

2025 Annual Report

Landfill Gas Performance Monitoring Go East Landfill/Alpine Estates Development

Prepared for
Century Communities®

Prepared by
Herrera Environmental Consultants, Inc.

2025 Annual Report

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Prepared for
Century Communities®
20000 North Creek Parkway, Suite 201
Bothell, Washington 98011
Telephone: 425-775-8661

Prepared by
Herrera Environmental Consultants, Inc.
2200 Sixth Avenue, Suite 1100
Seattle, Washington 98121
Telephone: 206-441-9080

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Certificate of Professional Engineer

This document has been prepared under the supervision of a professional engineer.



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Introduction

In 2025, Herrera Environmental Consultants, Inc. (Herrera) was contracted by Century Communities of Washington, LLC (Century Communities®) and the Alpine Estates Homeowners Association (HOA) to support in the operations and maintenance of the landfill gas (LFG) system at the Go East Landfill/Alpine Estates. This Annual Report presents LFG monitoring techniques, data, and results at and around the Go East Landfill/Alpine Estates for the year 2025. This document satisfies the Gas Pathway reporting requirements of the Landfill Gas Monitoring and Contingency Plan (LFGMCP) and the Go East Solid Waste Facility Permit.

Summary

This Annual Report provides relevant information pertaining to the LFG control and collection system at the Go East Landfill/Alpine Estates and results of the 2025 LFG compliance monitoring as set forth in the LFGMCP and the Go East Solid Waste Facility Permit. Annual LFG compliance monitoring for 2025 included methane monitoring at LFG probes and methane surface monitoring. Data presented in this report was collected by Herrera staff.

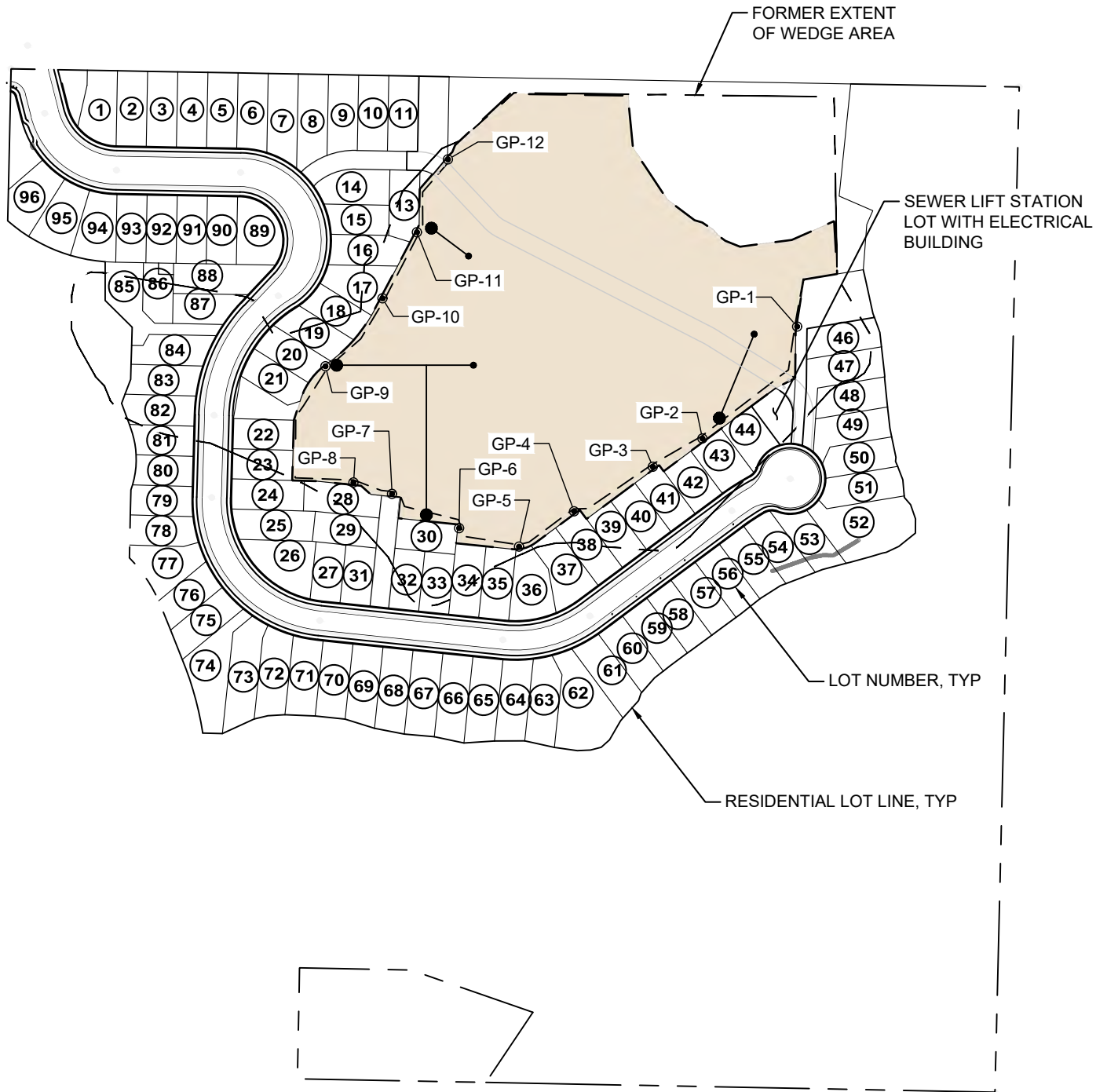
In 2025 Herrera continued routine LFG monitoring at the Go East Landfill/Alpine Estates property and saw exceedances of the Washington Administrative Code (WAC) 173-350-400 lower explosive limit (LEL) of 5 percent by volume methane at most of the perimeter soil gas probes. This has been typical since monitoring began at the landfill in November 2022. At the end of 2025, two of the 12 perimeter probes were still reading above 5 percent by volume methane; however, this number is down from 9 perimeter probes in exceedance in February 2025. At various times in 2025, multiple perimeter probes could not be monitored due to construction blockage or because they were buried (see Tables 6, 13, and 14); however, all perimeter probes were uncovered and returned to routine monitoring by the end of 2025. Monitoring of surface emissions and house ventilation trench monitoring stations has shown that the methane observed in the probes is not migrating to the surface or underneath homes. Herrera believes the environmental controls, monitoring, and contingency response measures installed and performed for the Alpines Estates homes provide safeguards against the potential threat of persistent methane immediately adjacent to the landfill perimeter. The network of house ventilation trench monitoring stations below each of the 96 Alpine Estates houses provides a large footprint for monitoring and evaluating LFG migration while additional investigations and contingency measures are done to mitigate the presence of LFG in the deep soils of the property.

Background

The project site is located at 4330 108th Street Southeast, Everett, Washington. It was operated as an excavation and sand reclamation site from 1969 through 1971. Between 1972 and 1977, the landfill operator, Rekoway, Inc. (Rekoway), accepted wood waste debris and concrete solid material that was compacted and placed in sealed cells before the site was initially closed in 1978. With Go East Corporation (Go East) as the Owner/Operator, the site reopened in 1979 and accepted wood waste placed in enclosed cells from 1979 to 1983. After this period, the landfill ceased all operations. In 2009, the property was purchased by P&GE, LLC (P&GE). In July 2022, P&GE completed landfill closure in accordance with the Go East Landfill Closure Plan that was approved by Snohomish County Health Department (SCHD) under its Solid Waste Facility Permit # PT0004938 (SW-027).

Closure involved reducing the landfill size, from approximately 10 acres to approximately 6 acres, by excavating the landfill edges and relocating the landfill material found there to the remaining landfill area. The excavated portion was designated as the "Wedge" area, where the excavation would be refilled with onsite and imported material. The remaining landfill area was closed in accordance with current standards and codes, in compliance with the various permits and approvals. Specific capping materials and environmental controls installed as part of the closure are discussed in the following section. P&GE also assembled the plans and permits associated with placing a housing community on the parcel around the closed landfill. In May 2022, Century Communities of Washington, LLC purchased the redevelopment project from P&GE and began installation of the utilities for the planned housing community. Snohomish County Planning and Development Services approved the final plat for the Alpine Estates, A Plat Community, on September 27, 2023. This plat map establishes residential property boundaries in close proximity to the final landfill boundary. At the end of 2025, Century Communities transferred ownership and liability of the landfill to the Alpine Estates HOA. During this transition, the HOA contracted with Herrera to continue landfill gas monitoring and management through the end of 2025 and beyond.

The closed landfill itself, each individual enclosed Alpine Estates home, and the sewer lift station electrical building (electrical building) were constructed with an LFG control system designed to collect any LFG and convey it to vent pipes that will release the gas a safe distance away from any receptor. The LFG control system acts as the primary line of defense against LFG migration beyond the landfill boundary. The individual LFG control systems for each Alpine Estates home and the electrical building are designed as a protective measure should any LFG migrate from the closed landfill. Figure 1 depicts the LFG monitoring locations and the reduced and capped landfill area.



LEGEND

- | | | | |
|--------|----------------------------------|-----|-----------------------------------|
| ● GP-# | LANDFILL GAS PROBE | --- | GRAVEL TRENCH WITH 2 IN PERF PIPE |
| ● | LANDFILL GAS SUMP | — | GRAVEL TRENCH WITH 2 IN PIPE |
| • | LANDFILL GAS VENT RISER WELLHEAD | ■ | CAPPED AND CLOSED LANDFILL AREA |

Go East Landfill

The closed landfill has an engineered final cover constructed of the following layers (from top to bottom):

- A minimum of 12 inches of topsoil
- A minimum of 12 inches of onsite sand
- Geocomposite (200-mil [200 thousandths of 1 inch] GSE® Fabrinet double-sided composite, with 6-ounce nonwoven geotextile)
- Geomembrane (40-mil GSE® UltraFlex, linear low-density polyethylene, double-sided, textured)
- A minimum 6-inch bottom layer of onsite sand

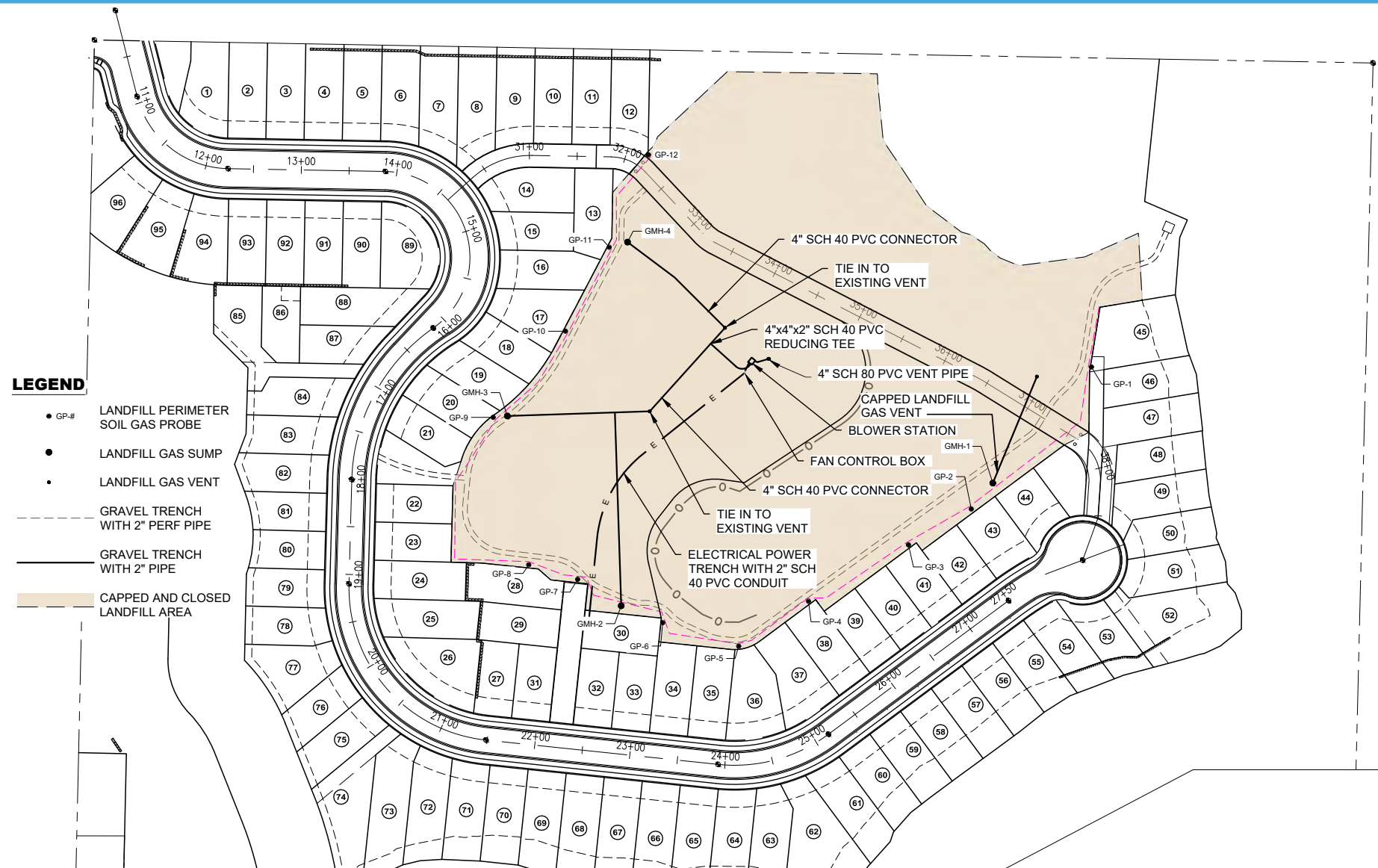
As the gas rises, it encounters the impenetrable surface and travels horizontally to the gravel-filled methane vent trench system located at the perimeter of the closed landfill. The trench was excavated to native soil with variable dimensions to match site conditions and filled with gravel. A geomembrane liner was placed on the outside of the methane vent trench and welded to the geomembrane liner of the landfill cover. The trench contains a 2-inch-diameter, perforated collection pipe that conveys the gas to one of four sump-like structures for continuous gas monitoring. Gas is conveyed from these four sumps to one of three horizontal pipes that extend to vertical vent pipes that discharge the gas 10 feet above grade. The vent pipes are located more than 100 feet from any buildable lot. Twelve gas perimeter monitoring probes were installed between the landfill containment system and the property boundary, and these probes extend into native soils (Vitek Environmental Engineers, 2022).

In 2022, in response to initial monitoring data, Herrera installed wind-driven turbine exhaust ventilators on top of each vent pipe to create pull and encourage increased LFG collection. In 2023, when that was observed to not sufficiently draw LFG away from the perimeter, Herrera installed a portable soil vapor extraction unit (blower) near GP-7 to provide vacuum on the perimeter trench through the sump near GP-7. Discharge was routed through the LFG Vent connected to sumps by GP-7 and GP-9. Other contingency measures were implemented in 2023 to try to bring methane levels down. These included leaving the probe valves open to vent, converting the collection system from passive to active with installation of a blower, and connecting the blower to several probes for individual vacuum extraction. In 2024, caps were added to vent pipe connections at the sumps by GP-11 and GP-2 to prevent atmospheric air from being pulled into the trench and to increase vacuum influence on the landfill perimeter trench. The vent pipe connection at the sump near GP-9 was also capped to prevent recirculation of LFG through the collection system.

In November 2024, the process for installing a larger, permanent blower unit to increase vacuum influence on the collection trench was initiated with collection of an LFG sample representative of LFG collected from the landfill perimeter collection trench. Although methane concentrations stayed mostly consistent after the blower was installed, methane reads at four of the 10 probes have consistently read

above the LEL of 5 percent and upward trends were observed in October through December. Therefore, an upsize of the blower was deemed necessary. Because of the flooding issues with the placement of the blower and its connection to the collection trench at a lower elevation, the new upsized blower was moved to the top of the grass hill in a central location between the two vent pipes. This location was selected so it was higher in elevation to reduce flooding problems, and so the blower could connect to the collection trench at three spots rather than one and increase vacuum influence on the landfill. To create these connection points from the blower to the collection trench, the existing vent pipes were removed, and additional lateral pipe and trench were connected at the points where the vent pipes came up out of the landfill liner cap. This new lateral pipe and trench continued and intersected near the new selected location of the blower. A new 10-foot-tall vent pipe was installed a minimum of 10 feet away from the blower to perform as the new discharge pipe. Additionally, a new electrical power trench was routed from the previous fan control box located near GP-7 at the old blower location, to the top of the hill, for power to the new blower location. This improvement to the LFG collection system is shown in Figure 2. All work to the piping system was completed in April 2025 and was performed above the existing landfill closure cover geomembrane. On October 31, 2025, the new upsized blower unit was delivered and installed to increase landfill gas extraction from the collection trench. The old smaller unit was operational between May 2, 2025, and October 31, 2025.

Figure 2.
Go East Landfill Gas Extraction System Modification As-Built.



PLAN VIEW
SCALE: 1:150

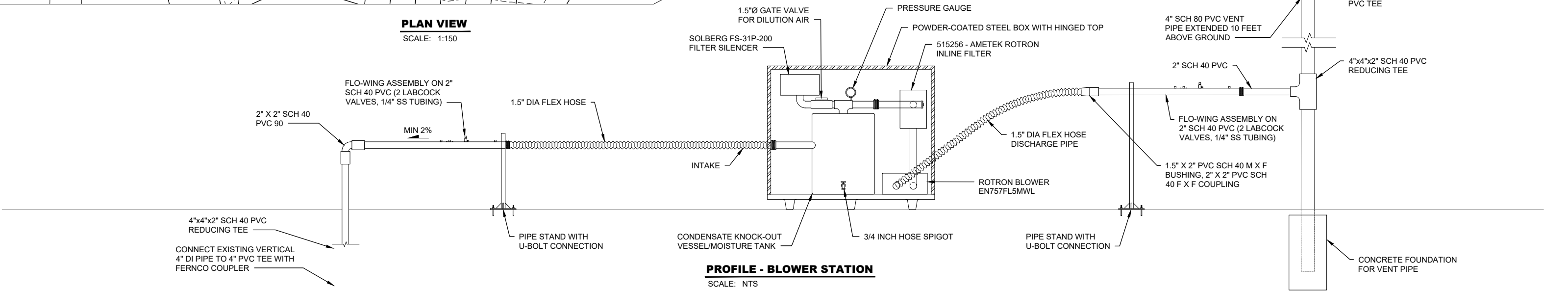
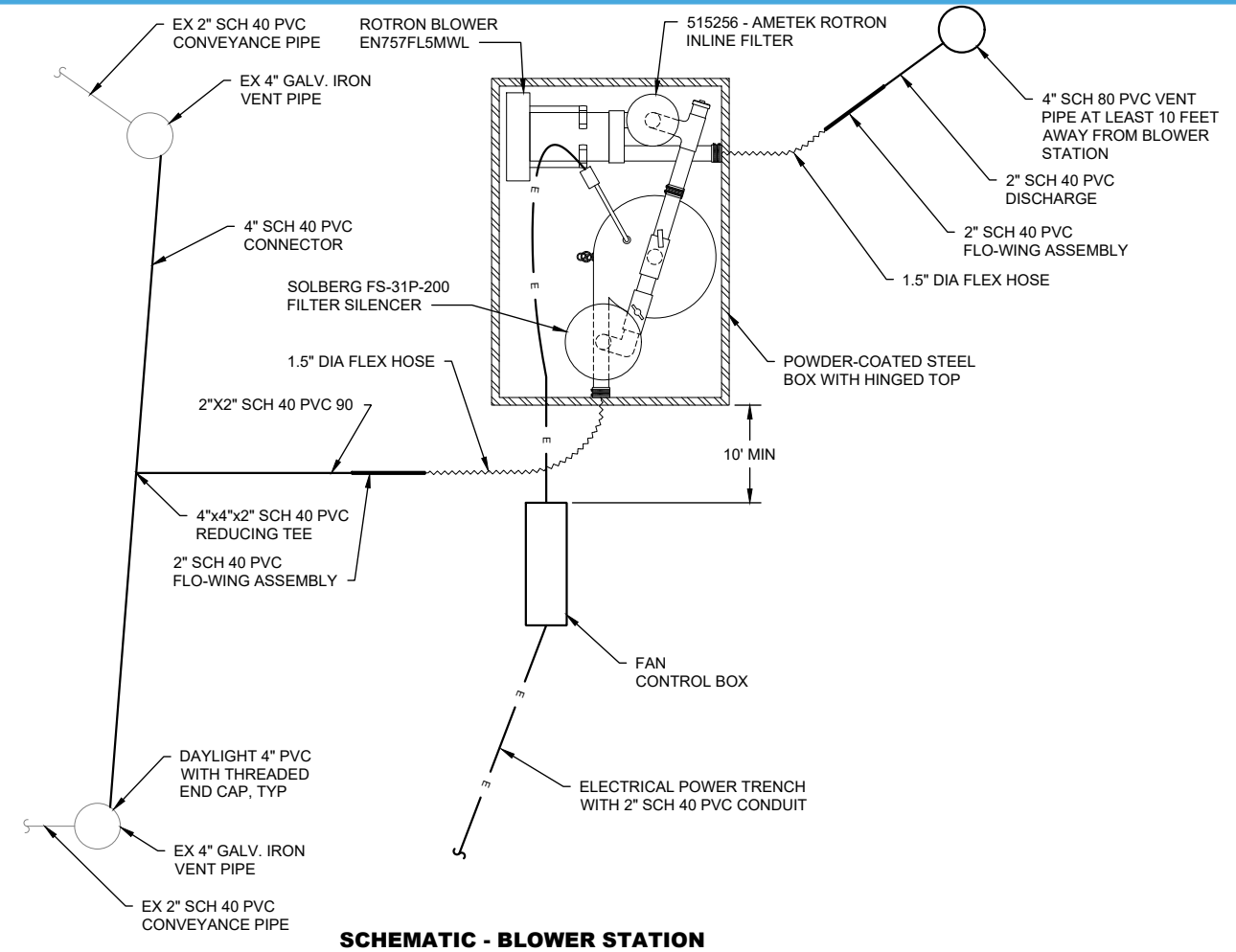


Table 1 summarizes the relevant historical landfill operations and closure activities.

