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Town of Dewitt Landfill Annual Engineer's Report

East Syracuse, New York



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**2024 Annual Post-Closure Monitoring Report
Town of Dewitt Landfill
Fisher Road
East Syracuse, NY
Onondaga County, New York**

**Prepared for
Town of Dewitt**

**By
Miller Engineers
Manlius, NY
April 2025**

2024 Annual Post-Closure Monitoring Report

Town of Dewitt Landfill

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1. INTRODUCTION

The Town of Dewitt retained Miller Engineers to observe, assist, and document post-closure monitoring activities at the Town of Dewitt Landfill in East Syracuse, New York. This report summarizes post-closure monitoring activities conducted in 2024 and provides the laboratory results of surface water, groundwater and landfill gas samples collected during the year.

2. BACKGROUND

The former Town of Dewitt Landfill is located between Butternut Drive and Burdick Street in East Syracuse, New York and is approximately 57 acres in size. Access to the site is from Fisher Road and is limited by a chain link fence and a locked gate. The site is surrounded by light industrial properties to the north and west and residential properties to the east. The Erie Canal, to the south, is a recreational area with multi-use trail, boating access and a picnic area.

The site is an inactive municipal landfill that previously accepted residential and industrial waste. The landfill was closed by the Town of Dewitt under the New York State Department of Environmental Conservation (NYSDEC) state Superfund Program (site code 734012). Investigation and remediation efforts included a Remedial Investigation/Feasibility Study in 1992, an Interim Remedial Measure (IRM) completed in 1994 (Part 360 landfill cap) and a Record of Decision (ROD) in March 1994. This site was included on the NYSDEC's list of Legacy sites based on the potential for soil vapor intrusion. Based upon additional evaluation by the New York State Department of Health (NYSDOH), the site was removed from the list in April 2009. Currently the site is monitored in accordance with the Monitoring and Maintenance Operations Manual (MMOM) prepared in December 1994 by O'Brien and Gere Engineers, Inc. for the Town of Dewitt.

In 2018, NYSDEC requested sampling for emerging contaminants (PFOAs and 1,4 dioxane) at the landfill. Samples were collected in December 2018, and a letter report submitted to NYSDEC in April 2019. Detections of some emerging contaminants were observed. In September 2022, after reviewing the results of the 2018 PFOA sampling event, NYSDEC requested that the Town add 1,4 Dioxane to the analyte list for annual groundwater sampling for 2023 and beyond. Annual sampling for 1,4 dioxane was included in the ongoing groundwater sampling program starting with the 3rd quarter sampling event of 2023.

In 2020 a solar panel array was constructed on the landfill and connected to the National Grid power grid near the Fisher Road landfill gate. The land for the solar panel array is leased from the Town of Dewitt and the operation and maintenance of the solar array and associated equipment are performed by a third party.

3. LANDFILL RECONNAISSANCE

Site visits were performed during March, June, September, and November 2024 to assess general site conditions at the landfill and to collect environmental samples. Landfill reconnaissance included observations and assessments of the final cover and vegetation, landfill gas venting system, storm water management system and access road, perimeter fence conditions, and the solar panel array. A summary of the observations is provided below. Appendix A presents the Inspection and Maintenance checklist completed March 14, 2024. Appendix B provides a photographic log of typical conditions observed at the landfill during 2024.

3.1 Final Cover and Vegetation

The site visits revealed uniform, healthy growth of grass across the landfill (See Appendix B, Photo 5). No woody bushes were observed near the gas vents, in down-chutes, or beneath solar panels (see Appendix B, Photos 3, 5, 6 and 8).

Based on these observations, the cover layer and cap material are in good repair and there are no deep-rooted plants or ruts compromising the low-permeability cap layer or allowing precipitation to infiltrate the waste layer.

3.2 Landfill Gas System

There are a total of 22 gas vents that comprise the passive gas venting system at the landfill (see Figure 1). All gas vents were observed to be in good repair and operable during the March 2024 visit. Vent screens were free of debris and blockages and appeared to be operating as designed.

Previous monitoring reports indicate that the most prolific gas producing vents are located along the east-west trending ridge at the top of the landfill. Qualitative observations, gas flow measurements and gas sampling were conducted at these vents on November 11, 2024. Results of gas vent observations and sampling are discussed in Section 4.3.

3.3 Storm-water Management and Drainage

A series of radial drainage ditches lined with riprap overlying perforated drainpipe are spaced around the landfill to facilitate storm water run-off and to minimize ponding and infiltration into the waste mass. During each of the 2024 site visits the ditches were observed to be unobstructed by woody growth under the solar array or adjacent to above ground electrical conduit. The drainage features are in good repair with no signs of erosion, or fine sediment accumulation. Some temporary ponding was observed on the top of the landfill slope near the solar array (see Appendix B, Photo 4). There were no small trees or tall woody plants observed in the down chutes

and the ditches appeared to drain efficiently. At this time, the drainage system appears to be functioning as designed.

3.4 Access Road and Fencing

A crushed stone access road surrounds the landfill and is located on the lower side slope. Vehicle traffic accesses the road through a locked chain link fence gate located on the north side of the landfill at the southern end of Fisher Road (see Figure 1 and Appendix B, Photo 1). In March 2024, the access road was observed to be in good repair with no washouts and no impassable dips or ruts.

The landfill is bounded on the south by an eight-foot-tall chain link fence that separates the Erie Canal towpath from the landfill (see Appendix B, Photo 2). The fence was observed to be in good repair with no openings or breaks in the fence and no damaged posts or rails. A short section of fence is also located at the access gate at Fisher Road and spans the access road at the northern landfill boundary between a stand of mature trees and a wetland. The fence and gate adequately prevent automobile and truck traffic from unauthorized entry to the landfill. On occasion, recreational ATV tracks have been observed, at various times of the year, circumventing the fence and accessing the landfill via the wetland.

In general, the access road and fencing appear to be functioning as designed.

3.5 Monitoring Wells

There are a total of 18 monitoring wells at the site. The wells are located outside the perimeter of the landfill. Well MW-1S, MW-7S, and MW-11D are upgradient and located south of the Erie Canal. Well couplets MW-4S,D, MW-5S,D and well MW-6S (see Appendix B, Photo 7) are downgradient and located on the north side of the landfill. The remaining monitoring wells are side-gradient. The wells were all observed to be in good repair and suitable for representative groundwater sampling. Table 1 lists the specifications of the monitoring wells.

4. POST-CLOSURE SAMPLING

The Monitoring and Maintenance Operations Manual (MMOM) calls for surface water, groundwater, and landfill gas monitoring. The sections below describe locations, frequency, methods and results for surface water, groundwater, and gas vent sampling. Figure 1 shows the sampling locations. Sampling results were tabulated and compared to standards, criteria, and guidance (SCG) appropriate for each sampling media and described below. Groundwater, surface water and gas vent samples were all analyzed by Alpha Analytical, Inc (New York State ELAP certification no. 11148) for Part 360 Baseline parameters plus 1,4 Dioxane

4.1 Surface Water Sampling

The MMOM requires surface water samples to be collected once every calendar quarter at three designated locations. Surface sample locations SW-1, SW-2 and SW-3 are located at the toe of the landfill slope and on the edge of the surrounding wetland. Surface water samples were collected on November 11, 2024. All surface water sample locations were dry during the first, second, and third quarter sampling visits.

Surface water samples were collected by digging a shallow hole in the wetland and allowing the hole to fill with water. Sample containers were filled by submerging them in the standing water. The samples were preserved on ice and shipped directly to the laboratory by the sampling crew. The samples were analyzed for Priority Pollutant Metals, volatile organic compounds (VOCs) using USEPA Method 624 and total dissolved solids (TDS).

