
TO: Chris Perea, Landfill Manager, Sandoval County Landfill

cc: William Schueler, Environmental Specialist, NMED Solid Waste Bureau

FROM: Andy Yuhas, Parkhill

DATE: March 29, 2024

SUBJECT: Sandoval County Landfill:
March 2024 Landfill Gas Monitoring Event [04135823.00]

On March 29, 2024, Parkhill performed quarterly landfill gas (LFG) monitoring at the Sandoval County Landfill (SCLF). Landfill gas measurements were recorded at the seventeen (17) active perimeter gas monitoring probes and ten (10) on-site structures shown on **Exhibit A**. Monitoring results for this event are provided as **Exhibit B**, and a copy of the field notes is included as **Exhibit C**.

Monitoring was performed using a CES Landtec™ GEM-2000® portable gas analyzer to measure methane (CH₄), oxygen (O₂), carbon dioxide (CO₂), and balance gas (typically nitrogen) in and around facility structures and in the perimeter probes. The GEM-2000® records gas measurements in terms of percent by volume in air; and was calibrated in the field prior to monitoring with 50% CH₄, 35% CO₂, and 4% O₂ calibration gases. Methane was not detected above the regulatory threshold of 25% of the lower explosive limit (LEL) for methane (1.25% by volume in air) at any of the monitoring locations or in any of the dedicated methane monitoring probes. The detected values for carbon dioxide and oxygen are generally consistent with the results of previous monitoring events.

Landfill gas monitoring at the perimeter probes is accomplished by connecting the GEM-2000® to the quick-connect port atop the probe with flexible Teflon tubing. Monitoring within structures is performed by connecting a 3-foot-long fiberglass extension rod to the tubing. For each type of monitoring, the pump on the GEM-2000® was turned on and the instrument was allowed to operate for a minimum of 90 seconds before stabilized instrument readings were recorded.