Table 1. Summary of Go East Landfill Operation and Closure Activities.	
Date	Description
1969–1971	Operated as excavation and sand reclamation site
1972	Accepted wood debris and concrete solid material that was compacted and placed in sealed cells
1978	Initial closure
1979–1983	Reopened with Go East Corporation as Owner/Operator; accepted wood waste placed in enclosed cells until 1983
1983	All landfill operations ceased.
2009	Purchased by P&GE
2021–2022	- Landfill closure was conducted by P&GE, with a minimum 12 inches of topsoil, 12 inches of onsite sand, geocomposite, geomembrane, and a 6-inch bottom layer of onsite sand. - Passive LFG system was built. Gravel-filled trenches at the landfill perimeter were excavated to native soil and laid with 2-inch diameter perforated pipes to direct gas to sump-like structures for continuous monitoring. The geomembrane liner on the outside of the trench is welded to the geomembrane liner of the landfill cover. Gas is conveyed from sumps to discharge pipes and vented 10 feet above grade. Gas is vented more than 100 feet from any buildable lot. - Twelve gas perimeter monitoring probes were installed between the landfill containment system and the property boundary, extending into native soils.
2022	- Century Communities of Washington, LLC purchased the redevelopment project. - Herrera repaired the perimeter soil gas probe casings to prepare them for routine monitoring. - Herrera began investigative LFG monitoring. - Herrera installed wind-driven turbine exhaust ventilators on top of each vent pipe to create pull and encourage increased LFG collection.
2023	- Herrera placed a blower on the landfill to turn passive collection into active collection and improve LFG extraction. The blower was installed near GP-7 to provide vacuum on the perimeter trench through the sump near GP-7. Discharge was routed through the LFG Vent connected to sumps by GP-7 and GP-9. - Herrera began LFG investigation and implemented contingency measures to reduce methane levels, including leaving the probe valves open to vent, turning the blower on and off to see if perimeter probe methane levels correlated, and connecting the blower to several probes for individual vacuum extraction.
2024	- Herrera began LFG compliance monitoring. - Caps were added to vent pipe connections at the sumps near GP-11 and GP-2, to prevent atmospheric air from being pulled into the trench and to increase vacuum influence on the landfill perimeter trench. The vent pipe connection at the sump near GP-9 was also capped to prevent recirculation of LFG through the collection system. - LFG sample was collected from the landfill collection trench for analysis, to begin the process of upsizing the blower unit and ensuring compliance with air emissions.
2025	- Herrera continued LFG compliance monitoring. - Herrera designed a new blower station based on the 2024 LFG sample and associated loading analysis. - A new upsized blower unit was ordered, installed, and put into operation to improve landfill gas extraction efficiency. - To connect the blower to the LFG trench, two existing vent pipes were removed, and additional lateral pipe and trench were connected at the existing vent pipe penetrations in the cap. - A new 10 feet tall vent pipe was installed to act as the new discharge pipe.

Alpine Estates Development

As shown in Figure 1, Alpine Estates homes are situated within 1,000 feet of the Go East Landfill. The Landfill Closure Plan and the Plat Map for the Alpine Estates Community require that the homes be constructed with gas barrier and ventilation systems that are protective against methane produced from the biodegradation of organic waste from the landfill. Methane is an odorless and colorless gas that is non-toxic and creates no hazard to human health when inhaled at the low levels observed in the Alpine Estates community. Methane is combustible and capable of igniting at concentrations between 5 and 15 percent by volume (i.e., 50,000 and 150,000 parts per million by volume, ppmV).

Each individual Alpine Estates home, as well as the electrical building, has a gas barrier and ventilation system designed to seal the foundation and collect and convey soil gas to a vent pipe that discharges above the structure. Soil gas can be monitored beneath each structure. The gas barrier and ventilation systems for the Alpine Estates homes and the electrical building provide a protective barrier for any explosive gases that might migrate from the closed landfill.

The electrical building was constructed with a gas mitigation system that includes a gas vapor impervious membrane and underlying passive ventilation system. The electrical building is uninhabited and only accessed occasionally for utility or maintenance purposes. The gas mitigation system design for the electrical building is included in Appendix A of the LFGMCP and is consistent with the Landfill Closure Plan.

For the safety of Alpine Estates homes' residents, in accordance with the nationally recognized Los Angeles Department of Building and Safety Methane Mitigation Standards, a gas barrier, ventilation, monitoring, and detection system was installed for all Alpine Estates homes, including the final 39 homes constructed in 2025. Figure 3 shows the typical details of the gas control system for Alpine Estates homes, and Table 2 summarizes the gas control system feature and the construction quality assurance (CQA) measures implemented.

Figure 3. Typical Gas Control System Details for Alpine Estates Homes.

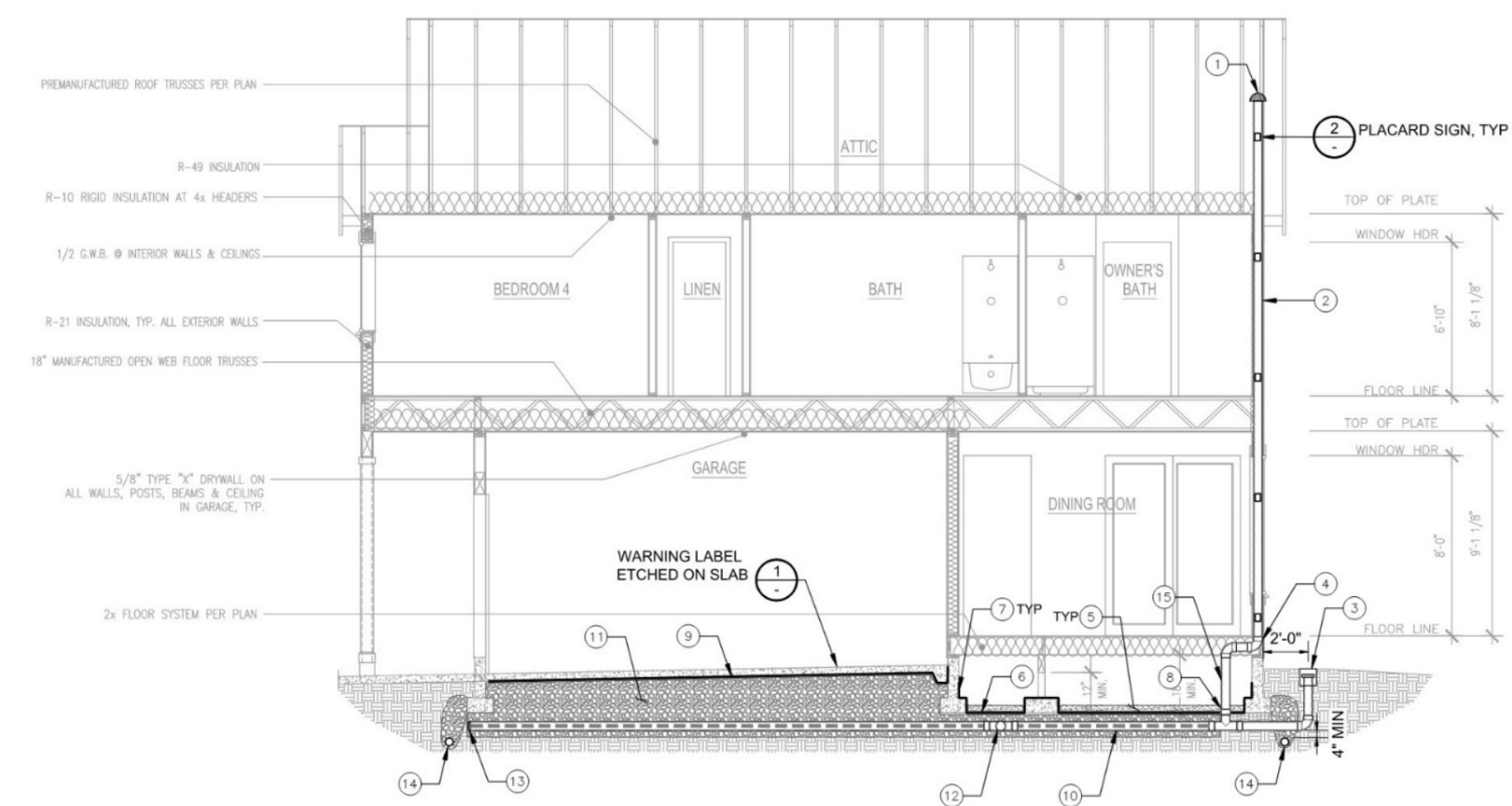


Table 2. Alpine Estates Gas Control Systems and Construction Quality Assurance Measures Implemented.			
Gas Control System Feature	Callout on Figure 2	Description	CQA Measure
Methane ventilation trench	Item 10	Beneath the house footprint and impervious geomembrane are perforated horizontal pipes surrounded by a gravel trench. These trenches provide a preferential pathway for any migrating LFG to be routed through the pipes, into the vents, and exhausted above the house.	Visual confirmation
Impervious geomembrane	Items 6 and 9	An impervious geomembrane is installed above the methane ventilation trench beneath the footprint of each home to provide a barrier to any potential migrating LFG and prevent it from entering the home.	Laboratory test to ensure performance and smoke test(s) using a high volume-low pressure pump and liquid smoke to verify no leaks after installation
Vent riser pipes	Item 2	Two vent riser pipes are attached to the ventilation trench pipe to convey any collected soil gas to be exhausted above the house. Methane gas warning labels are placed on vent riser pipes every five feet.	Air pressure leak test to ensure pipe is capable of holding 4 pounds per square inch for at least 1 hour without losing pressure. Visual confirmation for methane gas warning labels.
Garage stamp	"WARNING LABEL ETCHED ON SLAB"	A stamp is made in the garage to remind occupants of the installed methane gas control barrier below the slab.	Visual confirmation
House ventilation trench monitoring station	Item 3	An additional section of pipe is connected to the ventilation trench and terminates at a monitoring station in the backyard of the house to monitor the composition of gas in the ventilation trench.	Visual confirmation
Continuous gas detection and alarm system	Not called out	Three combustible gas detectors are installed inside the house to provide continuous monitoring of the indoor air of the house. The gas detectors are connected to a central control panel that will alarm if methane is detected at concentrations above 1.25% methane (12,500 ppmV, 25% of the way to becoming potentially explosive) within the house. The combustible gas detectors are placed near the ceiling because methane is lighter than air.	Activation tested to ensure functional
Electrical junction box in crawl space	Not called out	An electrical junction box is installed in the crawl space to provide power for an intrinsically safe fan, such as the Plastec P15 XP, rated for Class 1, Division 1, and Division 2 standards (functions similarly to radon fan). A fan will be installed if methane is detected and confirmed above 0.1% (1,000 ppmV) at the house ventilation trench monitoring station and/or 0.01% (100 ppmV) inside the house, to create an active collection system. The fan should be installed in the crawl space on the above ground segment of PVC pipe before the transition to the cast iron vent riser pipe. The vent riser pipe is air pressure tested and installed with warning labels to prevent the pipe from leaking soil gas in the event a fan needs to be installed.	Visual

Herrera personnel were present during every stage of construction of the gas barrier, ventilation, and detection system, to ensure all components were installed as designed. Table 3 summarizes the relevant development associated with Alpine Estates.

Table 3. Summary of Alpine Estates Development.	
Date	Description
2022	Century Communities of Washington, LLC purchased the redevelopment Project from P&GE and began installation of the utilities for the planned housing community.
2023	- The electrical building was constructed with a gas mitigation system, including a gas vapor impervious membrane and underlying passive ventilation system consisting of perforated horizontal pipes, gravel blankets, and a vent riser. - The first two Alpine Estates homes were constructed with gas mitigation systems, including gas vapor impervious membranes and underlying passive ventilation systems. - Methane surface emissions monitoring inside Alpine Estates homes while they were being constructed began.
2024	55 Alpine Estates homes were constructed with gas mitigation systems, including gas vapor impervious membranes and underlying passive ventilation systems. - Methane surface emissions monitoring inside Alpine Estates homes while they were being constructed continued.
2025	- The final 39 Alpine Estates homes were constructed with gas mitigation systems, including gas vapor impervious membranes and underlying passive ventilation systems. - Methane surface emissions monitoring inside Alpine Estates homes while they were being constructed continued.

Landfill Gas Collection System Status

In 2025, the four components of gas monitoring at the Go East Landfill and Alpine Estates Development were as follows:

- LFG Sumps – continuous monitoring within the landfill containment system
- Perimeter Soil Gas Probes – monitoring beyond the landfill containment system
- House Ventilation Trench Monitoring Stations – monitoring beneath Alpine Estates homes
- Indoor Air – monitoring the first-floor interior of Alpine Estates homes and electrical building

Each of these components were monitored, either manually by Herrera personnel or automatically through installed monitors. Table 4 summarizes the LFG monitoring components, their locations, and the frequency of monitoring, as well as the monitoring process and equipment used.

Table 4. Summary of Monitoring Components.			
Monitoring Component	Location	Frequency of Routine/Initial Monitoring	Monitoring Process and Equipment Used
LFG Sump	Along gas collection trench within the landfill containment system	Continuous	Automatic with RKI Instruments M2A Transmitter Units
Perimeter Soil Gas Probe	Beyond the landfill containment system adjacent to landfill property boundary	Quarterly	Manual with GEM™ 5000
House Ventilation Trench Monitoring Station	Adjacent to each Alpine Estates home. Connected to perforated collection pipe trenches positioned beneath house footprint	Monthly for first 6 months of home being built (each home)	Manual with GEM™ 5000
Indoor Air	Interior of each Alpine Estates home and electrical building	One time after structure is built (each structure)	Manual with SEM™ 5000
		Continuous ^a	Automatic with Macurco™ GD-2A Model

^a Only the Alpine Estates homes (not the electrical building) are continuously monitored with installed gas detectors.

Monitoring LFG collection systems serves two purposes: (1) performance monitoring within the system to guide its operation and (2) post-construction compliance monitoring to confirm that the system is mitigating LFG emissions as intended by the Landfill Closure Plan. The LFG conditions were evaluated for operational, supplemental, or regulatory purposes in 2025. Table 5 outlines the regulatory and/or supplemental level at which each of the four monitoring components are evaluated to inform how well the LFG collection and mitigation system is operating and the contingency monitoring action that is triggered when these levels are reached per the LFGMCP. Regulatory compliance criteria for methane are established at the property boundary of the landfill (i.e., the perimeter probes) and indoor air within the

structures. Supplemental monitoring levels were established to trigger monitoring at other monitoring components. Supplemental monitoring trigger levels help to ensure methane levels across the Alpine Estates Development remain below regulatory levels.

Table 5. Summary of Monitoring Types and Levels.

Monitoring Component	Monitoring Type	Methane Level (% by volume)	Monitoring Action and Frequency
LFG Sump	Supplemental	None	N/A
	Regulatory	None	N/A
Perimeter Soil Gas Probe	Supplemental	1%	For home lots, one-time monitoring of house ventilation trench monitoring stations after methane of greater than 1% is detected at the perimeter probe. For electrical building, one-time monitoring of indoor air. Refer to the table in Figure C-1 in Appendix C of the LFGMCP.
	Regulatory	5%	Weekly monitoring of the perimeter probe for 4 weeks until control is established, and then monthly monitoring until methane levels are confirmed to drop below 5%.
House Ventilation Trench Monitoring Station	Supplemental	0.1%	One-time monitoring of indoor air of the home after methane of greater than 0.1% is detected at the associated house ventilation monitoring station.
	Regulatory	None	N/A
Indoor Air	Supplemental	None	N/A
	Regulatory	0.01%	Daily indoor monitoring of the offsite structure until methane levels are confirmed to drop below 0.01%.

Landfill Gas Perimeter Probe Monitoring

Background

A network of soil gas probes is established around the perimeter of the landfill site. The locations of these probes are shown in Figure 1. These probes are used to evaluate whether LFG control systems are effective at controlling methane migration. The primary goal of monitoring is to keep methane levels below regulatory limits. Methane concentrations in soil at the landfill boundary should not exceed the LEL of 5 percent by volume (50,000 ppmV). The LEL represents the lowest concentration of a gas or vapor in air that is capable of producing a flash of fire in the presence of an ignition source.

Methods

Herrera utilized a Landtec GEM™ 5000 unit to measure gas concentrations at probes surrounding the perimeter of the landfill site. The GEM™ 5000 is a handheld portable gas analyzer that measures the concentrations of methane, carbon dioxide, and oxygen. The GEM™ 5000 measures methane and carbon

dioxide by dual wavelength infrared cell and oxygen by internal electrochemical cell. The GEM™ 5000 was used in accordance with the LFGMCP.

Twelve probes were monitored in 2025. GP-1 was unintentionally buried under asphalt during construction of the Lot 45 driveway and could not be monitored from March 2024 through October 2025. GP-8 and GP-12 were buried under soils as a result of development construction and could not be monitored from March 2025 through October 2025. GP-1, GP-8, and GP-12 were all uncovered in November 2025 prior to completion of the Alpine Estates Development. These probes have returned to routine monitoring.

Per Table 4 and the LFGMCP, perimeter soil gas probe should be monitored on a quarterly basis. Since the methane concentrations routinely exceeded the 5 percent regulatory level, Herrera personnel increased the monitoring frequency to monthly for most of 2025. Monitoring returned to weekly in November 2025 after the new upsized blower was installed to more closely monitor how gas levels changed with the change in operations. LFG monitoring was furthermore conducted during times when LFG is most likely to migrate. Barometric pressure and precipitation influence LFG migration. As a result, LFG monitoring was conducted under the following conditions to the extent possible:

- Barometric pressure was low following at least 2 hours of falling barometric pressure, with a drop of least 0.25 inches of mercury.
- Soils were saturated.
- During the winter, the snow cover was just beginning to melt, or the ground surface was frozen, snow-covered, and/or ice-covered.

Results

Soil gas concentrations collected at the probes along the landfill perimeter are presented per gas probe in Tables 6 to 18. Data since monitoring first began in 2022 is included. LFG composition data was also collected at the blower, to compare the composition of LFG inside the trench to the soil gas beyond the landfill. The blower reads represent the content of LFG collected from the perimeter collection trench with the dilution valve at the blower closed. The dilution valve is operated so that emissions from the LFG Vent is kept below the methane LEL of 5 percent. Figures 4 to 16 show the measured methane values for the gas probes and blower, respectively, plotted against the 5 percent regulatory limit. The figures also show when the blower was in operation and when it was turned off, and include other notable events related to the LFG collection system and its monitoring.