Surface water sampling results were compared to SCGs defined in NYSDEC “*Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998*” and subsequent addendums.

The results of the surface water sampling event indicate that there were a total of ten SCG exceedances. The exceedances included seven metals at SW-2, two metals at SW-1 and one metal at SW-3. There were no exceedances of SCGs for VOCs at any of the surface water sample locations..

There were no SCG exceedances for any other analytes.

The full list of analytes and results for each surface water location and each sampling event are presented in Tables 2a, 2b and 2c. The field observation forms are presented in Appendix C, and the full laboratory reports including quantified results and laboratory quality assurance/quality control data are presented Appendix D.

4.2 Groundwater Sampling

The MMOM requires groundwater samples to be collected once every calendar year at each of the 18 monitoring wells (see Figure 1). Groundwater samples were collected on November 7, 2024. The sampling date rotates by quarter in a four-year sequence. Table A-1 lists the sampling schedule.

Groundwater samples were collected using dedicated bailers to purge each of the wells of three volumes of water prior to sample collection. After purging, field parameters including temperature, pH, turbidity, conductance, oxidation-reduction potential, and dissolved oxygen were measured and recorded on field data sheets. The field data sheets are presented in Appendix C. The sample containers were filled using bailers and then preserved with ice and shipped directly

to the laboratory by the sampling crew. The samples were analyzed for Priority Pollutant Metals, VOCs using USEPA Method 624 and total dissolved solids (TDS).

Groundwater sampling results were compared to SCGs defined in NYSDEC “*TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998*” and subsequent addendums.

The results of the groundwater sampling are presented in Tables 3a and 3b. The results indicate metals exceedances in four of the wells. The SCG for arsenic (25ug/l) was exceeded at MW-3S and MW-9S, with concentrations ranging from 41 to 84 ug/l. The SCG for chromium (50 ug/l) was exceeded at MW-9D and MW-11D at concentrations of 570.4 ug/l and 2,417 ug/l, respectively. The SCG for nickel (100 ug/l) was exceeded at MW-9D (901 ug/l) and MW-11D (792 ug/l). The SCG for lead (25ug/l) was exceeded at MW-3S at 46.74 ug/l and MW-11D at 70.7 ug/l. The SCG for thallium (0.5 ug/l) was exceeded at MW-3S, MW-9S and MW-11D with concentrations ranging from 0.55 ug/l to 1.62 ug/l. The SCG for selenium (10ug/l) was exceeded at MW-11D at a concentration of 19.7 ug/l. No other metals exceeded SCGs at any other wells.

The VOC cis-1,2-dichloroethene exceeded its SCG (5 ug/l) at MW-4S, and MW-4D with concentrations ranging from 76 ug/l to 150 ug/l. Vinyl chloride exceeded the SCG of 2 ug/l at MW-4S, MW-4D, MW-8S and MW-9S with concentrations ranging from 3.9 to 58 ug/l. Trichloroethene exceeded its SCG of 5 ug/l at MW-4D at a concentration of 19 ug/l. Acetone also exceeded its SCG of 50 ug/l in MW-9D at a concentration of 80 ug/l. No other VOCs exceeded SCGs at any other wells.

The analyte 1,4 dioxane exceeded its SCG (0.35 ug/l) at six shallow wells and three deep wells. The exceedances ranged from 2.2 ug/l to 64 ug/l.

The field observation forms are presented in Appendix C, and the full laboratory reports including quantified results and laboratory quality assurance/quality control data are presented Appendix D.

4.3 Gas Vent Sampling

The MMOM requires that specific gas vents be monitored once per year with the three vents exhibiting the most prolific gas flows being sampled for laboratory analysis. Gas vents V-3, V-9, V-10, V-11, V-12, and V-18 (see Figure 1) were screened in the field on November 11, 2024, using a GEM 5000+ air analyzer and Veloci-calc 9565-P for methane, carbon dioxide, oxygen, hydrogen sulfide, carbon monoxide, and exit velocity. The gas vent field measurements were recorded on field logs and are presented in Appendix C. The field results indicated that gas vents V-9, V-10, and V-11 exhibited the highest gas velocities and gas samples were collected from those locations for laboratory analysis of VOCs using EPA Method TO-15.

Soil vent gas sampling results we compared to SCGs established in “NY-SSC-A: New York DOH Matrix A, B and C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.”

The results indicate the SCG for vinyl chloride exceeded SCGs at V-9, V-10, and V-11, with concentrations ranging from 65 ug/m³ to 228 ug/m³. The VOC cis 1,2-dichloroethene exceeded SCGs at V-10, with a concentration of 59.1 ug/m³. 1,1-dichloroethene exceeded SCGs at V-10 with a concentration of 39 ug/m³. No other analytes exceeded SCGs at the sampled gas vents.

The laboratory results of the gas vent sampling are presented in Table 4. The field observation forms are presented in Appendix C, and the full laboratory reports including quantified results and laboratory quality assurance/quality control data are presented Appendix D.

