



December 22, 2025

Alan Noell  
Washington State Department of Ecology  
15700 Dayton Avenue North  
Shoreline, Washington 98133

Subject: Go East Landfill/Alpine Estates Landfill Gas Monitoring Data Update

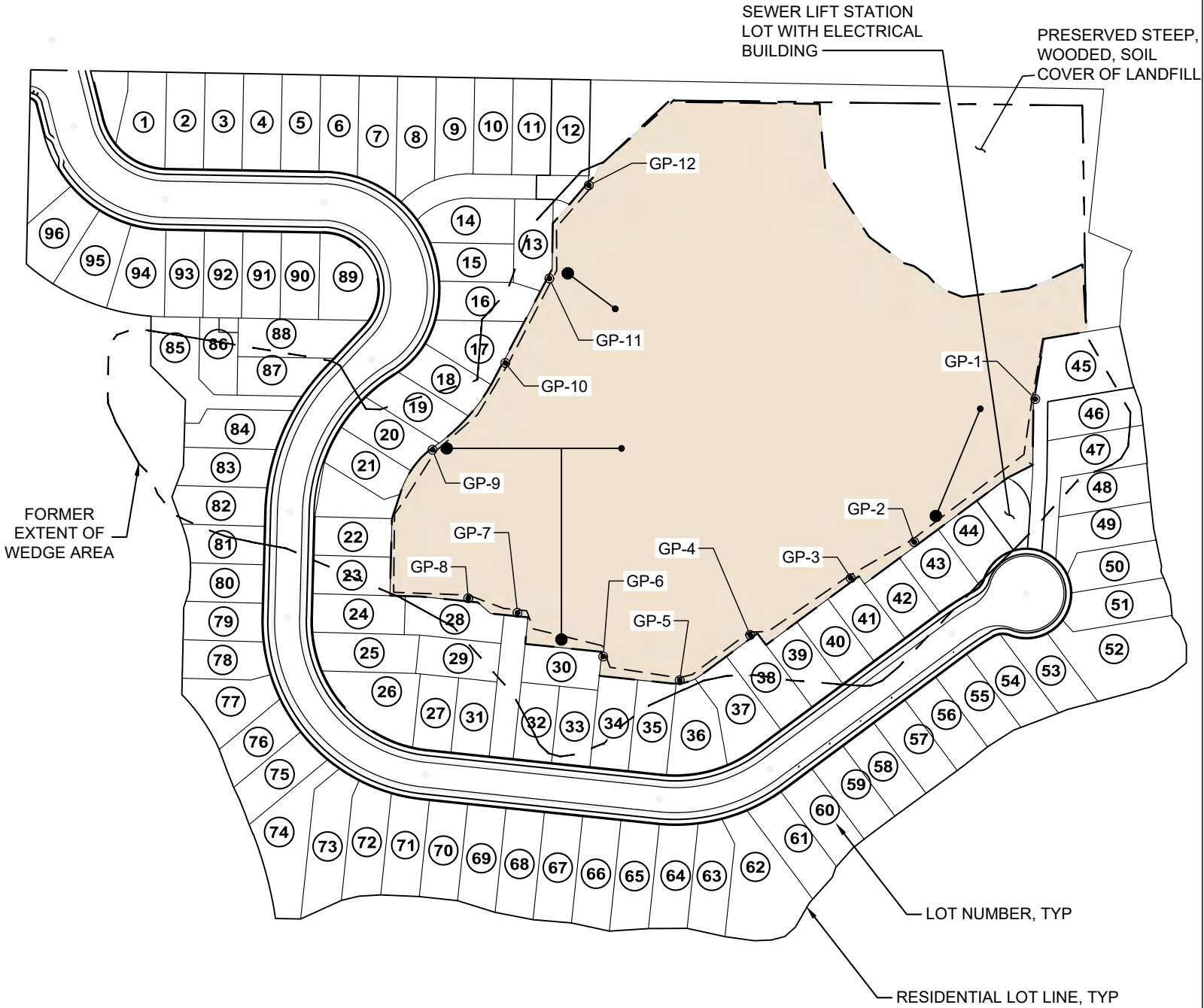
Dear Mr. Noell:

As discussed in the Go East Landfill/Alpine Estate Landfill Gas Monitoring Data Update, dated June 14, 2024 (June 14 Letter), upward trends in methane levels were observed after the removal of the soil vapor extraction unit from the landfill perimeter collection trench and individual probes in November of 2023. In the June 14 Letter, five steps were outlined to investigate the source and extent of methane on the Go East Landfill/Alpine Estates property and attempt to reduce methane in the soil gas surrounding the landfill boundary. Previous letters have presented the monitoring results since the implementation of Steps 1 and 2. This letter presents a summary of previous steps implemented and results of monitoring, and the initial monitoring results since implementation of Step 3 on October 31, 2025.

### Summary of Steps 1 and 2 Implementation and Results

Per Step 1 of the June 14 Letter, the portable soil vapor extraction unit (blower) was reinstalled on June 19, 2024. The blower was positioned near GP-7 to provide vacuum on the perimeter trench through the sump by GP-7. Discharge was routed through the Landfill Gas Vent connected to sumps by GP-7 and GP-9. Per Step 2 of the June 14 Letter, caps were added to the other two vent pipe connections at the sumps by GP-11 and GP-2 to prevent atmospheric air from being pulled into the trench and to try to increase vacuum influence on the landfill perimeter trench. The vent pipe connection at the sump by GP-9 was also capped to prevent recirculation of landfill gas through the collection system.

Figure 1 shows a map of the site and the locations of the probes, sumps, and vents. Methane concentrations at the blower and probes were collected weekly when the barometric pressure was declining. Tables 1 through 12 in Attachment A are continuations of Table 3 from the February 8, 2024, Landfill Gas Monitoring Readiness at Go East Landfill/Alpine Estates Development technical memorandum. Table 13 in Attachment A shows the reads collected at the blower. Monitoring results of the blower and the probes from Steps 1 and 2 are shown from June 25, 2024, through November 15, 2024.



**LEGEND**

- GP-# LANDFILL PERIMETER SOIL GAS PROBE
- LANDFILL GAS SUMP
- LANDFILL GAS VENT
- GRAVEL TRENCH WITH 2 IN PERF PIPE
- GRAVEL TRENCH WITH 2 IN PIPE
- CAPPED AND CLOSED LANDFILL AREA

Methane concentrations at the probes began trending downward after the blower was reinstalled on June 25, 2024 (Step 1), and the downward trend continued after caps were added to the vent pipe connections at the sumps by GP-11 and GP-2 on August 8, 2024 (Step 2). Because of the decreasing methane concentrations, Step 2 continued for longer than the originally planned month. Between June and November 2024, the number of perimeter probes with measured methane levels above the WAC 173-350-400 lower explosive limit of 5 percent methane reduced from 10 out of 12 observed prior to implementation of Steps 1 and 2, down to 4 out of 12.

In November 2024, monitored methane levels increased at GP-10, GP-11, and GP-12. This increase was likely due to saturated soils trapping pockets of methane gas in higher concentrations. Additionally, the blower had to be turned off on November 15, 2024, when heavy rains caused the sumps to fill with water and the blower to pull in large amounts of water, which blocked the collection of landfill gas. The blower was off between November 15, 2024, and May 2, 2025. During that time, methane levels at an additional 5 perimeter probes rose to above the 5 percent limit.

Because of the flooding issues with the placement of the blower and its connection to the collection trench at a lower elevation, the 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 close to the new blower location to get power at this new spot. All work was completed in April 2025 and was performed on top of the existing landfill closure liner. This schematic is shown in Figure 14 of this letter.

On May 2, 2025, the blower was turned on again in this new location on top of the grass hill, which caused the measured methane concentration at the probes to once again drop. Methane levels at GP-4, GP-5, GP-6, GP-7, GP-10, and GP-11 remained above the 5 percent limit for the duration of the operation of the previous blower through October 28, 2025.

### **Implementation of Step 3 and Initial Results**

The upward trends noted in the section prior and described in more detail in the Go East Landfill/Alpine Estate Landfill Gas Monitoring Data Update, dated December 6, 2024 (December 6 Letter) led Herrera to begin implementation of Step 3. Step 3 involved installing a larger blower unit to increase vacuum influence on the collection trench while keeping the vent pipe connections capped as they are for Step 2. To initiate Step 3, a landfill gas sample was collected from the blower on November 8, 2024, and analyzed for the U.S. Environmental Protection Agency (EPA) Toxic Organics – 15 (TO-15) constituents by Fremont Analytical in Seattle, Washington. A summary

data table that includes the analyte loading rates and their comparison to emissions thresholds for the Go East Landfill/Alpine Estates Development property is included in Table 14 of the December 6 Letter. All analytes had loading rates lower than the corresponding small quantity emission rate (SQER) thresholds, indicating the analytes and total emissions meet compliance and do not require further dispersion modeling to determine compliance.

The analysis also determined that the blower's flow rate could increase from 80 scfm to 196 scfm with the same TO-15 analyte concentrations reported by the laboratory, before analytes begin to exceed their SQERs.

The June 14 Letter originally mentioned that the Go East Landfill/Alpine Estates property would require a discharge permit to operate a larger blower unit. According to Regulation 1 Article 5.03(a)(5) of the Puget Sound Clean Air Agency (PSCAA), gas control equipment having a rated capacity of less than 200 scfm does not trigger source registration. Results of the emission loading analysis showed that no notification to or permit with PSCAA is required since flow will be kept below 200 scfm. Another sample will be collected from the new larger blower in late December 2025 to confirm emissions remain in compliance with increased landfill extraction.

On October 31, 2025, the new blower assembly was connected to the system, tying into the existing collection and vent pipes. The blower assembly includes a 5.5 horsepower Rotron EN757FL5MWL Sealed Regenerative Blower with Explosion-proof Motor (Rotron Blower). The data sheet for the blower is included in Attachment B. The Rotron Blower is outfitted with a Solberg Fs-31p-200 Filter Silencer (Filter Silencer) and an Ametek Rotron 515256 Inline Filter (Inline Filter). The Filter Silencer can handle a maximum flow rate of 135 scfm, removes dirt and debris at the inlet of the blower assembly, and reduces operating noise. The Inline Filter protects the Rotron Blower from harmful dust and other particles. The blower assembly is contained within a powder coated steel box, to further reduce noise and protect the assembly from the elements. The blower assembly outlet connects to a new vent pipe, which disperses the discharged landfill gas 10 feet aboveground. There are monitoring stations equipped with labcock valves for sampling on the inlet and outlet pipes. The as-built drawings are shown in Figure 14 of this letter.

Since installation of the new blower assembly, Herrera has taken measurements at the blower inlet and outlet on five different occasions. The measured methane concentration at the blower inlet was between 4.2 and 5.5 percent, while the concentration at the outlet remained between 2.0 and 2.5 percent. Flow at the Rotron Blower inlet, which represents collection monitoring results of landfill gas only without atmospheric dilution air, has been between 114 scfm and 148 scfm, below the 196 scfm threshold PSCAA source registration threshold. The dilution valve is operated so that emissions via the Landfill Gas Vent connected to the new blower assembly are kept below the lower explosive limit of 5 percent. The dilution valve has been kept open, and the outlet readings represent the emitted gas after the landfill gas is combined and diluted with atmospheric air. Table 14 shows the monitoring data of the inlet and outlet during operation of the Rotron Blower.