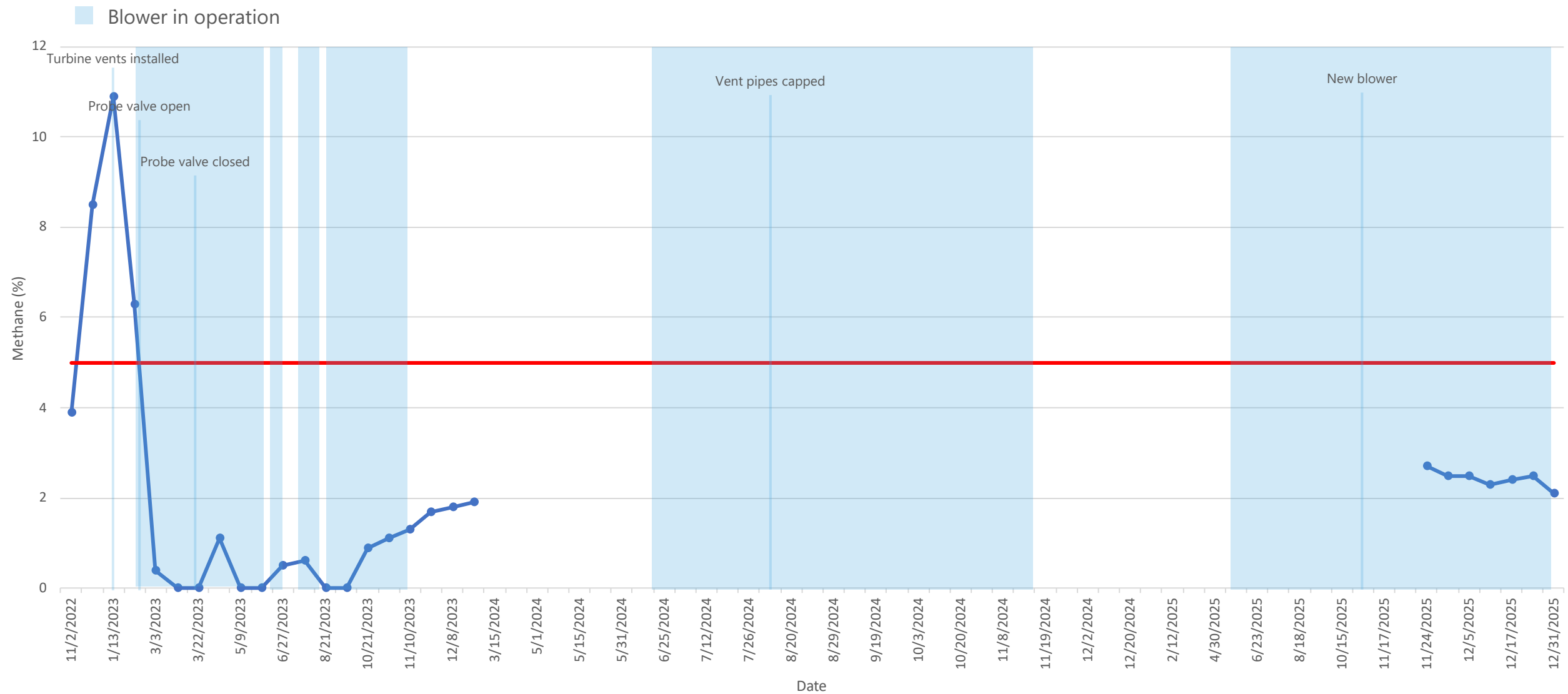
Gas Probe 1

Table 6. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 1.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	3.9	27.0	0.0	69.2	
11/23/2022	8.5	30.5	0.0	61.0	
1/13/2023	10.9	24.1	0.1	64.9	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	6.3	21.8	0.1	71.8	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Probe valve left open to vent (2/23/2023–3/22/2023)
3/3/2023	0.4	3.5	11.8	84.3	
3/10/2023	0.0	0.3	21.2	78.4	
3/22/2023	0.0	0.8	19.6	79.6	- Probe valve closed (3/22/2023–present)
4/1/2023	1.1	15.6	1.3	82.0	
5/9/2023	0.0	0.0	19.9	80.1	
6/15/2023	0.0	0.2	19.6	80.1	
6/27/2023	0.5	13.4	0.1	86.0	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	0.6	14.4	0.1	84.9	
8/21/2023	0.0	8.3	9.8	81.9	- Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023)
9/5/2023	0.0	7.3	11.6	81.1	- Vacuum extraction from methane trench (8/23/2023–11/10/2023)
9/22/2023	0.0	1.2	17.5	81.3	
10/21/2023	0.9	20.5	0.1	78.5	
11/1/2023	1.1	20.1	0.1	78.7	
11/10/2023	1.3	12.1	0.1	86.5	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	1.4	16.9	0.1	81.6	
11/30/2023	1.7	11.8	0.2	86.3	
12/8/2023	1.8	11.1	0.1	87.0	
1/3/2024	1.9	18.7	0.0	79.4	
3/15/2024	Not read due to construction blockage				
4/3/2024	Not read due to construction blockage				
5/1/2024	Not read due to construction blockage				
5/7/2024	Not read due to construction blockage				
5/15/2024	Not read due to construction blockage				
5/21/2024	Not read due to construction blockage				
5/31/2024	Not read due to construction blockage				
6/7/2024	Not read due to construction blockage				
6/25/2024	Not read due to construction blockage				- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	Not read due to construction blockage				
7/12/2024	Not read due to construction blockage				
7/16/2024	Not read due to construction blockage				
7/26/2024	Not read due to construction blockage				
8/8/2024	Not read due to construction blockage				- Caps added to the other two vent pipe connections at sumps
8/20/2024	Not read due to construction blockage				
8/24/2024	Not read due to construction blockage				
8/29/2024	Not read due to construction blockage				
9/4/2024	Not read due to construction blockage				
9/19/2024	Not read due to construction blockage				
9/26/2024	Not read due to construction blockage				
10/3/2024	Not read due to construction blockage				
10/8/2024	Not read due to construction blockage				
10/20/2024	Not read due to construction blockage				
10/30/2024	Not read due to construction blockage				
11/8/2024	Not read due to construction blockage				
11/12/2024	Not read due to construction blockage				
11/19/2024	Not read due to construction blockage				- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	Not read due to construction blockage				
12/2/2024	Not read due to construction blockage				
12/12/2024	Not read due to construction blockage				
12/20/2024	Not read due to construction blockage				
1/24/2025	Not read due to construction blockage				
2/12/2025	Not read due to construction blockage				
3/21/2025	Not read due to construction blockage				
4/30/2025	Not read due to construction blockage				

Table 6 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 1.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
5/9/2025	Not read due to construction blockage				- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	Not read due to construction blockage				
7/23/2025	Not read due to construction blockage				
8/18/2025	Not read due to construction blockage				
9/10/2025	Not read due to construction blockage				
10/15/2025	Not read due to construction blockage				
11/6/2025	Not read due to construction blockage				- Rotron blower unit installed (10/31/2025)
11/17/2025	Not read due to construction blockage				
11/21/2025	Not read due to construction blockage				
11/24/2025	2.7	17.3	0.1	79.9	- Probe uncovered from Lot 45 concrete driveway
12/1/2025	2.5	17.1	0.1	80.3	
12/5/2025	2.5	18.1	0.1	79.2	
12/10/2025	2.3	17.0	0.1	80.5	
12/17/2025	2.4	14.6	0.2	82.9	
12/22/2025	2.5	14.0	0.1	83.4	
12/31/2025	2.1	14.3	0.1	83.5	

Figure 4. Methane Content of Landfill Perimeter Soil Gas Probe #1.



Gas Probe 2

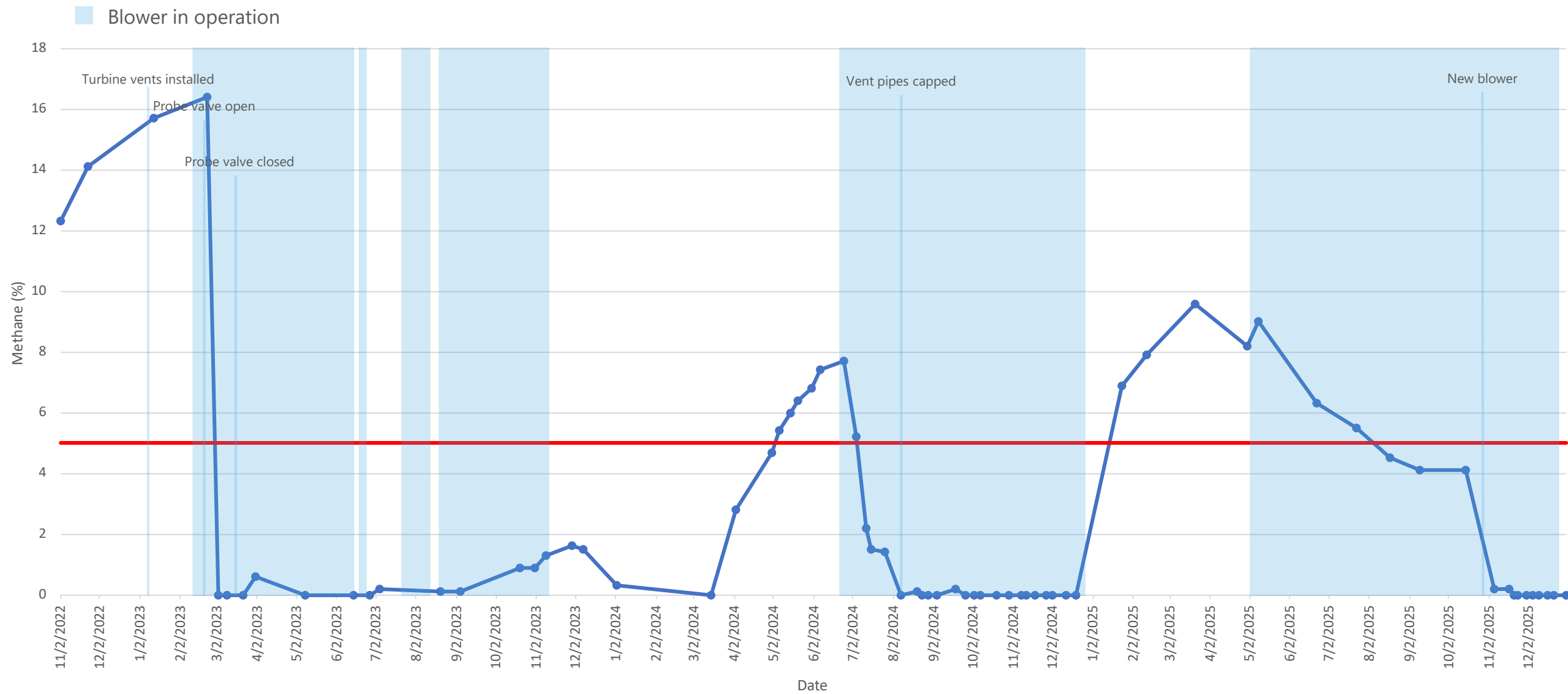
Table 7. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 2.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	12.3	29.2	0.0	58.4	
11/23/2022	14.1	26.9	0.0	39.1	
1/13/2023	15.7	25.2	0.1	59.1	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	16.4	24	0.1	59.6	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Probe valve left open to vent (2/23/2023–3/22/2023)
3/3/2023	0.0	1.8	17.7	80.5	
3/10/2023	0.0	0.2	21.3	78.4	
3/22/2023	0.0	0.2	20.0	79.9	- Probe valve closed (3/22/2023–present)
4/1/2023	0.6	9.9	1.5	87.9	
5/9/2023	0.0	0.0	20.1	79.8	
6/15/2023	0.0	0.5	19.7	79.8	
6/27/2023	0.0	13.5	0.4	86.1	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	0.2	15.6	0.1	84.2	
8/21/2023	0.1	22.7	0.1	77.1	- Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023)
9/5/2023	0.1	22.8	0.1	76.9	- Vacuum extraction from methane trench (8/23/2023–11/10/2023)
9/22/2023	0.0	21.4	0.1	78.4	
10/21/2023	0.9	22.2	0.1	76.9	
11/1/2023	0.9	21.6	0.1	77.4	
11/10/2023	1.3	21.2	0.1	77.4	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	1.5	20.1	0.1	78.3	
11/30/2023	1.6	20.3	0.1	78.1	
12/8/2023	1.5	19.8	0.0	78.6	
1/3/2024	0.3	18.3	0.0	81.4	
3/15/2024	Not read due to construction blockage				
4/3/2024	2.8	16.2	0.0	81	
5/1/2024	4.7	16.9	0.0	78.5	
5/7/2024	5.4	17.8	0.1	76.7	
5/15/2024	6.0	17.8	0.1	76.1	
5/21/2024	6.4	18	0.1	75.6	
5/31/2024	6.8	17.9	0.1	75.2	
6/7/2024	7.4	17.5	0.1	75.1	
6/25/2024	7.7	18	0.1	74.2	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	5.2	18.0	0.1	76.6	
7/12/2024	2.2	17.9	0.1	79.8	
7/16/2024	1.5	17.5	0.2	80.9	
7/26/2024	1.4	19.5	0.0	79.1	
8/8/2024	0.0	17.8	0.1	82.1	- Caps added to the other two vent pipe connections at sumps
8/20/2024	0.1	17.7	0.2	82.0	
8/24/2024	0.0	17.8	0.2	82.1	
8/29/2024	0.0	17.0	0.1	82.9	
9/4/2024	0.0	16.2	0.3	83.4	
9/19/2024	0.2	15.8	1.5	82.6	
9/26/2024	0.0	16.1	1.9	82.0	
10/3/2024	0.0	15.5	3.1	81.4	
10/8/2024	0.0	15.3	3.4	81.3	
10/20/2024	0.0	13.9	6.0	80.1	
10/30/2024	0.0	14.0	5.9	80.2	
11/8/2024	0.0	14.8	3.9	81.3	
11/12/2024	0.0	14.6	3.0	82.3	
11/19/2024	0.0	14.5	3.4	82.1	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	0.0	14.2	3.6	82.2	
12/2/2024	0.0	13.9	4.8	81.3	
12/12/2024	0.0	13.8	5.5	80.7	
12/20/2024	0.0	13.5	5.9	80.6	
1/24/2025	6.9	14.5	3.2	75.4	
2/12/2025	7.9	14.9	2.8	74.4	
3/21/2025	9.6	15.1	0.0	75.2	



Table 7 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 2.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
4/30/2025	8.2	15.2	0.0	76.6	
5/9/2025	9.0	15.4	0.0	75.6	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	6.3	15.6	0.0	78.1	
7/23/2025	5.5	15.8	0.0	78.7	
8/18/2025	4.5	15.5	0.1	79.9	
9/10/2025	4.1	16.8	0.1	79.0	
10/15/2025	4.1	17.1	0.1	78.7	
11/6/2025	0.2	17.4	0.1	82.3	- Rotron blower unit installed (10/31/2025)
11/17/2025	0.2	15.4	0.1	84.3	
11/21/2025	0.0	14.5	0.1	85.3	
11/24/2025	0.0	14.8	0.1	85.1	
12/1/2025	0.0	14.5	0.2	85.2	
12/5/2025	0.0	14.7	0.3	85.0	
12/10/2025	0.0	14.1	0.3	85.6	
12/17/2025	0.0	12.9	0.6	86.5	
12/22/2025	0.0	12.6	0.6	86.8	
12/31/2025	0.0	11.8	1.2	87.0	

Figure 5. Methane Content of Landfill Perimeter Soil Gas Probe #2.



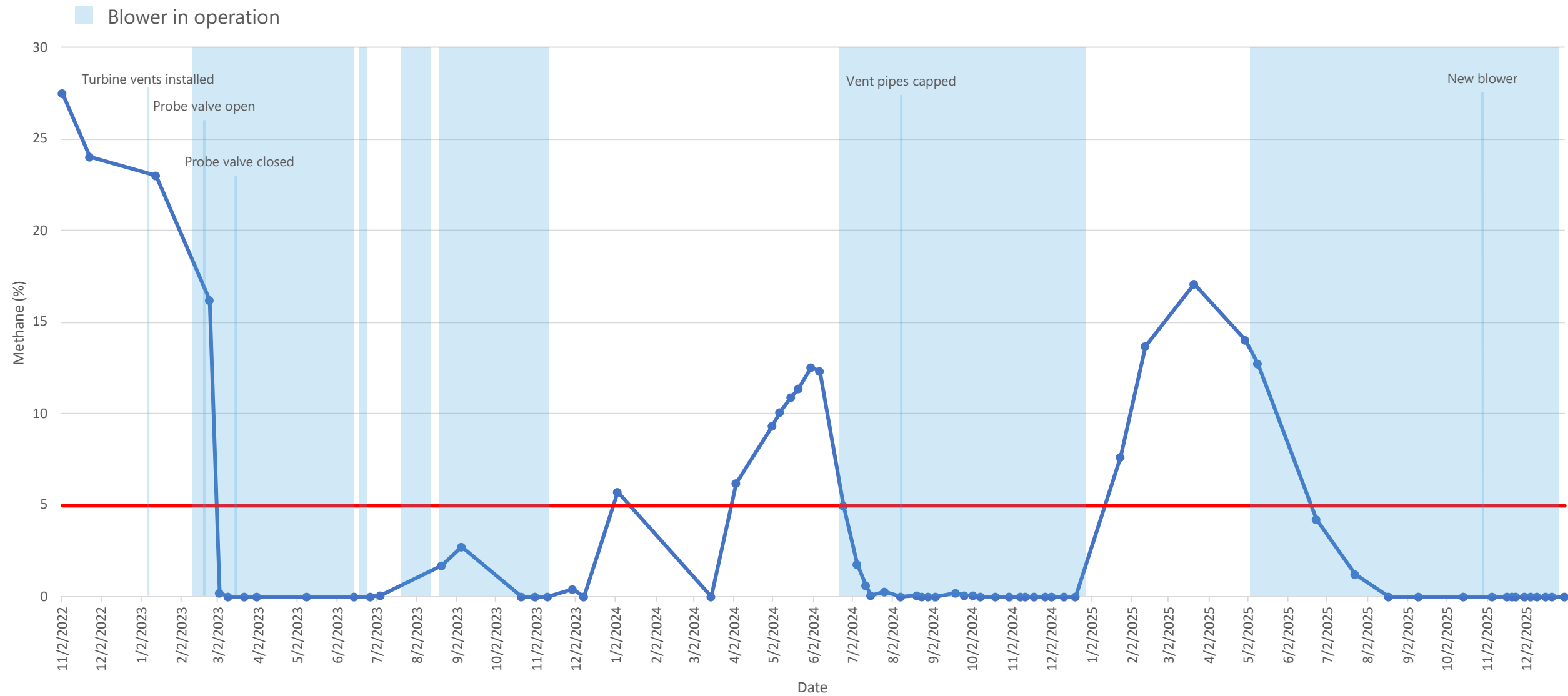
Gas Probe 3

Table 8. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 3.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	27.5	29.2	0.0	43.3	
11/23/2022	24.0	24.7	0.0	51.4	
1/13/2023	23.0	22.9	0.1	54.0	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	16.2	19.9	1.1	62.8	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	0.2	1.6	18.2	79.9	
3/10/2023	0.0	0.1	21.6	78.4	
3/22/2023	0.0	0.0	20.2	79.8	- Probe valves closed (3/22/2023–present)
4/1/2023	0.0	11.7	7.5	80.8	
5/9/2023	0.0	0.0	20.3	79.7	
6/15/2023	0.0	0.0	20.4	79.6	
6/27/2023	0.0	13.1	4.7	82.3	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	0.1	15.8	0.1	84.1	
8/21/2023	1.7	24.0	0.1	74.2	- Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023)
9/5/2023	2.7	25.2	0.1	72.0	- Vacuum extraction from methane trench (8/23/2023–11/10/2023)
9/22/2023	0.2	21.3	0.1	78.4	
10/21/2023	0.0	18.0	0.2	81.8	
11/1/2023	0.0	17.3	0.1	82.6	
11/10/2023	0.0	17.5	0.2	82.3	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	0.0	17.0	0.1	82.9	
11/30/2023	0.4	17.4	0.1	82.1	
12/8/2023	0.0	17.9	1.7	80.5	
1/3/2024	5.7	20.2	0.0	74.1	
3/15/2024	Not read due to construction blockage				
4/3/2024	6.2	17.7	0.0	76.1	
5/1/2024	9.3	18.5	0.0	72.1	
5/7/2024	10.1	19.6	0.1	70.2	
5/15/2024	10.9	20.2	0.1	68.8	
5/21/2024	11.4	20.9	0.1	67.6	
5/31/2024	12.5	21.1	0.1	66.3	
6/7/2024	12.3	20.9	0.1	66.7	
6/25/2024	5.0	21.0	0.1	73.9	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	1.8	20.3	0.1	77.8	
7/12/2024	0.6	19.3	0.1	80.0	
7/16/2024	0.1	19.1	0.1	80.7	
7/26/2024	0.3	21.5	0.0	78.2	
8/8/2024	0.0	19.5	0.1	80.5	- Caps added to the other two vent pipe connections at sumps
8/20/2024	0.1	18.3	0.1	81.5	
8/24/2024	0.0	17.4	1.0	81.7	
8/29/2024	0.0	13.1	5.1	81.8	
9/4/2024	0.0	12.3	4.1	83.5	
9/19/2024	0.2	12.4	5.3	82.1	
9/26/2024	0.1	12.3	5.5	82.1	
10/3/2024	0.1	12.3	6.2	81.4	
10/8/2024	0.0	13.2	4.8	82.0	
10/20/2024	0.0	9.9	9.8	80.3	
10/30/2024	0.0	9.6	10.8	79.6	
11/8/2024	0.0	10.0	8.4	81.7	
11/12/2024	0.0	10.0	6.8	83.2	
11/19/2024	0.0	10.2	6.9	82.9	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	0.0	10.4	6.8	82.8	
12/2/2024	0.0	9.8	7.1	83.1	
12/12/2024	0.0	9.6	7.4	83.0	
12/20/2024	0.0	9.4	7.7	82.9	
1/24/2025	7.6	11.5	6.5	74.4	
2/12/2025	13.7	12.1	5.1	69.1	
3/21/2025	17.1	12.9	0.1	70.0	

Table 8 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 3.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
4/30/2025	14.0	19.7	0.0	66.4	
5/9/2025	12.7	20.1	0.0	67.2	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	4.2	19.2	0.1	76.5	
7/23/2025	1.2	18.4	0.0	80.4	
8/18/2025	0.0	19.6	0.1	80.3	
9/10/2025	0.0	20.2	0.2	79.6	
10/15/2025	0.0	17.9	0.3	81.8	
11/6/2025	0.0	16.0	2.4	81.7	- Rotron blower unit installed (10/31/2025)
11/17/2025	0.0	11.6	10.0	78.4	
11/21/2025	0.0	9.5	13.0	77.5	
11/24/2025	0.0	8.7	14.0	77.3	
12/1/2025	0.0	7.2	14.8	78.0	
12/5/2025	0.0	6.8	14.9	78.3	
12/10/2025	0.0	6.0	14.7	79.3	
12/17/2025	0.0	5.6	15.3	79.1	
12/22/2025	0.0	0.1	21.7	78.2	
12/31/2025	0.0	4.4	17.2	78.5	

Figure 6. Methane Content of Landfill Perimeter Soil Gas Probe #3.