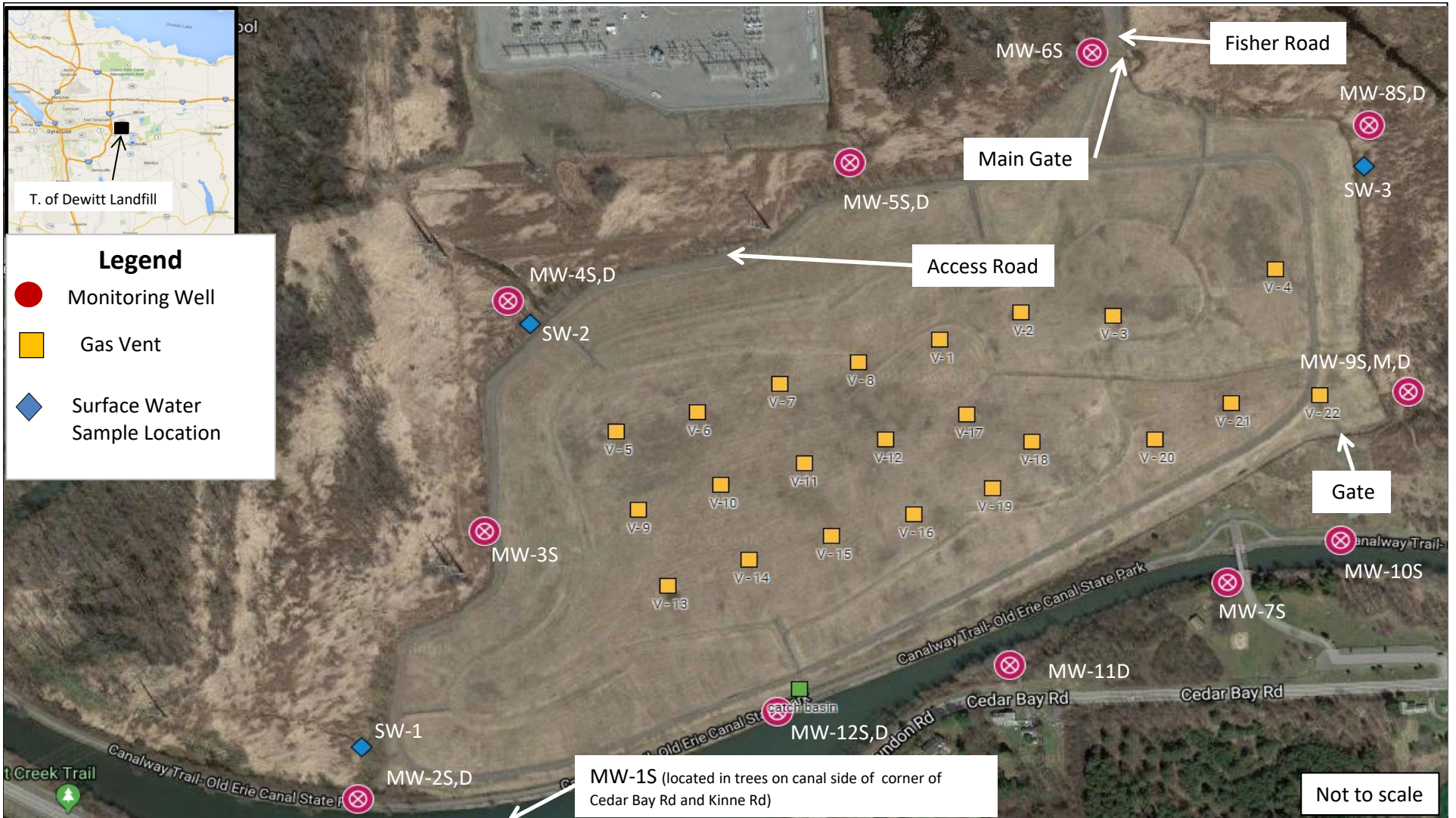
5. CONCLUSION

Based on site visits and the analyses of surface water, groundwater and gas vent samples, the general condition of the landfill is good, and all systems appear to be operating as designed. A few exceedances of environmental sampling SCGs have been noted, however these are comparable to previous years’ results and due to relatively low concentrations, isolated occurrences, and lack of significant exposure risks, do not pose a significant threat to human health or the environment.

6. RECOMMENDATIONS

- Continue road maintenance and grass mowing as specified in the Monitoring and Maintenance Operations Manual (MMOM).
- Continue surface water, groundwater (with the addition of 1,4 dioxane) and gas vent monitoring as specified in the MMOM.
- Pay particular attention to possible plant growth and animal behavior changes such as burrowing or congregating beneath solar panels where mowing may be less effective than prior to solar panel installation.

FIGURES



Town of Dewitt Landfill
Fisher Road
East Syracuse, New York

Site Map

FIGURE
1

Revised 3/3/2021

TABLES

Table 1.
Monitoring Well Specifications
Town Of Dewitt Landfill

ID	Well Diameter (inches)	Depth to Bottom (ft below top of casing)	Depth to Bottom by TA (feet below top of casing)	Typical Depth to Water from Top of Casing (feet)	Depth to Water 11/7/2024 (feet below top of casing)
MW-1S	2	21.0	21.08	13	13.47
MW-2S	2	35.5	35.59	12	12.76
MW-2D	2	52.0	51.98	12	11.35
MW-3S	2	35.6	17.45	3	2.35
MW-4S	2	20.0	19.98	2	2.04
MW-4D	2	35.3	35.27	1	1.51
MW-5S	2	26.6	26.59	2	6.98
MW-5D	2	45.0	45.19	2	2.66
MW-6S	2	21.7	27.74	4	4.12
MW-7S	2	22.4	22.38	14	14.72
MW-8S*	2	29.2	29.94	0*	0.30
MW-8D*	2	61.3	61.32	1	0.75
MW-9S	2	12.4	12.39	1	2.10
MW-9M	2	38.0	38.03	2	nm
MW-9D**	2	55.0	55.10	51**	40.17
MW-10S	2	20.6	11.80	11	11.37
MW-11D	2	39.0	39.45	28	31.51
MW-12S	2	23.0	23.01	9	10.05

* this well flows at times

** this well dry at times

Table 2a.
Surface Water Sampling Results
SW-1
Town of Dewitt Landfill
2023

LOCATION			SW-1		SW-1	
SAMPLING DATE			5/15/2023		12/7/2023	
	SCG	Units	Results	Qual	Results	Qual
General Chemistry						
Solids, Total Dissolved		ug/l	1200000		530000	
Total Metals						
Antimony, Total	3	ug/l	50	U	4	U
Arsenic, Total	25	ug/l	2.2	J	0.54	
Beryllium, Total	3	ug/l	5	U	0.5	U
Cadmium, Total	5	ug/l	5	U	0.2	U
Chromium, Total	50	ug/l	3.7	J	0.28	J
Copper, Total	200	ug/l	13.2		1.18	
Lead, Total	25	ug/l	5.2	J	1	U
Mercury, Total	0.7	ug/l	0.2	U	0.2	U
Nickel, Total	100	ug/l	3.4	J	1.66	J
Selenium, Total	10	ug/l	10	U	5	U
Silver, Total	50	ug/l	7	U	0.4	U
Thallium, Total	0.5	ug/l	11.9	J	1	U
Zinc, Total	2000	ug/l	176		10	U
Volatile Organics by GC/MS						
1,1,1-Trichloroethane	5	ug/l	2	U	2	U
1,1,2,2-Tetrachloroethane	5	ug/l	1	U	1	U
1,1,2-Trichloroethane	1	ug/l	1.5	U	1.5	U
1,1-Dichloroethane	5	ug/l	1.5	U	1.5	U
1,1-Dichloroethene	5	ug/l	1	U	1	U
1,2-Dichlorobenzene	3	ug/l	5	U	5	U
1,2-Dichloroethane	0.6	ug/l	1.5	U	1.5	U
1,2-Dichloropropane	1	ug/l	3.5	U	3.5	U
1,3-Dichlorobenzene	3	ug/l	5	U	5	U
1,4-Dichlorobenzene	3	ug/l	0.83	J	5	U
2-Butanone	50	ug/l	10	U	10	U
2-Chloroethylvinyl ether		ug/l	10	U	10	U
2-Hexanone	50	ug/l	10	U	10	U
4-Methyl-2-pentanone		ug/l	10	U	10	U
Acetone	50	ug/l	10	U	10	U
Acrolein	5	ug/l	8	U	8	U
Acrylonitrile	5	ug/l	10	U	10	U
Benzene	1	ug/l	1	U	1	U
Bromodichloromethane	50	ug/l	1	U	1	U
Bromoform	50	ug/l	1	U	1	U
Bromomethane	5	ug/l	5	U	5	U
Carbon disulfide	60	ug/l	5	U	5	U
Carbon tetrachloride	5	ug/l	1	U	1	U
Chlorobenzene	5	ug/l	2.7	J	3.5	U
Chloroethane	5	ug/l	1.9	J	2	U
Chloroform	7	ug/l	1	U	1	U
Chloromethane		ug/l	5	U	5	U
cis-1,2-Dichloroethene	5	ug/l	1	U	1	U
cis-1,3-Dichloropropene	0.4	ug/l	1.5	U	1.5	U
Dibromochloromethane	50	ug/l	1	U	1	U
Dibromomethane	5	ug/l	1	U	1	U
Ethylbenzene	5	ug/l	1	U	1	U
Methylene chloride	5	ug/l	1	U	1	U
o-xylene	5	ug/l	1	U	1	U
p/m-Xylene	5	ug/l	2	U	2	U
Styrene	5	ug/l	1	U	1	U
Tetrachloroethene	5	ug/l	1	U	1	U
Toluene	5	ug/l	1	U	1	U
trans-1,2-Dichloroethene	5	ug/l	1.5	U	1.5	U
trans-1,3-Dichloropropene	0.4	ug/l	1.5	U	1.5	U
Trichloroethene	5	ug/l	1	U	1	U
Trichlorofluoromethane	5	ug/l	5	U	5	U
Vinyl acetate		ug/l	10	U	10	U
Vinyl chloride	2	ug/l	1	U	1	U
Xylenes, Total		ug/l	1	U	1	U

* Comparison is not performed on parameters with non-numeric criteria.

Standard, criteria or guidance (SCG) is the New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

U - Not detected at the reported detection limit for the sample.