Methane levels at the monitoring probes have been measured for a month on a weekly interval since connecting the new Rotron Blower. Initial data shows a further drop in methane levels, with only GP-4, GP-6, and GP-10 still exhibiting methane levels above the 5 percent limit, though

trending downward. Since Step 3 was implemented a month ago, the methane reductions at these three probes still reading above 5 percent have been significant. GP-4 read at 13.1 percent methane prior to Step 3 implementation and is down to 5.9 percent methane after the most recent monitoring event. GP-6 went from 12.5 percent methane down to 6.7 percent. GP-10 went from 28.9 percent methane down to 21.6 percent methane. This is especially encouraging because this new blower assembly installation, associated monitoring, and methane reductions have taken place during the wet season of the year. The landfill has historically observed higher methane concentrations in the wetter months of the year.

### Next Steps

Initial monitoring of the probes since the installation of the Rotron Blower has shown to be promising. All probes, if not already reading 0 percent methane, have been trending downward in methane concentrations. Although 3 out of the 12 probes continue to observe methane above 5 percent, these probes also have been trending downward and are getting closer to the 5 percent methane threshold.

The June 14 Letter outlined that Steps 4 or 5 would be implemented depending on the results of Step 3. The June 14 Letter explained that if methane concentrations do not decline after a month of monitoring following Step 3 implementation (or do not decline significantly), Step 4 might need to be implemented. Step 4 would involve keeping the Rotron Blower installed and operating while increasing the extent of gas cleanup to beyond the landfill boundary. If methane concentrations do decline after a month of monitoring following Step 3 implementation, Step 5 would be implemented. Step 5 would involve the Rotron Blower providing enough cleanup inside of the landfill boundary, meaning soil gas extraction outside of the landfill boundary would not be needed. The Rotron Blower would stay installed and operating until all probes read consistently below 5 percent. Probe results after a month of monitoring since Step 3 was implemented are showing the Rotron Blower to be effective in reducing methane concentrations at the perimeter probes. This suggests that moving to Step 5 might be enough, but it is still too early in Step 3 monitoring to tell whether gas extraction from only within the landfill boundary is enough to get all probe levels below 5 percent. Herrera plans to continue with Step 3 so that 1 year of monitoring during all four seasons is completed with this Rotron Blower before any next determinations are made about the landfill/soil gas extraction system or monitoring protocol. Reads will continue to be collected weekly when the barometric pressure is declining through the end of the year 2025. With Washington State Department of Ecology agreement, Herrera plans to decrease the monitoring frequency of the probes and the blower to monthly in January 2026 assuming methane results at GP-1, GP-2, GP-3, GP-5, GP-7, GP-8, GP-9, GP-11, and GP-12 stay below 5 percent, and GP-4, GP-6 and GP-10 continue to trend downward and approach 5 percent.

The most important thing is that monitoring of surface emissions and house ventilation trench monitoring stations continues to show that the methane observed in the probes is not migrating to the surface or underneath Alpine Estates houses. The environmental controls, monitoring, and contingency measures installed and performed for all 96 Alpine Estates homes provide safeguards

Washington State Department of Ecology

December 22, 2025

Page 6

against the potential migration of landfill gas while methane concentrations continue to decrease in the deep soils surrounding the landfill boundary to acceptable levels.

Sincerely,

Herrera Environmental Consultants, Inc..



Tyson Wright, P.E.  
Senior Engineer

# **Attachment A**

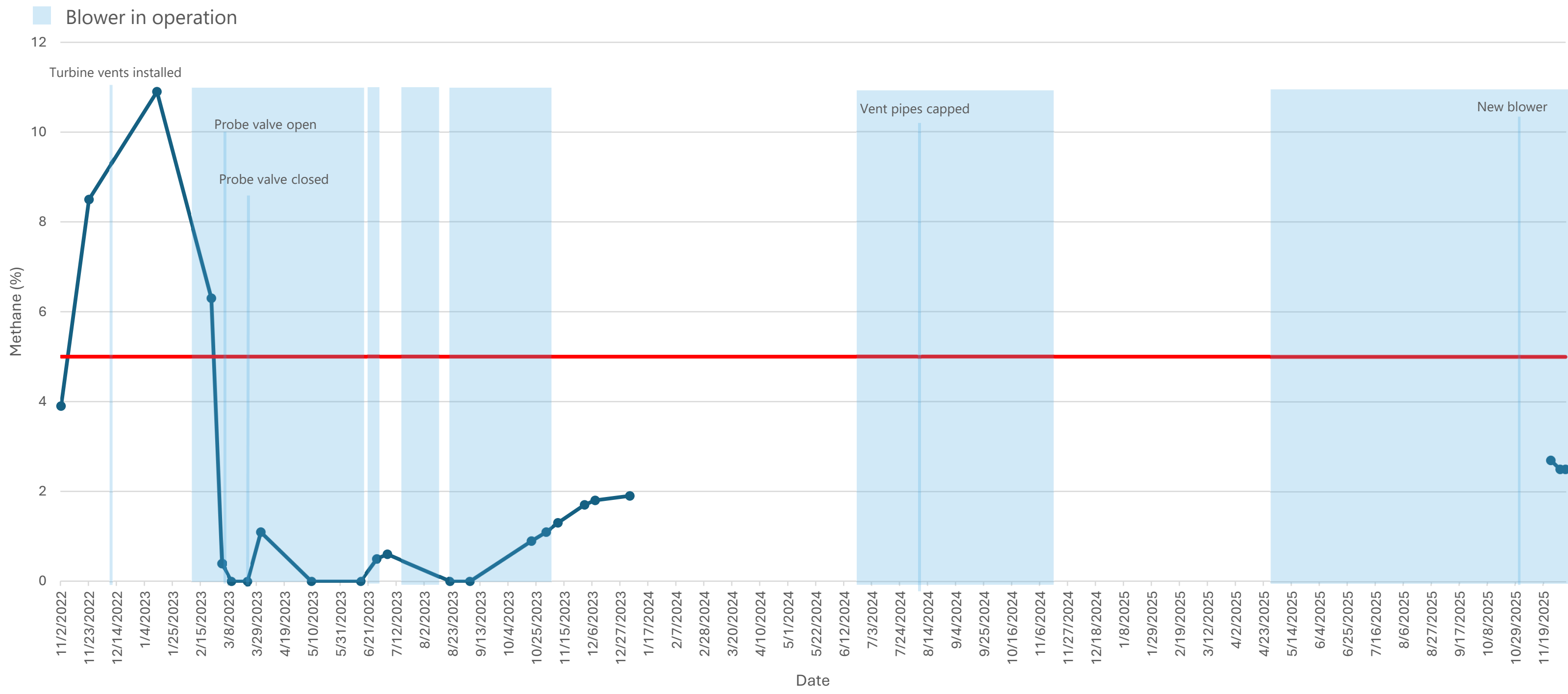
## **Monitoring Results**

**Table 1. 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	<b>8.5</b>	30.5	0.0	61	
1/13/2023	<b>10.9</b>	24.1	0.1	64.9	- Turbine vents installed on landfill gas vent (12/12/2022–present)
2/23/2023	<b>6.3</b>	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	
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	- 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				

<b>Table 1 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 1.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions/Key Dates</b>
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	

# Figure 2. Methane Content of Landfill Perimeter Soil Gas Probe #1.

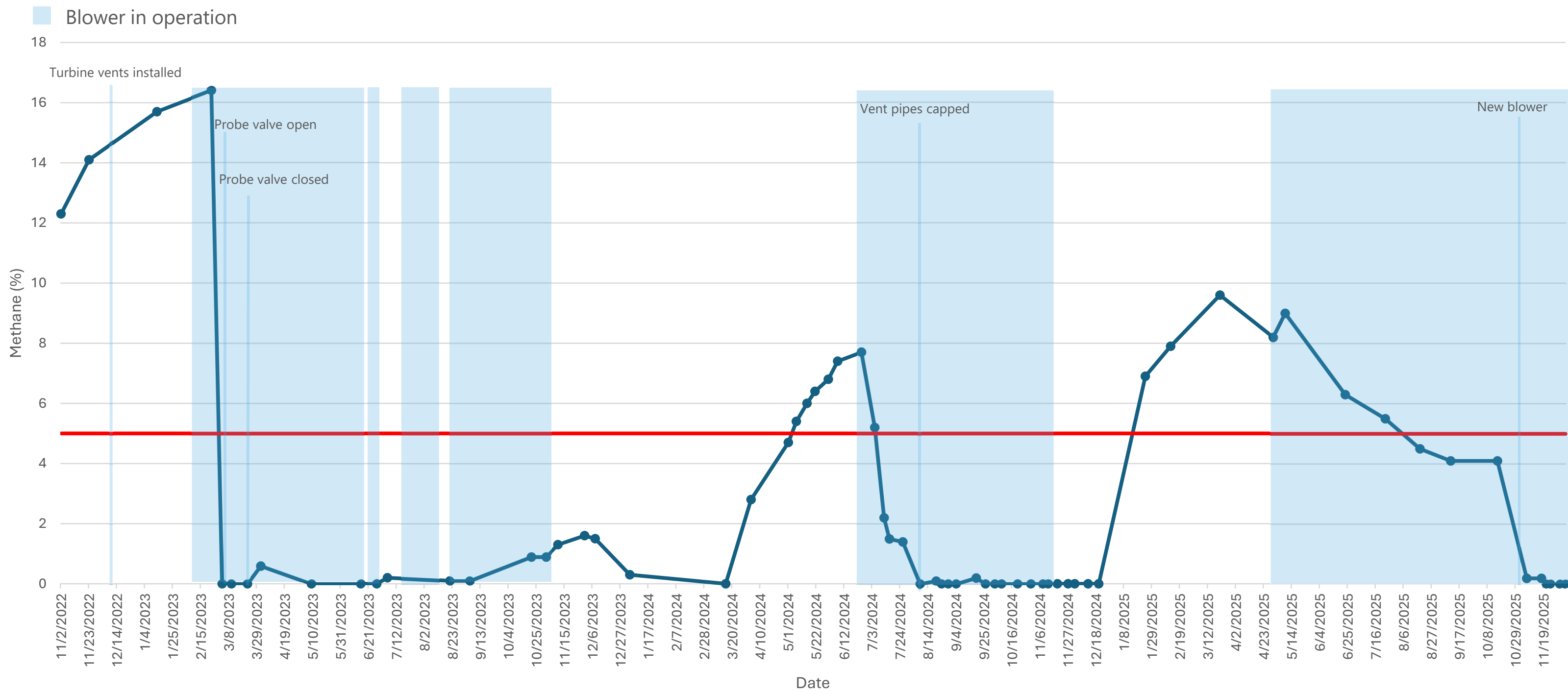


**Table 2. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 2.**

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 landfill gas 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	81.0	
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	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	
4/30/2025	8.2	15.2	0.0	76.6	

<b>Table 2 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 2.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
5/9/2025	<b>9.0</b>	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	<b>6.3</b>	15.6	0.0	78.1	
7/23/2025	<b>5.5</b>	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	
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	

