approved Materials
ASTM C33 Material Conformance

NO. 331033

501-230313

SOLD TO BRAD WEAKLEY EXCAVATING 8942 N MAIN ST POLAND, NY			DELIVER TO ATWOOD LAKE <i>Rice Valley</i>			ORDER # 8059		
						DATE 09/09/21		
P.O. #	CUST. #	JOB NO.	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT			
	WEAK03	000001	72780.00	28100.00	44680.00			
TRUCK	DRIVER	OWNER	HAULER	CODE				
WEEW4				BRAD WEAKLEY 0				
PRODUCT NO.	DESCRIPTION		SHIPPED QUANTITY	UNIT PRICE	AMOUNT			
L CR	SUBBASE TYPE2 CRUSHER RUN		22.34					
FOB	COD	LEAVE PIT	ARRIVE JOB	START UNLOADING	TAX TOTAL			
FOB	CHARGE	02:30 PM						
TONS OR YD DEL.	NO. OF LOADS DEL.		RECEIVED BY (SIGNATURE)					
179.18	10		<i>[Signature]</i>					

TRUCKER'S COPY

APPENDIX B

MONITORING WELL PURGE LOGS

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: MW-04

Sampling Personnel: R. Murphy, C. Dusel Date: 9/7/21 Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point:	TOC	Initial Depth to Water:	2.39	Depth to Well Bottom:	17.51	Well Diameter:	2"	Screen Length:	10'
Casing Type:	PVC		15.12	Volume in 1 Well Casing (liters):	9.3		Estimated Purge Volume (liters):		

Sample ID: MW-04 Sample Time: 1330 QA/QC: none

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1255	5.65	17.33	0.764	0.58	175	-55	300-325	2.39
1300	5.66	17.80	0.817	0.15	174	-65	310	2.83
1305	5.74	17.34	0.743	0.00	76.9	-70	310	2.82
1310	5.79	18.14	0.723	0.00	47.4	-68	310	2.84
1315	5.84	18.18	0.718	0.00	39.1	-64	310	2.84
1320	5.93	18.11	0.714	0.00	17.7	-61	310	2.84
1325	5.99	18.04	0.714	0.00	18.6	-64	310	2.84
1330	6.02	17.97	0.715	0.00	14.9	-65	310	2.84
Tolerance:	0.1	--	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Comments:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: MW-03
Sampling Personnel: R. Murphy, C. Dusel Date: 9/7/21 Company: AECOM

Purging/ Sampling Device:	<u>Geopump</u>	Tubing Type:	<u>HDPE</u>	Tubing Inlet:	<u>Screen Midpoint</u>				
Measuring Point:	<u>TOC</u>	Initial Depth to Water:	<u>2.68</u>	Depth to Well Bottom:	<u>17.00</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u>10'</u>
Casing Type:	<u>PVC</u>	Volume in 1 Well Casing (liters):	<u>14.32</u> <u>8.8</u>	Estimated Purge Volume (liters):	<u> </u>				

Sample ID: MW-03 Sample Time: 1502 QA/QC: none

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1437	5.89	12.45	0.856	0.10	30.7	-44	450 410	2.68
1442	5.76	12.47	0.851	0.00	31.8	-56	410	3.71
1447	5.88	12.35	0.839	0.00	39.0	-64	410	3.75
1452	5.91	12.34	0.835	0.00	22.1	-66	410	3.72
1457	5.94	12.39	0.833	0.00	19.4	-69	410	3.70
1502	5.97	12.33	0.831	0.00	15.2	-71	410	3.70
Tolerance:	0.1	--	3%	10%	10%	+ or - 10	--	---

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{CY}} = \pi r^2 h$)

Comments:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: SW-04S

Sampling Personnel: R. Murphy, C. Dusel Date: 9/7/21 Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point: TOC Initial Depth to Water: 2.95 Depth to Well Bottom: 8.07 Well Diameter: 2" Screen Length: 8'

Casing Type:	PVC	Volume in 1 Well Casing (liters):	Estimated Purge Volume (liters):
--------------	-----	-----------------------------------	----------------------------------

Sample ID: SW-04S Sample Time: 1649 QA/QC: none

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Comments:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: SW-04D

Sampling Personnel: R. Murphy, C. Dusel Date: Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point: _____ Pressure gauge _____ Initial Depth to Water: 7.0 psi Depth to Well Bottom: 84.42 Well Diameter: 2" Screen Length: 8'

Casing Type:	PVC	Volume in 1 Well Casing (liters):	_____	Estimated Purge Volume (liters):	_____
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Sample ID: SW-04D Sample Time: 1750 QA/QC: None

Sample Parameters: TCL VOC + TICs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Comments: Artesian well. Pressure reading at well head = 5.5 psi. 1 Pound Per Square Inch = 2.3067 Feet Of Water

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: MW-16

Sampling Personnel: R. Murphy, C. Dusel Date: 9/7/21 Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point: TOC Initial Depth to Water: 3.20 Depth to Well Bottom: 11.59 Well Diameter: 2" Screen Length: 8'

Casing Type:	PVC	Volume in 1 Well Casing (liters):	Estimated Purge Volume (liters):

Sample ID: MW-16 Sample Time: 83 QA/QC: none

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Comments:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: SW-01S

Sampling Personnel: R. Murphy, C. Dusel Date: 9/8/21 Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point:	TOC	Initial Depth to Water:	20.21	Depth to Well Bottom:	28.42	Well Diameter:	2"	Screen Length:	10'
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		8.21	Estimated
		Volume in 1	Purge
Casing		Well Casing	Volume
Type:	PVC	(liters): 5.07	(liters): _____

Sample ID: SW-01S Sample Time: 0945 QA/QC: FD-090821

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Comments: ~~Water slightly turbid upon sampling. Turbidity meter might not be working properly.~~

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: SW-01D

Sampling Personnel: R. Murphy, C. Dusel Date: 9/8/21 Company: AECOM

Purging/ Sampling

Device: Grundfos Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point:	TOC	Initial Depth to Water:	67.90	Depth to Well Bottom:	83.83	Well Diameter:	2"	Screen Length:	10'
------------------	-----	-------------------------	-------	-----------------------	-------	----------------	----	----------------	-----

16.03

Volume in 1
Well Casing
(liters): 9.9

Estimated
Purge
Volume
(liters): _____

Sample ID: SW-01D Sample Time: 1105 QA/QC: none

Sample Parameters: TCL VOC + TICs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1030	6.95	14.66	0.214	5.22	65.6	22	620 500	67.80
1035	7.13	13.79	0.220	0.15	18.7	-34	600	68.62
1040	7.26	14.19	0.219	0.00	10.2	-27	520	68.90
1045	7.38	14.44	0.217	0.00	6.7	-33	420	69.18
1050	7.49	14.72	0.216	0.00	6.2	-43	400	69.35
1055	7.70	15.09	0.215	0.00	4.3	-62	340	69.60
1100	7.73	15.30	0.213	0.00	3.7	-66	350	69.74
1105	7.76	15.56	0.214	0.00	3.8	-68	350	69.79
1110								
Tolerance:	0.1	--	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

~~Comments: Grundfos @ 195 H2 initially. Changed to 190 H2 after 10 minutes (14:32), 185 H2 after 15 minutes (14:37)~~

NO BACK ON WELL, Conventional Residential Well Cap.

Project: 60641010 Site: Rose Valley Landfill Well #: SW-03S

Sampling Personnel: R. Murphy, C. Dusel Date: 9/2/20 Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point:	TOC	Initial Depth to Water:	13.74	Depth to Well Bottom:	18.82	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	Purge Volume (liters):
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Sample ID: SW-03S Sample Time: 1202 QA/QC: none MS/MSD

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1137	7.49	14.31	0.218	10.35	16.8	100	880	13.74
1142	7.30	12.95	0.242	8.72	15.9	127	860	13.78
1147	7.21	13.02	0.258	8.74	6.9	135	860	13.78
1152	7.18	13.10	0.259	8.74	6.3	140	860	13.78
1157	7.22	13.24	0.257	8.47	6.6	135	860	13.78
1202	7.26	13.27	0.262	8.73	6.7	137	860	13.78
Tolerance:	0.1	--	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Comments: Could not locate - under ~ 1 foot of snow

No lack

0_RoseVly_SMA400_Technical440_Field_and_Laboratory_Data September 2021 Rose Valley Purge Logs September 2021-blank.xlsx

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: SW-02S

Sampling Personnel: R. Murphy, C. Dusel Date: 9/8/21 Company: AECOM

Purging/
Sampling
Device: Geopump Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point:	TOC	Initial Depth to Water:	13.41	Depth to Well Bottom:	20.03	Well Diameter:	2"	Screen Length:	10'
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Casing Type:	PVC	Volume in 1 Well Casing (liters):	Estimated Purge Volume (liters):

Sample ID: SW-02S Sample Time: 1319 QA/QC: none

Sample Parameters: TCL VOC + TICs, 1,4-dioxane, PFAS

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Information: WATER VOLUMES—0.75 inch diameter well = 67 ml/min; 1 inch diameter well = 164 ml/min; 2 inch diameter well = 674 ml/min;
4 inch diameter well = 2470 ml/min (vol_{cy} = $\pi r^2 h$)

Comments: 1250-BATTERY PLUG. Pull truck around after getting permission, Restart pump @ 1254

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60641010 Site: Rose Valley Landfill Well #: SW-02D

Sampling Personnel: R. Murphy, C. Dusel Date: 9/21 Company: AECOM

Purging/
Sampling
Device: Grundfos Tubing Type: HDPE Tubing Inlet: Screen Midpoint

Measuring Point: TOC Initial Depth to Water: 70.82 Depth to Well Bottom: 79.12 Well Diameter: 2" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): Purge Volume (liters):

Sample ID: SW-02D Sample Time: 1400 QA/QC: DUP-GW-01, MS/MSD
Equipment Rinse Blank collected.