J- The analyte was positively identified-the associated numerical value is the approximate concentration of the analyte in the sample.

 - The standard, criteria or guidance value is below the the detection limit.

 - The Reported concentration exceeds the standard, criteria or guidance value.

Table 2b.
Surface Water Sampling Results
SW-2
Town of Dewitt Landfill
2023

LOCATION			SW-2		SW-2	
SAMPLING DATE			5/15/2023		12/7/2023	
	SCG	Units	Results	Qual	Results	Qual
General Chemistry						
Solids, Total Dissolved		ug/l	730000		590000	
Total Metals						
Antimony, Total	3	ug/l	50	U	4	U
Arsenic, Total	25	ug/l	6		21.89	
Beryllium, Total	3	ug/l	5	U	0.55	
Cadmium, Total	5	ug/l	5	U	0.52	
Chromium, Total	50	ug/l	10	U	16.96	
Copper, Total	200	ug/l	10	U	36.81	
Lead, Total	25	ug/l	10	U	25.18	
Mercury, Total	0.7	ug/l	0.2	U	0.22	
Nickel, Total	100	ug/l	8.6	J	32.32	
Selenium, Total	10	ug/l	10	U	5	U
Silver, Total	50	ug/l	7	U	0.4	U
Thallium, Total	0.5	ug/l	12.1	J	1	U
Zinc, Total	2000	ug/l	3.5	J	160.1	
Volatile Organics by GC/MS						
1,1,1-Trichloroethane	5	ug/l	2	U	4	U
1,1,2,2-Tetrachloroethane	5	ug/l	1	U	2	U
1,1,2-Trichloroethane	1	ug/l	1.5	U	3	U
1,1-Dichloroethane	5	ug/l	1.5	U	3	U
1,1-Dichloroethene	5	ug/l	1	U	2	U
1,2-Dichlorobenzene	3	ug/l	5	U	10	U
1,2-Dichloroethane	0.6	ug/l	1.5	U	3	U
1,2-Dichloropropane	1	ug/l	3.5	U	7	U
1,3-Dichlorobenzene	3	ug/l	5	U	10	U
1,4-Dichlorobenzene	3	ug/l	5	U	10	U
2-Butanone	50	ug/l	10	U	20	U
2-Chloroethylvinyl ether		ug/l	10	U	20	U
2-Hexanone	50	ug/l	10	U	20	U
4-Methyl-2-pentanone		ug/l	10	U	20	U
Acetone	50	ug/l	2.5	J	20	U
Acrolein	5	ug/l	8	U	16	U
Acrylonitrile	5	ug/l	10	U	20	U
Benzene	1	ug/l	1	U	2	U
Bromodichloromethane	50	ug/l	1	U	2	U
Bromoform	50	ug/l	1	U	2	U
Bromomethane	5	ug/l	5	U	10	U
Carbon disulfide	60	ug/l	5	U	10	U
Carbon tetrachloride	5	ug/l	1	U	2	U
Chlorobenzene	5	ug/l	3.5	U	7	U
Chloroethane	5	ug/l	2	U	4	U
Chloroform	7	ug/l	1	U	2	U
Chloromethane		ug/l	5	U	10	U
cis-1,2-Dichloroethene	5	ug/l	1	U	2	U
cis-1,3-Dichloropropene	0.4	ug/l	1.5	U	3	U
Dibromochloromethane	50	ug/l	1	U	2	U
Dibromomethane	5	ug/l	1	U	2	U
Ethylbenzene	5	ug/l	1	U	2	U
Methylene chloride	5	ug/l	1	U	2	U
o-xylene	5	ug/l	1	U	2	U
p/m-Xylene	5	ug/l	2	U	4	U
Styrene	5	ug/l	1	U	2	U
Tetrachloroethene	5	ug/l	1	U	2	U
Toluene	5	ug/l	1	U	2	U
trans-1,2-Dichloroethene	5	ug/l	1.5	U	3	U
trans-1,3-Dichloropropene	0.4	ug/l	1.5	U	3	U
Trichloroethene	5	ug/l	1	U	2	U
Trichlorofluoromethane	5	ug/l	5	U	10	U
Vinyl acetate		ug/l	10	U	20	U
Vinyl chloride	2	ug/l	1	U	2	U
Xylenes, Total		ug/l	1	U	2	U

* Comparison is not performed on parameters with non-numeric criteria.

Standard, criteria or guidance (SCG) is the New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

U - Not detected at the reported detection limit for the sample.

Table 2c.
Surface Water Sampling Results
SW-3
Town of Dewitt Landfill
2023

LOCATION			SW-3		SW-3	
SAMPLING DATE			5/15/2023		12/7/2023	
	SCG	Units	Results	Qual	Results	Qual
General Chemistry						
Solids, Total Dissolved		ug/l	470000		460000	
Total Metals						
Antimony, Total	3	ug/l	15.1	J	8	U
Arsenic, Total	25	ug/l	24.9		17.93	
Beryllium, Total	3	ug/l	10	U	1	U
Cadmium, Total	5	ug/l	7.8	J	0.13	J
Chromium, Total	50	ug/l	20	U	2.44	
Copper, Total	200	ug/l	90.5		9.64	
Lead, Total	25	ug/l	40	U	7.43	J
Mercury, Total	0.7	ug/l	0.4	U	0.14	J
Nickel, Total	100	ug/l	115		21.96	
Selenium, Total	10	ug/l	20	U	10	U
Silver, Total	50	ug/l	14	U	0.8	U
Thallium, Total	0.5	ug/l	40	U	10	U
Zinc, Total	2000	ug/l	751		110.6	
Volatile Organics by GC/MS						
1,1,1-Trichloroethane	5	ug/l	4	U	4	U
1,1,2,2-Tetrachloroethane	5	ug/l	2	U	2	U
1,1,2-Trichloroethane	1	ug/l	3	U	3	U
1,1-Dichloroethane	5	ug/l	3	U	3	U
1,1-Dichloroethene	5	ug/l	2	U	2	U
1,2-Dichlorobenzene	3	ug/l	10	U	10	U
1,2-Dichloroethane	0.6	ug/l	3	U	3	U
1,2-Dichloropropane	1	ug/l	7	U	7	U
1,3-Dichlorobenzene	3	ug/l	10	U	10	U
1,4-Dichlorobenzene	3	ug/l	10	U	10	U
2-Butanone	50	ug/l	20	U	20	U
2-Chloroethylvinyl ether		ug/l	20	U	20	U
2-Hexanone	50	ug/l	20	U	20	U
4-Methyl-2-pentanone		ug/l	20	U	20	U
Acetone	50	ug/l	20	U	5.2	J
Acrolein	5	ug/l	16	U	16	U
Acrylonitrile	5	ug/l	20	U	20	U
Benzene	1	ug/l	2	U	2	U
Bromodichloromethane	50	ug/l	2	U	2	U
Bromoform	50	ug/l	2	U	2	U
Bromomethane	5	ug/l	10	U	10	U
Carbon disulfide	60	ug/l	10	U	10	U
Carbon tetrachloride	5	ug/l	2	U	2	U
Chlorobenzene	5	ug/l	7	U	7	U
Chloroethane	5	ug/l	4	U	4	U
Chloroform	7	ug/l	2	U	2	U
Chloromethane		ug/l	10	U	10	U
cis-1,2-Dichloroethene	5	ug/l	2	U	2	U
cis-1,3-Dichloropropene	0.4	ug/l	3	U	3	U
Dibromochloromethane	50	ug/l	2	U	2	U
Dibromomethane	5	ug/l	2	U	2	U
Ethylbenzene	5	ug/l	2	U	2	U
Methylene chloride	5	ug/l	2	U	2	U
o-xylene	5	ug/l	2	U	2	U
p/m-Xylene	5	ug/l	4	U	4	U
Styrene	5	ug/l	2	U	2	U
Tetrachloroethene	5	ug/l	2	U	2	U
Toluene	5	ug/l	2	U	2	U
trans-1,2-Dichloroethene	5	ug/l	3	U	3	U
trans-1,3-Dichloropropene	0.4	ug/l	3	U	3	U
Trichloroethene	5	ug/l	2	U	2	U
Trichlorofluoromethane	5	ug/l	10	U	10	U
Vinyl acetate		ug/l	20	U	20	U
Vinyl chloride	2	ug/l	2	U	2	U
Xylenes, Total		ug/l	2	U	2	U

* Comparison is not performed on parameters with non-numeric criteria.