# Figure 3. Methane Content of Landfill Perimeter Soil Gas Probe #2.



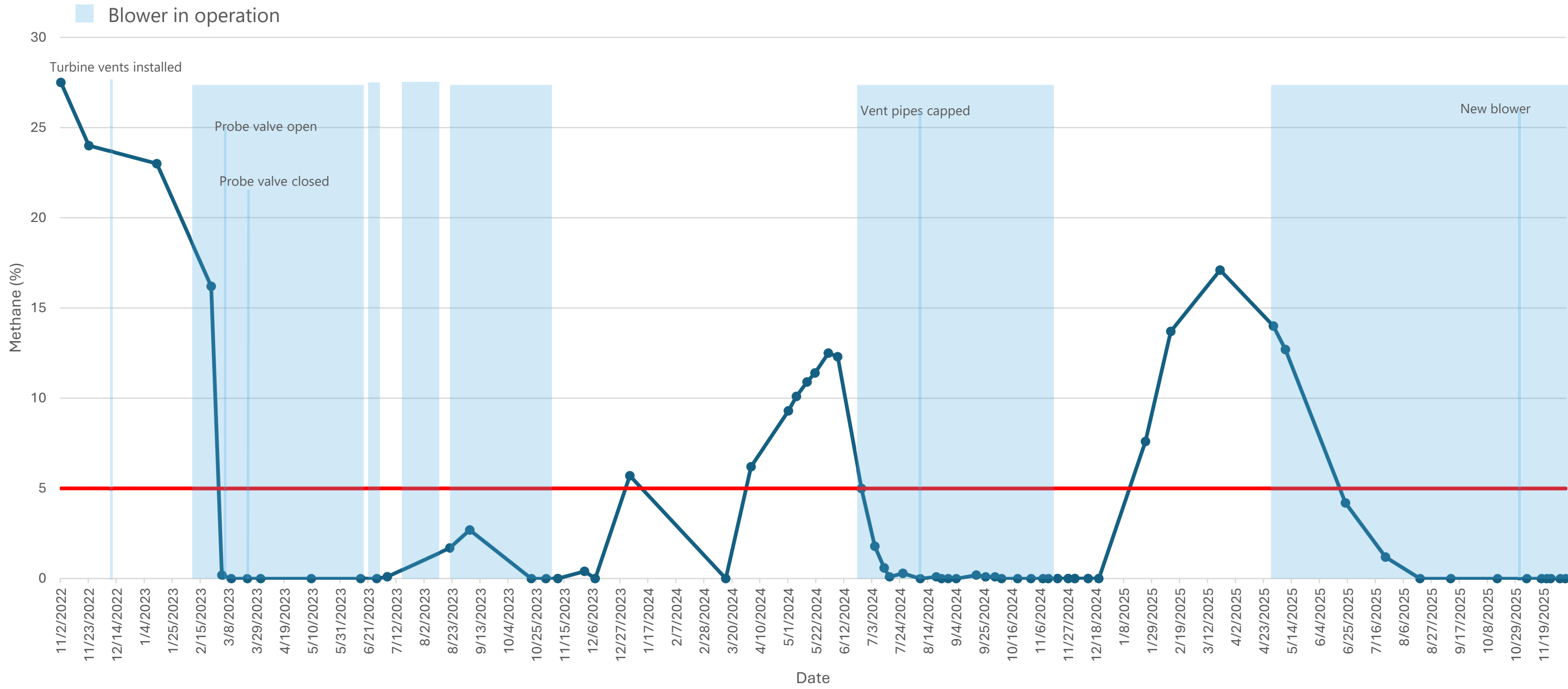
**Table 3. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 3.**

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 landfill gas 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	0.1	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	8.4	81.7	
11/12/2024	0.0	10	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	
4/30/2025	14.0	19.7	0.0	66.4	

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

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions / Key Dates
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	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	

# Figure 4. Methane Content of Landfill Perimeter Soil Gas Probe #3.

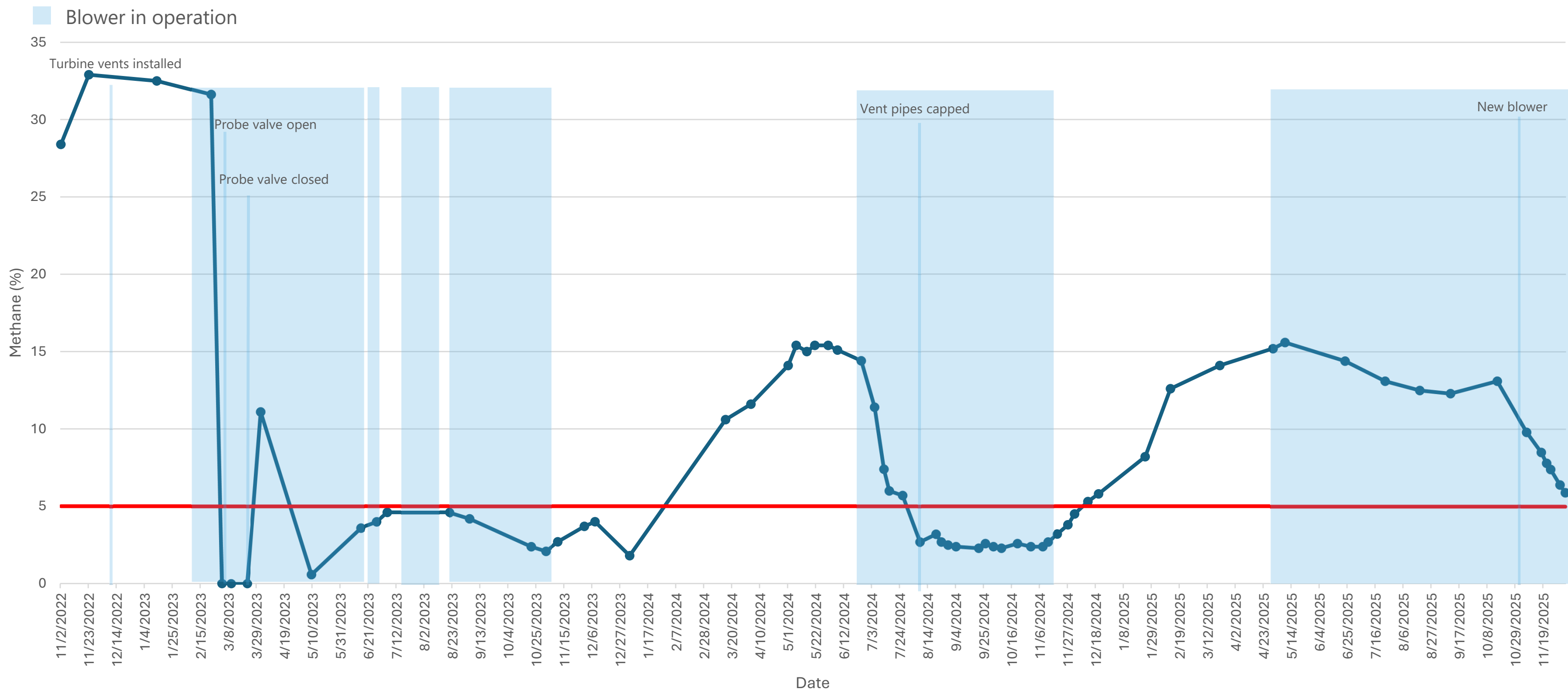


**Table 4. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 4.**

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 landfill gas 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	0.1	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	0.1	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	
12/12/2024	5.3	20.4	0.1	74.2	

<b>Table 4 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 4.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
12/20/2024	<b>5.8</b>	19.8	0.1	74.3	
1/24/2025	<b>8.2</b>	18.6	0.1	73.1	
2/12/2025	<b>12.6</b>	18.2	0.1	69.1	
3/21/2025	<b>14.1</b>	17.8	0.0	68.1	
4/30/2025	<b>15.2</b>	20.3	0.0	64.5	
5/9/2025	<b>15.6</b>	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	<b>14.4</b>	19.4	0.0	66.2	
7/23/2025	<b>13.1</b>	18.8	0.0	68.1	
8/18/2025	<b>12.5</b>	18.2	0.1	69.2	
9/10/2025	<b>12.3</b>	18.1	0.1	69.5	
10/15/2025	<b>13.1</b>	19.5	0.1	67.3	
11/6/2025	<b>9.8</b>	24.7	0.1	65.4	- Rotron blower unit installed (10/31/2025)
11/17/2025	<b>8.5</b>	24.2	0.1	67.2	
11/21/2025	<b>7.8</b>	23.4	0.1	68.7	
11/24/2025	<b>7.4</b>	23.3	0.1	69.1	
12/1/2025	<b>6.4</b>	22.8	0.1	70.7	
12/5/2025	<b>5.9</b>	22.6	0.1	71.4	

