

TO:	Chris Perea, Sandoval County Landfill
cc:	George Schuman, Permit Section Manager, NMED Solid Waste Bureau
FROM:	Andrew Yuhas; Parkhill Santiago Lopez; Parkhill
DATE:	June 1, 2021
SUBJECT:	Sandoval County Landfill: May 2021 Landfill Gas Monitoring Event [01802320]

On May 26, 2021, 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 **Attachment A**. Monitoring results for this event are provided as **Attachment B**, and a copy of the field notes is included as **Attachment 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. The trailer, previously located east of the Sandoval County Roads and Fleet Maintenance Building, is no longer located on-site, and has been removed from the site's LFG monitoring network.

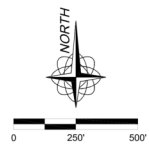
Landfill gas monitoring at the perimeter probes is accomplished by connecting the GEM-2000® to the quick-connect port atop the probe with flexible Teflon tubing. Monitoring within structures is performed by connecting a 3-foot-long fiberglass extension rod to the tubing. For each type of monitoring, 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.



- ### LEGEND
- SITE BOUNDARY (178.3 ACRES±)
 - UNIT BOUNDARY
 - CELL BOUNDARY
 - DISPOSAL AREA BOUNDARY (122.5 ACRES±)
 - UNIT IV BOUNDARY
 - FENCE LINE
 - PAVED ROAD
 - UTILITY EASEMENT
 - STORMWATER BASIN
 - o POWERPOLE
 - v FIRE HYDRANT (3)
 - + MW-7 EXISTING GROUNDWATER MONITORING WELL
 - o LFG-21 EXISTING LFG GAS PROBE (ACTIVE)
 - o LFG-4 EXISTING LFG GAS PROBE (INACTIVE)
 - o LFG-9A LFG GAS PROBE (DECOMMISSIONED)
 - + MW-4 GROUNDWATER MONITORING WELL (DECOMMISSIONED)
 - o GRID

NOTES:

- 1.) Site boundary from the 2014 Vacation Plat 093013 RRE book 25, page 65, Sandoval County Landfill.
- 2.) Planimetric features based on the topographic/planimetric mapping performed on January 24, 2014 by Aerotech Mapping Inc. Landfill operation facilities field verified on March 18, 2015.



Drawing: C:\Users\DRamirez\AppData\Local\Temp\AcPublish_1571262-25-21_LFG - MON NETWORK.dwg
 Date/Time: Mar. 12, 2021-09:38:14; LAYOUT: B (LS)
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Parkhill

FEBRUARY 2021 LANDFILL GAS MONITORING EVENT

Parkhill.com SANDOVAL COUNTY LANDFILL
 RIO RANCHO, NEW MEXICO

LANDFILL GAS MONITORING POINTS

May 22, 2021

Date: 05/22/2021
 Project No: 8023.20
 Sheet: ATTACHMENT A

Attachment B - Landfill Gas Monitoring Field Log

Monitoring Personnel: Andy Yuhas/ Santiago Lopez

Methane Monitoring Type: Dedicated Probe

Probe Depth: 30'

Monitoring Date: 05/26/2021

Weather Information

Date and amount of last precipitation: 5/18/2021 0.01 inches

Temp: 77 °F

Wind Speed: 8 mph

Wind Direction: SSW (observed at site)

Barometric Pressure: 29.93 inches mercury (Hg)

Weather Conditions: Overcast, warm, breezy

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000

Date and Time Last Calibrated: 5/26/21 11:30 AM

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	12:01	0	0.1	20.7	79.2
LFG-3	11:50	0	0.0	21.1	78.9
LFG-5	11:40	0	2.0	19.3	78.7
LFG-6	11:55	0	0.0	20.9	79.1
LFG-7	14:17	0	0.1	21.8	78.1
LFG-8	14:10	0	0.0	22.4	77.6
LFG-9B	13:13	0	0	22.1	77.9
LFG-10A	12:17	0	0	21.3	78.7
LFG-12	12:10	0	0.1	20.7	79.2
LFG-14	12:23	0	0.0	21.3	78.7
LFG-15	12:30	0	0.0	21.1	78.9
LFG-16	12:37	0	0	21.5	78.5
LFG-17	12:41	0	0	21.1	78.8
LFG-18	12:46	0	0	21.7	78.3
LFG-19	12:51	0	0	21.4	78.6
LFG-20	12:59	0	0.0	21.4	78.6
LFG-21	13:07	0	0.0	22.3	77.7

Landfill Structures

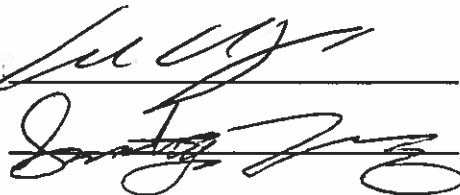
Scalehouse (ticket office)	13:52	0	0	22.3	77.7
Scalehouse (supervisor's office)	13:51	0	0	22.3	77.7
Employee Breakroom	13:47	0	0	22.3	77.7
Spotter's Shed	13:37	0	0	22.3	77.7
Recycling Storage	13:36	0	0	22.3	77.7
Portable Toilet	13:32	0	0	22.2	77.8
Gray Storage Shed	13:23	0	0	22.1	77.9
Composting Office	13:42	0	0	22.3	77.7
Public Works Dept. Admin.	13:20	0	0	22.1	77.9
Roads & Fleet Maintenance Bldg.	13:26	0	0	22.1	77.9
Trailer	NR	NR	NR	NR	NR
North Storage Shed	14:01	0	0	22.4	77.9

Ambient Readings

Near LFG 5	11:37	0	0.0	21.4	78.6
Near LFG 5	14:18	0	0	22.3	77.7

Note: The trailer is no longer on site.
No measurements were taken.

Signature(s):



Attachment C - Landfill Gas Monitoring Field Log

Monitoring Personnel: Andy Yuhus / Santiago Lopez
Methane Monitoring Type: Dedicated Probe

Probe Depth: 30'

Monitoring Date: 5/26/21

Weather Information

Date and amount of last precipitation 5/18/21, 0.01"

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LFG-20	12:59	0	0	21.4	78.6
LFG-21	13:07	0	0	22.3	77.7

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Gray Storage Shed	13:23	0	0	22.1	77.9
Composting Office	13:42	0	0	22.3	77.7
Public Works Dept. Admin.	13:26	0	0	22.1	77.9
Roads & Fleet Maintenance Bldg.	13:26	0	0	22.1	77.9
Trailer					
North Storage Shed	14:01	0	0	22.4	77.6

Ambient Readings

Near Employee Lounge LFG 5	11:37	0	0	21.4	78.6
Near Employee Lounge	14:18	0	0	22.3	77.7

LFG 7

Signature(s): Andy Yuhus / Santiago Lopez

[Handwritten signatures]