Gas Probe 4

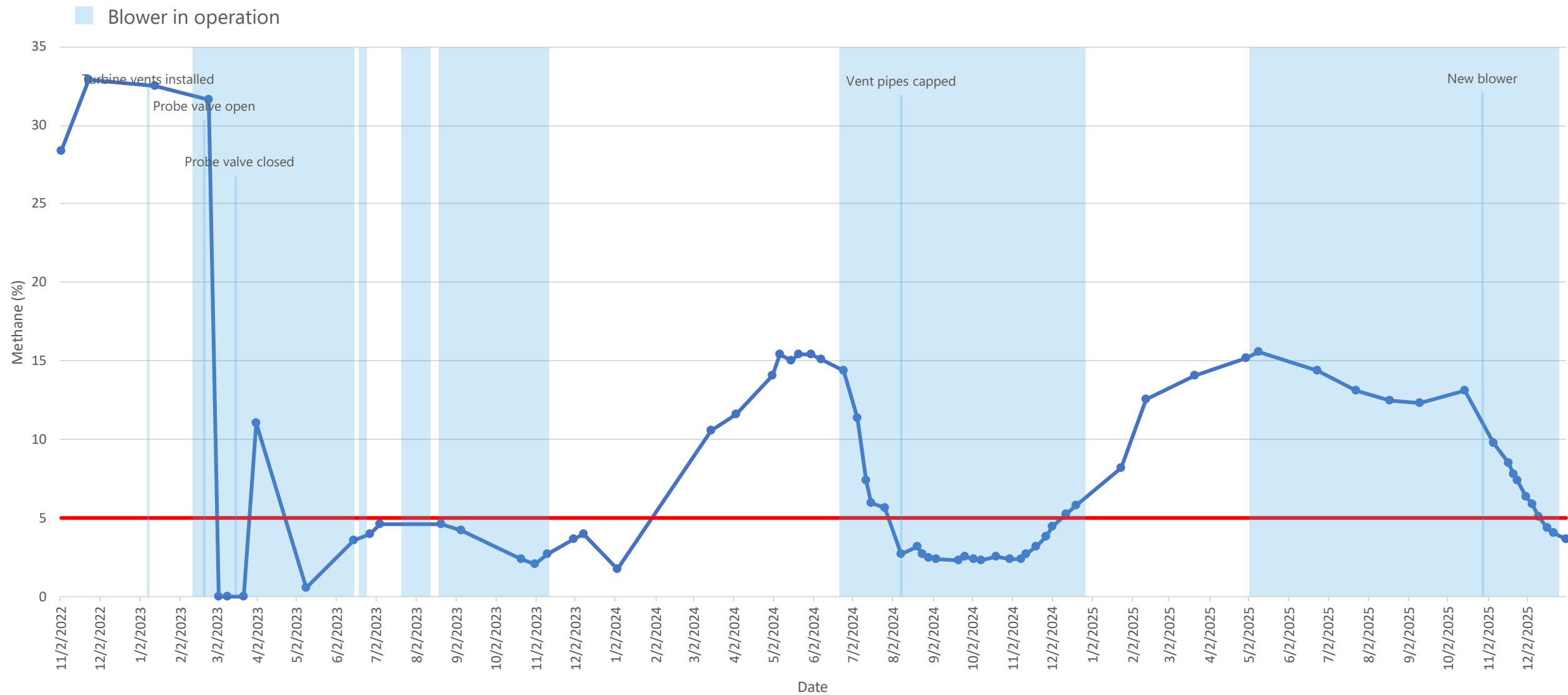
Table 9. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 4.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	28.4	31.7	0.1	39.8	
11/23/2022	32.9	27.7	0.0	39.3	
1/13/2023	32.5	26.5	0.0	41.0	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	31.6	25.6	0.1	42.7	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	0.0	0.2	20.9	79.0	
3/10/2023	0.0	0.1	21.6	78.3	
3/22/2023	0.0	0.0	20.4	79.6	- Perimeter probe valves closed (3/22/2023–present)
4/1/2023	11.1	10.5	0.0	78.3	
5/9/2023	0.6	14.3	3.2	81.9	- Vacuum extraction from soil gas probes (4/17/2023–6/16/2023)
6/15/2023	3.6	21.1	0.2	75.1	
6/27/2023	4.0	23.4	0.0	72.6	- Blower shut off (6/16/2023–6/17/2023) - Perimeter probe valve closed (6/16/2023 -6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Vacuum extraction from soil gas probes (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023) - Perimeter probe valve closed (6/26/2023 -7/24/2023)
7/5/2023	4.6	23.2	0.1	72.2	
8/21/2023	4.6	21.9	0.1	73.4	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023 -8/23/2023)
9/5/2023	4.2	21.1	0.4	74.4	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–11/10/2023)
9/22/2023	3.8	20.3	0.5	75.3	
10/21/2023	2.4	19.8	0.1	77.8	
11/1/2023	2.1	19.3	0.1	78.5	
11/10/2023	2.7	19.9	0.1	77.4	- Blower shut off (11/10/2023–6/19/2024) - Perimeter probe valve closed (11/10/2023–present)
11/17/2023	3.0	19.6	0.1	77.4	
11/30/2023	3.7	20.5	0.1	75.7	
12/8/2023	4.0	20.7	0.0	75.2	
1/3/2024	1.8	15.7	0.0	82.5	
3/15/2024	10.6	24.0	0.0	65.4	
4/3/2024	11.6	17.4	0.0	71.0	
5/1/2024	14.1	17.9	0.0	68.0	
5/7/2024	15.4	19.2	0.1	65.3	
5/15/2024	15.0	19.1	0.1	65.9	
5/21/2024	15.4	19.3	0.0	65.2	
5/31/2024	15.4	19.2	0.1	65.3	
6/7/2024	15.1	18.6	0.1	66.2	
6/25/2024	14.4	18.6	0.1	66.8	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	11.4	18.1	0.1	70.3	
7/12/2024	7.4	18.4	0.1	74.1	
7/16/2024	6.0	19.9	0.1	76.0	
7/26/2024	5.7	21.0	0.0	73.4	
8/8/2024	2.7	19.4	0.1	77.8	- Caps added to the other two vent pipe connections at sumps
8/20/2024	3.2	20.0	0.1	76.8	
8/24/2024	2.7	20.4	0.1	76.9	
8/29/2024	2.5	19.9	0.1	77.5	
9/4/2024	2.4	19.5	0.1	78.0	
9/21/2024	2.3	21.5	0.0	76.2	
9/26/2024	2.6	21.3	0.0	76.1	
10/2/2024	2.4	21.6	0.0	76.0	
10/8/2024	2.3	21.7	0.0	76.0	
10/20/2024	2.6	21.2	0.1	76.1	
10/30/2024	2.4	21.6	0.1	76.0	
11/8/2024	2.4	21.1	0.1	76.4	
11/12/2024	2.7	20.6	0.1	76.6	
11/19/2024	3.2	21.0.	0.1	75.7	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	3.8	21.1	0.1	75.0	
12/2/2024	4.5	21.1	0.1	74.3	



Table 9 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 4.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
12/12/2024	5.3	20.4	0.1	74.2	
12/20/2024	5.8	19.8	0.1	74.3	
1/24/2025	8.2	18.6	0.1	73.1	
2/12/2025	12.6	18.2	0.1	69.1	
3/21/2025	14.1	17.8	0.0	68.1	
4/30/2025	15.2	20.3	0.0	64.5	
5/9/2025	15.6	20.5	0.0	63.9	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	14.4	19.4	0.0	66.2	
7/23/2025	13.1	18.8	0.0	68.1	
8/18/2025	12.5	18.2	0.1	69.2	
9/10/2025	12.3	18.1	0.1	69.5	
10/15/2025	13.1	19.5	0.1	67.3	
11/6/2025	9.8	24.7	0.1	65.4	- Rotron blower unit installed (10/31/2025)
11/17/2025	8.5	24.2	0.1	67.2	
11/21/2025	7.8	23.4	0.1	68.7	
11/24/2025	7.4	23.3	0.1	69.1	
12/1/2025	6.4	22.8	0.1	70.7	
12/5/2025	5.9	22.6	0.1	71.4	
12/10/2025	5.1	22.2	0.1	72.5	
12/17/2025	4.4	22.0	0.1	73.4	
12/22/2025	4.1	21.3	1.2	73.4	
12/31/2025	3.7	21.7	0.2	74.4	

Figure 7. Methane Content of Landfill Perimeter Soil Gas Probe #4.



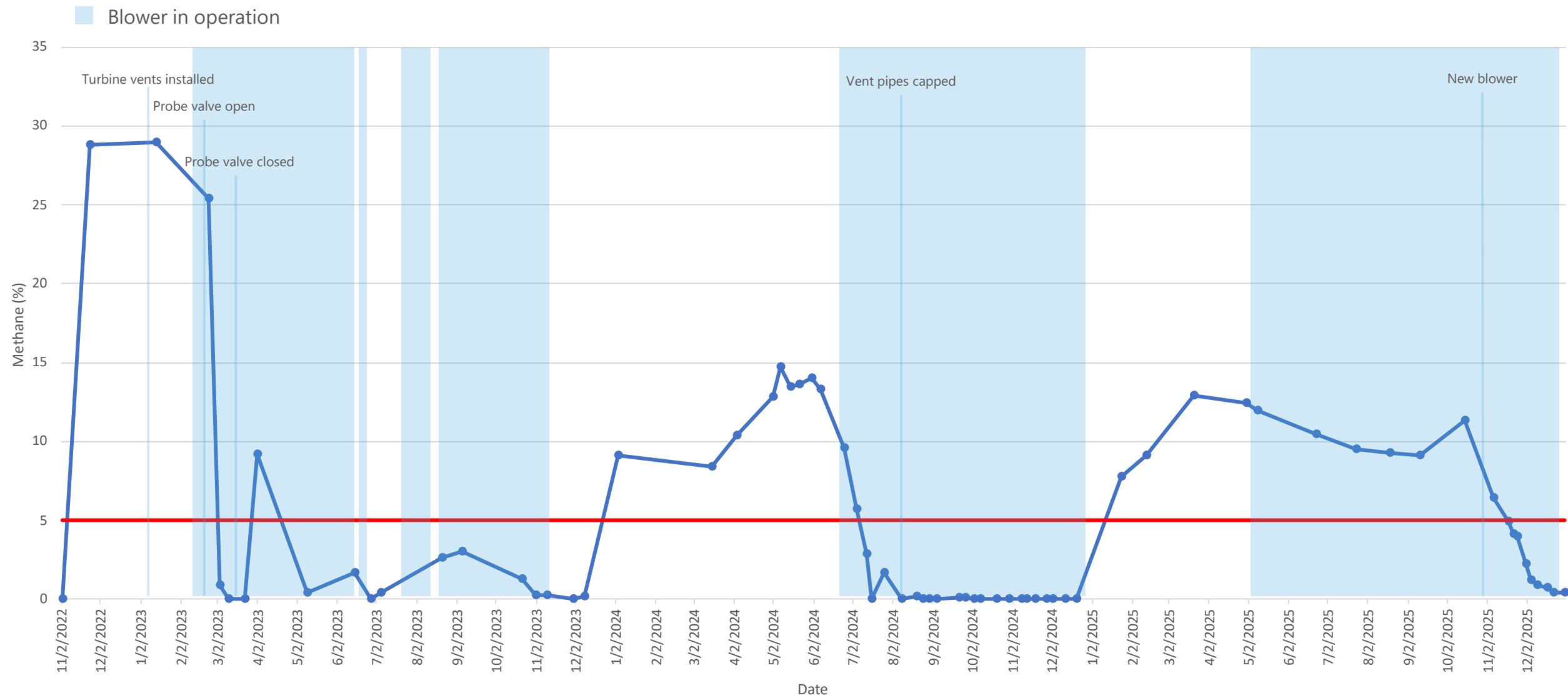
Gas Probe 5

Table 10. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 5.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	0.0	0.7	21.7	77.6	
11/23/2022	28.8	18.3	0.0	52.9	
1/13/2023	29.0	18.2	0.1	52.7	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	25.4	14.8	1.5	58.3	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	0.9	0.6	18.8	79.8	
3/10/2023	0.0	0.1	21.7	78.2	
3/22/2023	0.0	0.0	20.5	79.4	- Perimeter probe valves closed (3/22/2023–present)
4/1/2023	9.2	11.8	0.0	79.0	
5/9/2023	0.4	3.0	15.4	81.2	- Vacuum extraction from soil gas probes (4/17/2023–6/16/2023)
6/15/2023	1.7	13.2	3.2	81.9	
6/27/2023	0.0	13.9	0.5	85.6	- Blower shut off (6/16/2023–6/17/2023) - Perimeter probe valve closed (6/16/2023 -6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Vacuum extraction from soil gas probes (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023) - Perimeter probe valve closed (6/26/2023 -7/24/2023)
7/5/2023	0.4	14.0	0.0	85.5	
8/21/2023	2.6	17.6	0.1	79.7	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023 -8/23/2023)
9/5/2023	3.0	17.3	0.4	79.4	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–11/10/2023)
9/22/2023	2.0	15.8	1.6	80.6	
10/21/2023	1.3	15.6	2.8	80.3	
11/1/2023	0.3	11.5	5.8	82.4	
11/10/2023	0.3	13.3	3.7	82.7	- Blower shut off (11/10/2023–6/19/2024) - Perimeter probe valve closed (11/10/2023–present)
11/17/2023	0.0	10.3	4.9	84.8	
11/30/2023	0.0	12.9	2.1	85.0	
12/8/2023	0.2	15.4	0.0	84.3	
1/3/2024	9.1	17.4	0.0	73.5	
3/15/2024	8.4	22.0	0.0	69.6	
4/3/2024	10.4	15.4	0.0	74.2	
5/1/2024	12.8	16.0	0.0	71.2	
5/7/2024	14.7	17.3	0.1	67.9	
5/15/2024	13.5	16.5	0.0	70.0	
5/21/2024	13.6	16.5	0.0	69.9	
5/31/2024	14	16.1	0.1	69.9	
6/7/2024	13.3	15.3	0.1	71.4	
6/25/2024	9.6	13.8	0.1	76.5	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	5.7	12.8	0.1	81.4	
7/12/2024	2.9	12.8	0.1	84.3	
7/16/2024	0.0	9.6	0.1	90.3	
7/26/2024	1.7	13.3	0.0	85.0	
8/8/2024	0.0	12.2	0.1	87.7	- Caps added to the other two vent pipe connections at sumps
8/20/2024	0.2	13.0	0.1	86.7	
8/24/2024	0.0	13.1	0.4	86.5	
8/29/2024	0.0	12.2	1.3	86.4	
9/4/2024	0.0	11.7	1.6	86.8	
9/21/2024	0.1	11.9	3.1	84.9	
9/26/2024	0.1	11.2	3.7	85.0	
10/3/2024	0.0	10.9	5.1	84.0	
10/8/2024	0.0	10.8	4.8	84.4	
10/20/2024	0.0	9.6	6.7	83.7	
10/30/2024	0.0	9.8	7.6	82.6	
11/8/2024	0.0	9.6	7.7	82.8	
11/12/2024	0.0	9.0	7.5	83.5	
11/19/2024	0.0	11.8	3.0	85.1	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	0.0	10.2	6.5	83.3	
12/2/2024	0.0	10.8	5.6	83.6	

Table 10 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 5.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
12/12/2024	0.0	10.7	5.3	84.0	
12/20/2024	0.0	11.3	5.2	83.5	
1/24/2025	7.8	12.4	2.3	77.5	
2/12/2025	9.1	16.8	2.6	71.5	
3/21/2025	12.9	18.9	0.0	68.2	
4/30/2025	12.4	16.3	0.0	71.3	
5/9/2025	12.0	15.9	0.0	72.0	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	10.5	16.7	0.0	72.8	
7/23/2025	9.5	17.3	0.0	73.2	
8/18/2025	9.3	18.3	0.1	72.3	
9/10/2025	9.1	18.9	0.1	71.9	
10/15/2025	11.3	16.2	0.1	72.4	
11/6/2025	6.4	15.6	0.1	78.0	- Rotron blower unit installed (10/31/2025)
11/17/2025	4.9	15.3	0.1	79.7	
11/21/2025	4.1	14.8	0.1	81.0	
11/24/2025	4.0	15.1	0.1	80.8	
12/1/2025	2.2	14.3	0.1	83.4	
12/5/2025	1.2	14.0	0.1	84.8	
12/10/2025	0.9	13.9	0.1	85.2	
12/17/2025	0.7	14.1	0.1	85.0	
12/22/2025	0.4	14.4	0.1	85.2	
12/31/2025	0.4	14.5	0.2	85.0	

Figure 8. Methane Content of Landfill Perimeter Soil Gas Probe #5.