# Figure 5. Methane Content of Landfill Perimeter Soil Gas Probe #4.

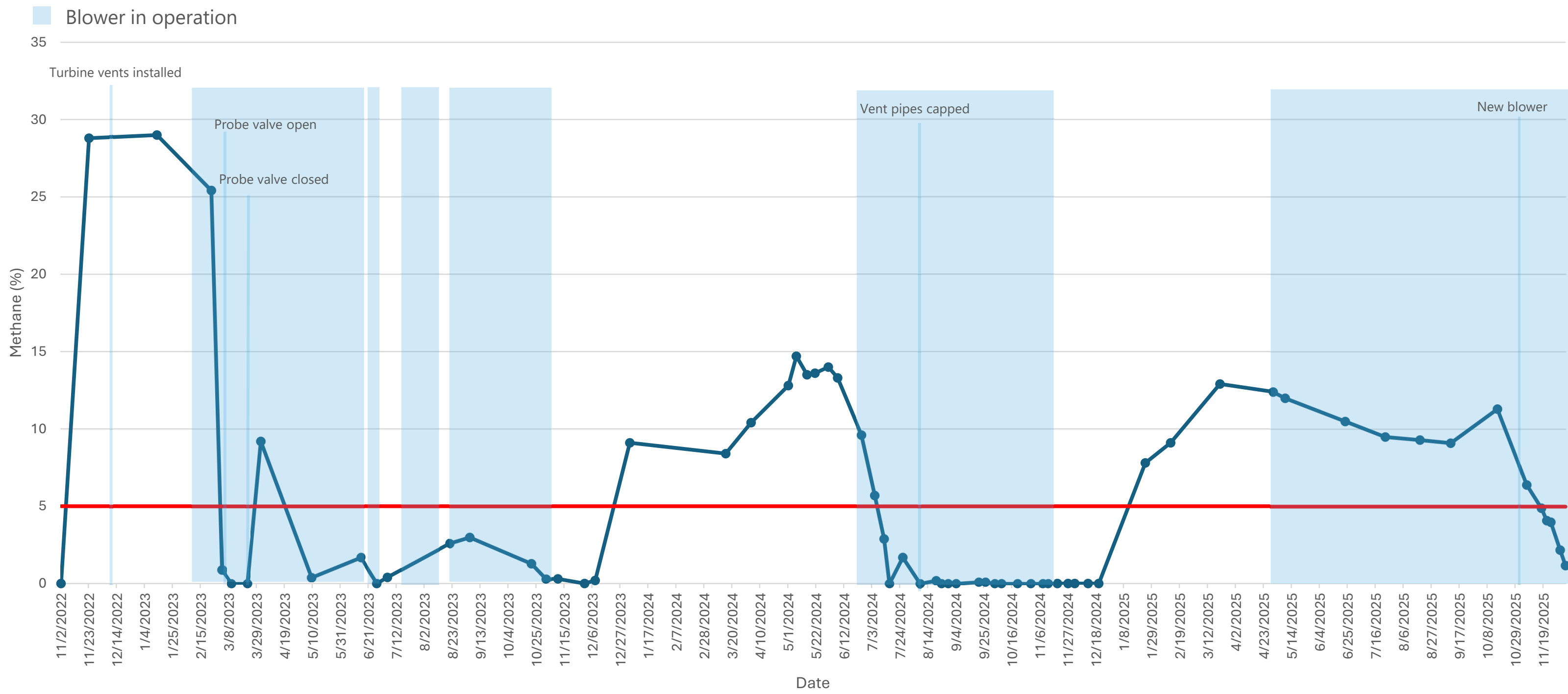


**Table 5. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 5.**

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions / Key Dates
11/2/2022	0.0	0.7	21.7	77.6	
11/23/2022	<b>28.8</b>	18.3	0.0	52.9	
1/13/2023	<b>29.0</b>	18.2	0.1	52.7	- Turbine vents installed on landfill gas vent (12/12/2022–present)
2/23/2023	<b>25.4</b>	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	<b>9.2</b>	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	<b>9.1</b>	17.4	0.0	73.5	
3/15/2024	<b>8.4</b>	22.0	0.0	69.6	
4/3/2024	<b>10.4</b>	15.4	0.0	74.2	
5/1/2024	<b>12.8</b>	16.0	0.0	71.2	
5/7/2024	<b>14.7</b>	17.3	0.1	67.9	
5/15/2024	<b>13.5</b>	16.5	0.0	70	
5/21/2024	<b>13.6</b>	16.5	0.0	69.9	
5/31/2024	<b>14</b>	16.1	0.1	69.9	
6/7/2024	<b>13.3</b>	15.3	0.1	71.4	
6/25/2024	<b>9.6</b>	13.8	0.1	76.5	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	<b>5.7</b>	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	
12/12/2024	0.0	10.7	5.3	84.0	

<b>Table 5 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 5.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
12/20/2024	0.0	11.3	5.2	83.5	
1/24/2025	<b>7.8</b>	12.4	2.3	77.5	
2/12/2025	<b>9.1</b>	16.8	2.6	71.5	
3/21/2025	<b>12.9</b>	18.9	0.0	68.2	
4/30/2025	<b>12.4</b>	16.3	0.0	71.3	
5/9/2025	<b>12</b>	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	<b>10.5</b>	16.7	0.0	72.8	
7/23/2025	<b>9.5</b>	17.3	0.0	73.2	
8/18/2025	<b>9.3</b>	18.3	0.1	72.3	
9/10/2025	<b>9.1</b>	18.9	0.1	71.9	
10/15/2025	<b>11.3</b>	16.2	0.1	72.4	
11/6/2025	<b>6.4</b>	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	

# Figure 6. Methane Content of Landfill Perimeter Soil Gas Probe #5.

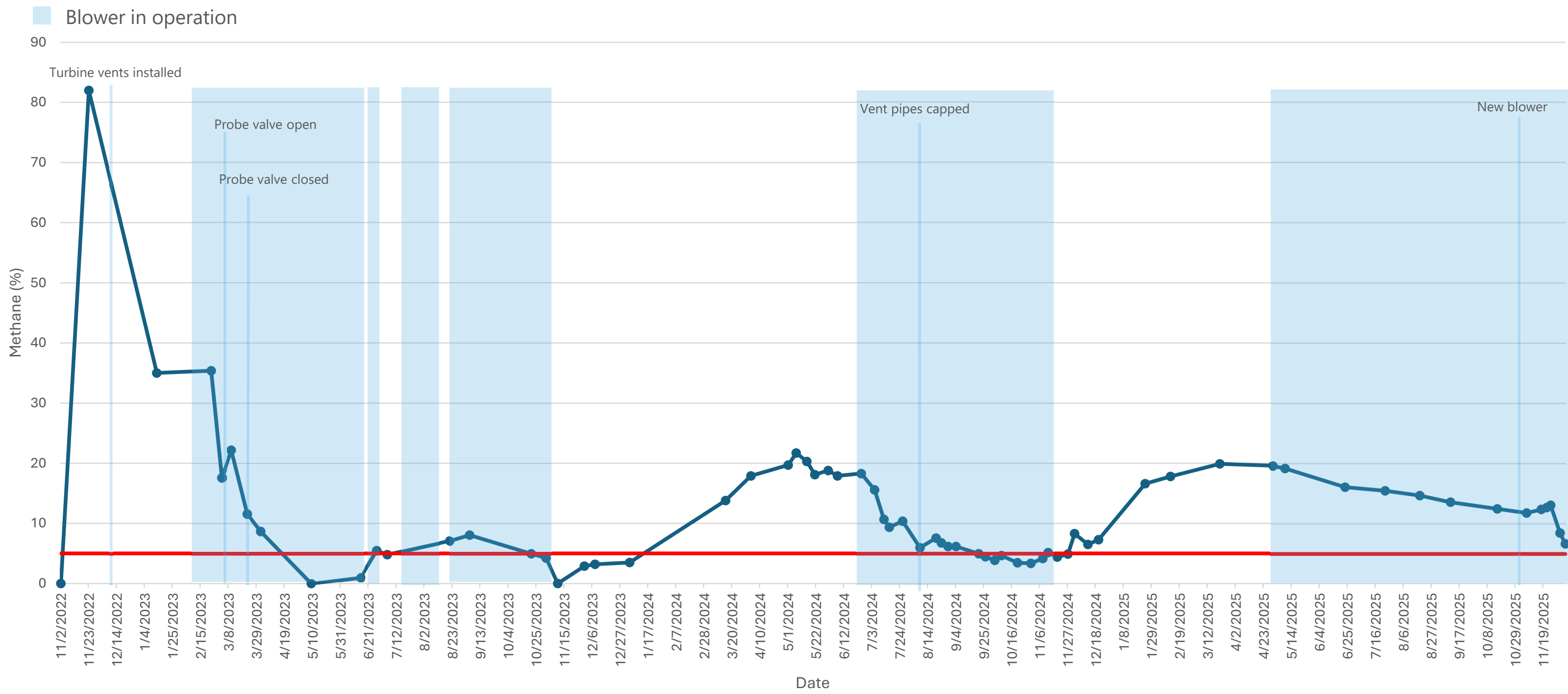


**Table 6. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 6.**

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions / Key Dates
11/2/2022	0.0	0.3	21.8	77.8	
11/23/2022	<b>82.0</b>	18.0	0.0	0.0	
1/13/2023	<b>35.0</b>	18.5	0.0	46.5	- Turbine vents installed on landfill gas vent (12/12/2022–present)
2/23/2023	<b>35.4</b>	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	<b>17.6</b>	13.4	3.3	65.8	
3/10/2023	<b>22.2</b>	22.2	0.2	55.5	- Vacuum extraction from soil gas probes (3/10/2023–6/16/2023)
3/22/2023	<b>11.6</b>	21.8	0.1	66.5	
4/1/2023	<b>8.7</b>	22.3	0.1	68.9	
5/9/2023	0.0	0.0	21	79.0	
6/15/2023	1.0	3.2	16	79.8	
6/27/2023	<b>5.5</b>	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	<b>7.1</b>	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	<b>8.1</b>	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	<b>6.8</b>	17.5	0.8	74.9	
10/21/2023	<b>5.0</b>	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	<b>13.8</b>	22.7	0.0	63.5	
4/3/2024	<b>17.9</b>	16.5	0.0	65.6	
5/1/2024	<b>19.7</b>	16.7	0.0	63.6	
5/7/2024	<b>21.7</b>	17.6	0.1	60.7	
5/15/2024	<b>20.3</b>	17.0	0.0	62.8	
5/21/2024	<b>18.1</b>	16.4	0.0	65.5	
5/31/2024	<b>18.8</b>	15.9	0.0	65.3	
6/7/2024	<b>17.9</b>	14.9	0.0	67.2	
6/25/2024	<b>18.3</b>	14.7	0.0	67.0	- Vacuum extraction from methane trench (6/19/2024–11/15/2024)
7/5/2024	<b>15.6</b>	15.6	0.1	68.7	
7/12/2024	<b>10.7</b>	16.7	0.1	72.5	
7/16/2024	<b>9.4</b>	15.4	0.1	75.1	
7/26/2024	<b>10.4</b>	16.7	0.0	72.9	
8/8/2024	<b>6.0</b>	15.6	0.1	78.3	- Caps added to the other two vent pipe connections at sumps
8/20/2024	<b>7.6</b>	17.6	0.1	74.8	
8/24/2024	<b>6.8</b>	18.1	0.1	75.0	
8/29/2024	<b>6.2</b>	15.7	0.1	78.1	
9/4/2024	<b>6.2</b>	17.0	0.1	76.7	
9/21/2024	<b>5.0</b>	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	<b>5.2</b>	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	
12/2/2024	<b>8.3</b>	17.8	0.0	73.8	
12/12/2024	<b>6.5</b>	16.5	0.0	77.0	

<b>Table 6 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 6.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
12/20/2024	<b>7.3</b>	17.0	0.1	75.6	
1/24/2025	<b>16.6</b>	19.1	0.0	64.3	
2/12/2025	<b>17.8</b>	18.6	0.0	63.6	
3/21/2025	<b>19.9</b>	17.8	0.0	62.3	
4/30/2025	<b>19.6</b>	17.2	0.0	63.2	
5/9/2025	<b>19.2</b>	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	<b>16.1</b>	16.1	0.0	67.8	
7/23/2025	<b>15.5</b>	15.6	0.0	68.9	
8/18/2025	<b>14.7</b>	15.8	0.1	69.4	
9/10/2025	<b>13.6</b>	15.5	0.1	70.8	
10/15/2025	<b>12.5</b>	15.8	0.1	71.6	
11/6/2025	<b>11.8</b>	15.3	0.1	72.9	- Rotron blower unit installed (10/31/2025)
11/17/2025	<b>12.4</b>	16.8	0.0	70.8	
11/21/2025	<b>12.7</b>	16.3	0.1	70.9	
11/24/2025	<b>13.1</b>	18.1	0.1	68.8	
12/1/2025	<b>8.5</b>	14.9	0.1	76.6	
12/5/2025	<b>6.7</b>	14.2	0.1	79.0	