MARCH 2024 LANDFILL GAS MONITORING EVENT

SANDOVAL COUNTY LANDFILL
RIO RANCHO, NEW MEXICO

Parkhill.com

LANDFILL GAS MONITORING POINTS

Date: 03/29/2024
Project No: 41358.23
Sheet: EXHIBIT A

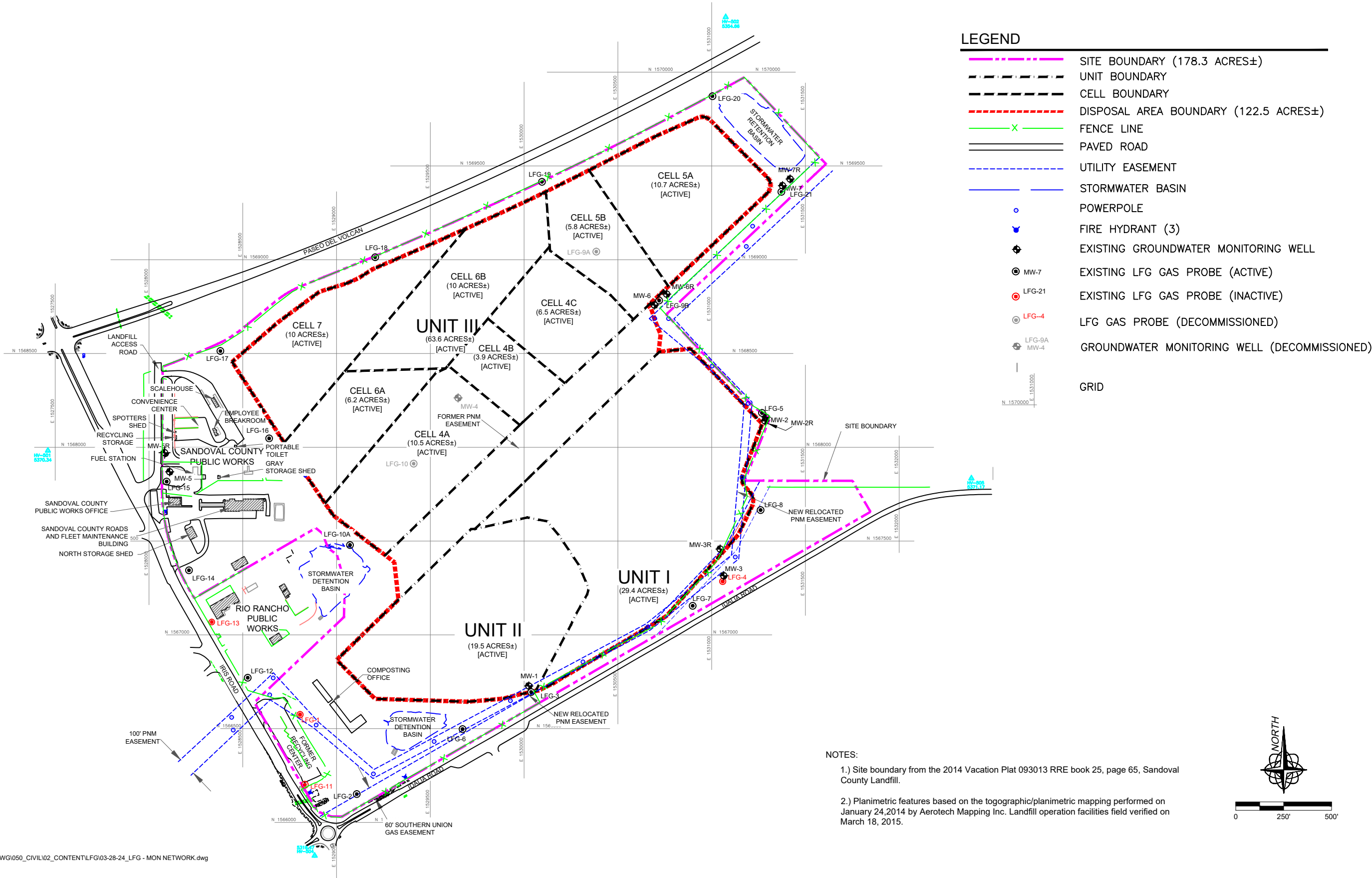


Exhibit B - Landfill Gas Monitoring Field Log

Monitoring Personnel: Andy Yuhas
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'
Monitoring Date: 3/28/2024

Weather Information

Date and amount of last precipitation: 03/26/2024; 0.02 in
Temp: 50 °F
Wind Speed: Calm mph
Wind Direction: -- (observed at site)
Barometric Pressure: 29.46 inches mercury (Hg)
Weather Conditions: Clear, Sunny, Cool

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000
Date and Time Last Calibrated: 03/28/2024 @ 06:45

Permanent Landfill Gas Monitoring Probes

Monitoring Probe ID	Time of Measurement	CH ₄ (% in air)	CO ₂ (% in air)	O ₂ (% in air)	Balance Gas (% in air)
LFG-2	9:33	0.0	0.2	20.4	79.4
LFG-3	9:19	0.0	0.5	20.1	79.4
LFG-5	9:11	0.0	2.6	18.4	79.0
LFG-6	9:24	0.0	0.0	20.5	79.5
LFG-7	10:56	0.0	0.9	19.4	79.7
LFG-8	10:45	0.1	0.5	19.9	79.5
LFG-9B	9:05	0.0	0.5	20.0	79.5
LFG-10A	9:46	0.0	0.4	19.6	80.0
LFG-12	9:40	0.0	0.2	20.3	79.5
LFG-14	9:55	0.0	0.2	20.2	79.6
LFG-15	7:25	0.0	0.1	20.7	79.2
LFG-16	8:03	0.0	0.8	20.6	78.6
LFG-17	8:08	0.0	0.3	21.1	78.6
LFG-18	8:16	0.0	0.4	20.6	79.0
LFG-19	8:22	0.0	0.9	20.1	79.0
LFG-20	8:29	0.0	0.0	21.4	78.6
LFG-21	8:59	0.0	0.2	20.8	79.0