Standard, criteria or guidance (SCG) is the New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

U - Not detected at the reported detection limit for the sample.

Table 3b.
Groundwater Sampling Results
Deep Monitoring Wells
Town of Dewitt Landfill
2024

LOCATION			MW-2D		MW-4D		MW-5D		MW-8D		MW-9D		MW-9M		MW-11D	
SAMPLING DATE			11/7/2024		11/7/2024		11/7/2024		11/7/2024		11/7/2024		11/7/2024		11/7/2024	
	SCG	Units	Results		Results		Results		Results		Results		Results		Results	
1,4 Dioxane by 8270E-SIM																
1,4-Dioxane	0.35	ug/l	0.139	U	22.1		2.76		0.339		28.1		NS		0.139	U
General Chemistry																
Solids, Total Dissolved		ug/l	2200000		2900000		3200000		2200000		220000000		NS		1100000	
Total Metals																
Antimony, Total	3	ug/l	2.12	J	4	U	4	U	4	U	80	U	NS		4	U
Arsenic, Total	25	ug/l	0.27	J	1.6		13.38		12.1		11.28	J	NS		13.94	
Beryllium, Total	3	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	10	U	NS		1.18	
Cadmium, Total	5	ug/l	0.06	J	0.2	U	0.2	U	0.2	U	1.32	J	NS		0.17	J
Chromium, Total	50	ug/l	33.5		0.61	J	0.75	J	0.2	J	570.4		NS		2417	
Copper, Total	200	ug/l	3.59		2.92		1.18		1.51		36.15		NS		62.34	
Lead, Total	25	ug/l	3.36		0.91	J	0.87	J	0.97	J	20	U	NS		70.7	
Mercury, Total	0.7	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	1	U	NS		0.31	
Nickel, Total	100	ug/l	18.04		2.37		1.73	J	2	U	901.4		NS		792.3	
Selenium, Total	10	ug/l	5	U	5	U	5	U	5	U	100	U	NS		19.7	
Silver, Total	50	ug/l	0.4	U	0.4	U	0.4	U	0.4	U	8	U	NS		0.29	J
Thallium, Total	0.5	ug/l	1	U	1	U	1	U	1	U	20	U	NS		0.55	J
Zinc, Total	2000	ug/l	38.36		11.55		12.77		14.53		88.57	J	NS		183.2	
Volatile Organics by GC/MS																
1,1,1-Trichloroethane	5	ug/l	2	U	2	U	2	U	2	U	2	U	NS		2	U
1,1,2,2-Tetrachloroethane	5	ug/l	1	U	1	U	1	U	1	U	1	U	NS		1	U
1,1,2-Trichloroethane	1	ug/l	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	NS		1.5	U
1,1-Dichloroethane	5	ug/l	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	NS		1.5	U
1,1-Dichloroethene	5	ug/l	1	U	1	U	1	U	1	U	1	U	NS		1	

Table 4.
Gas Vent Sampling Results
Town of Dewitt Landfill
2024

LOCATION					V-9		V-10		V-11	
SAMPLING DATE					11/11/2024		11/11/2024		11/11/2024	
	NY-SSC-A	NY-SSC-B	NY-SSC-C	Units	Results		Results		Results	
Volatile Organics in Air										
1,1,1-Trichloroethane		100		ug/m3	22.7	U	28.5	U	37.8	U
1,1,2,2-Tetrachloroethane				ug/m3	28.6	U	35.9	U	47.6	U
1,1,2-Trichloroethane				ug/m3	22.7	U	28.5	U	37.8	U
1,1-Dichloroethane				ug/m3	16.8	U	21.2	U	28	U
1,1-Dichloroethene	6			ug/m3	16.5	U	39.2		27.5	U
1,2,4-Trichlorobenzene				ug/m3	30.9	U	38.8	U	51.4	U
1,2,4-Trimethylbenzene				ug/m3	71.3		108		208	
1,2-Dibromoethane				ug/m3	32	U	40.2	U	53.3	U
1,2-Dichlorobenzene				ug/m3	25	U	31.4	U	41.7	U
1,2-Dichloroethane				ug/m3	16.8	U	21.2	U	28	U
1,2-Dichloropropane				ug/m3	19.2	U	24.2	U	32	U
1,3,5-Trimethylbenzene				ug/m3	70.8		121		319	
1,3-Butadiene				ug/m3	9.2	U	11.6	U	15.3	U
1,3-Dichlorobenzene				ug/m3	25	U	31.4	U	41.7	U
1,4-Dichlorobenzene				ug/m3	42.6		160		263	
1,4-Dioxane				ug/m3	15	U	18.8	U	25	U
2,2,4-Trimethylpentane				ug/m3	1560		1820		2950	
2-Butanone				ug/m3	30.7	U	104		51	U
2-Hexanone				ug/m3	17	U	21.4	U	28.4	U
3-Chloropropene				ug/m3	13	U	16.4	U	21.7	U
4-Ethyltoluene				ug/m3	20.5	U	25.7	U	34.1	U
4-Methyl-2-pentanone				ug/m3	48.4		53.7	U	70.9	U
Acetone				ug/m3	49.4	U	62.2	U	82.2	U
Benzene				ug/m3	253		298		383	
Benzyl chloride				ug/m3	21.5	U	27.1	U	35.9	U
Bromodichloromethane				ug/m3	27.9	U	35	U	46.4	U
Bromoform				ug/m3	43	U	54.1	U	71.7	U
Bromomethane				ug/m3	16.2	U	20.3	U	26.9	U
Carbon disulfide				ug/m3	74.7		26.2		85.9	
Carbon tetrachloride	6			ug/m3	26.2	U	32.9	U	43.6	U
Chlorobenzene				ug/m3	539		613		893	
Chloroethane				ug/m3	311		128		180	
Chloroform				ug/m3	20.3	U	25.5	U	33.8	U
Chloromethane				ug/m3	17.7		29.7		15	
cis-1,2-Dichloroethene	6			ug/m3	16.5	U	59.1		27.5	U
cis-1,3-Dichloropropene				ug/m3	18.9	U	23.7	U	31.5	U
Cyclohexane				ug/m3	1620		1270		1520	
Dibromochloromethane				ug/m3	35.4	U	44.6	U	59	U
Dichlorodifluoromethane				ug/m3	409		569		383	
Ethanol				ug/m3	196	U	247	U	326	U
Ethyl Acetate				ug/m3	37.5	U	47.2	U	62.3	U
Ethylbenzene				ug/m3						