# Figure 7. Methane Content of Landfill Perimeter Soil Gas Probe #6.

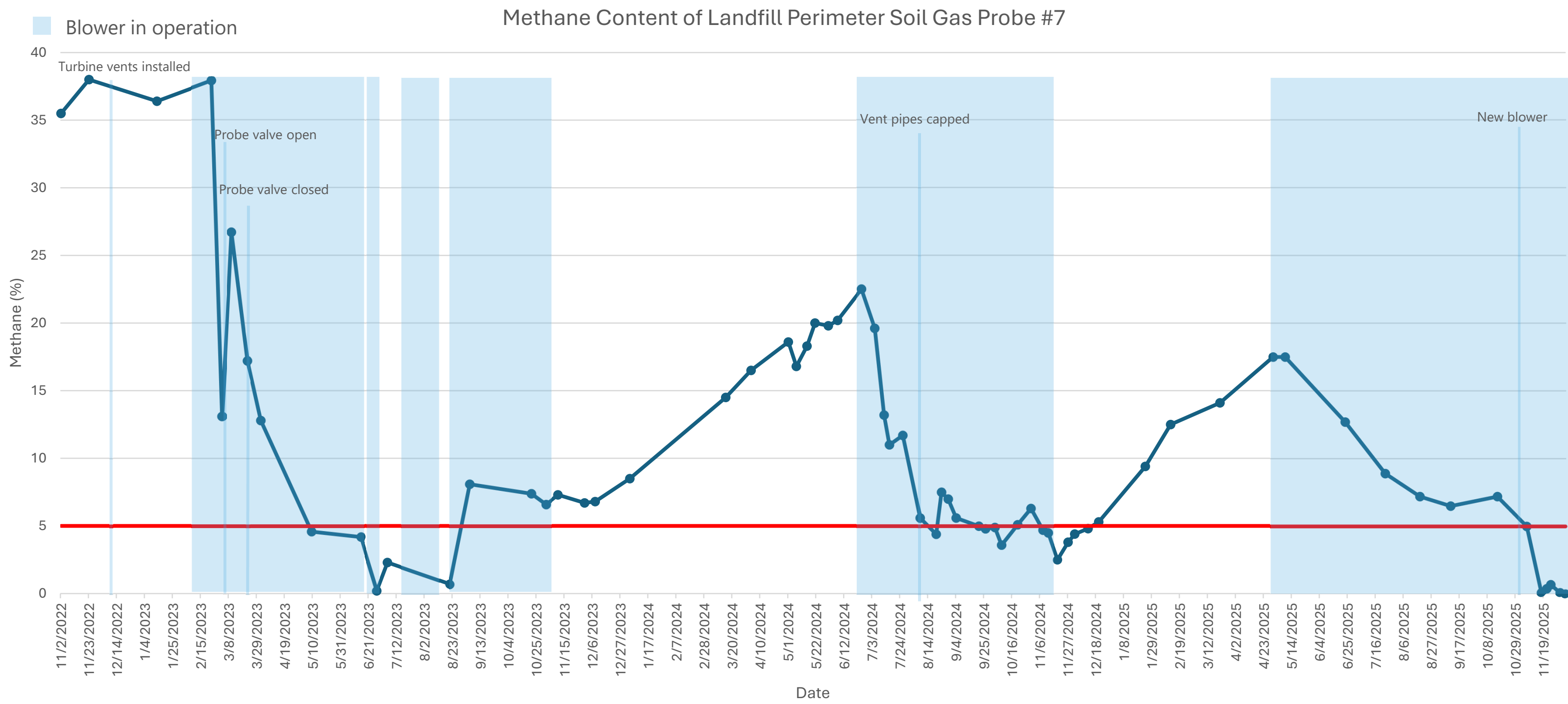


**Table 7. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 7.**

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions / Key Dates
11/2/2022	35.5	20.7	0.0	43.4	
11/23/2022	38	20.0	0.0	42.6	
1/13/2023	36.4	20.6	0.1	43	- Turbine vents installed on landfill gas 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	
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	
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	- 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	
12/2/2024	4.4	14.0	0.1	81.5	

<b>Table 7 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 7.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
12/12/2024	4.8	14.5	0.1	80.6	
12/20/2024	<b>5.3</b>	14.1	0.2	80.4	
1/24/2025	<b>9.4</b>	15.7	0.1	74.8	
2/12/2025	<b>12.5</b>	17.2	0.1	70.2	
3/21/2025	<b>14.1</b>	17.8	0.0	68.1	
4/30/2025	<b>17.5</b>	14.7	0.0	67.8	
5/9/2025	<b>17.5</b>	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	<b>12.7</b>	14.9	0.0	72.4	
7/23/2025	<b>8.9</b>	15.9	0.0	75.2	
8/18/2025	<b>7.2</b>	15.7	0.1	77.0	
9/10/2025	<b>6.5</b>	15.6	0.1	77.8	
10/15/2025	<b>7.2</b>	13.5	0.1	79.2	
11/6/2025	<b>5.0</b>	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	

# Figure 8. Methane Content of Landfill Perimeter Soil Gas Probe #7.

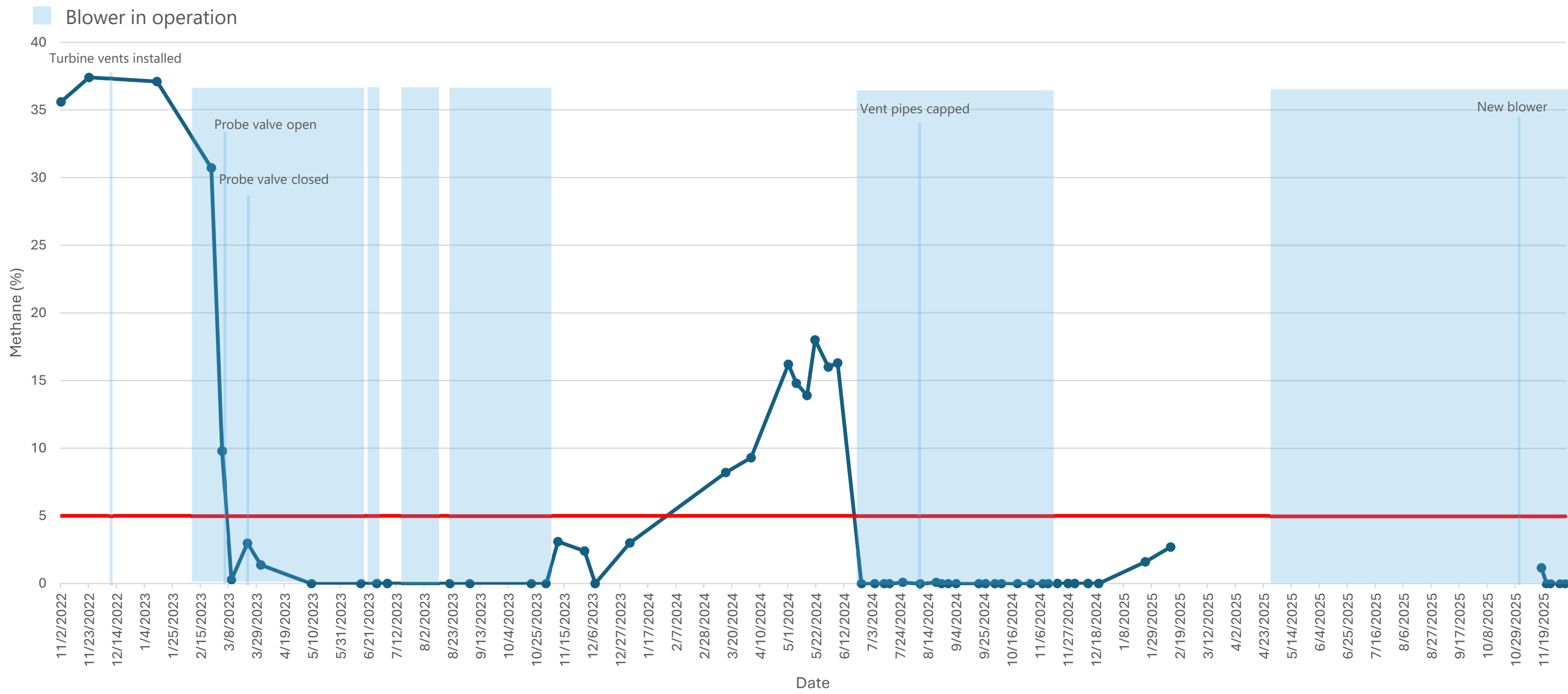


**Table 8. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 8.**

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	0.0	41.6	
1/13/2023	37.1	21.3	0.0	41.6	- Turbine vents installed on landfill gas 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	18.0	16.0	0.1	66.0	
5/31/2024	16.0	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	79.0	
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)
11/27/2024	0.0	2.5	19.9	77.6	
12/2/2024	0.0	1.8	20.9	77.3	

<b>Table 8 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 8.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
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	

# Figure 9. Methane Content of Landfill Perimeter Soil Gas Probe #8.

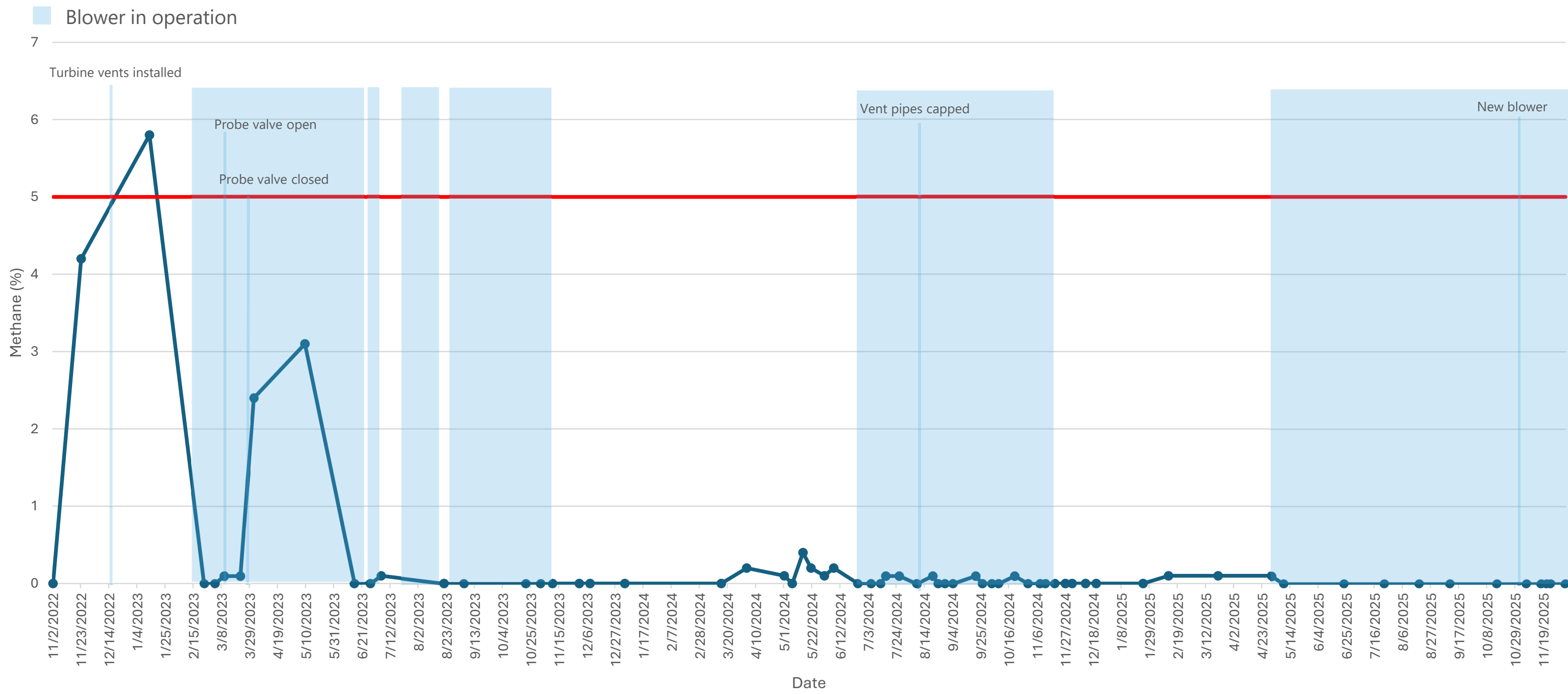


**Table 9. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 9.**

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 landfill gas 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	86.0	
4/30/2025	0.1	7.5	6.2	86.2	
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)

<b>Table 9 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 9.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
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	
12/1/2025	0.0	7.7	5.6	86.7	
12/5/2025	0.0	8.1	5.7	86.2	