Sample Parameters: TCL VOC + TICs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1343	7.50	15.41	0.369	7.21	4.5	58	788	70.82
1348	7.47	14.76	0.385	0.06	2.7	-43	700	70.82
1353	7.42	15.33	0.389	0.00	2.1	-79	700	70.82
1358	7.38	15.41	0.389	0.00	1.9	-89	700	70.82
1403	7.31	15.47	0.389	0.00	2.0	-89	700	70.82
1408	7.44	15.53	0.387	0.00	1.9	-95	700	70.82
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;

4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cm}} = \pi r^2 h$)

Comments: Grundfos - 200 Hz 189 Hz

APPENDIX C

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

**2021 GROUNDWATER SAMPLING EVENT
ROSE VALLEY LANDFILL SITE MANAGEMENT
HERKIMER COUNTY, NEW YORK
WORK ASSIGNMENT #D009803-31
SITE NO. 622017**

Analyses Performed by:

**EUROFINS TESTAMERICA
AMHERST, NEW YORK
AND SACRAMENTO, CALIFORNIA**

Prepared for:

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION**

Prepared by:

**AECOM
ONE JOHN JAMES AUDUBON PARKWAY
SUITE 210
AMHERST, NEW YORK 14228**

OCTOBER 2021

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 INTRODUCTION	1
2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES.....	1
3.0 DATA DELIVERABLE COMPLETENESS	2
4.0 SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES	2
5.0 NON-CONFORMANCES.....	2
6.0 SAMPLE RESULTS AND REPORTING	3
7.0 SUMMARY	3

TABLES (Following Text)

Table 1	Summary of Data Qualifications
Table 2	Validated Groundwater Sample Results
Table 3	Validated Field QC Sample Results

ATTACHMENTS

Attachment A	Validated Form 1's
Attachment B	Support Documentation

1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B-Guidance for Data Deliverables and the Development of Data Usability and Summary Reports*, May 2010. Discussed in this DUSR are analytical data for ten groundwater (GW) samples, one GW field duplicate (FD), one GW matrix spike/matrix spike duplicate (MS/MSD) pair, and one field blank collected by AECOM personnel on September 7-8, 2021 from the Rose Valley Landfill site (Site No. 622017). A trip blank accompanied the sample shipment to the lab. The samples were collected in support of NYSDEC Work Assignment # D009803-31.

2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES

The samples were delivered to Eurofins TestAmerica's service center located in Syracuse, New York. The aliquots for volatile organic compounds (VOCs) and 1,4-dioxane were forwarded on to the Amherst, N.Y. location; and the aliquots for per- and polyfluorinated alkyl acids (PFASs) analysis were forwarded on to the Sacramento, CA location for analysis. The samples were analyzed for the following parameters (not all samples were analyzed for all parameters):

<u>Parameter</u>	<u>Method Number</u>
Target Compound List (TCL) VOCs	SW8260C
1,4-Dioxane	SW8270D Selective Ion Monitoring (SIM)
Per- and Polyfluoroalkyl Substances (PFASs)	Method 537-Modified

A limited data validation was performed following the guidelines in the following USEPA Region II documents:

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C, SOP HW-24, Rev. 4, October 2014;*
- *Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry, SW-846 Method 8270D, SOP HW-22, Rev. 5, December 2010; and*

- *Data Review Guidelines for the analysis of PFAS in Non-Potable Water and Solids. Sampling, Analysis, and Assessment Of Per- and Polyfluoroalkyl Substances (PFASs) Under NYSDEC Part 375 Remedial Programs, Appendix I - January 2021.*

The limited validation included: a review of completeness of all required deliverables; holding times; a review of quality control (QC) results [blanks, instrument tunings, calibration standards, field duplicate analyses, and MS/MSD/laboratory control sample (LCS) recoveries] to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Data qualifiers applied to the results during the validation included ‘UJ’ (estimated quantitation limit), ‘J’ (estimated), and NJ’ (tentatively identified, approximate concentration). Definitions of USEPA Region II data qualifiers are presented at the end of this text. A summary of data qualifications is provided on Table 1. The validated analytical results are presented on Table 2 (groundwater), and Table 3 (field QC) samples. Copies of the validated laboratory results (i.e., Form 1’s) are presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

3.0 DATA DELIVERABLE COMPLETENESS

A full deliverable data package (i.e., NYSDEC ASP Category B, or equivalent) was provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

4.0 SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All samples were analyzed within the required holding times.

5.0 NON-CONFORMANCES

Field Duplicate Sample

A field duplicate was collected at GW location SW-01S and exhibited good analytical precision with

the following exception:

The relative percent difference (%RPD) between the sample and field duplicate exceeded 50% for 1,4-dioxane. The 1,4-dioxane results in these samples have been qualified 'J'/'UJ'. Since the field duplicate results seem very similar to sample MW-04 it appears that the sample aliquots may have been switched in the field or laboratory. The laboratory did investigate and could not find evidence of this on their end.

6.0 SAMPLE RESULTS AND REPORTING

All quantitation/detection limits were reported in accordance with method requirements and were adjusted for sample volume and dilution factors (if applicable). Results less than the quantitation/reporting limits/minimum level were qualified 'J' by the laboratory.

The 'E' qualifier applied by the laboratory on the SVOC Form Is for FD-090821 was crossed out. The actual result was within the calibration range; however the 'E' qualifier is generated automatically based on the labeled isotope bias corrected concentration.

The ion mass ratio for perfluorohexanoic acid (PFHxA) in sample MW-04 was outside of the labs QC limits for identification. However using analyst judgement the laboratory has reported it as a detection and qualified the result 'I'. The 'I' qualifier was changed to 'NJ' by the validator.

7.0 SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'UJ' (estimated quantitation limit), 'J' (estimated), and 'NJ' (tentatively identified, approximate concentration) are considered conditionally usable. AECOM does not recommend the recollection of any samples at this time.

Prepared By: Ann Marie Kropovitch, Chemist



Date: 10/11/21

Reviewed By: Peter R. Fairbanks, Senior Chemist



Date: 10/11/21

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D – The positive value is the result of an analysis at a secondary dilution factor
- NJ- The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

TABLE 1
SUMMARY OF DATA QUALIFICATIONS
ROSE VALLEY LANDFILL SITE

SAMPLE ID	FRACTION	ANALYTICAL DEVIATION	QUALIFICATION
SW-01S and FD-090821	SVOCs	%RPD for 1,4-dioxane > QC limit.	Qualify detected results 'J' and non-detect results 'UJ.'
MW-04	PFC	Ion mass ratio for PFHxA outside of QC limits.	Qualify detected result 'NJ.'

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID		MW-03	MW-04	MW-16	SW-01D	FD-090821
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/07/21	09/07/21	09/07/21	09/08/21	09/08/21
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	0.93 J	7.6	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	3.7	1.2	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	10 U	10 U	10 U	10 U	10 U
Benzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID		MW-03	MW-04	MW-16	SW-01D	FD-090821
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/07/21	09/07/21	09/07/21	09/08/21	09/08/21
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
Bromoform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID		MW-03	MW-04	MW-16	SW-01D	FD-090821
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/07/21	09/07/21	09/07/21	09/08/21	09/08/21
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
Vinyl chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	0.23	4.6	0.42	NA	5.4 J
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	4.5 U	4.5 U	4.6 U	NA	4.5 U
Perfluorobutanesulfonic acid (PFBS)	NG/L	6.1	0.69 J	0.40 J	NA	0.24 J
Perfluorobutanoic acid (PFBA)	NG/L	3.2 J	4.5 U	4.6 U	NA	4.5 U
Perfluorodecane sulfonate (PFDS)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluorodecanoic acid (PFDA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	4.5 U	4.5 U	4.6 U	NA	4.5 U
Perfluorododecanoic acid (PFDoA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluoroheptanoic acid (PFHpA)	NG/L	7.3	2.3	0.49 J	NA	0.36 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	13	1.2 J	1.9 U	NA	1.6 J
Perfluorohexanoic acid (PFHxA)	NG/L	5.9	2.6 NJ	1.9 U	NA	1.8 U
Perfluorononanoic acid (PFNA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluorooctane sulfonamide (FOSA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluorooctanesulfonic acid (PFOS)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluorooctanoic acid (PFOA)	NG/L	18	7.7	1.3 J	NA	3.5
Perfluoropentanoic acid (PFPA)	NG/L	2.6	1.8	1.9 U	NA	1.8 U
Perfluorotetradecanoic acid (PFTeA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
Perfluorotridecanoic acid (PFTriA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		MW-03	MW-04	MW-16	SW-01D	SW-01S
Sample ID		MW-03	MW-04	MW-16	SW-01D	FD-090821
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/07/21	09/07/21	09/07/21	09/08/21	09/08/21
Parameter	Units					Field Duplicate (1-1)
Per- and Polyfluoroalkyl Substances						
Perfluoroundecanoic acid (PFUnA)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	4.5 U	4.5 U	4.6 U	NA	4.5 U
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.8 U	1.8 U	1.9 U	NA	1.8 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/08/21	09/08/21	09/08/21	09/08/21	09/07/21
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	10 U	10 U	10 U	10 U	10 U
Benzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/08/21	09/08/21	09/08/21	09/08/21	09/07/21
Parameter	Units					
Volatile Organic Compounds						
Bromoform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/08/21	09/08/21	09/08/21	09/08/21	09/07/21
Parameter	Units					
Volatile Organic Compounds						
Vinyl chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	0.20 UJ	NA	0.20 U	0.20 U	NA
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	4.3 U	NA	4.6 U	4.7 U	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	0.18 J	NA	1.9 U	0.58 J	NA
Perfluorobutanoic acid (PFBA)	NG/L	4.3 U	NA	4.6 U	4.7 U	NA
Perfluorodecane sulfonate (PFDS)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorodecanoic acid (PFDA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	4.3 U	NA	4.6 U	4.7 U	NA
Perfluorododecanoic acid (PFDoA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	0.49 J	NA	1.9 U	1.9 U	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	1.4 J	NA	1.9 U	1.9 U	NA
Perfluorohexanoic acid (PFHxA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorononanoic acid (PFNA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorooctanoic acid (PFOA)	NG/L	3.3	NA	1.9 U	1.0 J	NA
Perfluoropentanoic acid (PFPA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Sample ID		SW-01S	SW-02D	SW-02S	SW-03S	SW-04D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/08/21	09/08/21	09/08/21	09/08/21	09/07/21
Parameter	Units					
Per- and Polyfluoroalkyl Substances						
Perfluoroundecanoic acid (PFUnA)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	4.3 U	NA	4.6 U	4.7 U	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.7 U	NA	1.9 U	1.9 U	NA