Gas Probe 6

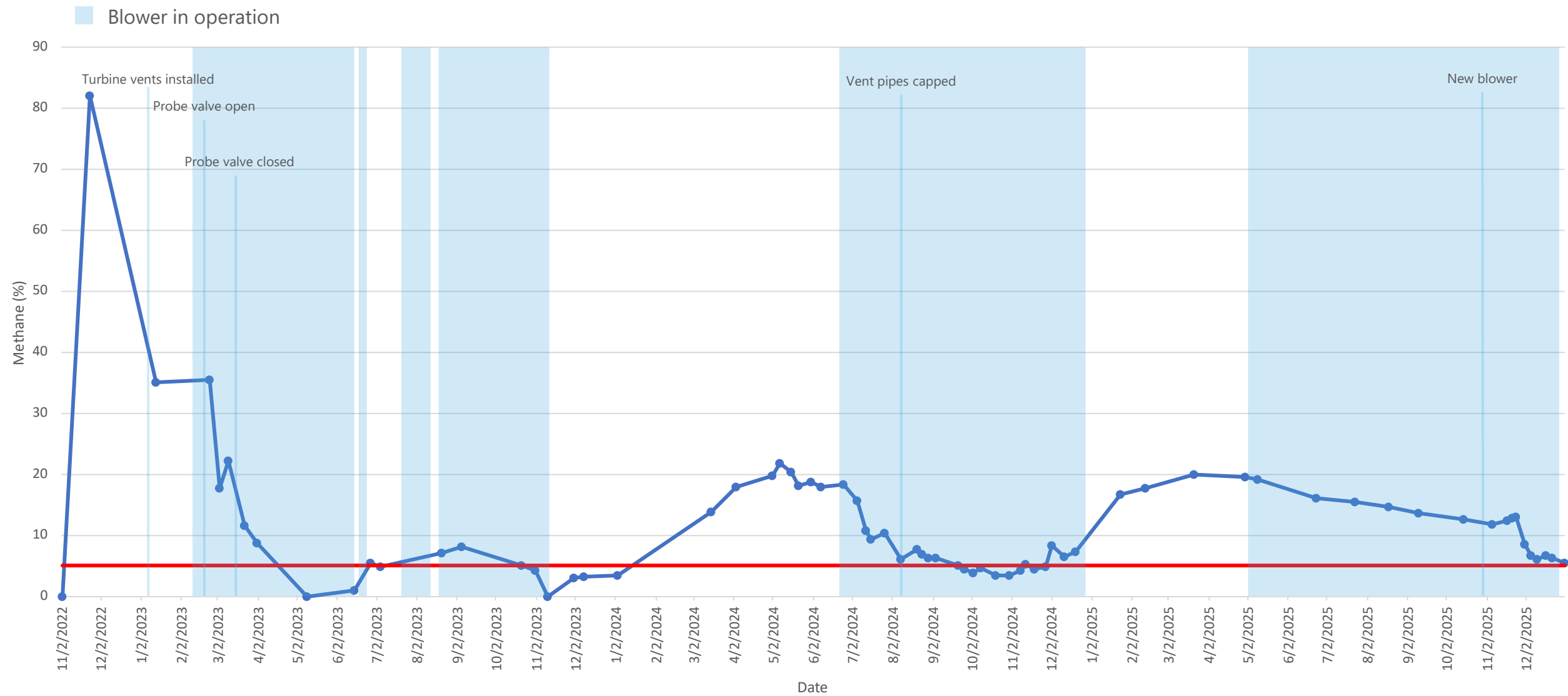
Table 11. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 6.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	0.0	0.3	21.8	77.8	
11/23/2022	82.0	18.0	0.0	0.0	
1/13/2023	35.0	18.5	0.0	46.5	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	35.4	15.4	0.2	49.0	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	17.6	13.4	3.3	65.8	
3/10/2023	22.2	22.2	0.2	55.5	- Vacuum extraction from soil gas probes (3/10/2023–6/16/2023)
3/22/2023	11.6	21.8	0.1	66.5	
4/1/2023	8.7	22.3	0.1	68.9	
5/9/2023	0.0	0.0	21.0	79.0	
6/15/2023	1.0	3.2	16.0	79.8	
6/27/2023	5.5	16.7	0.0	77.8	- Blower shut off (6/16/2023–6/17/2023) - Perimeter probe valve closed (6/16/2023 -6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Vacuum extraction from soil gas probes (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023) - Perimeter probe valve closed (6/26/2023 -7/24/2023)
7/5/2023	4.8	14.4	0.0	80.8	
8/21/2023	7.1	15.8	0.6	76.6	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023 -8/23/2023)
9/5/2023	8.1	16.5	0.9	74.5	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–11/10/2023)
9/22/2023	6.8	17.5	0.8	74.9	
10/21/2023	5.0	19.5	0.1	75.5	
11/1/2023	4.3	19.2	0.1	76.4	
11/10/2023	0.0	0.1	20.9	79.0	- Blower shut off (11/10/2023–6/19/2024) - Perimeter probe valve closed (11/10/2023–present)
11/17/2023	3.7	17.7	0.1	78.5	
11/30/2023	2.9	17.1	0.0	80.0	
12/8/2023	3.2	14.6	0.0	82.2	
1/3/2024	3.5	15.6	0.0	80.9	
3/15/2024	13.8	22.7	0.0	63.5	
4/3/2024	17.9	16.5	0.0	65.6	
5/1/2024	19.7	16.7	0.0	63.6	
5/7/2024	21.7	17.6	0.1	60.7	
5/15/2024	20.3	17.0	0.0	62.8	
5/21/2024	18.1	16.4	0.0	65.5	
5/31/2024	18.8	15.9	0.0	65.3	
6/7/2024	17.9	14.9	0.0	67.2	
6/25/2024	18.3	14.7	0.0	67.0	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	15.6	15.6	0.1	68.7	
7/12/2024	10.7	16.7	0.1	72.5	
7/16/2024	9.4	15.4	0.1	75.1	
7/26/2024	10.4	16.7	0.0	72.9	
8/8/2024	6.0	15.6	0.1	78.3	- Caps added to the other two vent pipe connections at sumps
8/20/2024	7.6	17.6	0.1	74.8	
8/24/2024	6.8	18.1	0.1	75.0	
8/29/2024	6.2	15.7	0.1	78.1	
9/4/2024	6.2	17.0	0.1	76.7	
9/21/2024	5.0	16.9	0.0	78.1	
9/26/2024	4.5	16.1	0.0	79.4	
10/3/2024	3.9	16.0	0.0	80.1	
10/8/2024	4.7	18.1	0.1	77.1	
10/20/2024	3.5	15.4	0.1	81.0	
10/30/2024	3.4	16.1	0.0	80.4	
11/8/2024	4.2	17.1	0.0	78.7	
11/12/2024	5.2	17.1	0.0	77.6	
11/19/2024	4.4	16.1	0.1	79.5	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	4.9	17.2	0.1	77.8	



Table 11 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 6.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
12/2/2024	8.3	17.8	0.0	73.8	
12/12/2024	6.5	16.5	0.0	77.0	
12/20/2024	7.3	17.0	0.1	75.6	
1/24/2025	16.6	19.1	0.0	64.3	
2/12/2025	17.8	18.6	0.0	63.6	
3/21/2025	19.9	17.8	0.0	62.3	
4/30/2025	19.6	17.2	0.0	63.2	
5/9/2025	19.2	16.9	0.0	63.9	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	16.1	16.1	0.0	67.8	
7/23/2025	15.5	15.6	0.0	68.9	
8/18/2025	14.7	15.8	0.1	69.4	
9/10/2025	13.6	15.5	0.1	70.8	
10/15/2025	12.5	15.8	0.1	71.6	
11/6/2025	11.8	15.3	0.1	72.9	- Rotron blower unit installed (10/31/2025)
11/17/2025	12.4	16.8	0.0	70.8	
11/21/2025	12.7	16.3	0.1	70.9	
11/24/2025	13.1	18.1	0.1	68.8	
12/1/2025	8.5	14.9	0.1	76.6	
12/5/2025	6.7	14.2	0.1	79.0	
12/10/2025	6.1	14.6	0.1	79.2	
12/17/2025	6.6	17.3	0.1	76.0	
12/22/2025	6.3	17.8	0.3	75.6	
12/31/2025	5.5	16.2	0.5	77.8	

Figure 9. Methane Content of Landfill Perimeter Soil Gas Probe #6.



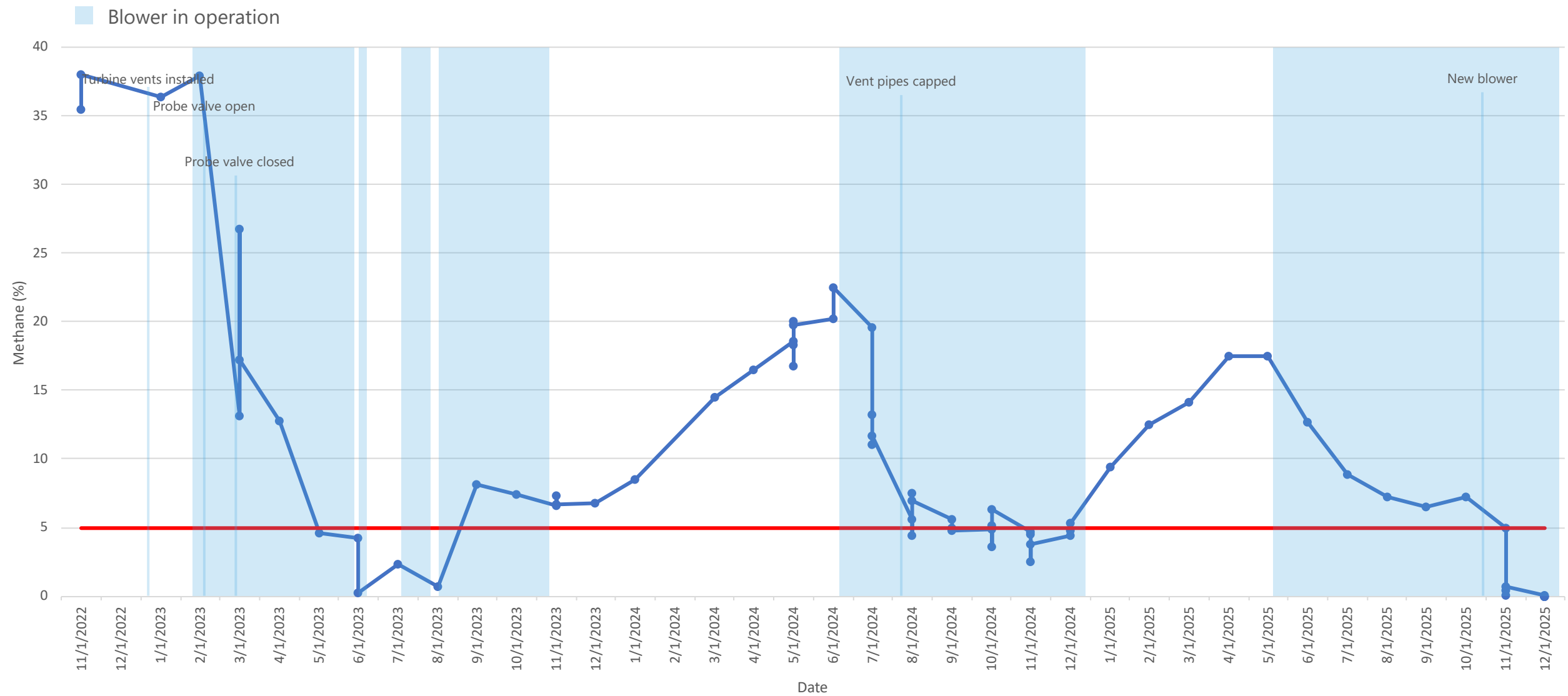
Gas Probe 7

Table 12. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 7.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	35.5	20.7	0.0	43.4	
11/23/2022	38.0	20.0	0.0	42.6	
1/13/2023	36.4	20.6	0.1	43.0	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	37.9	19.6	0.1	42.4	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	13.1	6.1	12.7	68.2	
3/10/2023	26.7	18.3	3.1	51.9	- Vacuum extraction from soil gas probes (3/10/2023–6/16/2023)
3/22/2023	17.2	18.4	1.4	63.0	
4/1/2023	12.8	20.5	1.2	65.5	
5/9/2023	4.6	15.8	4.0	75.6	
6/15/2023	4.2	18.6	0.2	77.0	
6/27/2023	0.2	18.8	0.2	80.7	- Blower shut off (6/16/2023–6/17/2023) - Perimeter probe valve closed (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Vacuum extraction from soil gas probes (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023) - Perimeter probe valve closed (6/26/2023 -7/24/2023)
7/5/2023	2.3	16.2	0.0	81.5	
8/21/2023	0.7	14.9	0.3	84.0	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023 -8/23/2023)
9/5/2023	8.1	17.9	0.1	73.9	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–8/25/2023) - Perimeter probe valve closed and removed from vacuum extraction system (8/25/2023–present)
9/22/2023	8.5	17.9	0.1	73.5	
10/21/2023	7.4	19.1	0.1	73.4	
11/1/2023	6.6	19.2	0.0	74.1	
11/10/2023	7.3	20.3	0.1	72.4	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	6.8	18.7	0.1	74.5	
11/30/2023	6.7	20.5	0.0	72.7	
12/8/2023	6.8	19.2	0.0	74.0	
1/3/2024	8.5	18.2	0.0	73.3	
3/15/2024	14.5	21.7	0.0	63.8	
4/3/2024	16.5	14.3	0.0	69.2	
5/1/2024	18.6	16.7	0.0	64.7	
5/7/2024	16.8	17.5	0.1	65.5	
5/15/2024	18.3	18.7	0.0	63.0	
5/21/2024	20.0	19.5	0.1	60.4	
5/31/2024	19.8	20.7	0.1	59.5	
6/7/2024	20.2	19.9	0.1	59.8	
6/25/2024	22.5	17.7	0.3	59.5	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	19.6	17.1	0.2	63.1	
7/12/2024	13.2	16.2	0.1	70.4	
7/16/2024	11.0	15.5	0.1	73.4	
7/26/2024	11.7	17.2	0.0	71.1	
8/8/2024	5.6	15.8	0.1	78.5	- Caps added to the other two vent pipe connections at sumps
8/20/2024	4.4	16.1	0.3	79.3	
8/24/2024	7.5	17.2	0.0	75.3	
8/29/2024	7.0	17.0	0.1	75.9	
9/4/2024	5.6	16.5	0.1	77.8	
9/21/2024	5.0	17.2	0.0	77.8	
9/26/2024	4.8	16.8	0.0	78.4	
10/3/2024	4.9	17.3	0.0	77.8	
10/8/2024	3.6	17.1	0.3	79.0	
10/20/2024	5.1	16.8	0.1	78.0	
10/30/2024	6.3	17.6	0.1	76.0	
11/8/2024	4.7	15.8	0.0	79.3	
11/12/2024	4.5	16.3	0.1	79.1	
11/19/2024	2.5	13.2	0.1	84.2	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	3.8	13.6	0.1	82.5	

Table 12 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 7.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
12/2/2024	4.4	14.0	0.1	81.5	
12/12/2024	4.8	14.5	0.1	80.6	
12/20/2024	5.3	14.1	0.2	80.4	
1/24/2025	9.4	15.7	0.1	74.8	
2/12/2025	12.5	17.2	0.1	70.2	
3/21/2025	14.1	17.8	0.0	68.1	
4/30/2025	17.5	14.7	0.0	67.8	
5/9/2025	17.5	15.7	0.0	66.8	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	12.7	14.9	0.0	72.4	
7/23/2025	8.9	15.9	0.0	75.2	
8/18/2025	7.2	15.7	0.1	77.0	
9/10/2025	6.5	15.6	0.1	77.8	
10/15/2025	7.2	13.5	0.1	79.2	
11/6/2025	5.0	12.5	0.2	82.2	- Rotron blower unit installed (10/31/2025)
11/17/2025	0.1	9.2	0.1	90.6	
11/21/2025	0.4	7.5	0.1	92.0	
11/24/2025	0.7	7.7	0.1	91.5	
12/1/2025	0.1	6.4	0.1	93.4	
12/5/2025	0.0	6.6	1.7	91.7	
12/10/2025	0.0	6.2	0.7	93.1	
12/17/2025	0.0	6.3	0.9	92.9	
12/22/2025	0.0	5.7	0.7	93.7	
12/31/2025	0.0	0.3	22.4	77.3	

Figure 10. Methane Content of Landfill Perimeter Soil Gas Probe #7.



Gas Probe 8

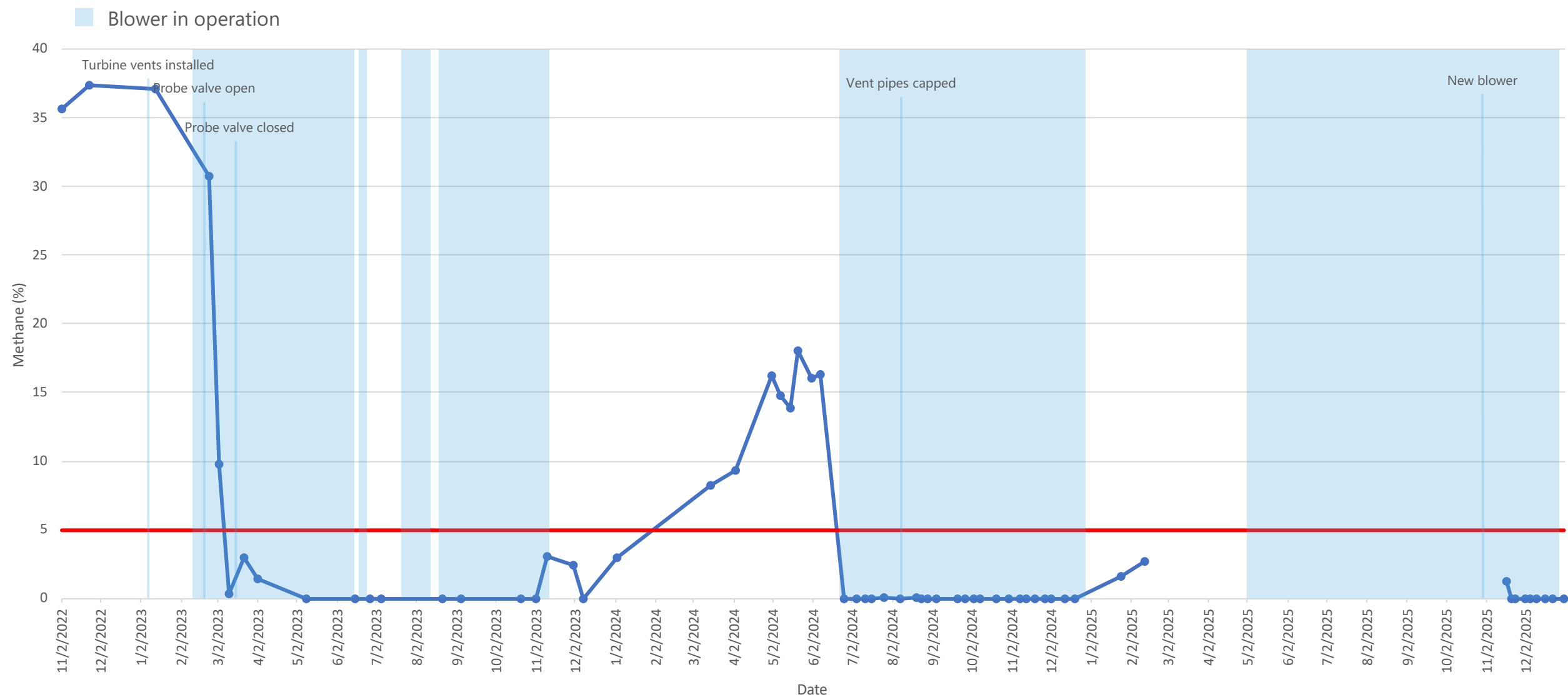
Table 13. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 8.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	35.6	23.7	0.0	40.7	
11/23/2022	37.4	21	0.0	41.6	
1/13/2023	37.1	21.3	0.0	41.6	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	30.7	22.7	0.2	46.4	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	9.8	2.5	16	71.8	
3/10/2023	0.3	0.2	16.2	83.3	- Vacuum extraction from soil gas probes (3/10/2023–6/16/2023)
3/22/2023	3.0	6.3	13.9	76.8	
4/1/2023	1.4	5.3	16.2	77.2	
5/9/2023	0.0	5.4	14.6	80.0	
6/15/2023	0.0	2.5	17.4	80.1	
6/27/2023	0.0	4.1	13.6	82.3	- Blower shut off (6/16/2023–6/17/2023) - Perimeter probe valve closed (6/16/2023 -6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Vacuum extraction from soil gas probes (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023) - Perimeter probe valve closed (6/26/2023 -7/24/2023)
7/5/2023	0.0	8.1	4.0	87.9	
8/21/2023	0.0	6.3	8.4	85.3	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023 -8/23/2023)
9/5/2023	0.0	4.1	14.8	81.1	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–8/25/2023) - Perimeter probe valve closed and removed from vacuum extraction system (8/25/2023–present)
9/22/2023	0.0	5.5	13.7	80.8	
10/21/2023	0.0	5.5	15.1	79.4	
11/1/2023	0.0	4.5	16.6	78.9	
11/10/2023	3.1	12.9	2.9	81.0	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	0.0	10.6	8.1	81.3	
11/30/2023	2.4	14.0	0.0	83.5	
12/8/2023	0.0	11.2	3.0	85.8	
1/3/2024	3.0	11.1	0.0	85.9	
3/15/2024	8.2	14.9	0.0	76.9	
4/3/2024	9.3	9.9	0.0	80.8	
5/1/2024	16.2	13.6	0.0	70.2	
5/7/2024	14.8	14.0	0.1	71.2	
5/15/2024	13.9	14.5	0.0	71.5	
5/21/2024	18	16.0	0.1	66.0	
5/31/2024	16	16.6	0.1	67.3	
6/7/2024	16.3	16.4	0.1	67.1	
6/25/2024	0.0	5.1	15.8	79.1	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	0.0	3.6	17.4	79	
7/12/2024	0.0	2.4	18.1	66.5	
7/16/2024	0.0	2.0	16.5	70.5	
7/26/2024	0.1	1.6	16.7	81.7	
8/8/2024	0.0	1.8	18.8	72.1	- Caps added to the other two vent pipe connections at sumps
8/20/2024	0.1	1.9	19.2	78.8	
8/24/2024	0.0	2.3	18.8	78.9	
8/29/2024	0.0	2.6	18.6	78.8	
9/4/2024	0.0	2.5	17.1	80.5	
9/21/2024	0.0	2.1	18.0	79.9	
9/26/2024	0.0	1.9	18.0	80.1	
10/3/2024	0.0	1.9	20.0	78.1	
10/8/2024	0.0	1.7	18.9	79.4	
10/20/2024	0.0	1.9	19.6	78.5	
10/30/2024	0.0	1.8	19.5	78.7	
11/8/2024	0.0	2.0	20.9	77.1	
11/12/2024	0.0	1.9	20.3	77.8	
11/19/2024	0.0	2.2	20.1	77.7	- Blower shut off (11/15/2024–5/2/2025)



Table 13 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 8.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/27/2024	0.0	2.5	19.9	77.6	
12/2/2024	0.0	1.8	20.9	77.3	
12/12/2024	0.0	1.7	20.3	78.0	
12/20/2024	0.0	2.1	20.6	77.3	
1/24/2025	1.6	2.2	19.5	76.7	
2/12/2025	2.7	2.7	20.2	74.4	
3/21/2025	Not read due to construction blockage				
4/30/2025	Not read due to construction blockage				
5/9/2025	Not read due to construction blockage				- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	Not read due to construction blockage				
7/23/2025	Not read due to construction blockage				
8/18/2025	Not read due to construction blockage				
9/10/2025	Not read due to construction blockage				
10/15/2025	Not read due to construction blockage				
11/6/2025	Not read due to construction blockage				- Rotron blower unit installed (10/31/2025)
11/17/2025	1.2	3.2	19.8	75.8	
11/21/2025	0.0	1.6	20.1	78.3	
11/24/2025	0.0	1.3	20.4	78.3	
12/1/2025	0.0	1.0	20.9	78.0	
12/5/2025	0.0	1.1	20.7	78.2	
12/10/2025	0.0	1.0	20.4	78.5	
12/17/2025	0.0	1.0	20.6	78.4	
12/22/2025	0.0	1.0	20.9	78.1	
12/31/2025	0.0	0.9	21.9	77.2	

Figure 11. Methane Content of Landfill Perimeter Soil Gas Probe #8.