# Figure 10. Methane Content of Landfill Perimeter Soil Gas Probe #9.

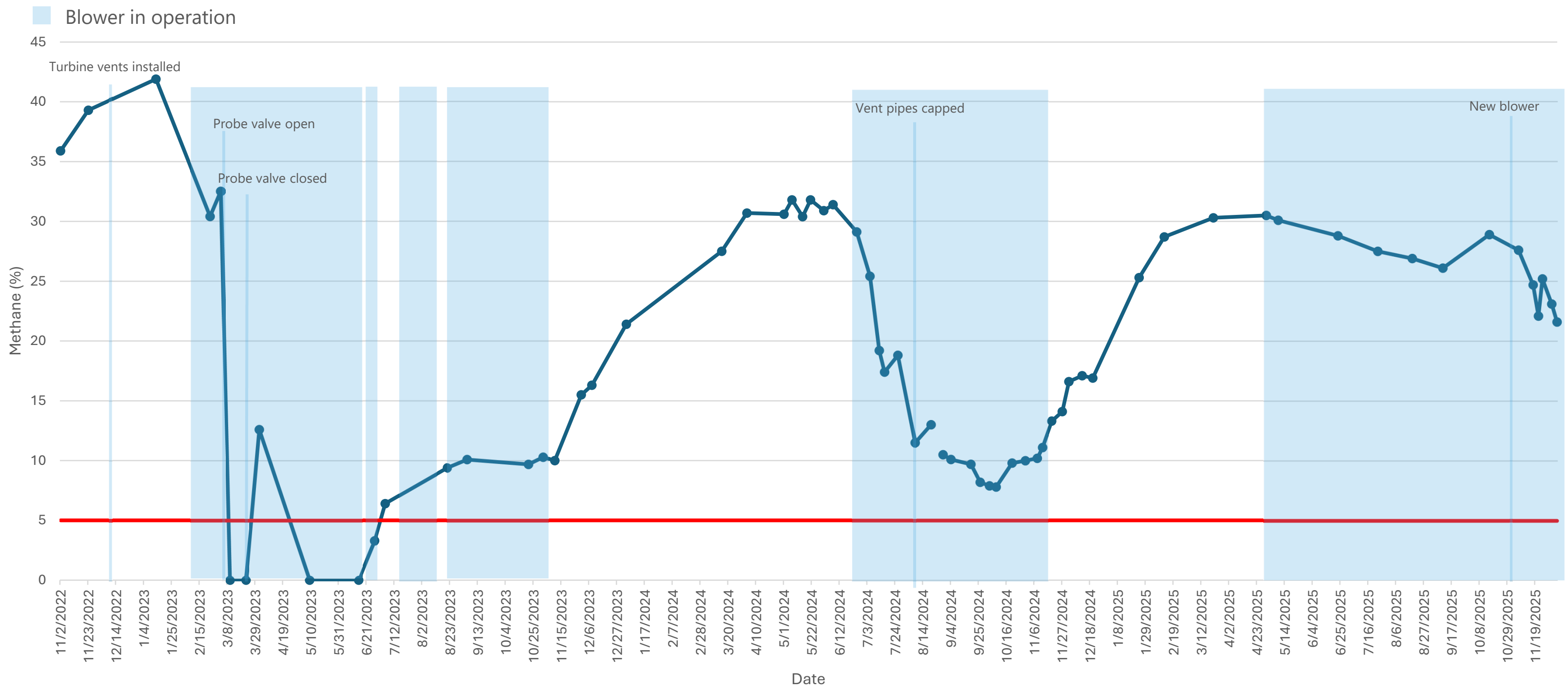


**Table 10. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 10.**

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 landfill gas 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	

<b>Table 10 (continued). Monitoring Results for Landfill Perimeter Soil Gas Probe Number 10.</b>					
<b>Date</b>	<b>% Methane</b>	<b>% Carbon Dioxide</b>	<b>% Oxygen</b>	<b>% Balance</b>	<b>Actions / Key Dates</b>
2/12/2025	<b>28.7</b>	34.1	0.0	37.2	
3/21/2025	<b>30.3</b>	35.5	0.0	34.2	
4/30/2025	<b>30.5</b>	20.5	0.0	49.0	
5/9/2025	<b>30.1</b>	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	<b>28.8</b>	25.4	0.0	45.8	
7/23/2025	<b>27.5</b>	27.4	0.1	45.0	
8/18/2025	<b>26.9</b>	26.2	0.1	46.8	
9/10/2025	<b>26.1</b>	24.2	0.1	49.6	
10/15/2025	<b>28.9</b>	25.6	0.1	45.4	
11/6/2025	<b>27.6</b>	25.1	0.2	47.1	- Rotron blower unit installed (10/31/2025)
11/17/2025	<b>24.7</b>	24.9	0.1	50.4	
11/21/2025	<b>22.1</b>	21.9	1.7	54.3	
11/24/2025	<b>25.2</b>	24.7	0.0	50.0	
12/1/2025	<b>23.1</b>	26.2	0.1	50.7	
12/5/2025	<b>21.6</b>	26.3	0.1	51.9	

# Figure 11. Methane Content of Landfill Perimeter Soil Gas Probe #10.

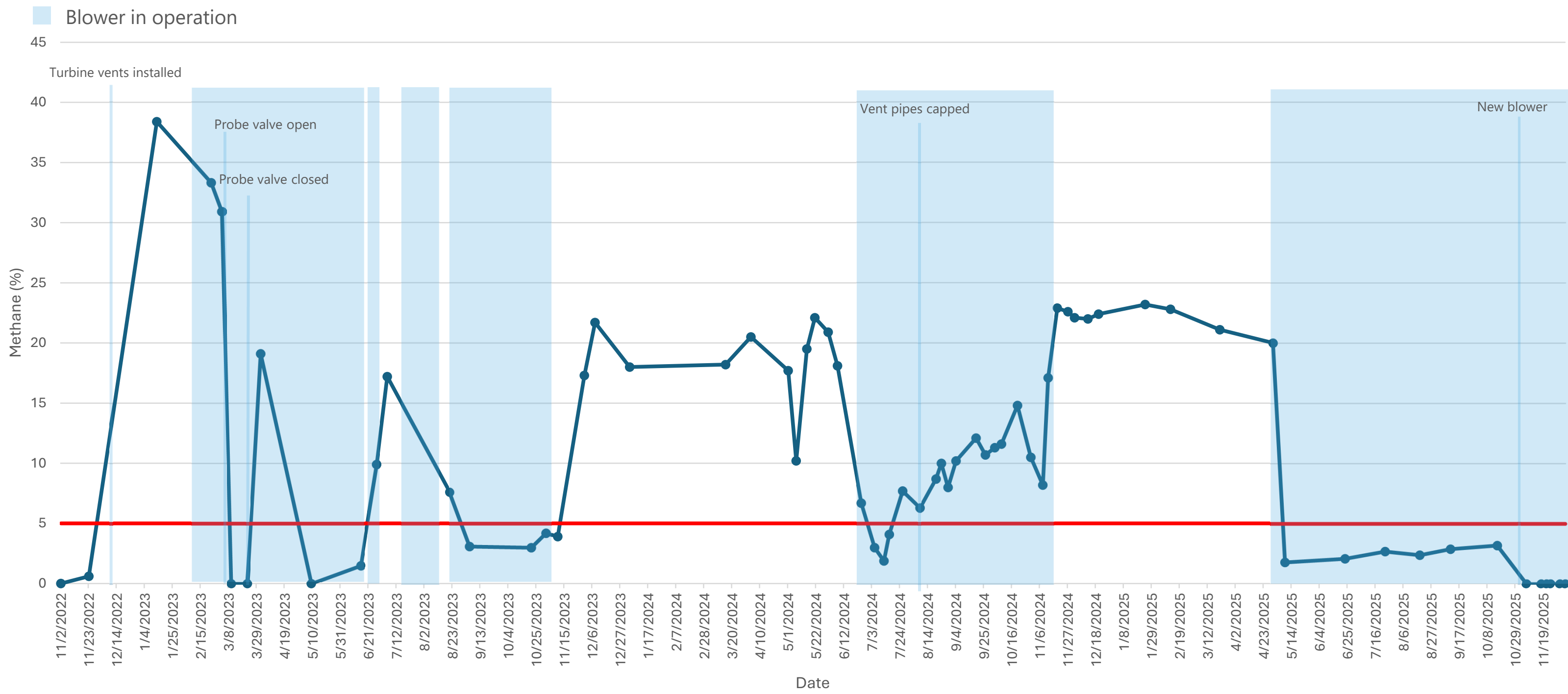


**Table 11. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 11.**

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	<b>38.4</b>	48.0	0.1	13.5	- Turbine vents installed on landfill gas vent (12/12/2022–present)
2/23/2023	<b>33.3</b>	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	<b>30.9</b>	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	<b>19.1</b>	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	<b>9.9</b>	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	<b>17.2</b>	33.6	0.1	49.0	
8/21/2023	<b>7.6</b>	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	<b>17.3</b>	33.4	0.1	49.2	
12/8/2023	<b>21.7</b>	25.8	0.0	52.4	
1/3/2024	<b>18.0</b>	29.8	0.4	51.7	
3/15/2024	<b>18.2</b>	32.5	0.0	49.3	
4/3/2024	<b>20.5</b>	30.3	0.0	49.2	
5/1/2024	<b>17.7</b>	28.0	0.1	54.2	
5/7/2024	<b>10.2</b>	27.4	0.6	61.7	
5/15/2024	<b>19.5</b>	30.6	0.4	49.5	
5/21/2024	<b>22.1</b>	32.6	0.2	45.1	
5/31/2024	<b>20.9</b>	32.2	0.2	46.7	
6/7/2024	<b>18.1</b>	31.0	0.2	50.7	
6/25/2024	<b>6.7</b>	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	<b>7.7</b>	27.3	0.6	64.5	
8/8/2024	<b>6.3</b>	25.4	0.9	67.4	- Caps added to the other two vent pipe connections at sumps
8/20/2024	<b>8.7</b>	25.5	1.0	64.9	
8/24/2024	<b>10.0</b>	26.3	1.1	62.6	
8/29/2024	<b>8.0</b>	25.5	0.3	66.2	
9/4/2024	<b>10.2</b>	26.5	0.5	62.8	
9/19/2024	<b>12.1</b>	28.2	0.6	59.1	
9/26/2024	<b>10.7</b>	30.4	0.4	58.5	
10/3/2024	<b>11.3</b>	31.0	0.4	57.3	
10/8/2024	<b>11.6</b>	30.9	0.6	56.9	
10/20/2024	<b>14.8</b>	30.9	0.7	53.6	
10/30/2024	<b>10.5</b>	29.6	0.5	59.4	
11/8/2024	<b>8.2</b>	26.8	0.5	64.5	
11/12/2024	<b>17.1</b>	30.5	0.1	52.3	
11/19/2024	<b>22.9</b>	32.9	0.1	44.1	- Blower shut off (11/15/2024–5/2/2025)
11/27/2024	<b>22.6</b>	32.1	0.3	45.0	
12/2/2024	<b>22.1</b>	31.5	0.5	45.9	
12/12/2024	<b>22.0</b>	30.6	0.4	47.0	
12/20/2024	<b>22.4</b>	31.4	0.3	45.9	
1/24/2025	<b>23.2</b>	29.5	0.7	46.6	