Table A-1.
Dewitt Landfill
Sample Collection Matrix and Parameters Schedule

Quarter	2020	2021	2022	2023	2024	2025
Jan - Mar	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples
	<i>GW - Not Required</i>	<i>GW - Not Required</i>	<i>GW - Not Required</i>	<i>GW - Not Required</i>	<i>GW - Not Required</i>	<i>GW - Not Required</i>
	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>
Apr-Jun	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples
	<i>GW - Not Required</i>	<i>GW - Not Required</i>	GW - 18 samples	<i>GW - Not Required</i>	<i>GW - Not Required</i>	GW - 18 samples + 1,4 dioxane
	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	Gas - 6 field screen, 3 samples	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	Gas - 6 field screen, 3 samples
Jul-Sep	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples
	GW - 18 samples	<i>GW - Not Required</i>	<i>GW - Not Required</i>	GW - 18 samples + 1,4 dioxane	<i>GW - Not Required</i>	<i>GW - Not Required</i>
	Gas - 6 field screen, 3 samples	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	Gas - 6 field screen, 3 samples	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>
Oct-Dec	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples	SW - 3 samples
	<i>GW - Not Required</i>	GW - 18 samples	<i>GW - Not Required</i>	<i>GW - Not Required</i>	GW - 18 samples + 1,4 dioxane	<i>GW - Not Required</i>
	<i>Gas - Not Required</i>	Gas - 6 field screen, 3 samples	<i>Gas - Not Required</i>	<i>Gas - Not Required</i>	Gas - 6 field screen, 3 samples	<i>Gas - Not Required</i>

SW = Surface Water: 4 quarters per year, 3 locations, VOCs, metals, TDS

GW = Groundwater: 1 quarter per year, 18 locations, VOCs, metals, TDS, +1,4-dioxane beginning third quarter 2023

Gas = Gas vent: 1 quarter per year, 6 locations field test, 3 locations TO-15

APPENDICES

Appendix A
Post Closure Activities

Sampling Schedule

Inspection and Maintenance Checklist

Town of Dewitt Landfill
Inspection and Maintenance Checklist

Date: 3/14/24

Inspector(s): G. Gould

Weather: M. Sunny 55°F

<u>Landfill Component</u>	<u>Photos</u>	<u>Observations/Comments</u>
A. Security and Access		
1. Gate(s) secure and locked		yes
2. Fencing in good repair (no burrows, holes, or bent posts and rails).		yes
B. Access Road(s)		
1. Crushed stone or blacktop in tact		yes
2. No ruts or washouts		yes
C. Landfill Cap		
1. Mowing status		grass cut last fall, matted and dormant now
2. Erosion observations		none
3. Settling, flat spots or depressions		a few depressions with water puddles
4. Stressed vegetation, bare spots		dormant grass
5. Deep rooted, woody growth		none - down chutes and rip-rap are clear
D. Gas venting and/or collection		
1. Vents upright and undamaged		yes
2. Unobstructed openings		yes
3. Settlement and/or boot integrity		slight settling on solar panel areas

Town of Dewitt Landfill
Inspection and Maintenance Checklist

Date 3/14/24

E. Surface Water Control		
1. Swales, ditches and down chutes unobstructed		yes
2. Culverts open and clear		yes - rip-rap has partially obstructed culvert pipe on S side
3. Catch basins and manholes		n/a
F. Monitoring Locations		
1. Monitoring Wells locked, labeled and in tact		all wells are outside l.f. perimeter they are accessible and in tact
2. Surface water and/or leachate locations identifiable and accessible.		yes

General Observations:
Overall conditions are good. I cleared some fallen branches off of the access road. There are several small areas of standing water at gas vent depressions and adjacent to the perimeter access road. These wet spots are typical and will dry up when the grass begins to grow. The cap is in good shape.

Signed: Gerald Galt

Corrective Actions

Inspection Area No.	Solution	Person responsible
	none	
	required	
	2	

Appendix B
Photographic Log

Photographic Log



Photo 1. Fisher Road access gate facing south – March 2024.



Photo 2. Sothern access road facing ESE at perimeter fence and Erie Canal. – March 2024



Photo 3. Typical Gas vent. – March 2024.



Photo 4. Temporary wet spot from spring rains and snowmelt, viewing northeast toward solar panels. March 2024.



Photo 5. Healthy dormant grass, viewing NW from perimeter access road. – March 2024.



Photo 6. Down chute on NW corner of landfill is open and clear. – March 2024.



Photo 7. Monitoring Well MW-6S near North gate. March 2024.



Photo 8. Viewing north at top of landfill and front side of solar array. – March 2024.

Appendix C

Field Data Sheets

FIELD OBSERVATIONS

Client: Town of Devitt

Sample Point ID: SW-1

Facility: Town of Devitt LDF

Sample Matrix: GSW

Field Personnel: KN/NK

SAMPLING INFORMATION:

Date/Time: 11/7/24

(Circle One)

Sampling Method: Dip Cup

Dedicated: YES NO

Diameter of Well: _____

Well Depth (from top of PVC): _____

Water Depth (from top of PVC): _____

Length of Water Column (LWC): _____

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Purge Volume: LWC x () x 3= _____

Volume Purged: _____



See Multiplier to input based on Well Diameter

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Cond. (Umhos/cm)	Turbidity (NTU)	ORP (Mv)	DO (mg/L)
1400	9.3	7.35	822	1189.25	-71.3	5.66

Weather conditions at time of sampling: _____

COMMENTS & OBSERVATIONS: _____

Date: 11-7-25

Signature: [Signature]

Company: Pace

FIELD OBSERVATIONS

Client: Town of Dewitt

Sample Point ID: SW-2

Facility: Town of Dewitt LDF

Sample Matrix: _____

Field Personnel: NK / KN

SAMPLING INFORMATION:

Date/Time: 11/7/24

(Circle One)

Sampling Method: Dip cup

Dedicated: YES NO

Diameter of Well: _____

Well Depth (from top of PVC): _____

Water Depth (from top of PVC): _____

Length of Water Column (LWC): _____

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Purge Volume: LWC x () x 3= _____

Volume Purged: _____

↑

See Multiplier to input based on Well Diameter

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Cond. (Umhos/cm)	Turbidity (NTU)	ORP (Mv)	DO (mg/L)
1412	10.6	7.25	890	2240.34	-52.3	4.71

Weather conditions at time of sampling: _____

COMMENTS & OBSERVATIONS: _____

Date: 11/7/24

Signature: [Signature]

Company: [Signature]

FIELD OBSERVATIONS

Client: Town of Dewitt

Date: 11/11/24

Facility: Town of Dewitt Landfill

Field Personnel: _____

Time	Location	%CH4	%CG(LEL)	%CO2	%O2	H2S(ppm)	CO(ppm)	ATM. Pres("Hg)	VEL ft/min
1327	Upwind	0.0	76.1	0.1	23.8	0	0	29.07	
1328	V-9	0.1	76.1	0.2	23.7	0	0	29.07	
1328	V-10	22.0	45.6	28.9	2.5	2	0	29.07	
1334	V-11	23.2	42.1	34.0	0.5	4	0	29.07	
1337	V-12	20.7	44.5	29.1	6.6	3	3	29.07	
1339	V-18	23.5	40.0	33.9	2.0	2	3	29.07	
1341	V-3	23.4	42.3	30.8	3.5	2	4	29.07	
1342	Downwind	6.7	73.0	1.8	23.7	0	4	29.07	

Notes: _____

Monitoring Equipment: GEM 5000

GRB 0087 22.45
GRB 0103 6.15
GRB 0016 16.92

GRB 0023 9.16 11.8

1331

Dup V-10

3

FIELD OBSERVATIONS

Client: Town of A. Devitt

Sample Point ID: MW-20

Facility: Town of Devitt LDF

Sample Matrix: GW

Field Personnel: KN, NK

SAMPLING INFORMATION:

Date/Time: 11-7-24 S:1303 E:1340

(Circle One)

Sampling Method: Bailer

Dedicated: YES NO

Diameter of Well: 2.0"