Landfill Structures

Scalehouse (ticket office)	10:30	0.0	0.0	20.9	79.1
Scalehouse (supervisor's office)	10:32	0.0	0.0	20.9	79.1
Employee Breakroom	10:19	0.0	0.0	20.8	79.2
Spotter's Shed	10:25	0.0	0.0	20.9	79.1
Recycling Storage	10:23	0.0	0.0	20.9	79.1
Portable Toilet	10:14	0.0	0.0	20.7	79.3
Gray Storage Shed	10:22	0.0	0.0	20.8	79.2
Composting Office	9:45	0.0	0.0	20.8	79.2
Public Works Dept. Admin.	10:10	0.0	0.0	20.6	79.4
Roads & Fleet Maintenance Bldg.	10:06	0.0	0.0	20.6	79.4
North Storage Shed	10:01	0.0	0.0	20.5	79.5

Ambient Readings

Office	7:22	0.0	0.0	20.9	79.1
Near LFG 8	11:00	0.0	0.0	20.8	79.2

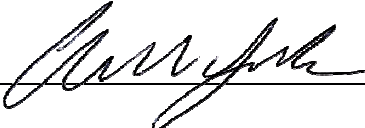
Signature(s): 
Andy Yuhas

Exhibit C - Landfill Gas Monitoring Field Log

Monitoring Personnel: Andy Yuhas
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'
Monitoring Date: 3/29/24

Weather Information

Date and amount of last precipitation: 3/26/24, 0.02"
Temp: 50-60°F
Wind Speed: Calm mph
Wind Direction: — (observed at site)
Barometric Pressure: 29.46" S inches mercury (Hg)
Weather Conditions: clear, sunny

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000
Date and Time Last Calibrated: 3/29/2021, 0645

Permanent Landfill Gas Monitoring Probes

Monitoring Probe ID	Time of Measurement	CH ₄ (% in air)	CO ₂ (% in air)	O ₂ (% in air)	Balance Gas (% in air)
LFG-2	0933	0.0	0.2	20.4	79.4
LFG-3	0919	0.0	0.5	20.1	79.4
LFG-5	0911	0.0	2.6	18.4	79.0
LFG-6	0924	0.0	0.0	20.5	79.5
LFG-7	1056	0.0	0.9	19.4	79.7
LFG-8	1045	0.1	0.5	19.9	79.5
LFG-9B	0905	0.0	0.5	20.0	79.5
LFG-10A	0946	0.0	0.4	19.6	80.0
LFG-12	0940	0.0	0.7	20.3	79.5
LFG-14	0955	0.0	0.2	20.2	79.6
LFG-15	0725	0.0	0.1	20.7	79.2
LFG-16	0803	0.0	0.8	20.6	78.6
LFG-17	0808	0.0	0.3	21.1	78.6
LFG-18	0816	0.0	0.4	20.6	79.0
LFG-19	0822	0.0	0.9	20.1	79.0
LFG-20	0829	0.0	0.0	21.4	78.6
LFG-21	0859	0.0	0.2	20.8	79.0

Landfill Structures

Scalehouse (ticket office)	1030	0.0	0.0	20.9	79.1
Scalehouse (supervisor's office)	1032	0.0	0.0	20.9	79.1
Employee Breakroom	1019	0.0	0.0	20.8	79.2
Spotter's Shed	1025	0.0	0.0	20.9	79.1
Recycling Storage	1023	0.0	0.0	20.9	79.1
Portable Toilet	1014	0.0	0.0	20.7	79.3
Gray Storage Shed	1022	0.0	0.0	20.8	79.2
Composting Office	0945	0.0	0.0	20.8	79.2
Public Works Dept. Admin.	1010	0.0	0.0	20.6	79.4
Roads & Fleet Maintenance Bldg.	1006	0.0	0.0	20.6	79.4
North Storage Shed	1001	0.0	0.0	20.5	79.5

Ambient Readings

Office	0722	0.0	0.0	20.9	79.1
Near LFG 8	1100	0.0	0.0	20.8	79.2

Signature(s): 