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-04S
Sample ID		SW-04S
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		09/07/21
Parameter	Units	
Volatile Organic Compounds		
1,1,1-Trichloroethane	UG/L	1.0 U
1,1,2,2-Tetrachloroethane	UG/L	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.0 U
1,1,2-Trichloroethane	UG/L	1.0 U
1,1-Dichloroethane	UG/L	1.0 U
1,1-Dichloroethene	UG/L	1.0 U
1,2,4-Trichlorobenzene	UG/L	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1.0 U
1,2-Dichlorobenzene	UG/L	1.0 U
1,2-Dichloroethane	UG/L	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U
1,2-Dichloropropane	UG/L	1.0 U
1,3-Dichlorobenzene	UG/L	1.0 U
1,3-Dichloropropene (cis)	UG/L	1.0 U
1,3-Dichloropropene (trans)	UG/L	1.0 U
1,4-Dichlorobenzene	UG/L	1.0 U
2-Hexanone	UG/L	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U
Acetone	UG/L	10 U
Benzene	UG/L	1.0 U
Bromodichloromethane	UG/L	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-04S
Sample ID		SW-04S
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		09/07/21
Parameter	Units	
Volatile Organic Compounds		
Bromoform	UG/L	1.0 U
Bromomethane	UG/L	1.0 U
Carbon disulfide	UG/L	1.0 U
Carbon tetrachloride	UG/L	1.0 U
Chlorobenzene	UG/L	1.0 U
Chloroethane	UG/L	1.0 U
Chloroform	UG/L	1.0 U
Chloromethane	UG/L	1.0 U
Cyclohexane	UG/L	1.0 U
Dibromochloromethane	UG/L	1.0 U
Dichlorodifluoromethane	UG/L	1.0 U
Ethylbenzene	UG/L	1.0 U
Isopropylbenzene (Cumene)	UG/L	1.0 U
Methyl acetate	UG/L	2.5 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U
Methyl tert-butyl ether	UG/L	1.0 U
Methylcyclohexane	UG/L	1.0 U
Methylene chloride	UG/L	1.0 U
Styrene	UG/L	1.0 U
Tetrachloroethene	UG/L	1.0 U
Toluene	UG/L	1.0 U
Trichloroethene	UG/L	1.0 U
Trichlorofluoromethane	UG/L	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-04S
Sample ID		SW-04S
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		09/07/21
Parameter	Units	
Volatile Organic Compounds		
Vinyl chloride	UG/L	1.0 U
Xylene (total)	UG/L	2.0 U
Semivolatile Organic Compounds		
1,4-Dioxane	UG/L	0.51
Per- and Polyfluoroalkyl Substances		
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	4.8 U
Perfluorobutanesulfonic acid (PFBS)	NG/L	1.9 U
Perfluorobutanoic acid (PFBA)	NG/L	4.8 U
Perfluorodecane sulfonate (PFDS)	NG/L	1.9 U
Perfluorodecanoic acid (PFDA)	NG/L	1.9 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	4.8 U
Perfluorododecanoic acid (PFDoA)	NG/L	1.9 U
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	1.9 U
Perfluoroheptanoic acid (PFHpA)	NG/L	0.63 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	1.9 U
Perfluorohexanoic acid (PFHxA)	NG/L	0.76 J
Perfluorononanoic acid (PFNA)	NG/L	1.9 U
Perfluorooctane sulfonamide (FOSA)	NG/L	1.9 U
Perfluorooctanesulfonic acid (PFOS)	NG/L	1.9 U
Perfluorooctanoic acid (PFOA)	NG/L	1.6 J
Perfluoropentanoic acid (PFPA)	NG/L	0.52 J
Perfluorotetradecanoic acid (PFTeA)	NG/L	1.9 U
Perfluorotridecanoic acid (PFTriA)	NG/L	1.9 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 2
ROSE VALLEY LANDFILL
VALIDATED GROUNDWATER SAMPLE RESULTS

Location ID		SW-04S
Sample ID		SW-04S
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		09/07/21
Parameter	Units	
Per- and Polyfluoroalkyl Substances		
Perfluoroundecanoic acid (PFUnA)	NG/L	1.9 U
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	4.8 U
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.9 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 3
ROSE VALLEY LANDFILL
VALIDATED FIELD QC SAMPLE RESULTS

Location ID		FIELDQC	FIELDQC
Sample ID		FB-090821	TB-090721-090821
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		09/08/21	09/08/21
Parameter	Units	Field Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/L	NA	1.0 U
1,1,2,2-Tetrachloroethane	UG/L	NA	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	NA	1.0 U
1,1,2-Trichloroethane	UG/L	NA	1.0 U
1,1-Dichloroethane	UG/L	NA	1.0 U
1,1-Dichloroethene	UG/L	NA	1.0 U
1,2,4-Trichlorobenzene	UG/L	NA	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	NA	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	NA	1.0 U
1,2-Dichlorobenzene	UG/L	NA	1.0 U
1,2-Dichloroethane	UG/L	NA	1.0 U
1,2-Dichloroethene (cis)	UG/L	NA	1.0 U
1,2-Dichloroethene (trans)	UG/L	NA	1.0 U
1,2-Dichloropropane	UG/L	NA	1.0 U
1,3-Dichlorobenzene	UG/L	NA	1.0 U
1,3-Dichloropropene (cis)	UG/L	NA	1.0 U
1,3-Dichloropropene (trans)	UG/L	NA	1.0 U
1,4-Dichlorobenzene	UG/L	NA	1.0 U
2-Hexanone	UG/L	NA	5.0 U
4-Methyl-2-pentanone	UG/L	NA	5.0 U
Acetone	UG/L	NA	10 U
Benzene	UG/L	NA	1.0 U
Bromodichloromethane	UG/L	NA	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 3
ROSE VALLEY LANDFILL
VALIDATED FIELD QC SAMPLE RESULTS

Location ID		FIELDQC	FIELDQC
Sample ID		FB-090821	TB-090721-090821
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		09/08/21	09/08/21
Parameter	Units	Field Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
Bromoform	UG/L	NA	1.0 U
Bromomethane	UG/L	NA	1.0 U
Carbon disulfide	UG/L	NA	1.0 U
Carbon tetrachloride	UG/L	NA	1.0 U
Chlorobenzene	UG/L	NA	1.0 U
Chloroethane	UG/L	NA	1.0 U
Chloroform	UG/L	NA	1.0 U
Chloromethane	UG/L	NA	1.0 U
Cyclohexane	UG/L	NA	1.0 U
Dibromochloromethane	UG/L	NA	1.0 U
Dichlorodifluoromethane	UG/L	NA	1.0 U
Ethylbenzene	UG/L	NA	1.0 U
Isopropylbenzene (Cumene)	UG/L	NA	1.0 U
Methyl acetate	UG/L	NA	2.5 U
Methyl ethyl ketone (2-Butanone)	UG/L	NA	10 U
Methyl tert-butyl ether	UG/L	NA	1.0 U
Methylcyclohexane	UG/L	NA	1.0 U
Methylene chloride	UG/L	NA	0.69 J
Styrene	UG/L	NA	1.0 U
Tetrachloroethene	UG/L	NA	1.0 U
Toluene	UG/L	NA	1.0 U
Trichloroethene	UG/L	NA	1.0 U
Trichlorofluoromethane	UG/L	NA	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 3
ROSE VALLEY LANDFILL
VALIDATED FIELD QC SAMPLE RESULTS

Location ID		FIELDQC	FIELDQC
Sample ID		FB-090821	TB-090721-090821
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		09/08/21	09/08/21
Parameter	Units	Field Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
Vinyl chloride	UG/L	NA	1.0 U
Xylene (total)	UG/L	NA	2.0 U
Per- and Polyfluoroalkyl Substances			
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	4.3 U	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	1.7 U	NA
Perfluorobutanoic acid (PFBA)	NG/L	4.3 U	NA
Perfluorodecane sulfonate (PFDS)	NG/L	1.7 U	NA
Perfluorodecanoic acid (PFDA)	NG/L	1.7 U	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	4.3 U	NA
Perfluorododecanoic acid (PFDoA)	NG/L	1.7 U	NA
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	1.7 U	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	1.7 U	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	1.7 U	NA
Perfluorohexanoic acid (PFHxA)	NG/L	1.7 U	NA
Perfluorononanoic acid (PFNA)	NG/L	1.7 U	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	1.7 U	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	1.7 U	NA
Perfluorooctanoic acid (PFOA)	NG/L	1.7 U	NA
Perfluoropentanoic acid (PFPA)	NG/L	1.7 U	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	1.7 U	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	1.7 U	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	1.7 U	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	4.3 U	NA

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

TABLE 3
ROSE VALLEY LANDFILL
VALIDATED FIELD QC SAMPLE RESULTS

Location ID		FIELDQC	FIELDQC
Sample ID		FB-090821	TB-090721-090821
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		09/08/21	09/08/21
Parameter	Units	Field Blank (1-1)	Trip Blank (1-1)
Per- and Polyfluoroalkyl Substances			
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.7 U	NA

Flags assigned during chemistry validation are shown.

Made By: AMK 10/1/21

Checked By: PRF 10/4/21

Detection Limits shown are PQL

ATTACHMENT A

VALIDATED FORM 1's

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: MW-04 Lab Sample ID: 480-189331-1
 Matrix: Water Lab File ID: N6223.D
 Analysis Method: 8260C Date Collected: 09/07/2021 13:30
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 00:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	7.6		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	1.2		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: MW-04 Lab Sample ID: 480-189331-1
 Matrix: Water Lab File ID: N6223.D
 Analysis Method: 8260C Date Collected: 09/07/2021 13:30
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 00:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: MW-03 Lab Sample ID: 480-189331-2

Matrix: Water Lab File ID: N6224.D

Analysis Method: 8260C Date Collected: 09/07/2021 15:02

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 01:08

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	0.93	J	1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: MW-03 Lab Sample ID: 480-189331-2
 Matrix: Water Lab File ID: N6224.D
 Analysis Method: 8260C Date Collected: 09/07/2021 15:02
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 01:08
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	95		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-04S Lab Sample ID: 480-189331-3
 Matrix: Water Lab File ID: N6225.D
 Analysis Method: 8260C Date Collected: 09/07/2021 16:49
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 01:31
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-04S Lab Sample ID: 480-189331-3
 Matrix: Water Lab File ID: N6225.D
 Analysis Method: 8260C Date Collected: 09/07/2021 16:49
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 01:31
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	97		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-01S Lab Sample ID: 480-189331-6

Matrix: Water Lab File ID: N6228.D

Analysis Method: 8260C Date Collected: 09/08/2021 09:45

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 02:41

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-01S Lab Sample ID: 480-189331-6
 Matrix: Water Lab File ID: N6228.D
 Analysis Method: 8260C Date Collected: 09/08/2021 09:45
 Sample wt/vol: 5 (mL) Date Analyzed: 09/16/2021 02:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		77-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	98		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

FD OF SW-01S

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: FD-090821 Lab Sample ID: 480-189331-7

Matrix: Water Lab File ID: N6229.D

Analysis Method: 8260C Date Collected: 09/08/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 03:03

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

FD OF SW-01S

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: FD-090821 Lab Sample ID: 480-189331-7
 Matrix: Water Lab File ID: N6229.D
 Analysis Method: 8260C Date Collected: 09/08/2021 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 03:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-01D Lab Sample ID: 480-189331-8

Matrix: Water Lab File ID: N6230.D

Analysis Method: 8260C Date Collected: 09/08/2021 11:05

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 03:26

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-01D Lab Sample ID: 480-189331-8
 Matrix: Water Lab File ID: N6230.D
 Analysis Method: 8260C Date Collected: 09/08/2021 11:05
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 03:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		77-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-03S Lab Sample ID: 480-189331-9