Table 11 (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	

# Figure 12. Methane Content of Landfill Perimeter Soil Gas Probe #11.

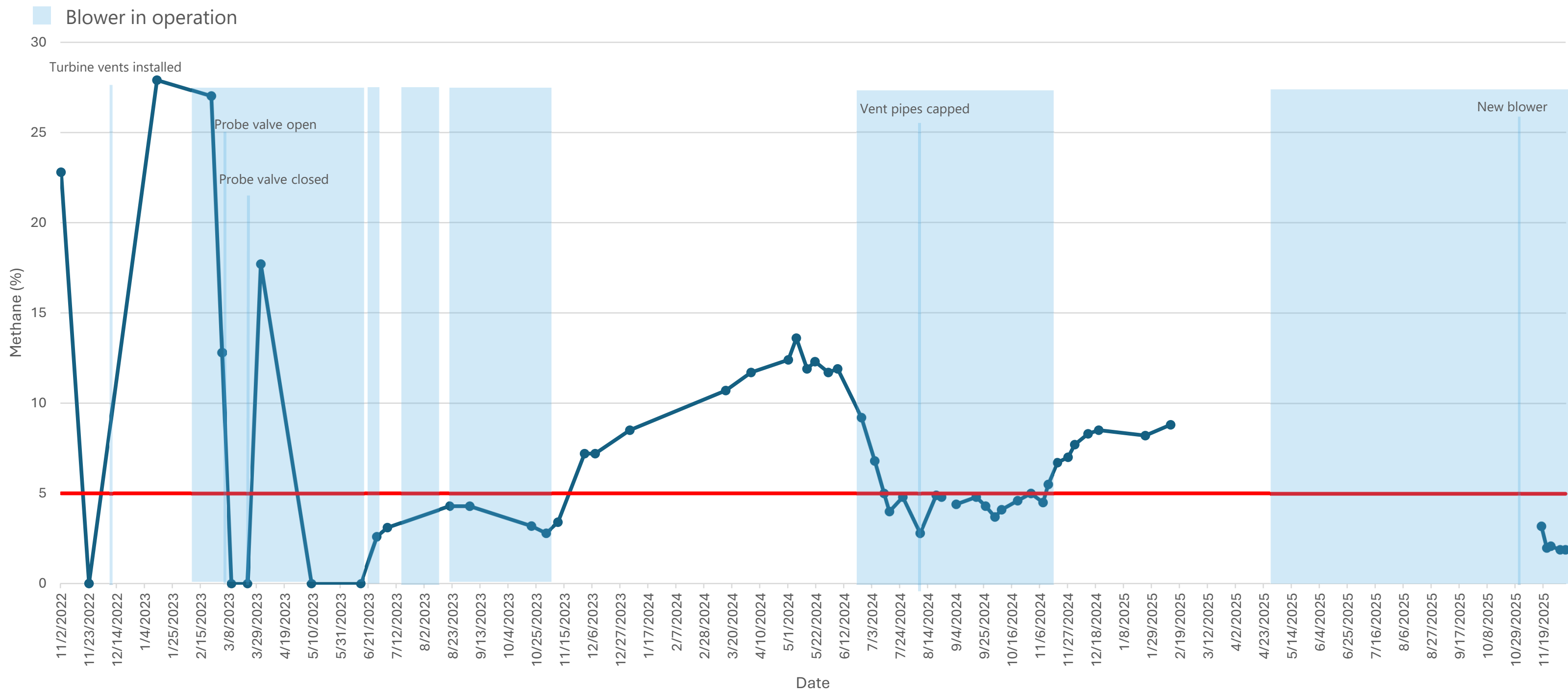


**Table 12. Monitoring Results for Landfill Perimeter Soil Gas Probe Number 12.**

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 landfill gas vent (12/12/2022–present)
2/23/2023	27.0	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 12 (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				- 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	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	

# Figure 13. Methane Content of Landfill Perimeter Soil Gas Probe #12.



**Table 13. Monitoring Results for Temporary Soil Vapor Extraction Unit.**

Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions / Key Dates / Notes
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	76.0	- 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	
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	-	-	-	-	
4/30/2025	-	-	-	-	

Table 13 (continued). Monitoring Results for Temporary Soil Vapor Extraction Unit.					
Date	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Actions / Key Dates / Notes
5/9/2025	3.6	4.2	18.5	73.7	- 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	3.3	4.4	17.4	74.9	
7/23/2025	3.8	4.5	17.8	73.9	
8/18/2025	3.5	4.8	16.8	74.9	
9/10/2025	2.9	5.6	15.5	76.0	
10/15/2025	3.4	4.9	16.5	75.2	-Rotron blower unit installed (10/31/2025)

Notes:

- = blower not running

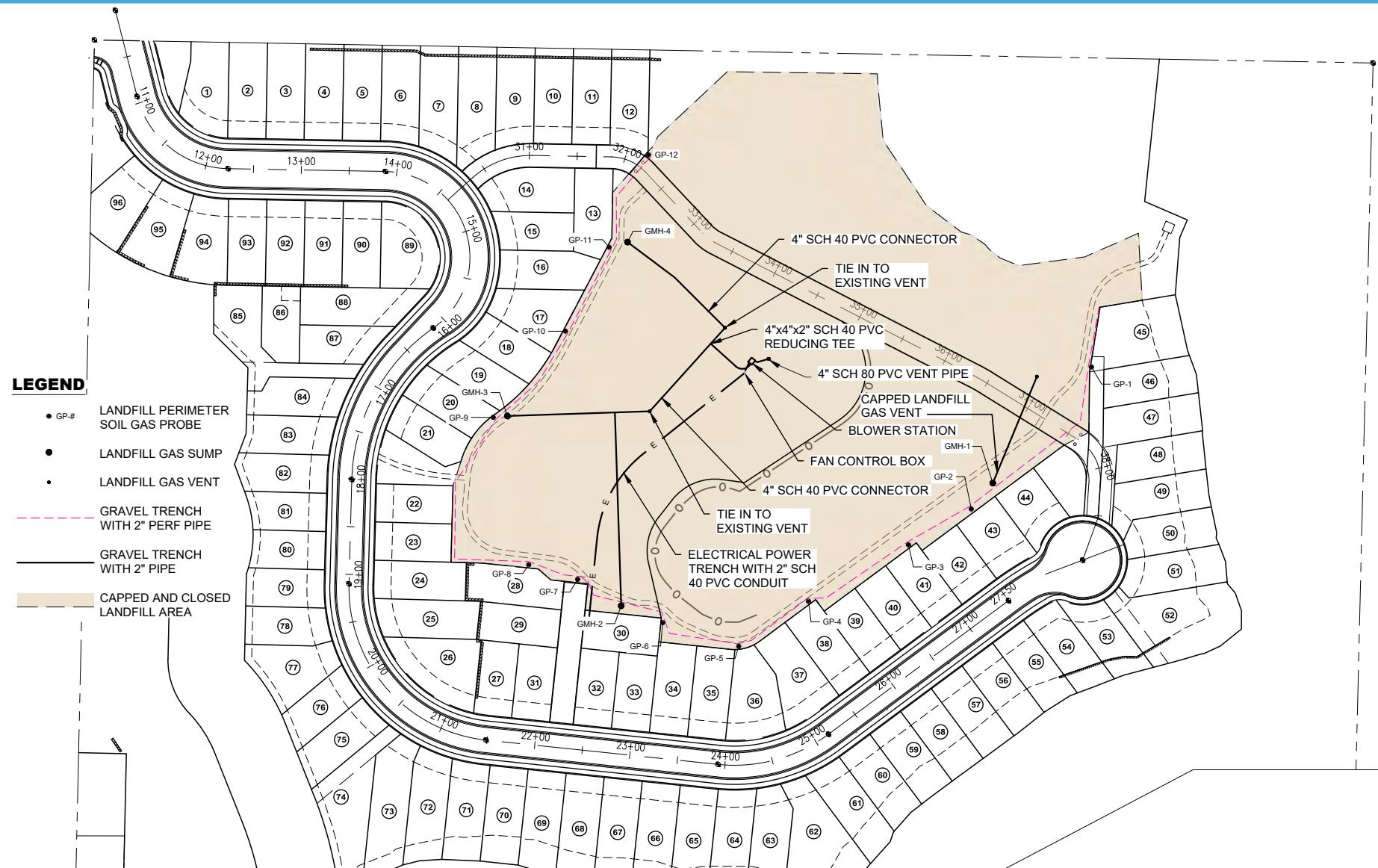
NR = Not Read

Table 14. Monitoring Results for New Soil Vapor Extraction Unit (Rotron Blower).									
Date	Inlet vs Outlet	% Methane	% Carbon Dioxide	% Oxygen	% Balance	Static Pressure ("H2O)	Differential Pressure ("H2O)	Flow (scfm)	Velocity (fps)
11/16/2025	Inlet	4.2	7.5	14.5	73.9	-34.95	1.88	114.61	82.02
	Outlet	2.3	4.1	17.5	76.2	0.80	6.21	208.31	149.06
11/21/2025	Inlet	5.5	8.1	13.5	73	-31.03	2.46	131.11	93.82
	Outlet	2.3	4.1	17.7	75.9	1.52	6.85	218.75	156.53
11/24/2025	Inlet	4.6	7.7	14.6	73.1	-30.83	2.64	135.82	97.19
	Outlet	2.5	4.6	17.1	75.8	0.89	8.02	236.73	169.40
12/1/2025	Inlet	4.3	8.1	14.4	73.2	-28.62	31.15	148.36	106.16
	Outlet	2.1	4.4	18	75.4	1.35	5.89	202.87	145.17
12/5/2025	Inlet	4.4	9.2	12.3	74.1	-32.42	2.32	127.32	91.11
	Outlet	2.0	4.8	17.2	75.9	1.10	6.23	208.64	149.30