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Well Depth (from top of PVC): 52'

Water Depth (from top of PVC): 11.35

Length of Water Column (LWC): 40.65

Purge Volume: LWC x (0.163) x 3 = 19.9

Volume Purged: 520



See Multiplier to input based on Well Diameter

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Cond. (Umhos/cm)	Turbidity (NTU)	ORP (Mv)	DO (mg/L)
1341	15.3	7.12	2515	11.16	-126.5	6.37

Weather conditions at time of sampling: Partly Cloudy

COMMENTS & OBSERVATIONS: Clear aqueous sample w/ earthy odor

Date: 11/7/24 Signature: [Signature] Company: P&G

FIELD OBSERVATIONS

Client: Town of Dewitt

Sample Point ID: MW-35

Facility: Town of Dewitt Landfill

Sample Matrix: GW

Field Personnel: AF

SAMPLING INFORMATION:

Date/Time: 11/7/24

(Circle One)

Sampling Method: Bailer

Dedicated: YES NO

Diameter of Well: 2"

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Well Depth (from top of PVC): 36.50

Water Depth (from top of PVC): 2.35

Length of Water Column (LWC): 34.15

Purge Volume: $LWC \times (.163) \times 3 =$ 16.7

Volume Purged: 17

See Multiplier to input based on Well Diameter

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Cond. (Umhos/cm)	Turbidity (NTU)	ORP (Mv)	DO (mg/L)
1430	10.5	7.04	2733	763.13	-26.0	5.65

Weather conditions at time of sampling: Breezy, Sunny

COMMENTS & OBSERVATIONS: Orange tint and earthy scent

Date: 11/7/24 Signature: [Signature] Company: PACE

FIELD OBSERVATIONS

Client: Town of Dewitt

Sample Point ID: MW-45

Facility: Town of Dewitt Landfill

Sample Matrix: GV

Field Personnel: NK, KN

SAMPLING INFORMATION:

Date/Time: 11/7/24 S: 0955 E: 1017

(Circle One)

Sampling Method: Bailer

Dedicated: (YES) NO

Diameter of Well: 2"

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Well Depth (from top of PVC): 19.85

Water Depth (from top of PVC): 2.04

Length of Water Column (LWC): 17.81

Purge Volume: LWC x (0.16) x 3 = 8.55

Volume Purged: ~ 8.6

↑
See Multiplier to input based on Well Diameter

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Cond. (Umhos/cm)	Turbidity (NTU)	ORP (Mv)	DO (mg/L)
1018	11.3	6.85	2131	7.01	34.4	8.32

Weather conditions at time of sampling: overcast

COMMENTS & OBSERVATIONS: sample cloudy, no odor

Date: 11/7/24 Signature: [Signature] Company: paq

Appendix D

Laboratory Reports

- November 2024 - Surface water sampling – Alpha Analytical: Analytical Report Lab Job No: L2465905
- November 2024 - Groundwater sampling – Alpha Analytical: Analytical Report Lab Job No: L2465263.
- November 2024 – Gas Vent Sampling – Alpha Analytical: Analytical Report Lab Job No: L2465909.



ANALYTICAL REPORT

Lab Number:	L2465905
Client:	Town of Dewitt 5400 Butternut Drive East Syracuse, NY 13057
ATTN:	Kerri Fusco
Phone:	(315) 446-3392
Project Name:	T. OF DEWITT LANDFILL MONITOR.
Project Number:	1128-2024-SW
Report Date:	11/22/24

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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



Project Name: T. OF DEWITT LANDFILL MONITOR.
Project Number: 1128-2024-SW

Lab Number: L2465905
Report Date: 11/22/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2465905-01	SW-1	WATER	FISHER RD, EAST SYRACUSE	11/11/24 14:12	11/11/24
L2465905-02	SW-2	WATER	FISHER RD, EAST SYRACUSE	11/11/24 14:00	11/11/24
L2465905-03	SW-3	WATER	FISHER RD, EAST SYRACUSE	11/11/24 13:50	11/11/24
L2465905-04	TRIP BLANK	WATER	FISHER RD, EAST SYRACUSE	11/11/24 00:00	11/11/24

Project Name: T. OF DEWITT LANDFILL MONITOR.
Project Number: 1128-2024-SW

Lab Number: L2465905
Report Date: 11/22/24

Case Narrative

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

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

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

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

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

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

Project Name: T. OF DEWITT LANDFILL MONITOR.
Project Number: 1128-2024-SW

Lab Number: L2465905
Report Date: 11/22/24

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2465905-01: The sample was received above the appropriate pH for the Total Metals analysis. The laboratory added additional HNO₃ to a pH <2.

Volatile Organics by Method 624

L2465905-01D, -02D and -03D: The sample has elevated detection limits due to the dilution required by the sample matrix (cloudy, particles, sediment).

Total Metals

L2465905-01: The sample has elevated detection limits for all elements, with the exception of mercury and thallium, due to the dilution required by the sample matrix.

L2465905-01 and -02: The sample has elevated detection limits for all elements due to the prep dilution required by the sample matrix.

L2465905-02 and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

L2465905-03: The sample has an elevated detection limit for mercury due to the prep dilution required by the sample matrix.

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

Authorized Signature:



Caitlin Walukevich

Title: Technical Director/Representative

Date: 11/22/24

ORGANICS

VOLATILES

Project Name: T. OF DEWITT LANDFILL MONITOR.**Lab Number:** L2465905**Project Number:** 1128-2024-SW**Report Date:** 11/22/24**SAMPLE RESULTS**

Lab ID: L2465905-01 D
 Client ID: SW-1
 Sample Location: FISHER RD, EAST SYRACUSE

Date Collected: 11/11/24 14:12
 Date Received: 11/11/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 11/12/24 22:29
 Analyst: GMT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	2.8	5
1,1-Dichloroethane	ND		ug/l	7.5	2.0	5
Chloroform	ND		ug/l	5.0	1.9	5
Carbon tetrachloride	ND		ug/l	5.0	1.2	5
1,2-Dichloropropane	ND		ug/l	18	2.3	5
Dibromochloromethane	ND		ug/l	5.0	1.4	5
1,1,2-Trichloroethane	ND		ug/l	7.5	1.7	5
2-Chloroethylvinyl ether	ND		ug/l	50	1.7	5
Tetrachloroethene	ND		ug/l	5.0	1.3	5
Chlorobenzene	ND		ug/l	18	1.5	5
Trichlorofluoromethane	ND		ug/l	25	1.4	5
1,2-Dichloroethane	ND		ug/l	7.5	2.4	5
1,1,1-Trichloroethane	ND		ug/l	10	1.4	5
Bromodichloromethane	ND		ug/l	5.0	1.4	5
trans-1,3-Dichloropropene	ND		ug/l	7.5	1.6	5
cis-1,3-Dichloropropene	ND		ug/l	7.5	1.7	5
Bromoform	ND		ug/l	5.0	1.1	5
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.0	5
Benzene	ND		ug/l	5.0	1.9	5
Toluene	ND		ug/l	5.0	1.6	5
Ethylbenzene	ND		ug/l	5.0	1.4	5
Chloromethane	ND		ug/l	25	5.2	5
Bromomethane	ND		ug/l	25	6.1	5
Vinyl chloride	ND		ug/l	5.0	1.9	5
Chloroethane	ND		ug/l	10	1.8	5
1,1-Dichloroethene	ND		ug/l	5.0	1.5	5
trans-1,2-Dichloroethene	ND		ug/l	7.5	1.6	5
cis-1,2-Dichloroethene	ND		ug/l	5.0	0.86	5