Matrix: Water Lab File ID: N6231.D

Analysis Method: 8260C Date Collected: 09/08/2021 12:02

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 03:49

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-03S Lab Sample ID: 480-189331-9
 Matrix: Water Lab File ID: N6231.D
 Analysis Method: 8260C Date Collected: 09/08/2021 12:02
 Sample wt/vol: 5 (mL) Date Analyzed: 09/16/2021 03:49
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	101		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-02S Lab Sample ID: 480-189331-10

Matrix: Water Lab File ID: N6232.D

Analysis Method: 8260C Date Collected: 09/08/2021 13:14

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 04:12

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-02S Lab Sample ID: 480-189331-10
 Matrix: Water Lab File ID: N6232.D
 Analysis Method: 8260C Date Collected: 09/08/2021 13:14
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 04:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
1868-53-7	Dibromofluoromethane (Surr)	101		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-02D Lab Sample ID: 480-189331-11

Matrix: Water Lab File ID: N6233.D

Analysis Method: 8260C Date Collected: 09/08/2021 14:08

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 04:35

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-02D Lab Sample ID: 480-189331-11
 Matrix: Water Lab File ID: N6233.D
 Analysis Method: 8260C Date Collected: 09/08/2021 14:08
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 04:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: TB-090721-090821 Lab Sample ID: 480-189331-13
 Matrix: Water Lab File ID: N6234.D
 Analysis Method: 8260C Date Collected: 09/08/2021 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 04:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: TB-090721-090821 Lab Sample ID: 480-189331-13
 Matrix: Water Lab File ID: N6234.D
 Analysis Method: 8260C Date Collected: 09/08/2021 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 09/16/2021 04:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 596449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	0.69	J	1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
SDG No.: _____
Client Sample ID: MW-04 Lab Sample ID: 480-189331-1
Matrix: Water Lab File ID: U33164030.D
Analysis Method: 8270D SIM ID Date Collected: 09/07/2021 13:30
Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 17:01
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.6		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: MW-03 Lab Sample ID: 480-189331-2
 Matrix: Water Lab File ID: U33164031.D
 Analysis Method: 8270D SIM ID Date Collected: 09/07/2021 15:02
 Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
 Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 17:25
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.23		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	28		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
SDG No.: _____
Client Sample ID: SW-04S Lab Sample ID: 480-189331-3
Matrix: Water Lab File ID: U33164032.D
Analysis Method: 8270D SIM ID Date Collected: 09/07/2021 16:49
Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 17:48
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.51		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	33		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: MW-16 Lab Sample ID: 480-189331-5
 Matrix: Water Lab File ID: U33164033.D
 Analysis Method: 8270D SIM ID Date Collected: 09/07/2021 18:31
 Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
 Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 18:12
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.42		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
SDG No.: _____
Client Sample ID: SW-01S Lab Sample ID: 480-189331-6
Matrix: Water Lab File ID: U33164034.D
Analysis Method: 8270D SIM ID Date Collected: 09/08/2021 09:45
Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 18:35
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND	UJ	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	38		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: FD-090821 Lab Sample ID: 480-189331-7
 Matrix: Water Lab File ID: U33164035.D
 Analysis Method: 8270D SIM ID Date Collected: 09/08/2021 00:00
 Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
 Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 18:59
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.4	J	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	36		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
SDG No.: _____
Client Sample ID: SW-03S Lab Sample ID: 480-189331-9
Matrix: Water Lab File ID: U33164028.D
Analysis Method: 8270D SIM ID Date Collected: 09/08/2021 12:02
Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 16:14
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	33		15-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-189331-1
 SDG No.: _____
 Client Sample ID: SW-02S Lab Sample ID: 480-189331-10
 Matrix: Water Lab File ID: U33164036.D
 Analysis Method: 8270D SIM ID Date Collected: 09/08/2021 13:14
 Extract. Method: 3510C Date Extracted: 09/09/2021 15:09
 Sample wt/vol: 1000 (mL) Date Analyzed: 09/10/2021 19:22
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 595917 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		15-110

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: MW-04 Lab Sample ID: 480-189331-1

Matrix: Water Lab File ID: 2021.09.16_A9_PFC+_C_021.d

Analysis Method: 537 (modified) Date Collected: 09/07/2021 13:30

Extraction Method: 3535 Date Extracted: 09/13/2021 19:32

Sample wt/vol: 276.2 (mL) Date Analyzed: 09/16/2021 21:28

Con. Extract Vol.: 10.0 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Acquity ID: 2.1 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 525700 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.5	2.2
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.8		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	2.6	NJ	1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.3		1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	7.7		1.8	0.77
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.66
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.69	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.2	J	1.8	0.52
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.89
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.2
27619-97-2	6:2 FTS	ND		4.5	2.3
39108-34-4	8:2 FTS	ND		1.8	0.42

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Sacramento</u>	Job No.: <u>480-189331-1</u>
SDG No.: _____	
Client Sample ID: <u>MW-03</u>	Lab Sample ID: <u>480-189331-2</u>
Matrix: <u>Water</u>	Lab File ID: <u>2021.09.16_A9_PFC+_C_022.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>09/07/2021 15:02</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>09/13/2021 19:32</u>
Sample wt/vol: <u>279.9 (mL)</u>	Date Analyzed: <u>09/16/2021 21:38</u>
Con. Extract Vol.: <u>10.0 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>525700</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.2	J	4.5	2.1
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.6		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	5.9		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.3		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	18		1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65
375-73-5	Perfluorobutanesulfonic acid (PFBS)	6.1		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	13		1.8	0.51
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.88
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.2
27619-97-2	6:2 FTS	ND		4.5	2.2
39108-34-4	8:2 FTS	ND		1.8	0.41

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-04S Lab Sample ID: 480-189331-3

Matrix: Water Lab File ID: 2021.09.16_A9_PFC+_C_023.d

Analysis Method: 537 (modified) Date Collected: 09/07/2021 16:49

Extraction Method: 3535 Date Extracted: 09/13/2021 19:32

Sample wt/vol: 258.7 (mL) Date Analyzed: 09/16/2021 21:47

Con. Extract Vol.: 10.0 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Acquity ID: 2.1 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 525700 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.8	2.3
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.52	J	1.9	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	0.76	J	1.9	0.56
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.63	J	1.9	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	1.6	J	1.9	0.82
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.26
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.71
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.55
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.52
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.95
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	1.2
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	1.3
27619-97-2	6:2 FTS	ND		4.8	2.4
39108-34-4	8:2 FTS	ND		1.9	0.44

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: MW-16 Lab Sample ID: 480-189331-5

Matrix: Water Lab File ID: 2021.09.16_A9_PFC+_C_024.d

Analysis Method: 537 (modified) Date Collected: 09/07/2021 18:31

Extraction Method: 3535 Date Extracted: 09/13/2021 19:32

Sample wt/vol: 269.8 (mL) Date Analyzed: 09/16/2021 21:57

Con. Extract Vol.: 10.0 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Acquity ID: 2.1 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 525700 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.6	2.2
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.49	J	1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	1.3	J	1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.68
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.40	J	1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.53
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.91
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	1.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	1.2
27619-97-2	6:2 FTS	ND		4.6	2.3
39108-34-4	8:2 FTS	ND		1.9	0.43

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-01S Lab Sample ID: 480-189331-6

Matrix: Water Lab File ID: 2021.09.16_A9_PFC+_C_025.d

Analysis Method: 537 (modified) Date Collected: 09/08/2021 09:45

Extraction Method: 3535 Date Extracted: 09/13/2021 19:32

Sample wt/vol: 291.4 (mL) Date Analyzed: 09/16/2021 22:06

Con. Extract Vol.: 10.0 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Acquity ID: 2.1 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 525700 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.3	2.1
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.49	J	1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	3.3		1.7	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.63
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.18	J	1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.7	0.49
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.84
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.3	1.0
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.3	1.1
27619-97-2	6:2 FTS	ND		4.3	2.1
39108-34-4	8:2 FTS	ND		1.7	0.39

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

FD OF SW-01S

Lab Name: <u>Eurofins TestAmerica, Sacramento</u>	Job No.: <u>480-189331-1</u>
SDG No.: _____	
Client Sample ID: <u>FD-090821</u>	Lab Sample ID: <u>480-189331-7</u>
Matrix: <u>Water</u>	Lab File ID: <u>2021.09.16_A9_PFC+_C_026.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>09/08/2021 00:00</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>09/13/2021 19:32</u>
Sample wt/vol: <u>276.9 (mL)</u>	Date Analyzed: <u>09/16/2021 22:16</u>
Con. Extract Vol.: <u>10.0 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>525700</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.5	2.2
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.36	J	1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	3.5		1.8	0.77
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.99
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.66
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.24	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.6	J	1.8	0.51
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.88
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.2
27619-97-2	6:2 FTS	ND		4.5	2.3
39108-34-4	8:2 FTS	ND		1.8	0.42

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-03S Lab Sample ID: 480-189331-9

Matrix: Water Lab File ID: 2021.09.16_A9_PFC+_C_029.d

Analysis Method: 537 (modified) Date Collected: 09/08/2021 12:02

Extraction Method: 3535 Date Extracted: 09/13/2021 19:32

Sample wt/vol: 267.7 (mL) Date Analyzed: 09/16/2021 22:44

Con. Extract Vol.: 10.0 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Acquity ID: 2.1 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 525700 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.7	2.2
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	1.0	J	1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.68
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.58	J	1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.53
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.92
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	1.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	1.2
27619-97-2	6:2 FTS	ND		4.7	2.3
39108-34-4	8:2 FTS	ND		1.9	0.43

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Sacramento Job No.: 480-189331-1

SDG No.: _____

Client Sample ID: SW-02S Lab Sample ID: 480-189331-10

Matrix: Water Lab File ID: 2021.09.16_A9_PFC+_C_032.d

Analysis Method: 537 (modified) Date Collected: 09/08/2021 13:14

Extraction Method: 3535 Date Extracted: 09/13/2021 19:32

Sample wt/vol: 269.3 (mL) Date Analyzed: 09/16/2021 23:12

Con. Extract Vol.: 10.0 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: Acquity ID: 2.1 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 525700 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.6	2.2
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.9	0.79
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.68
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.19
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.53
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.50
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.91
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	1.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	1.2
27619-97-2	6:2 FTS	ND		4.6	2.3
39108-34-4	8:2 FTS	ND		1.9	0.43