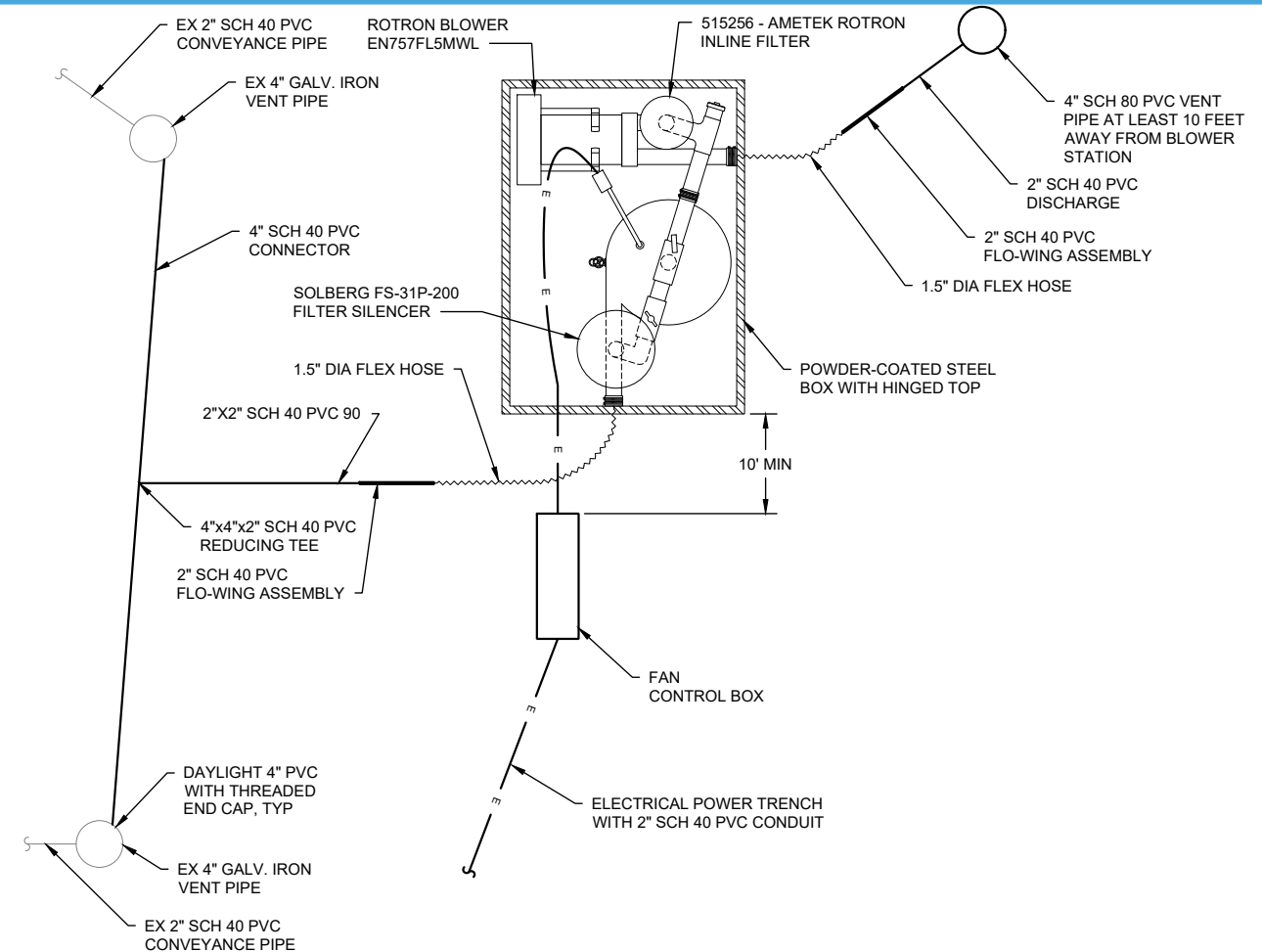
Notes:

Inlet represents collection monitoring results of landfill gas only.

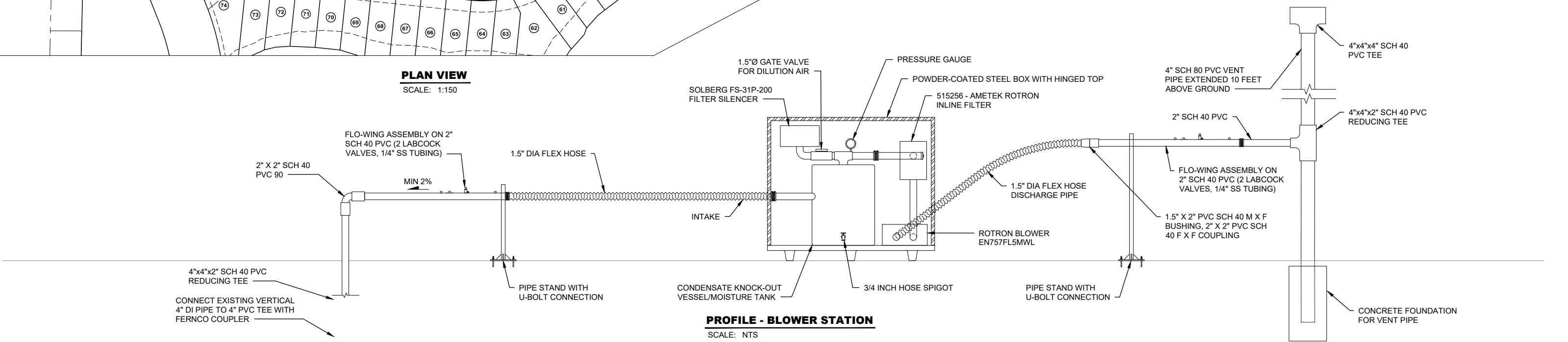
Outlet represents discharge monitoring results of landfill gas combined with dilution (atmospheric) air.



**PLAN VIEW**  
SCALE: 1:150



**Schematic - BLOWER STATION**  
SCALE: NTS



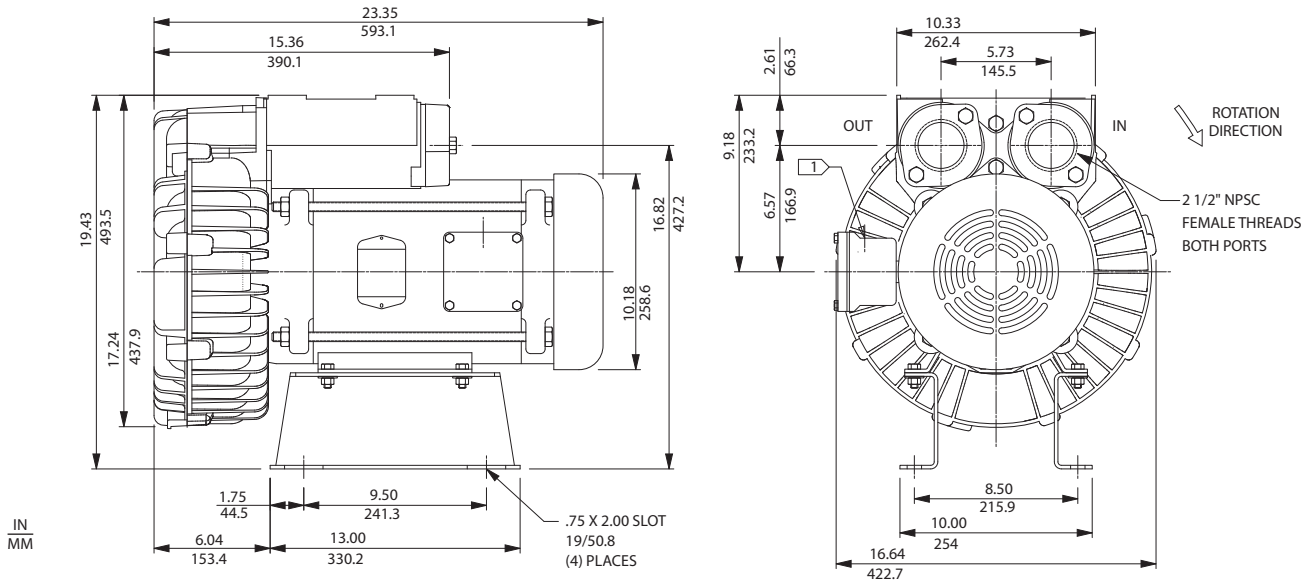
**PROFILE - BLOWER STATION**  
SCALE: NTS



# **Attachment B**

## **Rotron Blower Data Sheet**

Sealed Regenerative Blower w/Explosion-proof Motor



- NOTES  
 1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD.  
 2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.  
 3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		EN757FL5MWL	CP757FX5MWLR
Specification	Units	081333	080616
Motor Enclosure - Shaft Mt.	-	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	5.5	5.5
Phase - Frequency	-	Single-60 hz	Single-60 hz
Voltage	AC	230	230
Motor Nameplate Amps	Amps (A)	21.7	21.7
Max. Blower Amps	Amps (A)	29.9	29.9
Locked Rotor Amps	Amps (A)	155	155
Service Factor	-	1	1
Starter Size	-	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D	I-D
Shipping Weight	Lbs	158	158
	Kg	71.7	71.7

**Voltage** - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

**Operating Temperatures** - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

**Maximum Blower Amps** - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

**XP Motor Class - Group** - See Explosive Atmosphere Classification Chart in Section I

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

Sealed Regenerative Blower w/Explosion-proof Motor

## FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 310 SCFM
- Maximum pressure: 80 IWG
- Maximum vacuum: 75 IWG
- Standard motor: 5.0 HP, explosion-proof
- Cast aluminum blower housing, impeller, cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

## MOTOR OPTIONS

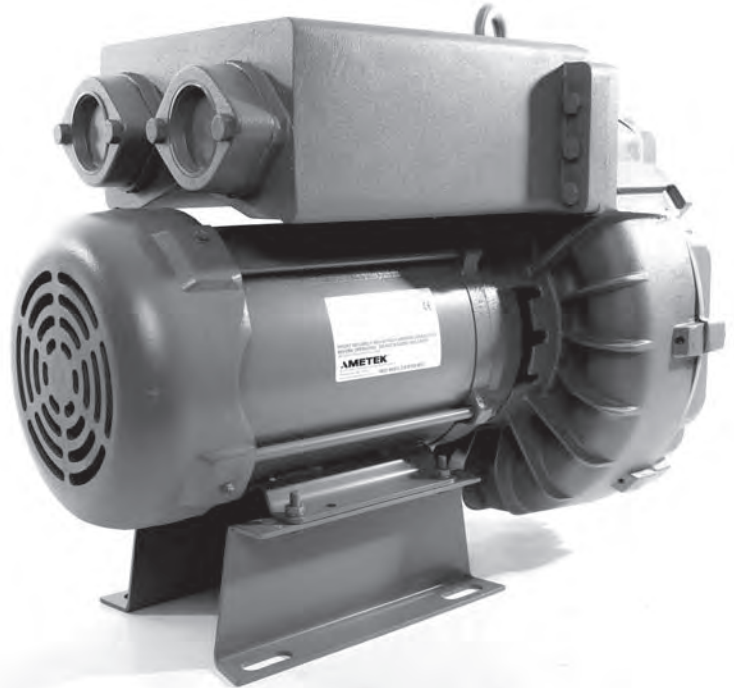
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

## BLOWER OPTIONS

- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

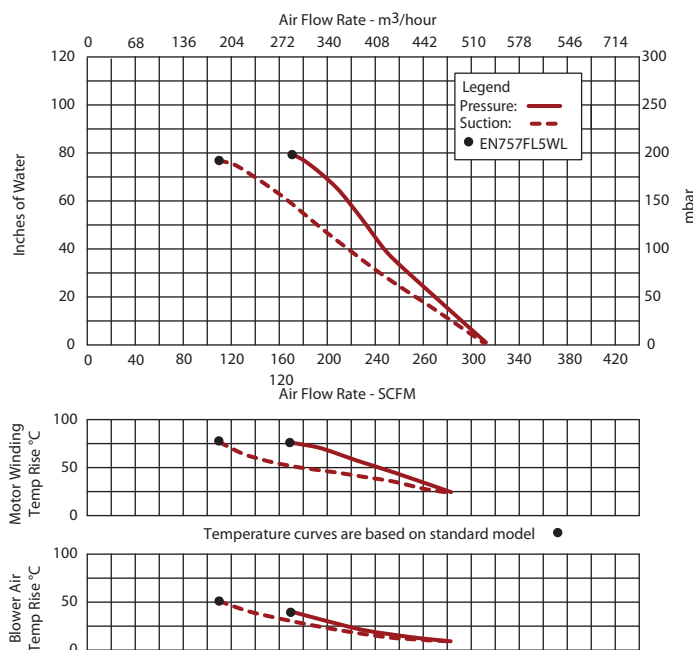
## ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package



## Blower Performance at Standard Conditions

60 Hz



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