Project Name: T. OF DEWITT LANDFILL MONITOR.
Project Number: 1128-2024-SW

Lab Number: L2465905
Report Date: 11/22/24

SAMPLE RESULTS

Lab ID: L2465905-01 **D**
Client ID: SW-1
Sample Location: FISHER RD, EAST SYRACUSE

Date Collected: 11/11/24 14:12
Date Received: 11/11/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	5.0	1.7	5
1,2-Dichlorobenzene	ND		ug/l	25	1.4	5
1,3-Dichlorobenzene	ND		ug/l	25	1.4	5
1,4-Dichlorobenzene	ND		ug/l	25	1.4	5
p/m-Xylene	ND		ug/l	10	1.5	5
o-xylene	ND		ug/l	5.0	1.7	5
Xylenes, Total	ND		ug/l	5.0	1.5	5
Styrene	ND		ug/l	5.0	1.8	5
Acetone	ND		ug/l	50	12.	5
Carbon disulfide	ND		ug/l	25	1.4	5
2-Butanone	ND		ug/l	50	5.2	5
Vinyl acetate	ND		ug/l	50	2.0	5
4-Methyl-2-pentanone	ND		ug/l	50	0.95	5
2-Hexanone	ND		ug/l	50	2.8	5
Acrolein	ND		ug/l	40	9.1	5
Acrylonitrile	ND		ug/l	50	1.7	5
Dibromomethane	ND		ug/l	5.0	1.1	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	81		60-140
Fluorobenzene	87		60-140
4-Bromofluorobenzene	93		60-140

Project Name: T. OF DEWITT LANDFILL MONITOR.
Project Number: 1128-2024-SW

Lab Number: L2465905
Report Date: 11/22/24

SAMPLE RESULTS

Lab ID: L2465905-02 **D**
Client ID: SW-2
Sample Location: FISHER RD, EAST SYRACUSE

Date Collected: 11/11/24 14:00
Date Received: 11/11/24
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 11/12/24 23:00
Analyst: GMT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	4.0	2.2	4
1,1-Dichloroethane	ND		ug/l	6.0	1.6	4
Chloroform	ND		ug/l	4.0	1.5	4
Carbon tetrachloride	ND		ug/l	4.0	0.98	4
1,2-Dichloropropane	ND		ug/l	14	1.9	4
Dibromochloromethane	ND		ug/l	4.0	1.1	4
1,1,2-Trichloroethane	ND		ug/l	6.0	1.4	4
2-Chloroethylvinyl ether	ND		ug/l	40	1.4	4
Tetrachloroethene	ND		ug/l	4.0	1.0	4
Chlorobenzene	ND		ug/l	14	1.2	4
Trichlorofluoromethane	ND		ug/l	20	1.1	4
1,2-Dichloroethane	ND		ug/l	6.0	1.9	4
1,1,1-Trichloroethane	ND		ug/l	8.0	1.1	4
Bromodichloromethane	ND		ug/l	4.0	1.1	4
trans-1,3-Dichloropropene	ND		ug/l	6.0	1.2	4
cis-1,3-Dichloropropene	ND		ug/l	6.0	1.3	4
Bromoform	ND		ug/l	4.0	0.86	4
1,1,1,2-Tetrachloroethane	ND		ug/l	4.0	0.81	4
Benzene	ND		ug/l	4.0	1.5	4
Toluene	ND		ug/l	4.0	1.2	4
Ethylbenzene	ND		ug/l	4.0	1.1	4
Chloromethane	ND		ug/l	20	4.2	4
Bromomethane	ND		ug/l	20	4.9	4
Vinyl chloride	ND		ug/l	4.0	1.5	4
Chloroethane	ND		ug/l	8.0	1.5	4
1,1-Dichloroethene	ND		ug/l	4.0	1.2	4
trans-1,2-Dichloroethene	ND		ug/l	6.0	1.3	4
cis-1,2-Dichloroethene	ND		ug/l	4.0	0.68	4

Project Name: T. OF DEWITT LANDFILL MONITOR.
Project Number: 1128-2024-SW

Lab Number: L2465905
Report Date: 11/22/24

SAMPLE RESULTS

Lab ID: L2465905-02 **D**
Client ID: SW-2
Sample Location: FISHER RD, EAST SYRACUSE

Date Collected: 11/11/24 14:00
Date Received: 11/11/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	4.0	1.3	4
1,2-Dichlorobenzene	ND		ug/l	20	1.1	4
1,3-Dichlorobenzene	ND		ug/l	20	1.1	4
1,4-Dichlorobenzene	ND		ug/l	20	1.1	4
p/m-Xylene	ND		ug/l	8.0	1.2	4
o-xylene	ND		ug/l	4.0	1.4	4
Xylenes, Total	ND		ug/l	4.0	1.2	4
Styrene	ND		ug/l	4.0	1.5	4
Acetone	ND		ug/l	40	9.5	4
Carbon disulfide	ND		ug/l	20	1.1	4
2-Butanone	ND		ug/l	40	4.2	4
Vinyl acetate	ND		ug/l	40	1.6	4
4-Methyl-2-pentanone	ND		ug/l	40	0.76	4
2-Hexanone	ND		ug/l	40	2.2	4
Acrolein	ND		ug/l	32	7.3	4
Acrylonitrile	ND		ug/l	40	1.3	4
Dibromomethane	ND		ug/l	4.0	0.91	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	81		60-140
Fluorobenzene	86		60-140
4-Bromofluorobenzene	94		60-140

Project Name: T. OF DEWITT LANDFILL MONITOR.**Lab Number:** L2465905**Project Number:** 1128-2024-SW**Report Date:** 11/22/24**SAMPLE RESULTS**

Lab ID: L2465905-03 D
 Client ID: SW-3
 Sample Location: FISHER RD, EAST SYRACUSE

Date Collected: 11/11/24 13:50
 Date Received: 11/11/24
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 128,624.1
 Analytical Date: 11/12/24 23:32
 Analyst: GMT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	1.4	2.5
1,1-Dichloroethane	ND		ug/l	3.8	0.99	2.5
Chloroform	ND		ug/l	2.5	0.96	2.5
Carbon tetrachloride	ND		ug/l	2.5	0.61	2.5
1,2-Dichloropropane	ND		ug/l	8.8	1.2	2.5
Dibromochloromethane	ND		ug/l	2.5	0.68	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	0.84	2.5
2-Chloroethylvinyl ether	ND		ug/l	25	0.87	2.5
Tetrachloroethene	ND		ug/l	2.5	0.65	2.5
Chlorobenzene	ND		ug/l	8.8	0.76	2.5
Trichlorofluoromethane	ND		ug/l	12	0.69	2.5
1,2-Dichloroethane	ND		ug/l	3.8	1.2	2.5
1,1,1-Trichloroethane	ND		ug/l	5.0	0.72	2.5
Bromodichloromethane	ND		ug/l	2.5	0.69	2.5
trans-1,3-Dichloropropene	ND		ug/l	3.8	0.78	2.5
cis-1,3-Dichloropropene	ND		ug/l	3.8	0.84	2.5
Bromoform	ND		ug/l	2.5	0.54	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.51	2.5
Benzene	ND		ug/l	2.5	0.96	2.5
Toluene	ND		ug/l	2.5	0.78	2.5
Ethylbenzene	ND		ug/l	2.5	0.70	2.5
Chloromethane	ND		ug/l	12	2.6	2.5
Bromomethane	ND		ug/l	12	3.0	2.5
Vinyl chloride	ND		ug/l	2.5	0.94	2.5
Chloroethane	ND		ug/l	5.0	0.93	2.5
1,1-Dichloroethene	ND		ug/l	2.5	0.77	2.5
trans-1,2-Dichloroethene	ND		ug/l	3.8	0.82	2.5
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.43	2.5