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Sacramento</u>	Job No.: <u>480-189331-1</u>
SDG No.: _____	
Client Sample ID: <u>FB-090821</u>	Lab Sample ID: <u>480-189331-12</u>
Matrix: <u>Water</u>	Lab File ID: <u>2021.09.14_A9_PFC+_A_051.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>09/08/2021 12:20</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>09/13/2021 19:32</u>
Sample wt/vol: <u>289.5 (mL)</u>	Date Analyzed: <u>09/15/2021 00:43</u>
Con. Extract Vol.: <u>10.0 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>525274</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.3	2.1
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.63
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.49
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.47
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.85
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.3	1.0
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.3	1.1
27619-97-2	6:2 FTS	ND		4.3	2.2
39108-34-4	8:2 FTS	ND		1.7	0.40

ATTACHMENT B

SUPPORT DOCUMENTATION

Chain of Custody Record

Client Information		Lab PM: Stone, Judy L		Carrier Tracking No(s):		COC No: 480-164390-36082.1															
Client Contact: George Kisluk		Phone: 716-903-1346		E-Mail: Judy.Stone@Eurofins.com		Page 1 of 2															
Company: AECOM		PWSID:		State of Origin: NY		Job #:															
Address: One John James Audubon Parkway Suite 210		Due Date Requested:		Analysis Requested																	
City: Amherst		TAT Requested (days):		Preservation Codes:																	
State, Zip: NY, 14228		Compliance Project: STANDARD		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:																	
Phone:		PO #: 136857		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)																	
Email: george.kisluk@aecom.com		WO #:																			
Project Name: Rose Valley Landfill #622017		Project #: 48019943																			
Site:		SSOW#:																			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=oil, A=air)		Field Filtered Sample (Yes or No)		8260C - TCL list OLM04.2		PFC_IDA - PFA's, standard list (21) - BURL		8270D - SIM_MS_ID - SIM List		Total Number of containers		Special Instructions/Note:	
MW-04		9/7/21		1330		G		W		X		A		N		N		7			
MW-03		9/7/21		1502		G		W		X		A		N		N		7			
SW-04S		9/7/21		1649		G		W		X		A		N		N		7			
SW-04D		9/7/21		1750		G		W		X		A		N		N		7			
MW-16		9/7/21		1831		G		W		X		A		N		N		3			
SW-01S		9/8/21		0945		G		W		X		A		N		N					
FD-090821		9/8/21		—		G		W		X		A		N		N					
SW-01SD		9/8/21		1105		G		W		X		A		N		N					
SW-03S		9/8/21		1202		G		W		X		A		N		N					
SW-03S MS		9/8/21		1202		G		W		X		A		N		N					
SW-03S MSD		9/8/21		1202		G		W		X		A		N		N					
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client		<input checked="" type="checkbox"/> Disposal By Lab		<input type="checkbox"/> Archive For		Months	
Empty Kit Relinquished by: Robert May		Date: 9/8/21		Time: 1040		Company: AECOM		Received by: [Signature]		Date/Time: 9/9/21 1040		Company: [Signature]		Date/Time: 9/9/21 1040		Company: [Signature]		Date/Time: 9/9/21 1040		Company: [Signature]	
Relinquished by: [Signature]		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 30.29 °C																	



480-189331 Chain of Custody

7 MATRIX SPIKE
7 MATRIX SPIKE DUPLICATE

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact:		Hartmann, Steve			480-66426.1
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:
Company:		Steve Hartmann@Eurofinset.com		New York	Page 1 of 2
Address:		Accreditations Required (See note):		Job #:	480-189331-1
880 Riverside Parkway,		NELAP - New York		Preservation Codes:	
City:	West Sacramento	Due Date Requested:		Analysis Requested	
State, Zip:	CA, 95605	9/22/2021		Total Number of containers	
Phone:	916-373-5600(Tel) 916-372-1059(Fax)	TAT Requested (days):		Field Filtered Sample (Yes or No)	
E-Mail:		PO #		Perform MS/MSD (Yes or No)	
		IWO #		PFC_IDA/3535_PFC PFAS, Standard List (21 Analytes)	
Project Name:	Rose Valley Landfill #622017	Project #:		Preservation Code:	
Site:		48019943		Matrix	
		SSOW#		(Water, Solid, or Tissue Analyte)	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix	Special Instructions/Note:
MW-04 (480-189331-1)	9/7/21	13:30 Eastern	Water	Water	
MW-03 (480-189331-2)	9/7/21	15:02 Eastern	Water	Water	
SW-04S (480-189331-3)	9/7/21	16:49 Eastern	Water	Water	
MW-16 (480-189331-5)	9/7/21	18:31 Eastern	Water	Water	
SW-01S (480-189331-6)	9/8/21	09:45 Eastern	Water	Water	
FD-090821 (480-189331-7)	9/8/21	Eastern	Water	Water	
SW-03S (480-189331-9)	9/8/21	12:02 Eastern	Water	Water	
SW-03S (480-189331-9MS)	9/8/21	12:02 Eastern	MS	Water	
SW-03S (480-189331-9MSD)	9/8/21	12:02 Eastern	MSD	Water	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon: out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) _____

Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date/Time: 9/11/21 17:00 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seal No. 1512616

Custody Seal Intact: ☒ Yes ☐ No

Cooler Temperature(s) °C and Other Remarks: 1.56

Ver: 06/08/2021

Chain of Custody Record

[illegible]

Job Narrative
480-189331-1

Comments

No additional comments.

Receipt

The samples were received on 9/9/2021 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 3.0° C.

Receipt Exceptions

The following samples have discoloration as seen in the NCM email photo attachment: SW-04S (480-189331-3) and MW-16 (480-189331-5).

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D SIM ID: The 1,4-Dioxane result reported for sample FD-090821 (480-189331-7) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte: MW-04 (480-189331-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3535: The following samples were observed to be light yellow prior to extraction: MW-04 (480-189331-1), MW-03 (480-189331-2), SW-04S (480-189331-3) and MW-16 (480-189331-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

APPENDIX D

MONITORING WELL INSPECTION FORMS

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/8/2021

TIME: 15:00

WELL ID: MW-02

EXTERIOR INSPECTION

PROTECTIVE CASING: Bent. Appears to have been hit with vehicle.

LOCK/HASP: None

HINGE/ LID: None

WELL PAD: Damaged

BOLLARDS: None

LABEL/ID: None

OTHER: Damage to well casing.

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: None

WATER LEVEL: not measured

DEPTH TO BOTTOM: not measured HARD/SOFT BOTTOM

OTHER: Blockage at 2 feet below to or riser.

Suspect beverage containers (cans or bottles) were dropped into inner casing.

COMMENTS: Well is in similar condition as per October 2019 inspection.

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL:

LOCK KEY # no lock

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/7/2021

TIME: 14:37

WELL ID: MW-03

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 2.68

DEPTH TO BOTTOM: 17.00 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/7/2021

TIME: 12:55

WELL ID: MW-04

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 2.39

DEPTH TO BOTTOM: 17.51 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/7/2021

TIME: 18:11

WELL ID: MW-16

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 3.20

DEPTH TO BOTTOM: 11.59 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/8/2021

TIME: 9:15

WELL ID: SW-01S

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 20.21

DEPTH TO BOTTOM: 28.42 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/8/2021

TIME: 10:30

WELL ID: SW-01D

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: N/A

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 67.80

DEPTH TO BOTTOM: 83.83 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: No Lock on well, cap is conventional residential well cap, bolted on and secure.

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # _____

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/8/2021

TIME: 12:39

WELL ID: SW-02S

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: None

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 13.41

DEPTH TO BOTTOM: 20.03 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/8/2021

TIME: 13:43

WELL ID: SW-02D

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, stick-up

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: _____

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 70.82

DEPTH TO BOTTOM: 79.12 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/8/2021

TIME: 11:37

WELL ID: SW-03S

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, flush mount

LOCK/HASP: No Lock

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: Water in well box. Purged water from well box prior to removing well plug.

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 13.74

DEPTH TO BOTTOM: 18.82 HARD/SOFT BOTTOM Soft

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # _____

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/7/2021

TIME: 16:19

WELL ID: SW-04S

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, flush mount

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: Water in well box. Purged water from well box prior to removing well plug.

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 2.95

DEPTH TO BOTTOM: 8.07 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: _____

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

MONITORING WELL INSPECTION FORM

SITE NAME: Rose Valley Landfill

JOB#: 60641010

DATE: 9/7/2021

TIME: 17:20

WELL ID: SW-04D

EXTERIOR INSPECTION

PROTECTIVE CASING: OK, flush mount

LOCK/HASP: OK

HINGE/ LID: OK

WELL PAD: OK

BOLLARDS: None

LABEL/ID: OK

OTHER: Water in well box. Purged water from well box prior to removing well plug.

INTERIOR INSPECTION

WELL RISER: OK

ANULAR SPACE: OK

WELL CAP: OK

WATER LEVEL: 7.0 psi = 16.15 feet above measuring point.

DEPTH TO BOTTOM: 84.42 HARD/SOFT BOTTOM Hard

OTHER: _____

COMMENTS: Artesian well.

SIGNATURE INSPECTOR: Robert J. Murphy SIGNATURE APPROVAL: _____

LOCK KEY # 2246

APPENDIX E
LANDFILL INSPECTION FORMS

ROSE VALLEY LANDFILL SITE - POST CLOSURE

NYSDEC SITE NO. 6-22-017

INSPECTION LOG SHEET

Date: 5/4/21Inspector: Chuck DyselWeather: light rainSignature: Chuck DyselTemperature: 55-60°FCompany: AEROMType: Winter ☒ Spring ☐ Summer ☐ Fall ☐
(Circle One)

Item Inspected	Maintenance Needed (Y/N)	Comments	Inspector's Initials
Drainage Channel	Y	Need to remove vegetation and spray w/ Round Up	C.D.
Groundwater Monitoring Wells	N	See M. well inspection forms	
Perimeter Access Road	Y	ON Landfill hillside is occurring at base of LF	
Vegetative Cover	Y	Mowing should be conducted 2xs/yr.	
Repaired Vegetation	N	None	
Final Cover Layers (Cap Settlement, etc.)	N	Good shape	
Gas Vents	Y	two vents shot will require repair	
Fence and Gates	Y	Need to install front crash gate	
Other Items: (Specify)	Y	access road from site entrance to LF gate	
Other Items: (Specify)		has been washed out erosion occurring	V

TABLE 2

ideal \rightarrow now $2x/4x$ \swarrow
will result in better jobs.

Fences, Gates and Perimeter Access Road	<p>Cutting or bending of fence fabric</p> <p>Missing locks, hinges, etc. from gates</p> <p>Motorbike or snowmobile tracks</p> <p>Shotgun shell casings</p> <p>Beer cans or other trash</p> <p>Other signs of access or vandalism</p> <p>Condition of access road surface</p> <p>Other:</p>	<p>Front gate was open when arrived @ site.</p>	<p>Front gate requires repair and new crash gate.</p>
Gas Vent	<p>Integrity of pipes and joints</p> <p>Plumbness and differential settlement</p> <p>Obstruction of vents by bird, insect or animal nests</p> <p>Corrosion or deterioration of pipes or supports</p> <p>Localized browning of vegetation</p> <p>Other:</p>	<p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p>	<p>Will need to repair PVC pipe.</p>

APPENDIX F
PHOTOGRAPHIC LOG



Photo 1 – Looking Northeast from landfill access road– Landfill cap prior to mowing.