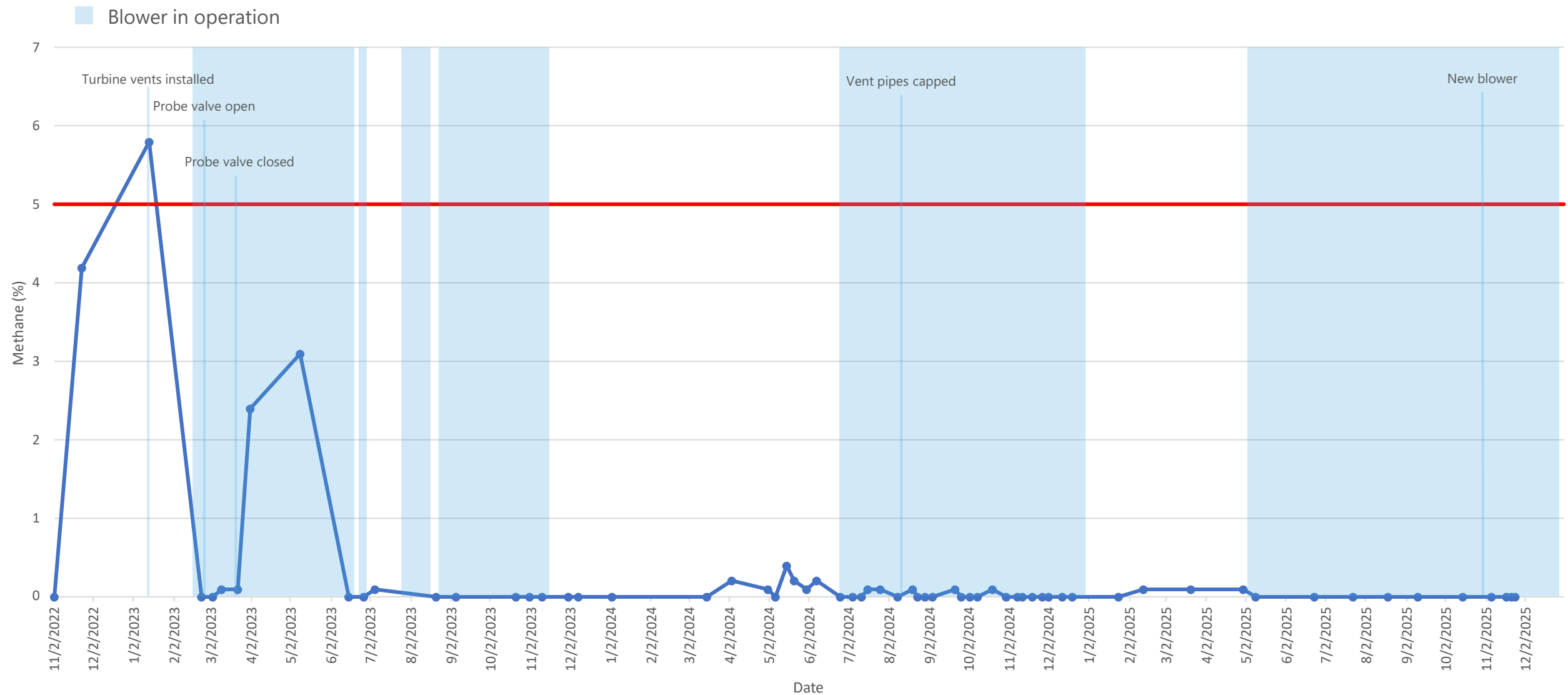
Gas Probe 9

Table 14. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 9.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	Not Read				
11/23/2022	4.2	0.1	14.0	81.7	
1/13/2023	5.8	0.1	3.2	90.9	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	Not Read				- Vacuum extraction from methane trench (2/10/2023–6/16/2023)
3/3/2023	Not Read				
3/10/2023	0.1	0.1	21.4	78.5	
3/22/2023	0.1	0.0	21.2	78.7	
4/1/2023	2.4	0.1	2.2	95.3	
5/9/2023	3.1	0.1	0.2	96.6	
6/15/2023	0.0	3.1	13.6	83.3	
6/27/2023	0.0	6.2	5.0	88.8	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	0.1	8.8	4.7	86.4	
8/21/2023	Not Read				- Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023)
9/5/2023	Not Read				- Vacuum extraction from methane trench (8/23/2023–11/10/2023)
9/22/2023	Not Read				
10/21/2023	Not Read				
11/1/2023	Not Read				
11/10/2023	0.0	6.5	4.9	88.6	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	0.0	6.5	4.9	88.6	
11/30/2023	0.0	6.5	4.9	88.6	
12/8/2023	0.0	6.5	4.9	88.6	
1/3/2024	0.0	4.7	8.4	86.9	
3/15/2024	0.0	5.5	5.9	88.6	
4/3/2024	0.2	7.8	6.1	86.1	
5/1/2024	0.1	5.6	6.7	87.7	
5/7/2024	0.0	7.2	6.3	86.5	
5/15/2024	0.4	6.3	7.6	86.1	
5/21/2024	0.2	7.9	6.8	85.3	
5/31/2024	0.1	8.6	5.3	86.1	
6/7/2024	0.2	8.2	6.5	85.3	
6/25/2024	0.0	8.5	5.2	86.3	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	0.0	7.9	6.7	85.4	
7/12/2024	0.0	8.1	6.2	85.7	
7/16/2024	0.1	7.6	6.6	85.8	
7/26/2024	0.1	7.7	6.5	85.8	
8/8/2024	0.0	7.6	6.6	85.8	- Caps added to the other two vent pipe connections at sumps
8/20/2024	0.1	7.6	6.7	85.7	
8/24/2024	0.0	7.7	6.5	85.8	
8/29/2024	0.0	8.0	6.5	85.5	
9/4/2024	0.0	7.9	6.6	85.5	
9/21/2024	0.1	7.7	6.5	85.8	
9/26/2024	0.0	7.2	6.3	86.5	
10/3/2024	0.0	7.9	3.2	88.9	
10/8/2024	0.0	8.5	5.2	86.3	
10/20/2024	0.1	7.6	6.6	85.8	
10/30/2024	0.0	8.2	6.1	85.7	
11/8/2024	0.0	8.1	5.6	86.3	
11/12/2024	0.0	7.7	5.1	87.2	
11/19/2024	0.0	7.4	6.9	85.7	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	0.0	8.1	5.9	86.0	
12/2/2024	0.0	8.0	5.4	86.6	
12/12/2024	0.0	7.6	6.2	86.2	
12/20/2024	0.0	7.3	6.7	86.0	
1/24/2025	0.0	7.8	5.5	86.7	
2/12/2025	0.1	7.6	5.8	86.5	
3/21/2025	0.1	7.9	6.0	86	
4/30/2025	0.1	7.5	6.2	86.2	

Table 14 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 9.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
5/9/2025	0.0	7.8	5.9	86.3	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	0.0	7.7	6.3	86.0	
7/23/2025	0.0	8.2	6.1	85.7	
8/18/2025	0.0	7.9	6.3	85.8	
9/10/2025	0.0	8.0	6.0	86.0	
10/15/2025	0.0	8.1	5.8	86.1	
11/6/2025	0.0	7.9	7.7	84.4	- Rotron blower unit installed (10/31/2025)
11/17/2025	0.0	8.2	5.9	85.9	
11/21/2025	0.0	7.6	5.7	86.7	
11/24/2025	0.0	8.7	5.6	85.7	
12/17/2025	0.0	8.1	6.3	85.6	
12/22/2025	0.0	8.0	6.5	85.5	
12/31/2025	0.0	7.7	7.0	85.3	

Figure 12. Methane Content of Landfill Perimeter Soil Gas Probe #9.



Gas Probe 10

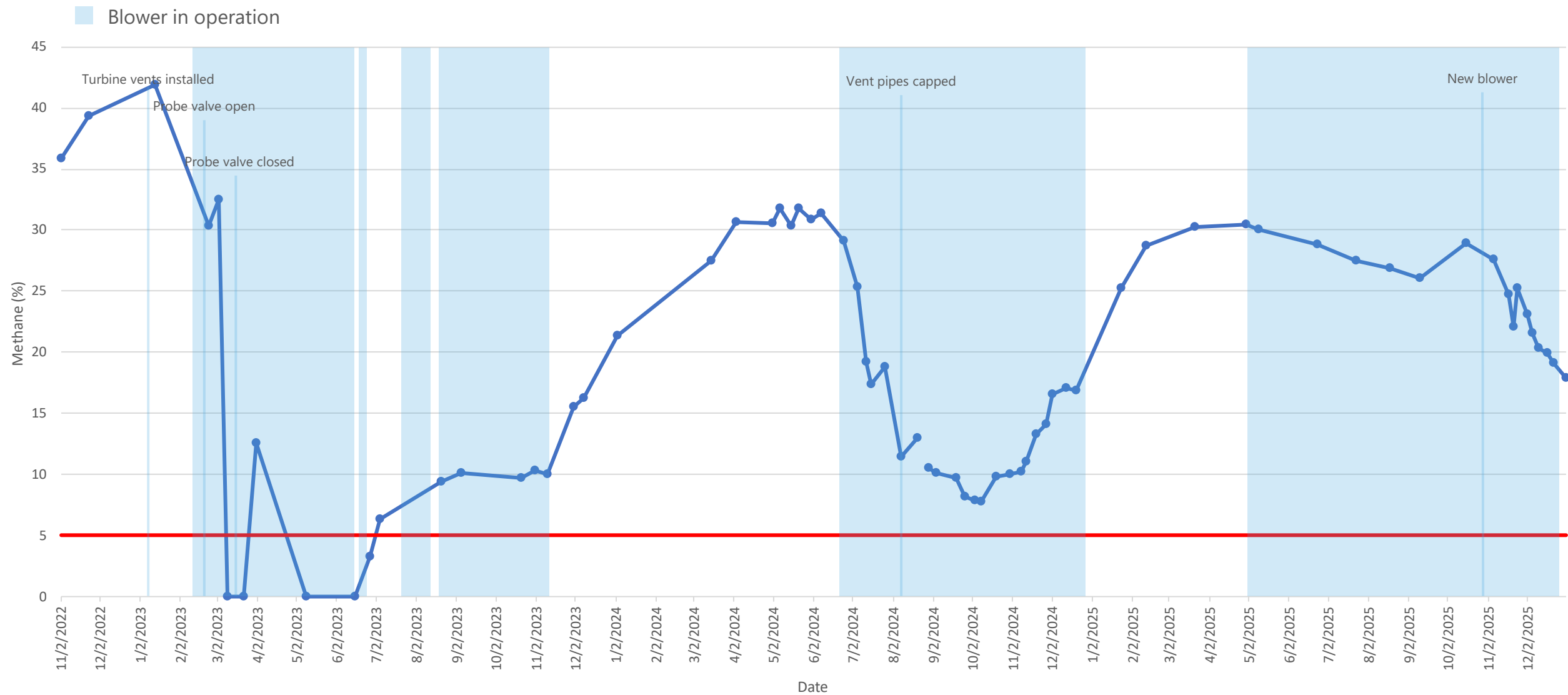
Table 15. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 10.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	35.9	56.4	0.0	7.7	
11/23/2022	39.3	53.6	0.0	6.9	
1/13/2023	41.9	55.3	0.1	2.7	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	30.4	40.5	0.0	29.0	- Blower installed and turned on (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	32.5	31.1	0.1	36.3	
3/10/2023	0.0	0.1	21.9	78.0	
3/22/2023	0.0	0.1	21.1	78.8	- Perimeter probe valves closed (3/22/2023–7/21/2023)
4/1/2023	12.6	15.1	0.0	72.3	
5/9/2023	0.0	0.1	20.4	79.5	
6/15/2023	0.0	0.0	21.1	78.9	
6/27/2023	3.3	15.3	0.0	81.4	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	6.4	19.1	0.0	74.5	
8/21/2023	9.4	31.3	0.1	59.2	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023 -8/23/2023)
9/5/2023	10.1	30.6	0.1	59.2	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–11/10/2023)
9/22/2023	9.3	28.8	0.1	61.8	
10/21/2023	9.7	28.3	0.1	61.9	
11/1/2023	10.3	27.7	0.0	62.0	
11/10/2023	10.0	27.5	0.1	62.4	- Blower shut off (11/10/2023–6/19/2024) - Perimeter probe valve closed (11/10/2023–present)
11/17/2023	10.7	27.6	0.0	61.7	
11/30/2023	15.5	31.3	0.0	53.1	
12/8/2023	16.3	32.2	0.0	51.5	
1/3/2024	21.4	35.3	0.0	43.3	
3/15/2024	27.5	37.3	0.0	35.2	
4/3/2024	30.7	38.5	0.0	30.7	
5/1/2024	30.6	35.0	0.0	34.4	
5/7/2024	31.8	38.9	0.1	29.2	
5/15/2024	30.4	38.5	0.0	31.1	
5/21/2024	31.8	39.0	0.1	29.1	
5/31/2024	30.9	38.6	0.0	30.5	
6/7/2024	31.4	38.5	0.1	30.0	
6/25/2024	29.1	37.8	0.2	32.9	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	25.4	36.0	0.1	38.4	
7/12/2024	19.2	32.9	0.1	47.9	
7/16/2024	17.4	32.1	0.1	50.4	
7/26/2024	18.8	35.0	0.0	46.2	
8/8/2024	11.5	30.8	0.1	57.6	- Caps added to the other two vent pipe connections at sumps
8/20/2024	13.0	30.4	0.1	56.5	
8/24/2024	Not Read				
8/29/2024	10.5	29.2	0.1	60.3	
9/4/2024	10.1	28.9	0.1	60.9	
9/19/2024	9.7	29.4	0.1	60.8	
9/26/2024	8.2	31.1	0.0	60.7	
10/3/2024	7.9	31.1	0.0	61.0	
10/8/2024	7.8	31.2	0.0	61.0	
10/20/2024	9.8	30.7	0.1	59.4	
10/30/2024	10.0	30.7	0.1	59.1	
11/8/2024	10.2	30.5	0.1	59.3	
11/12/2024	11.1	30.1	0.2	58.7	
11/19/2024	13.3	31.1	0.1	55.5	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	14.1	31.8	0.1	54.0	
12/2/2024	16.6	32.7	0.1	50.7	
12/12/2024	17.1	30.7	0.1	52.1	
12/20/2024	16.9	31.5	0.1	51.5	
1/24/2025	25.3	33.6	0.1	41.0	



Table 15 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 10.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
2/12/2025	28.7	34.1	0.0	37.2	
3/21/2025	30.3	35.5	0.0	34.2	
4/30/2025	30.5	20.5	0.0	49.0	
5/9/2025	30.1	37.5	0.0	32.4	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	28.8	25.4	0.0	45.8	
7/23/2025	27.5	27.4	0.1	45.0	
8/18/2025	26.9	26.2	0.1	46.8	
9/10/2025	26.1	24.2	0.1	49.6	
10/15/2025	28.9	25.6	0.1	45.4	
11/6/2025	27.6	25.1	0.2	47.1	- Rotron blower unit installed (10/31/2025)
11/17/2025	24.7	24.9	0.1	50.4	
11/21/2025	22.1	21.9	1.7	54.3	
11/24/2025	25.2	24.7	0.0	50.0	
12/1/2025	23.1	26.2	0.1	50.7	
12/5/2025	21.6	26.3	0.1	51.9	
12/10/2025	20.3	26.4	0.2	53.1	
12/17/2025	19.9	25.8	0.1	54.2	
12/22/2025	19.1	26.5	0.1	54.3	
12/31/2025	17.9	25.1	0.1	56.9	

Figure 13. Methane Content of Landfill Perimeter Soil Gas Probe #10.



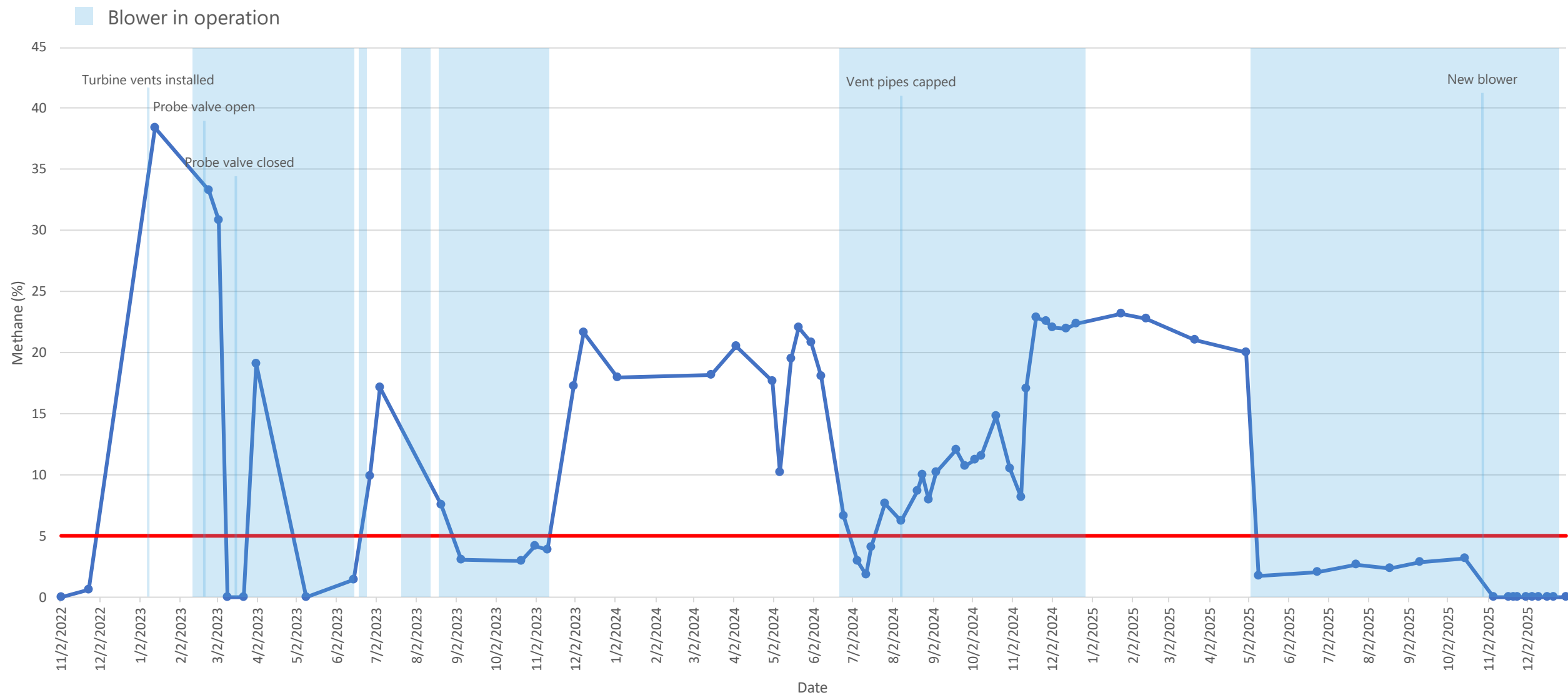
Gas Probe 11

Table 16. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 11.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	0.0	16.2	8.2	75.7	
11/23/2022	0.6	22.9	2.8	73.7	
1/13/2023	38.4	48.0	0.1	13.5	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	33.3	36.3	0.0	30.4	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Perimeter probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	30.9	27.0	0.1	42.0	
3/10/2023	0.0	0.3	21.8	77.9	
3/22/2023	0.0	0.2	21.3	78.5	- Perimeter probe valves closed (3/22/2023–7/21/2023)
4/1/2023	19.1	25.0	0.5	55.4	
5/9/2023	0.0	0.7	20.0	79.3	
6/15/2023	1.5	20.8	0.9	76.8	
6/27/2023	9.9	27.2	0.4	62.5	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	17.2	33.6	0.1	49.0	
8/21/2023	7.6	26.3	0.4	65.7	- Vacuum extraction from soil gas probes (7/21/2023–8/18/2023) - Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023) - Perimeter probe valve closed (8/18/2023–8/23/2023)
9/5/2023	3.1	24.0	0.5	72.5	- Vacuum extraction from methane trench (8/23/2023–11/10/2023) - Vacuum extraction from soil gas probes (8/23/2023–11/10/2023)
9/22/2023	1.6	21.9	1.8	74.7	
10/21/2023	3.0	25.2	1.6	70.2	
11/1/2023	4.2	27.0	0.6	68.2	
11/10/2023	3.9	26.1	1.2	68.8	- Blower shut off (11/10/2023–6/19/2024) - Perimeter probe valve closed (11/10/2023–present)
11/17/2023	2.6	21.4	0.1	75.9	
11/30/2023	17.3	33.4	0.1	49.2	
12/8/2023	21.7	25.8	0.0	52.4	
1/3/2024	18.0	29.8	0.4	51.7	
3/15/2024	18.2	32.5	0.0	49.3	
4/3/2024	20.5	30.3	0.0	49.2	
5/1/2024	17.7	28.0	0.1	54.2	
5/7/2024	10.2	27.4	0.6	61.7	
5/15/2024	19.5	30.6	0.4	49.5	
5/21/2024	22.1	32.6	0.2	45.1	
5/31/2024	20.9	32.2	0.2	46.7	
6/7/2024	18.1	31.0	0.2	50.7	
6/25/2024	6.7	26.3	0.9	66.1	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	3.0	22.7	1.0	73.3	
7/12/2024	1.9	22.2	1.0	74.9	
7/16/2024	4.1	22.8	1.0	72.1	
7/26/2024	7.7	27.3	0.6	64.5	
8/8/2024	6.3	25.4	0.9	67.4	- Caps added to the other two vent pipe connections at sumps
8/20/2024	8.7	25.5	1.0	64.9	
8/24/2024	10.0	26.3	1.1	62.6	
8/29/2024	8.0	25.5	0.3	66.2	
9/4/2024	10.2	26.5	0.5	62.8	
9/19/2024	12.1	28.2	0.6	59.1	
9/26/2024	10.7	30.4	0.4	58.5	
10/3/2024	11.3	31.0	0.4	57.3	
10/8/2024	11.6	30.9	0.6	56.9	
10/20/2024	14.8	30.9	0.7	53.6	
10/30/2024	10.5	29.6	0.5	59.4	
11/8/2024	8.2	26.8	0.5	64.5	
11/12/2024	17.1	30.5	0.1	52.3	
11/19/2024	22.9	32.9	0.1	44.1	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	22.6	32.1	0.3	45.0	
12/2/2024	22.1	31.5	0.5	45.9	
12/12/2024	22.0	30.6	0.4	47.0	
12/20/2024	22.4	31.4	0.3	45.9	
1/24/2025	23.2	29.5	0.7	46.6	