Photo 2 –. Typical groundwater monitoring well equipment setup (SW-01S).



Photo 3 – Looking North – Landfill cap after mowing with brush hog.



Photo 4 – Tractor used to Brush Hog along drainage channel.



Photo 5 – Looking Southwest – Rough grading site access road with existing crusher run.



Photo 6 – Looking West – Site access road rough-graded to divert surface water away from site access road.



Photo 7 – Looking Northeast– Newly installed crash gate located at site entrance. The crash gate is outside of the existing double swing gate.



Photo 8 – Looking Southwest– Entrance gate area being regraded to facilitate gate operation.



Photo 9 – Looking East – Smooth drum roller used to compact crusher run on top of No. 4 stone.



Photo 10 – Looking Southwest – Access road following repairs. Also shown (red lines) are surface water diversion swales.



Photo 10 –Damaged methane gas vent prior to repair (bullet hole).



Photo 11 and 12 – Two repaired methane gas vents.



Photo 13 – Looking Southwest – Tandem dump truck placing crusher run on the landfill road to fill eroded portion of road.



Photo 14 – Looking Southwest – Grading of material placed as shown in Photo 13.



Photo 15 – Looking East – Newly-created ATV access point at the northern end of the existing front gate fence area.



Photo 16 – Looking Northwest – After regrading and draining ponded surface water, No. 4 stone placed to create stable subbase in wet unstable portion of site access road.



Photo 17 – Trees in the drainage channel prior to being removed by AECOM.



Photo 18 – Looking East – Wet, unstable portion of site access road prior to regrading for improved surface water drainage, and placement of No. 4 stone as shown in Photo 16.



Photo 19 – Looking West – Tires and miscellaneous debris dumped in swale between Site and Military Rd.

APPENDIX G

**EMAIL CORRESPONDENCE WITH LOCAL
RESIDENTS AND LAW ENFORCEMENT**

McDaid, Dan

From: Dusel, Chuck
Sent: Tuesday, November 02, 2021 12:20 PM
To: McDaid, Dan
Subject: FW: [EXTERNAL] Re: Rose Valley Landfill

From:
Sent: Friday, July 2, 2021 10:35 AM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Cc: Gregory, Charles T (DEC) <Charles.Gregory@dec.ny.gov>
Subject: [EXTERNAL] Re: Rose Valley Landfill

Hi Chuck,

Yes, I would be happy to help out in that regard. It's no trouble as I drive or walk by it several times each week. Presently I'm away, but will be back home next Tuesday. Feel free to call my cell phone at . I have it setup to go right to voice mail when an unidentified number comes in, so just leave a message and I'll call you back.

Regards,

Sent from my iPhone

On Jul 1, 2021, at 1:33 PM, Dusel, Chuck <chuck.dusel@aecom.com> wrote:

Hi ,

This is Chuck Dusel the URS now AECOM project manager for the Rose Valley Landfill site. Hopefully you remember me.

In the past I was working for Mike Mason, NYSDEC when the landfill cap was installed and when we installed the guard rail along the road, etc.

Mike has retired and there is a new NYSDEC project manager who name is Charlie Gregory. He is copied on this email.

First of all, hopefully you are doing fine and you still live near the site.

We recently made a site visit and saw the front gate was open.

We would still like to limit this type of entry and we were wondering if you could provide us with assistance. Charlie lives in the Albany area and I am in the Buffalo area. We were hoping you could inform us when you notice the gate open, etc. You could send an email or contact us by phone.

We would like to discuss with you when you have time.

Please acknowledge receipt of the email and provide a time and phone number so we can talk to you.

Thank you!

Chuck

If you

Charles Dusel, Civil Engineer
Sr. Project Manager, Environment, Upstate New York
D +1-716-923-1211
M +1-716-353-3016
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aecom.com

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McDaid, Dan

From: Dusel, Chuck
Sent: Tuesday, November 02, 2021 12:19 PM
To: McDaid, Dan
Subject: FW: [EXTERNAL] RE: Rose Valley Landfill

-----Original Message-----

From: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Sent: Sunday, July 25, 2021 7:55 PM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Subject: [EXTERNAL] RE: Rose Valley Landfill

So conducted traffic control in the area and closed the gate three times during the weekend. I was able to issue some tickets and spread the word through local residents. I secured the gate today with coat hangers so I'm assuming that will not last. I will keep monitoring the area and the gate progress. The case has been open for 30 days and will be closed on paper. I am asking other troopers to still continue enforcement in the area to assist with the trespass problem. If you require anything at any time, feel free to email or call.

Thanks!
Jenn

-----Original Message-----

From: Dusel, Chuck <chuck.dusel@aecom.com>
Sent: Friday, July 23, 2021 5:22 PM
To:
Cc: Gregory, Charles T (DEC) <Charles.Gregory@dec.ny.gov>; GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Subject: RE: [EXTERNAL] Rose Valley Landfill

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

Hi ,

Jenn Greenwood, NYS Trooper made a temporary fix (see attached email).
Brady fence is coming to try and fix it better soon, I spoke with them they are super busy but said they will hopefully get to it this weekend.
The Trooper is going to be making a stationary post tomorrow.

Thanks for your email.
Chuck

-----Original Message-----

From: Sent: Friday, July 23, 2021 2:52 PM

To: Dusel, Chuck <chuck.dusel@aecom.com>
Cc: Charles T Gregory <Charles.Gregory@dec.ny.gov>
Subject: [EXTERNAL] Rose Valley Landfill

Hi Chuck and Charles -

Just wanted to let you know that I drove by today (Friday) and the gate is wide open again. Apparently when they fixed it (Tuesday or Wednesday) this week they didn't get around to welding it.....

Have a good weekend .

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McDaid, Dan

From: Dusel, Chuck
Sent: Tuesday, November 02, 2021 12:18 PM
To: McDaid, Dan
Subject: FW: [EXTERNAL] RE: Rose Valley Landfill

-----Original Message-----

From: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Sent: Friday, July 23, 2021 7:32 PM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Subject: [EXTERNAL] RE: Rose Valley Landfill

They did not get to fixing the gate. The gate is now wide open again. I'll be posting up there tomorrow after closing the gate and waiting for people to open it again and enter then write them the appropriate PL and VTL charges.

Thanks,
jenn

-----Original Message-----

From: Dusel, Chuck <chuck.dusel@aecom.com>
Sent: Friday, July 23, 2021 5:22 PM
To:
Cc: Gregory, Charles T (DEC) <Charles.Gregory@dec.ny.gov>; GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Subject: RE: [EXTERNAL] Rose Valley Landfill

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The Trooper is going to be making a stationary post tomorrow.

Thanks for your email.
Chuck

-----Original Message-----

From:
Sent: Friday, July 23, 2021 2:52 PM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Cc: Charles T Gregory <Charles.Gregory@dec.ny.gov>
Subject: [EXTERNAL] Rose Valley Landfill

Hi Chuck and Charles -

Just wanted to let you know that I drove by today (Friday) and the gate is wide open again. Apparently when they fixed it (Tuesday or Wednesday) this week they didn't get around to welding it.....

Have a good weekend .

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McDaid, Dan

From: Dusel, Chuck
Sent: Tuesday, November 02, 2021 12:18 PM
To: McDaid, Dan
Subject: FW: ATV operation on Bromley Rd/Military Rd/Rose Valley Rd T/Newport

From: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Sent: Tuesday, July 20, 2021 7:23 PM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Subject: [EXTERNAL] RE: ATV operation on Bromley Rd/Military Rd/Rose Valley Rd T/Newport

I secured the gate again today and tried to block each of the entry points created on Bromley Road and Military Road. I utilized the tree branches and debris left in the area to indicate no trespass, but it probably won't last. The gate does not have a lock on it. I only closed it and tried to tie it shut with clothing and towels that I found in the area. If you could also put up no posted signs and identify who owns the property that would also assist in addressing our travelers from Utica, Rome, and other local cities. I will be working days this weekend so I will try to be on a stationary post at the location to spread the word and address any violators. It does not appear that they are traveling on the landfill itself as I had walked in today to check out the area. They are on the outskirts of the landfill and riding the adjacent hills plus illegal burns. I am also advising local DEC officers of these violations as well.

Thanks!
Jenn

From: Dusel, Chuck <chuck.dusel@aecom.com>
Sent: Tuesday, July 20, 2021 4:32 PM
To: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Cc: Gregory, Charles T (DEC) <Charles.Gregory@dec.ny.gov>; Murphy, Rob <rob.murphy@aecom.com>; Kisluk, George <george.kisluk@aecom.com>
Subject: RE: ATV operation on Bromley Rd/Military Rd/Rose Valley Rd T/Newport

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

Hi Jenn,
Thanks for the note.
One of the neighbors reported that the front gate was opened up again (see attached email).
I sit in Buffalo and I am not sure if trespassers have been on the landfill itself?
I have reported this to our fencing subcontractor for the site (Brady Fence) to give me an estimate for the repair. Still waiting to hear back from them.
Thank you for the increased patrol, I would think it has to be helping, especially if some of the kids see the patrol.
Thanks again!
Chuck

From: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Sent: Tuesday, July 20, 2021 8:11 AM

To: Dusel, Chuck <chuck.dusel@aecom.com>

Subject: [EXTERNAL] RE: ATV operation on Bromley Rd/Military Rd/Rose Valley Rd T/Newport

Hi Chuck,

I was just returning to work and checking in to see how things are going? Have you experienced any further trespass or ATV operation on the landfill with more enforcement in the area?

Thanks,
Jenn

From: Dusel, Chuck <chuck.dusel@aecom.com>

Sent: Friday, July 2, 2021 8:53 AM

To: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>

Cc: troopers.sm.d121.herkimer.station.sergeants <d121sta@troopers.ny.gov>; Gregory, Charles T (DEC) <Charles.Gregory@dec.ny.gov>; Kisluk, George <george.kisluk@aecom.com>; Murphy, Rob <rob.murphy@aecom.com>; McDaid, Daniel <daniel.mcdaid@aecom.com>

Subject: RE: ATV operation on Bromley Rd/Military Rd/Rose Valley Rd T/Newport

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

Hi Jennifer,

Thank you for returning my call. I have attached the pdf of the Rose Valley Site Plan that you requested.

Again, our main concern is the recent ATV riding on the actual landfill. The tire tracks result in erosion which will ultimately damage the engineered cap.