Table 16 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 11.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
2/12/2025	22.8	27.8	0.4	49.0	
3/21/2025	21.1	25.5	0.0	53.4	
4/30/2025	20.0	27.2	0.0	52.8	
5/9/2025	1.8	15.7	5.7	76.9	- Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	2.1	14.3	6.1	77.5	
7/23/2025	2.7	13.2	6.2	77.9	
8/18/2025	2.4	6.7	14.2	76.7	
9/10/2025	2.9	5.6	15.5	76.0	
10/15/2025	3.2	6.5	15.7	74.6	
11/6/2025	0.0	6.0	15.5	78.5	- Rotron blower unit installed (10/31/2025)
11/17/2025	0.0	3.7	17.7	78.5	
11/21/2025	0.0	0.9	20.8	78.2	
11/24/2025	0.0	2.4	19.5	78.2	
12/1/2025	0.0	1.5	20.6	77.9	
12/5/2025	0.0	1.3	20.3	78.4	
12/10/2025	0.0	0.1	21.5	78.4	
12/17/2025	0.0	3.3	17.5	79.2	
12/22/2025	0.0	2.2	19.9	77.9	
12/31/2025	0.0	1.4	20.7	77.9	

Figure 14. Methane Content of Landfill Perimeter Soil Gas Probe #11.



Gas Probe 12

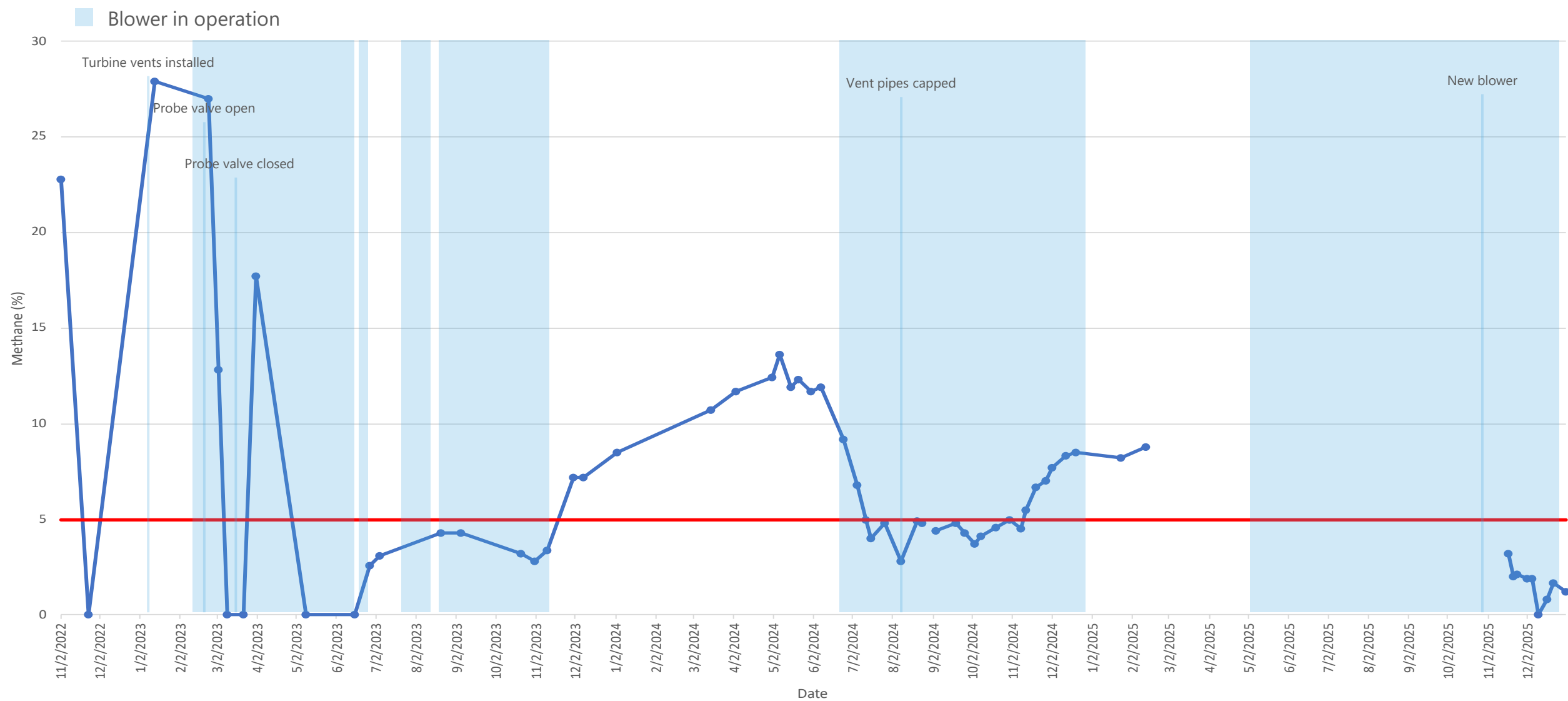
Table 17. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 12.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	22.8	40.6	0.8	35.1	
11/23/2022	0.0	0.2	21.4	78.4	
1/13/2023	27.9	42.9	0.3	29.0	- Turbine vents installed on LFG vent (12/12/2022–present)
2/23/2023	27	42.2	0.0	30.8	- Vacuum extraction from methane trench (2/10/2023–6/16/2023) - Probe valves left open to vent (2/23/2023–3/22/2023)
3/3/2023	12.8	24.9	0.1	62.2	
3/10/2023	0.0	0.1	22.0	77.9	
3/22/2023	0.0	0.8	20.1	79.1	- Probe valves closed (3/22/2023–present)
4/1/2023	17.7	36.1	0.0	46.2	
5/9/2023	0.0	0.0	20.4	79.6	
6/15/2023	0.0	2.0	16.7	81.3	
6/27/2023	2.6	26.3	0.4	70.7	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	3.1	27.9	0.2	68.7	
8/21/2023	4.3	30.4	0.3	65.1	- Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023)
9/5/2023	4.3	31.1	0.0	64.5	- Vacuum extraction from methane trench (8/23/2023–11/10/2023)
9/22/2023	4.1	30.4	0.8	64.6	
10/21/2023	3.2	31.6	0.1	65.0	
11/1/2023	2.8	27.9	1.8	67.5	
11/10/2023	3.4	30.3	0.1	66.2	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	3.4	30.4	0.0	66.2	
11/30/2023	7.2	32.4	0.0	60.4	
12/8/2023	7.2	32.5	0.0	60.4	
1/3/2024	8.5	32.8	0.0	58.7	
3/15/2024	10.7	34.1	0.0	55.2	
4/3/2024	11.7	31.5	0.0	56.8	
5/1/2024	12.4	29.4	0.0	58.2	
5/7/2024	13.6	32.0	0.1	54.4	
5/15/2024	11.9	30.7	0.0	57.4	
5/21/2024	12.3	31.3	0.0	56.4	
5/31/2024	11.7	30.6	0.1	57.6	
6/7/2024	11.9	30.1	0.1	58.0	
6/25/2024	9.2	28.5	0.1	62.3	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	6.8	27.0	0.1	66.1	
7/12/2024	5.0	25.5	0.1	69.4	
7/16/2024	4.0	24.2	0.2	71.5	
7/26/2024	4.8	26.5	0.0	68.7	
8/8/2024	2.8	24.1	0.3	72.8	- Caps added to the other two vent pipe connections at sumps
8/20/2024	4.9	24.8	0.1	70.2	
8/24/2024	4.8	25.4	0.0	69.8	
8/29/2024	Not Read				
9/4/2024	4.4	24.6	0.1	70.9	
9/19/2024	4.8	26.1	0.0	69.1	
9/26/2024	4.3	27.8	0.0	67.9	
10/3/2024	3.7	27.1	0.0	69.2	
10/8/2024	4.1	28.0	0.0	67.9	
10/20/2024	4.6	27.5	0.0	67.9	
10/30/2024	5.0	28.1	0.0	66.9	
11/8/2024	4.5	27.8	0.0	67.7	
11/12/2024	5.5	27.4	0.1	67.0	
11/19/2024	6.7	27.8	0.1	65.4	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	7.0	28.2	0.0	64.8	
12/2/2024	7.7	28.6	0.0	63.6	
12/12/2024	8.3	31.4	0.0	60.3	
12/20/2024	8.5	32.5	0.0	59.0	
1/24/2025	8.2	26.7	0.0	65.1	
2/12/2025	8.8	27.5	0.1	63.6	
3/21/2025	Not read due to construction blockage				
4/30/2025	Not read due to construction blockage				



Table 17 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 12.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
5/9/2025	Not read due to construction blockage				- <u>Vacuum extraction from methane trench with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)</u>
6/23/2025	Not read due to construction blockage				
7/23/2025	Not read due to construction blockage				
8/18/2025	Not read due to construction blockage				
9/10/2025	Not read due to construction blockage				
10/15/2025	Not read due to construction blockage				
11/6/2025	Not read due to construction blockage				- <u>Rotron blower unit installed (10/31/2025)</u>
11/17/2025	3.2	25.1	0.1	71.6	
11/21/2025	2.0	24.1	0.1	73.8	
11/24/2025	2.1	24.5	0.1	73.2	
12/1/2025	1.9	24.1	0.4	73.5	
12/5/2025	1.9	23.7	0.1	74.3	
12/10/2025	0.0	21.7	0.1	75.3	
12/17/2025	0.8	14.2	4.0	81.1	
12/22/2025	1.7	22.1	0.1	76.2	
12/31/2025	1.2	22.6	0.1	76.0	

Figure 15. Methane Content of Landfill Perimeter Soil Gas Probe #12.



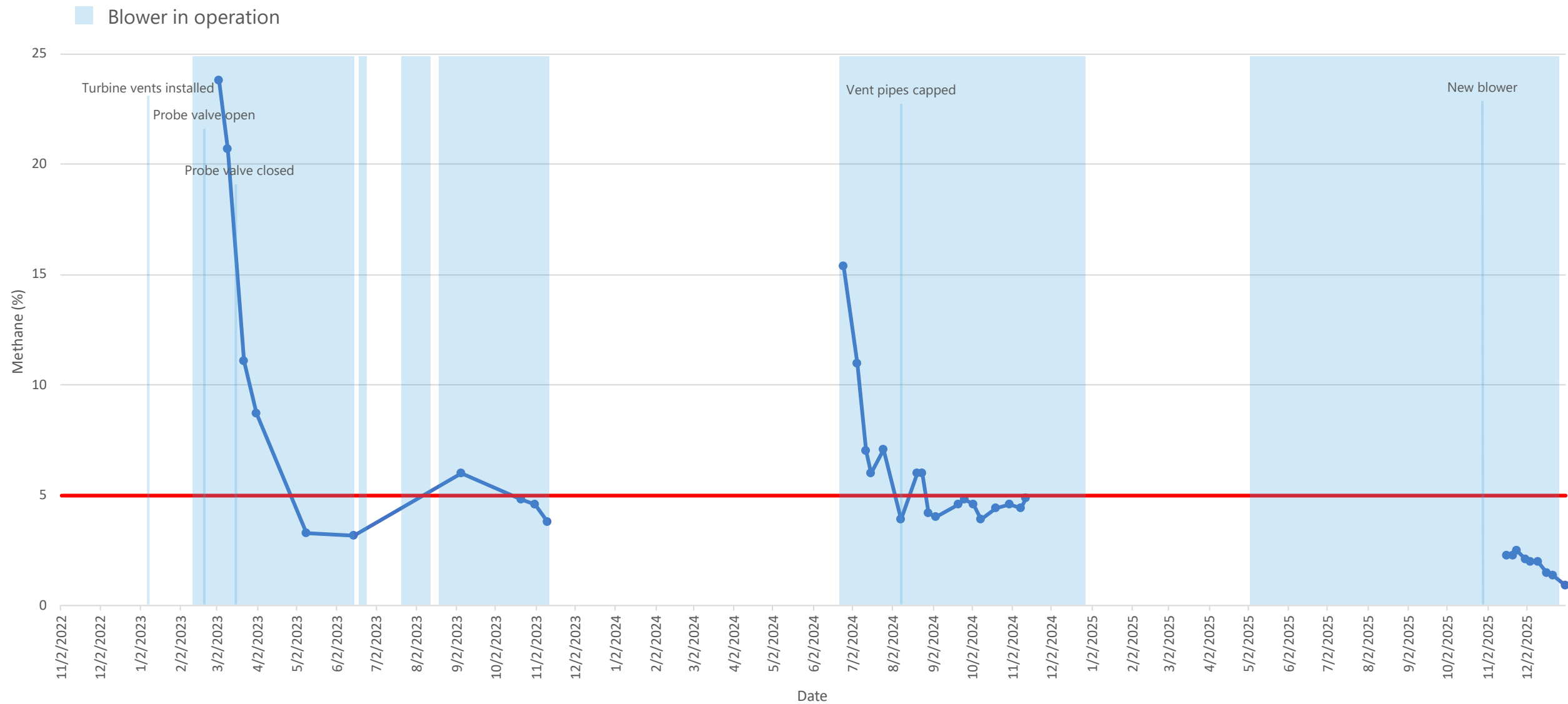
Soil Vapor Extraction Unit

Table 18. Monitoring Results for Soil Vapor Extraction Unit.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
11/2/2022	-	-	-	-	- Blower not installed (11/2/2022–2/10/2023)
11/23/2022	-	-	-	-	
1/13/2023	-	-	-	-	
2/23/2023	Not Read				- Blower installed, vacuum extraction from methane trench (2/10/2023–6/16/2023)
3/3/2023	23.8	19.7	1.6	54.9	
3/10/2023	20.7	19.8	4.2	55.3	
3/22/2023	11.1	17.8	4.7	66.5	
4/1/2023	8.7	19.0	4.5	67.8	
5/9/2023	3.3	13.8	4.9	78.0	
6/15/2023	3.2	11.5	7.9	77.3	
6/27/2023	-	-	-	-	- Blower shut off (6/16/2023–6/17/2023) - Vacuum extraction from methane trench (6/17/2023–6/26/2023) - Blower shut off (6/26/2023–7/24/2023)
7/5/2023	-	-	-	-	
8/21/2023	-	-	-	-	- Vacuum extraction from methane trench (7/24/2023–8/18/2023) - Blower shut off (8/18/2023–8/23/2023)
9/5/2023	6.0	14.6	6.0	73.4	- Vacuum extraction from methane trench (8/23/2023–11/10/2023)
9/22/2023	Not Read				
10/21/2023	4.8	15.7	6.6	72.9	
11/1/2023	4.6	16.5	5.1	73.8	
11/10/2023	3.8	13.6	8.3	74.3	- Blower shut off (11/10/2023–6/19/2024)
11/17/2023	-	-	-	-	
11/30/2023	-	-	-	-	
12/8/2023	-	-	-	-	
1/3/2024	-	-	-	-	
3/15/2024	-	-	-	-	
4/3/2024	-	-	-	-	
5/1/2024	-	-	-	-	
5/7/2024	-	-	-	-	
5/15/2024	-	-	-	-	
5/21/2024	-	-	-	-	
5/31/2024	-	-	-	-	
6/7/2024	-	-	-	-	
6/25/2024	15.4	14.3	5.2	65.1	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	11.0	13.8	5.8	69.4	
7/12/2024	7.0	13.4	7.1	72.4	
7/16/2024	6.0	12.7	6.6	74.8	
7/26/2024	7.1	14.8	6.7	71.4	
8/8/2024	3.9	12.4	7.7	76	- Caps added to the other two vent pipe connections at sumps
8/20/2024	6.0	13.9	6.9	73.2	
8/24/2024	6.0	15.4	5.6	73.0	
8/29/2024	4.2	15.0	5.9	73.4	- Dilution valve on blower opened halfway (8/24/24–11/15/2024)
9/4/2024	4.0	14.3	6.0	74.3	
9/21/2024	4.6	14.5	6.4	74.5	
9/26/2024	4.8	14.8	5.8	74.6	
10/3/2024	4.6	15.0	6.3	74.1	
10/8/2024	3.9	14.5	6.1	75.5	
10/20/2024	4.4	12.8	8.0	74.7	
10/30/2024	4.6	12.8	9.4	73.3	
11/8/2024	4.4	13.3	8.3	74.1	
11/12/2024	4.9	11.7	10.2	73.2	
11/19/2024	-	-	-	-	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	-	-	-	-	
12/2/2024	-	-	-	-	
12/12/2024	-	-	-	-	
12/20/2024	-	-	-	-	
1/24/2025	-	-	-	-	
2/12/2025	-	-	-	-	
3/21/2025	-	-	-	-	

Table 18 (continued). Monitoring Results for Soil Vapor Extraction Unit.

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions/Key Dates
4/30/2025	-	-	-	-	
5/9/2025	-	-	-	-	- Vacuum extraction from methane with blower unit moved from next to GP-7 to top of grass hill (5/2/2025–present)
6/23/2025	-	-	-	-	
7/23/2025	-	-	-	-	
8/18/2025	-	-	-	-	
9/10/2025	-	-	-	-	
10/15/2025	-	-	-	-	
11/16/2025	2.3	-	-	-	- Rotron blower unit installed (10/31/2025)
11/21/2025	2.3	-	-	-	
11/24/2025	2.5	-	-	-	
12/1/2025	2.1	-	-	-	
12/5/2025	2.0	-	-	-	
12/10/2025	2.0	-	-	-	
12/17/2025	1.5	-	-	-	
12/22/2025	1.4	-	-	-	
12/31/2025	0.9	-	-	-	

Figure 16. Methane Content at Portable Soil Vapor Extraction Unit.



Notable Areas/Probes

Methane concentrations above 5 percent have been observed since the landfill was closed and monitoring began in November 2022. Per the LFG Monitoring Readiness Report (Herrera 2024), Herrera personnel performed a number of investigations, implemented contingency measures, and saw fluctuations of methane levels in the probes since the start of monitoring. In February 2023, a blower unit was installed that reduced methane levels at all probes. Some probes were directly connected to the blower to help facilitate quicker soil gas cleanup. In November 2023, the blower was turned off to evaluate the rebound of methane levels. Methane concentrations rebounded to similar concentrations observed when monitoring was initiated in November 2022. The trend upward in spring and early summer of 2024 led to Herrera taking additional action to better control methane presence.

The blower was reinstalled in June 2024 (as it was in 2023) near GP-7, to provide vacuum on the perimeter trench through the sump near GP-7. Discharge was routed through the LFG Vent connected to sumps near GP-7 and GP-9. In August 2024, caps were added to the other two vent pipe connections at the sumps near GP-11 and GP-2 to prevent atmospheric air from being pulled into the trench and to increase vacuum influence on the landfill perimeter trench. The vent pipe connection at the sump near GP-9 was also capped to prevent recirculation of LFG through the collection system.

In 2025, an upsized blower was installed to attempt to decrease high (above 5 percent) methane levels observed in the probes. Methane was detected above 5 percent at nine of twelve probes in early 2025. By the end of 2025, only GP-6 and GP-10 continued to observe methane hot spots above 5 percent. GP-1, GP-4, and GP-12 still observed methane levels above 1 percent at the end of 2025.