Thank you for the increased patrol in this area.

Please notify Charlie and myself if you observe the front gate open or any other suspicious activity. We can then make arrangements to secure the site.

We will be completing some access road and gas vent repairs (which had been shot), ground water sampling and lawn mowing this summer. When we have the exact dates for this work we will copy you.

We are going to attempt to post a note on the riders Facebook page that we discussed. Any other ideas you have will be appreciated.

I have also copied Charlie Gregory, the NYSDEC project manager and some coworkers on this email.

Thanks again for help.

Thanks!

Chuck

Charles Dusel, Civil Engineer

Sr. Project Manager, Environment, Upstate New York

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M +1-716-353-3016

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From: GREENWOOD, JENNIFER (TROOPERS) <JENNIFER.GREENWOOD@troopers.ny.gov>
Sent: Thursday, July 1, 2021 8:52 PM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Cc: troopers.sm.d121.herkimer.station.sergeants <d121sta@troopers.ny.gov>
Subject: [EXTERNAL] ATV operation on Bromley Rd/Military Rd/Rose Valley Rd T/Newport

Hi Chuck,

As discussed via telephone, please provide a map of the area so that we may know the concrete borders of the property for enforcement purposes. If you have any questions or concerns at any time, feel free to email or call. I have copied my Sgt's on this email so that the map can be dispersed in my absence.

Respectfully,

Tpr Jennifer Greenwood
State Police Herkimer
126 Gros Blvd
Herkimer NY 13350
T: 315-866-7112
F: 315-866-9868

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McDaid, Dan

From: Dusel, Chuck
Sent: Tuesday, November 02, 2021 12:17 PM
To: McDaid, Dan
Subject: FW: [EXTERNAL] Rose Valley Landfill

-----Original Message-----

From:
Sent: Friday, July 23, 2021 2:52 PM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Cc: Charles T Gregory <Charles.Gregory@dec.ny.gov>
Subject: [EXTERNAL] Rose Valley Landfill

Hi Chuck and Charles -

Just wanted to let you know that I drove by today (Friday) and the gate is wide open again. Apparently when they fixed it (Tuesday or Wednesday) this week they didn't get around to welding it.....

Have a good weekend .

ATTACHMENT B



PERIODIC INSPECTION REPORT

DATE: Friday, June 26, 2020

**ROSE VALLEY LANDFILL
NYSDEC SITE No. 6-22-017**

TEMPERATURE:

SKIES:

Partly Cloudy

WIND:

PRECIPITATION:

None

Brady Fence Co., Inc. (Brady Fence) provided email communications to document the following:

1. The clearing of brush around the south side of the main double-swing gate;
2. Straightening of the gate posts; and
3. Installation of a cut-proof latch and cut-proof padlock on the gate.

On May 27, 2020, NYSDEC reported to URS that a local resident informed them that the gate on Rose Valley Road was opened and there were ATV riders on the property. The gate was damaged but still intact (Photos 1 and 2).

On June 26, 2020 Brady Fence installed a cut-proof latch (Photos 3 through 6) and a cut-proof padlock. Before installing the new latch and padlock, Brady Fence straightened the gate posts and readjusted the gate to facilitate installation of the new latch and padlock. Brady Fence reported that they would mail gate keys to NYSDEC and URS. During the site visit, , Brady Fence also cleared brush around the south side of the main gate (Photo 7).

URS was not on site for this activity. Photos were provided by Brady Fence.

PHOTO LOG – SEE ATTACHED 7 IMAGES.

PREPARED BY: Chuck Dusel

TITLE: PM/Engineer



Photo 1 – Looking southeast - Northern side of main gate prior to repairs .



Photo 2 – Looking southeast – Southern side of gate prior to brush clearing.



Photos 3 and 4 – New cut-proof latch prior to installation.



Photos 5 and 6 – Looking east at the main gate after repairs and installation of the new latch and padlock.



Photo 7 – Looking southeast - Main gate after repairs, with brush cleared from the southern side.

**ROSE VALLEY LANDFILL
NYSDEC SITE No. 6-22-017**

TEMPERATURE: 55-60°F
WIND: Light**SKIES:** Cloudy
PRECIPITATION: Light Rain

On May 4, 2021, NYSDEC (Charles Gregory) and AECOM (Chuck Dusel and Rob Murphy) met onsite for a site-walk. The purpose was to introduce Rob Murphy to Charlie and the site and also to discuss necessary road repairs. Subcontractor Marcy Excavating (Eric Hale) was onsite during the walk-over. AECOM, NYSDEC, Marcy Excavating completed an entire site tour that included all monitoring wells, north and south basins, surface water sample locations, a tour of the back of the site from Military road. The following observations were made during the site walk:

- Upon arrival the gate from Rose Valley Road was observed to be wide open, the bolts attaching the latch to the framing had been discarded and the latch was on the ground nearby.
- A couch and other garbage were observed just inside the gate.
- Trespassers have created several small burn piles and a lean-to structure on the property.
- The road just inside the gate has eroded down to the geotextile fabric and should be regraded/recrowned to prevent further erosion. Ditching may be necessary to direct and channel water along side the road instead of along it.
- Within the ditch adjacent to Military Road on the back side of the landfill approximately 30 plus tires, TVs, and other trash were observed.
- Some ATV tracks were noted within the fenced in, capped area of the landfill.
- Two gas vents have been apparently shot and will need to be repaired to prevent damage to the cap/water intrusion into the landfill.

Charlie will discuss with his management regarding how much time, money, effort the state is willing to spend to fix the road. The budget placeholder for road repair is only \$20k and Eric Hale indicated that would not be sufficient for the optimal road repair.

Prior to departing the site AECOM procured replacement bolts from Brady Fence, replaced the latch and added a second lock to it.

PHOTO LOG – SEE ATTACHED 19 IMAGES.**PREPARED BY:** Chuck Dusel and Rob Murphy**TITLE:** PM/Geologist

PHOTO LOG

Site Photograph Log
Rose Valley Landfill
NYSDEC Site No. 6-22-017
May 4, 2021

Photo Number:

1

Photo Title:

20210504_105833.jpg

Direction:

North

Explanation:

The latch from the entry gate has been removed, gate open upon arrival.



Photo Number:

2

Photo Title:

20210504_110024.jpg

Direction:

North

Explanation:

Couch and debris left onsite.



Photo Number:

3

Photo Title:

20210504_110218.jpg

Direction:

East

Explanation:

Drums along the southern fence line just inside the gate, length of time they have been here unknown, there is liquid in the drum laying on its side.



Photo Number:

4

Photo Title:

20210504_110307.jpg

Direction:

East

Explanation:

More drums and debris a little further east of the first couple observed, however these are all empty.



Site Photograph Log
Rose Valley Landfill
NYSDEC Site No. 6-22-017
May 4, 2021

Photo Number:

5

Photo Title:

20210504_110646.jpg

Direction:

Southwest

Explanation:

Water flows down the road towards the entry gate. The road on the right hand side is eroded down to the geotextile fabric in several areas.



Photo Number:

6

Photo Title:

20210504_110702.jpg

Direction:

Northeast

Explanation:

Opposite direction from previous photo, geotextile visible on left hand side.



Photo Number:

7

Photo Title:

20210504_110809.jpg

Direction:

East

Explanation:

ATVs have begun tracking over the grassy knoll instead of following the road.



Photo Number:

8

Photo Title:

20210504_111233.jpg

Direction:

East Southeast

Explanation:

Ponding in the access road.



Site Photograph Log
Rose Valley Landfill
NYSDEC Site No. 6-22-017
May 4, 2021

Photo Number:

9

Photo Title:

20210504_111329.jpg

Direction:

South

Explanation:

Debris and burn pile.



Photo Number:

10

Photo Title:

20210504_111422.jpg

Direction:

East

Explanation:

Lean-to structure at top of bluff.



Photo Number:

11

Photo Title:

20210504_111505.jpg

Direction:

East

Explanation:

ATV activity on sand bluffs.



Photo Number:

12

Photo Title:

20210504_112552.jpg

Direction:

South

Explanation:

Tracks observed on the southwest corner of the landfill cap.



Site Photograph Log
Rose Valley Landfill
NYSDEC Site No. 6-22-017
May 4, 2021

Photo Number:

13

Photo Title:

20210504_113047.jpg

Direction:

Northeast

Explanation:

Bullet holes observed in one of the landfill vents.



Photo Number:

14

Photo Title:

20210504_113331.jpg

Direction:

North

Explanation:

Another vent with bullet damage.



Photo Number:

15

Photo Title:

20210504_122216.jpg

Direction:

South

Explanation:

More ATV tracks along the southern edge of the landfill.



Photo Number:

16

Photo Title:

20210504_124715.jpg

Direction:

South

Explanation:

Widened out ATV entry path from northern entry point at Military Road.



Site Photograph Log
Rose Valley Landfill
NYSDEC Site No. 6-22-017
May 4, 2021

Photo Number:

17

Photo Title:

20210504_124846.jpg

Direction:

East

Explanation:

Burn pile and trash at
Military Road entry point.



Photo Number:

18

Photo Title:

20210504_125247.jpg

Direction:

South

Explanation:

Tires and trash thrown in the
ditch alongside Military Road
North of the site.



Photo Number:

19

Photo Title:

20210504_153535.jpg

Direction:

Northeast

Explanation:

Gate latch repaired and an
extra lock added.



**ROSE VALLEY LANDFILL
NYSDEC SITE No. 6-22-017**

TEMPERATURE: 20-30 °F
WIND: Calm

SKIES: Clear
PRECIPITATION: None

On February 24, 2022, AECOM (Dan McDaid) arrived at the Rose Valley Landfill Site to observe site conditions and to collect residential groundwater well samples. One residential groundwater well sample was collected at _____, including a field duplicate, matrix spike, and matrix spike duplicate. The sample was delivered under chain of custody to the Pace Analytical Services service center in East Syracuse, NY the same day. The sample will be analyzed for 1,4-dioxane and PFAS. The following observations were made during the site visit:

- The front gate, crash gate and landfill gate were intact, although inaccessible due to snow.
- The site roads were covered in snow and ice so road conditions could not be assessed. There was evidence of snowmobile traffic, and some debris (beer cans, etc.) but no signs of vandalism or other disturbance.

PHOTO LOG – SEE ATTACHED IMAGES.

PREPARED BY: Dan McDaid

TITLE: Civil Engineer

PHOTO LOG

Site Photograph Log
Rose Valley Landfill
NYSDEC Site No. 6-22-017
February 24, 2022

Photo Number:

1

Direction:

Northeast

Explanation:

Landfill access road



Photo Number:

2

Direction:

North

Explanation:

Landfill access road, with the landfill in the background.