Top of Hill/West Side

The top of the hill around GP-10 and GP-11 have typically shown the highest soil vapor methane presence since monitoring began. Methane levels at GP-10 peaked in April 2025 at 30.5 percent when the blower was off. This was the highest methane recorded out of all twelve probes in 2025. Methane levels began decreasing once the upsized blower was installed in October 2025. Methane dropped from 28.9 percent to 17.9 percent when the upsized blower was operating in 2025. GP-11 had a high of 23.2 percent methane in January when the blower was not running. Zero percent methane was observed at GP-11 once the upsized blower was turned on through the end of the year. GP-12 observed a high methane percentage of 8.8 percent in February 2025 when the blower was off. Since installing and turning on the upsized blower, methane levels have consistently been below 2 percent methane at GP-12. GP-12 was buried under soils from March through November as a result of development construction activities. GP-12 was found with a metal detector in November and was uncovered and has returned to normal monitoring. GP-9 has remained consistently below the 5 percent benchmark throughout all of 2024.

Side of Hill/South Side

GP-4, GP-5, GP-6, GP-7, and GP-8 had methane levels above 5 percent when monitoring first began at the landfill in 2022. All probes' methane levels have historically dropped with implementation of the blower unit and direct vacuum extraction. All probes' methane levels have historically rose again when the blower has been shut off. GP-4, GP-5, GP-6, and GP-7 were above the 5 percent limit between the

months of January and October 2025, with a peak concentration of 19.9 percent methane in April at GP-6 when the blower was off. When the upsized blower was installed and turned on in October 2025, all probes except GP-6 returned to methane levels below 5 percent. GP-6 was reading at 5.5 percent in December 2025 and is still trending downward. GP-8 observed methane levels below 5 percent for the entirety of 2025. GP-8 was buried under soils from March through November as a result of development construction activities. GP-8 was found with a metal detector in November and was uncovered and has returned to normal monitoring.

Bottom of Hill/East Side

GP-1, GP-2, and GP-3 had methane levels above 5 percent when monitoring first began at the landfill in 2022. GP-2 and GP-3 both have historically observed methane levels below 5 percent when the blower is operational, and methane levels above 5 percent when the blower is shut down. In March 2025, GP-2 peaked at 9.6 percent methane, and GP-3 peaked at 17.1 percent methane when the blower was off. Since the upsized blower was installed and began operation in October 2025, GP-2 and GP-3 have maintained methane levels around 0 percent. GP-1 observed levels near 2.0 percent at the end of 2025. GP-1 was buried under an asphalt driveway from March 2024 through November 2025 as a result of development construction activities. GP-1 was found with a metal detector and was uncovered and has returned to normal monitoring.

Landfill Gas Surface Monitoring

Background

Methane surface emissions monitoring was conducted around the Go East Landfill, beneath the vapor barriers at the house ventilation trench monitoring stations and within Alpine Estates homes on 10 occasions in 2024. Per the LFGMCP, the interior of the electrical building and Alpine Estates homes were air monitored to ensure that methane levels are safe prior to occupancy. The concentrations of methane must not exceed 0.01 percent (100 ppmV) in indoor air of the Alpine Estates homes, per WAC 173-350-400(4)(b).

The continuous methane detectors installed within the homes cannot detect levels below 0.5 percent (5,000 ppmV) methane, and the electrical building is not equipped with such devices. To ensure that methane concentrations inside the offsite structures were below the 0.01 percent (100 ppmV) regulatory threshold, indoor methane levels were monitored using a surface emissions monitor that can detect methane as low as 1 ppmV (0.0001 percent). Naturally occurring methane levels in atmosphere are approximately 2 ppmV (0.0002 percent) (Helmenstine, 2024). Each home completed in 2024 had the interior air monitored at least once before occupancy, often more than once.

Surface monitoring was conducted as part of an initial assessment either following completion of home construction or during home construction. Surface monitoring was conducted as part of a supplemental assessment when supplemental monitoring trigger level exceedances were either (1) observed both at a perimeter probe and at the house ventilation trench monitoring station (in the case of Alpine Estates homes) or (2) just observed at a perimeter probe (in the case of the electrical building).

Supplemental monitoring measures are taken when methane levels above 1 percent are observed at the perimeter probes. Perimeter probes have a regulatory assessment level of 5 percent methane, and, while not regulatory, a supplemental monitoring trigger level of 1 percent methane that initiates monitoring at the house monitoring stations of specific Alpine Estates development lots. Figure C-1 of the LFGMCP defines the lots that are to be monitored when there is an exceedance of 1 percent methane observed at a given probe.

Positioned outside of the house, the house monitoring stations connect to the collection system pipe installed beneath the house footprint. In 2025, the final 39 Alpine Estates houses were constructed. The house monitoring stations have been installed for these homes, and the contingency monitoring of the lots has begun (see LFGMCP, Figure C-1). Indoor home air monitoring with a surface emissions monitor is required if there is a detection of methane at or above 0.1 percent at the house monitoring station; this detection has not occurred.

Method

Herrera personnel used a Landtec SEM 5000 Tunable Diode Laser Absorption Spectroscopy (TDLAS) detector to measure methane concentrations across the surface of the Go East landfill and within and around uninhabited Alpine Estates homes. The SEM 5000 unit is calibrated to the landfill site location and adjusts measurements based on the background methane concentrations measured upwind and downwind. In accordance with WAC 173-408, monitoring was conducted with the Landtec SEM 5000 unit's probe (1) within 3 inches of the landfill or ground surface while traversing the monitored areas, (2) when barometric pressure was stable or dropping, and (3) when wind was less than 5 miles per hour (mph) and gusts did not exceed 10 mph. The monitored areas included the perimeter of the landfill and the lots of homes under development.

Results

Figures 17 to 19 show the results of methane surface monitoring conducted on three separate dates in 2025. Surface monitoring within the Alpine Estates home and beneath the vapor barrier took place at least one time within each house before construction was completed. One yellow dot represents one recorded methane concentration in ppmV. During 2025 surface monitoring, the highest observed concentration of methane was 23.5 ppmV (regulatory limit is 500 ppmV for outdoor air), near the LFG continuous monitoring sump closest to Lot 13, but off the property of any home. The highest methane observances were typically near the continuous monitoring sumps, because these locations are where the collection trench is not buried and is accessible at ground level. The highest methane level observed within or beneath a home at the house ventilation trench monitoring station was 4.1 ppmV (regulatory limit is 100 ppmV for indoor air). Results of surface monitoring across the site and within each home indicate that methane conditions at Alpine Estates are safe and well below the 0.01 percent(100 ppmV) regulatory threshold.

Figure 17.
January Surface Monitoring Results.

January 16, 2025

Maximum Methane Concentration Observed on Day: 23.5

Methane Concentration (ppm)

- 2.20 - 2.50
- 2.51 - 2.90
- 2.91 - 4.10
- 4.11 - 13.40
- 13.41 - 23.50

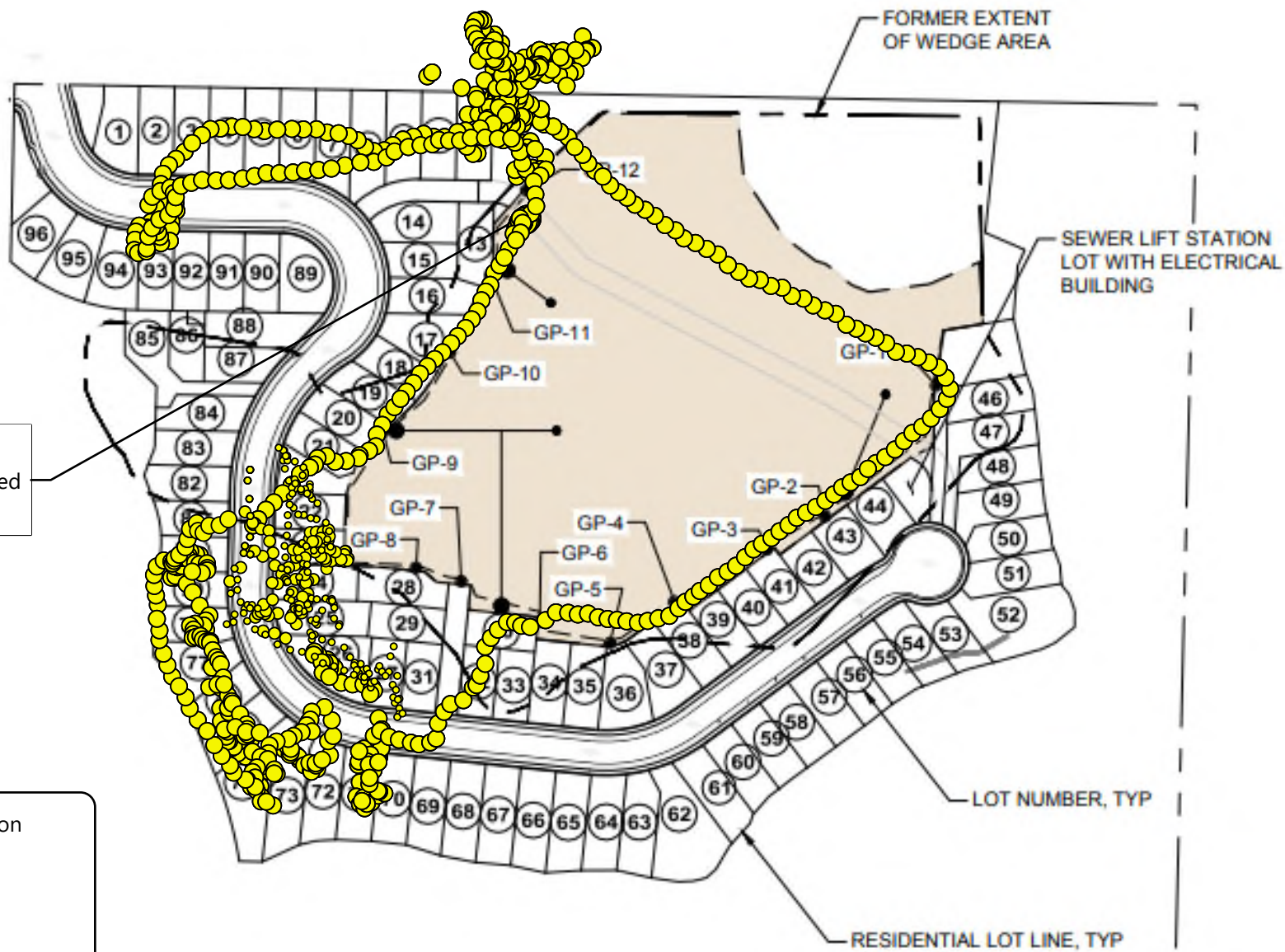
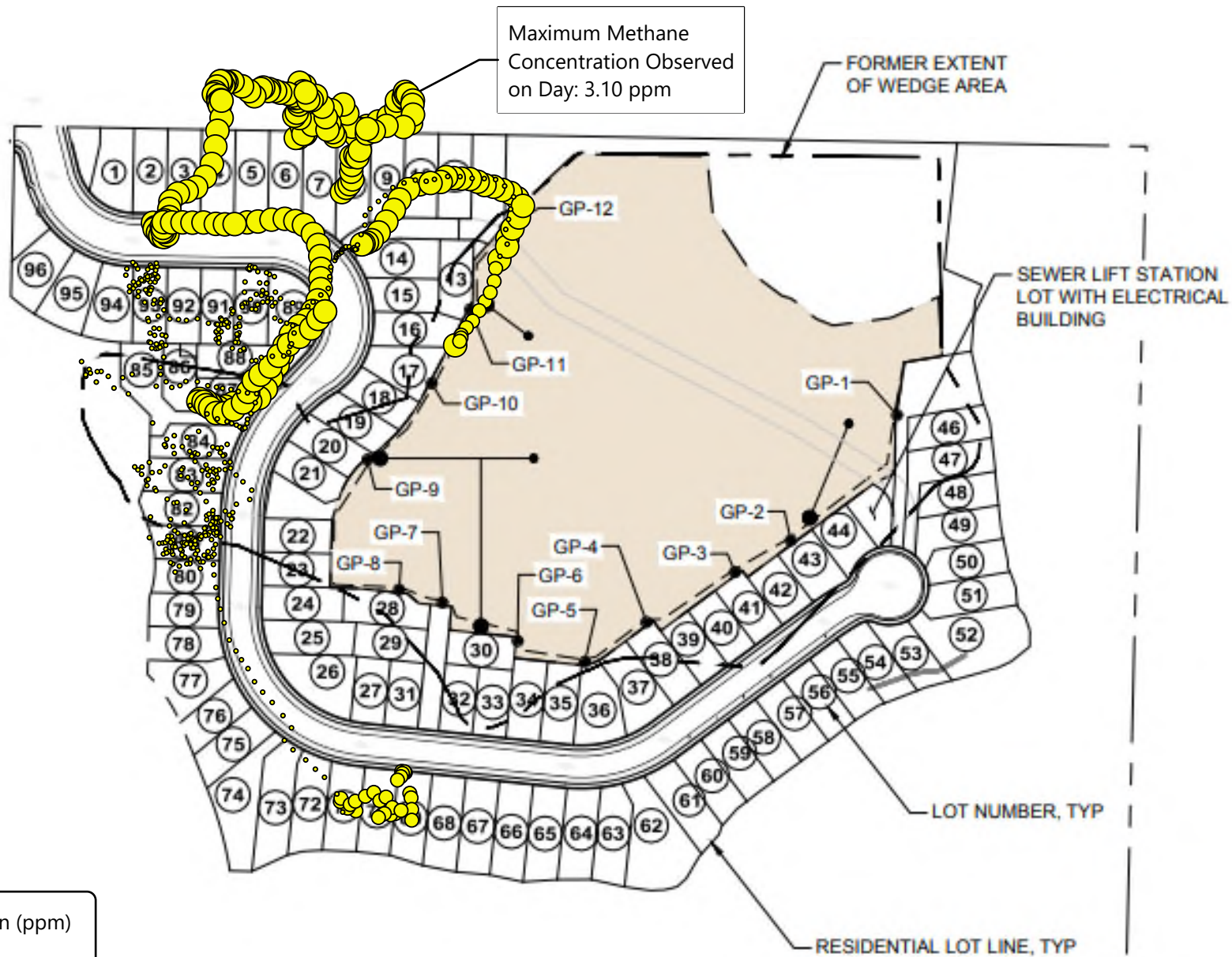


Figure 18.
May Surface Monitoring Results.

May 5, 2025



Methane Concentration (ppm)

- 2.00 - 2.10
- 2.11 - 2.60
- 2.61 - 3.10

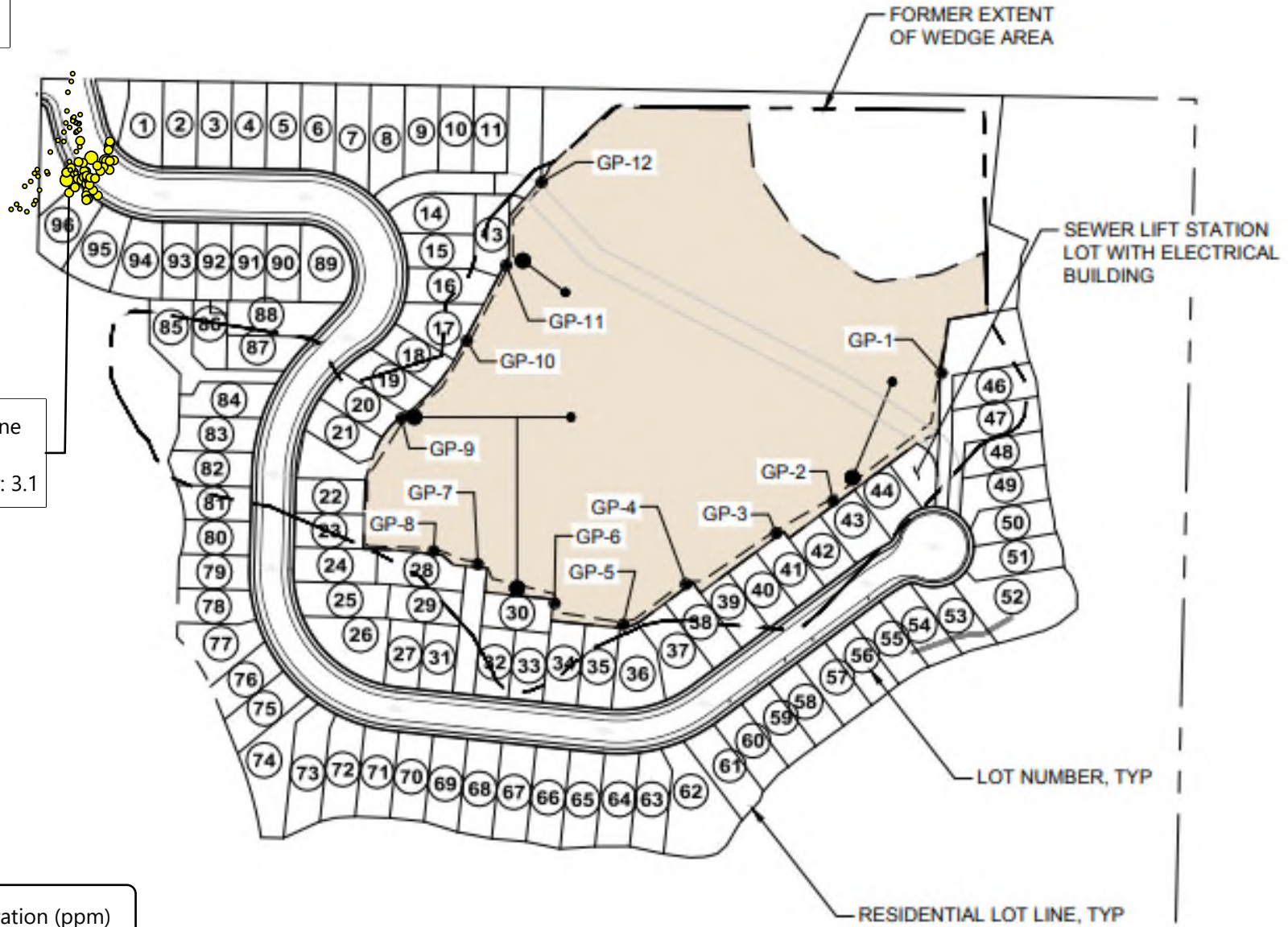
Figure 19.
September Surface Monitoring Results.

September 11, 2025

Maximum Methane Concentration
Observed on Day: 3.1

Methane Concentration (ppm)

- 2.90
- 2.91 - 3.00
- 3.1



Planned Work for 2026

During 2026, the following onsite work is planned for the Go East Landfill:

- Perform monthly perimeter probe monitoring until methane levels are confirmed to drop below 5 percent. Monitoring frequency will be coordinated and agreed upon with Ecology
- House ventilation trench monitoring station and indoor air monitoring of Alpine Estates homes if supplemental monitoring action is triggered.
- Collect LFG samples and analyze emissions with a new upsized blower; prepare another Go East Landfill Emissions Technical Memorandum for Ecology and SCHD.
- Herrera will begin performing water monitoring for the Go East Landfill/Alpine Estates starting in 2026, per approval by the HOA. Water monitoring was previously performed by GeoEngineers, who resigned from their duties during the ownership change near the end of 2025. The last water monitoring event performed by GeoEngineers was in September 2025. Herrea will perform the ground and surface water monitoring in March and September 2026 and beyond. Herrera will prepare the water monitoring annual reports starting in March 2027. This March 2027 report will include results of 2026 water monitoring and September 2025 water monitoring. The March 2025 water monitoring event was included in the 2025 Annual Monitoring Report for Groundwater and Surface Water at the Go East Landfill Corp Closed Landfill (GeoEngineers 2025).

References

Anne Marie Helmenstine, Ph D. "The Chemical Composition of Air." ThoughtCo. July 30, 2024.

<<https://www.thoughtco.com/chemical-composition-of-air-604288#Table%20of%20Elements%20and%20Compounds%20in%20Air>>.

GeoEngineers. 2020. Interim Action Work Plan.

GeoEngineers. 2021. Final Interim Action Completion Report – Go East Landfill Corp Site.

GeoEngineers. 2025. 2025 Annual Monitoring Report for Groundwater and Surface Water at the Go East Landfill. May 30.

Herrera Environmental Consultants. 2024. Landfill Gas Monitoring and Contingency Plan. Updated January 17.

Herrera Environmental Consultants. 2024. Landfill Gas Monitoring Readiness. February 16.

Pace Engineers Inc. 2022. Construction Quality Assurance Report – Go East Landfill. May 20.

Vikek Environmental Engineers, LLC. 2022. Landfill Gas Monitoring and Contingency Plan, Go East Landfill/Bakerview, Everett, Washington.

Vikek Environmental Engineers, LLC. 2022. Technical Memorandum – Landfill Gas Probe Installation, Go East Landfill/Bakerview, Everett, Washington