**ROSE VALLEY LANDFILL
NYSDEC SITE No. 6-22-017**

TEMPERATURE: 70s
WIND: Calm

SKIES: Overcast
PRECIPITATION: Light Rain

On August 31, 2022, at 1:30 PM, AECOM (Chuck Dusel) arrived at the Rose Valley Landfill Site to observe site conditions and oversee maintenance activities being carried out by AECOM's Subcontractor, Brady Fence. Upon arrival, Brady Fence was mowing the landfill using a skid steer with a brush hog attachment. It was observed that several concrete barriers had been placed around the Site in order to limit ATV access to the landfill. AECOM instructed Brady Fence to relocate one of the barriers, which was restricting Site access from Military Road.

AECOM (Chuck Dusel) returned to the Site the morning of Thursday, September 1 to conduct a landfill inspection, and to clear some woody vegetation from the drainage ditches. Brady Fence completed mowing the landfill in the afternoon. They then relocated the concrete barrier, as requested by AECOM, and regraded the site access road where ATV traffic had created a banked area near the Site front entrance gate.

PHOTO LOG – SEE ATTACHED IMAGES.

PREPARED BY: Dan McDaid

TITLE: Project Engineer

ROSE VALLEY LANDFILL SITE - POST CLOSURE

NYSDEC SITE NO. 6-22-017

INSPECTION LOG SHEET

Date: 8/31/22

Inspector: Chuck Dusek

Weather: Partly cloudy - lite rain

Signature: C. Dusek

Temperature: ~78°

Company: AECOM

Type: Winter Spring Summer Fall
(Circle One)

Item Inspected	Maintenance Needed (Y/N)	Comments	Inspector's Initials
Drainage Channel	Y	AECOM removed large veg. and small trees	CD
Groundwater Monitoring Wells	Y	MW-02 should be decommissioned	
Perimeter Access Road	Y	minor regrade @ entrance gate	
Vegetative Cover	Y	Mow with brush hog	
Repaired Vegetation	N	No repairs or additional maintenance required	
Final Cover Layers (Cap Settlement, etc.)	N		
Gas Vents	Y	mower hit gas vent	
Fence and Gates	N		
Other Items: (Specify)	N	installed concrete blocks @ site access points	
Perimeter Drainage Channel	N	North channel is head cutting; Monitor - no repair needed immediately	CD

TABLE 2
LANDFILL CAP AND SITE STORMWATER MANAGEMENT SYSTEM
MINIMUM CHECKLIST FOR ROUTINE INSPECTIONS

Component	Item	Number/Location/ Area Checked	Condition
Cap Grading	Obvious subsidences, depressions, or cracks <i>None</i> Evidence of ponded water <i>No</i> Stressed vegetation <i>None</i> Signs of erosion occurring at a localized change in grade <i>No</i> Evidence of Breaching of toe <i>No</i> Animal burrows <i>No</i> Other:	<i>entire cap was inspected</i>	<i>Good Condition.</i>
Cap Vegetation and Repaired Vegetation	Areas of sparse, dead, or missing vegetation <i>None</i> Small rill erosion <i>No</i> Animal burrows <i>No</i> Other:	<i>entire cap</i>	<i>CAP was just mowed -</i>
Drainage Channel	Missing or displaced stones <i>None</i> Woody vegetation growing in the stones or grass cover <i>Yes</i>	<i>All Channels.</i>	<i>removed woody veg. in channels.</i>
GW Monitoring Wells	Condition of lock and cover Signs of damage to casing or collar Condition of weep hole from casing Evidence of tampering Other:	<i>None</i>	<i>Wells were not inspected on this site visit.</i>

Fences, Gates and Perimeter Access Road	<p>Cutting or bending of fence fabric <i>none</i></p> <p>Missing locks, hinges, etc. from gates <i>no</i></p> <p>Motorbike or snowmobile tracks <i>yes</i></p> <p>Shotgun shell casings <i>no</i></p> <p>Beer cans or other trash <i>yes</i></p> <p>Other signs of access or vandalism <i>yes</i></p> <p>Condition of access road surface</p> <p>Other:</p>	check all gates - good condition.	eventually site access road which leads to landfill will need regriading in the vicinity of landfill gate
Gas Vent	<p>Integrity of pipes and joints <i>good</i></p> <p>Plumbness and differential settlement <i>ok/none</i></p> <p>Obstruction of vents by bird, insect or animal nests <i>no</i></p> <p>Corrosion or deterioration of pipes or supports <i>no</i></p> <p>Localized browning of vegetation <i>none</i></p> <p>Other:</p>	all vents	No repairs are currently necessary.

PHOTO LOG



Photo 1 – Looking Southwest towards landfill gate - Landfill access road, after mowing.



Photo 2 – Looking North - Brady fence mowing the landfill cap



Photo 3 – Skid steer with brush hog attachment used by Brady Fence.



Photo 4 – Before and after of mowing on the landfill cap



Photo 5 – Looking East - Site entrance access road and gate. Access road is in good condition.



Photo 6 – Concrete block installed to limit ATV access to the Site from east side of Bromley Road.



Photo 7 – Logs and brush piled by local resident to limit ATV access to the Site. This photo shows a path made by ATV riders to enter the site from Bromley Road.



Photo 8 – Logs and brush piled by local resident to limit ATV access to the site. This photo shows a path made by ATV riders to enter the site from Bromley Road. Note “posted” sign installed by local resident.



Photo 9 – Larger concrete block placed to limit ATV access to the Site from Bromley Road.



Photo 10 – Looking South - Concrete blocks placed on the landfill access road to limit ATV access. The large concrete block shown here was relocated just inside the Site entrance gate (see Photo 20).



Photo 11 – Looking South - Concrete blocks placed on the landfill access road to limit ATV access just south of Military Road.



Photo 12 – Looking East - Landfill Cap. Parked on the landfill is a flatbed trailer used to mobilize the skid steer and brush hog.



Photo 13 – Looking Southwest - Shelter constructed by trespassers. Note that no litter was observed and a trash can was placed.



Photo 14 – Looking South - Area just west of the landfill where litter is often observed.



Photo 15 – Diversion channel liner. Head cutting was initially observed here during the August 9, 2012 inspection. No significant change to the extent of the head cutting has been observed since.



Photo 16 – Looking West - Diversion channel on the north side of the landfill.



Photo 17 – Looking South - Landfill cap after mowing was completed. Road repairs were made in 2021, and road remains in good condition after the repairs.



Photo 18 – Looking Northeast – ATV traffic has damaged the main Site access road just inside the gate. This photo was taken prior to regrading by Brady Fence.



Photo 19 – Looking Northwest – Banking in site access road after regrading.



Photo 20 – Looking Northwest – Concrete block (see photo 10) relocated from Military Road to Site access road.



Photo 21 – Looking Northeast – Regraded access road (refer to Photo 18).

**ROSE VALLEY LANDFILL
NYSDEC SITE No. 6-22-017**

TEMPERATURE: 75 °F
WIND: Calm

SKIES: Party Cloudy
PRECIPITATION: None

On June 21, 2023, AECOM (Chuck Dusel) arrived at the Rose Valley Landfill Site to observe site conditions and inspect mowing and the landfill cap. The mowing had been completed upon arrival.

- The front gate, crash gate and landfill gate were intact.
- The site roads were found to be in good condition with minor erosion due to ATV traffic near the front gate.
- There is still debris (televisions, tires, beer cans, a couch, etc.) but no signs of vandalism or other disturbance.
- Head cutting in the swale on the northwest portion of the Site has not progressed since the previous site visit.

PHOTO LOG – SEE ATTACHED IMAGES.

PREPARED BY: Chuck Dusel

TITLE: Civil Engineer

PHOTO LOG



Photo 1 – Looking Northeast at the crash gate at the Site entrance. The gate is in good condition.



Photo 2 – Looking east at a concrete block that was placed by AECOM on a trail to prevent trespassing. The circled area is a new trail that was created by trespassers to avoid the block.



Photo 3 – Looking west towards the landfill at dumped trash (old TVs, etc.) off Military Road.



Photo 4 – Looking west towards the landfill at a couch, tire and other trash dumped near Military Road.



Photo 5 – Looking west at tires dumped in the ravine near Military Road.



Photo 6 – Looking west at tires and 5-gallon buckets dumped in the ravine near Military Road.



Photo 7 – Looking west at tires dumped in the ravine near Military Road.



Photo 8 – Looking northwest from Military road at the rear Site entrance near the ATV riding area.



Photo 9 – Looking west at brush and trash piled near the rear Site entrance off Military Road. Some of this was burned.



Photo 10 – Looking West at the rear of the Site, showing the road used to access the ATV riding area.



Photo 11 – Looking east towards the landfill from the landfill access road. Erosion and washouts are occurring along the shoulder (circled).



Photo 12 – The same location as shown in Photo 11, looking north.



Photo 13 – Looking east towards the landfill from the access road.



Photo 14 – Looking West from a recently- mowed portion of the landfill cap.



Photo 15 – A location that AECOM uses to evaluate sloughing in the outer perimeter swale on the northern edge of the landfill. Some filter fabric is exposed (circled). No additional sloughing or erosion has been observed over the past several site visits.



Photo 16 – Looking east – View from the landfill cap, showing the cap drainage swale. Some of the cap was recently mowed. The area of the cap in the photo background is not typically between the swale and the woods mowed.



Photo 17 – Looking west – Recently-mowed portion of the landfill cap. This portion of the cap is not typically mowed. This is the same area shown in Photo 16.



Photo 18 – The same area shown in the two previous photos where the mowing tractor got stuck.



Photo 19 – Looking north at the landfill cap drainage swale after woody vegetation had recently been cleared out of the swale by AECOM.



Photo 20 – Looking south at the mowed landfill cap with the drainage swale shown on the right side of the photo.



Photo 21 – Looking east from the landfill cap. In this photo, the cap was recently mowed.



Photo 22 – Looking east from the landfill cap. In this photo, the cap was recently mowed.



Photo 23 – Some woody vegetation that was trimmed in the landfill cap drainage swale.



Photo 24 – Looking south at a portion of the landfill cap that was recently mowed.



Photo 25 – Looking south at the landfill cap drainage swale. Woody vegetation in the swale was recently cleared by AECOM.



Photo 26 – Looking south – Methane vents on a recently- mowed portion of the landfill cap.



Photo 27 - Looking north – Recently-mowed portion of the landfill cap. Shown in the foreground is the landfill road in good condition of the landfill road.



Photo 28 – Looking north – Recently-mowed portion of the landfill cap. A portion of the ATV area is shown in the background.



Photo 29 – Looking west at the landfill access gate in good condition.



Photo 30 – Looking west – a lean-to constructed by trespassers along the landfill access road.



Photo 31 – Looking east across the site, with the landfill cap shown.



Photo 33 – Remnants of a campfire that was used by trespassers.