
TO: Daniele Berardelli, Permit Section Manager, NMED Solid Waste Bureau

cc: Chris Perea, Landfill Manager, Sandoval County Landfill

FROM: Tyler Zack, PE, Parkhill

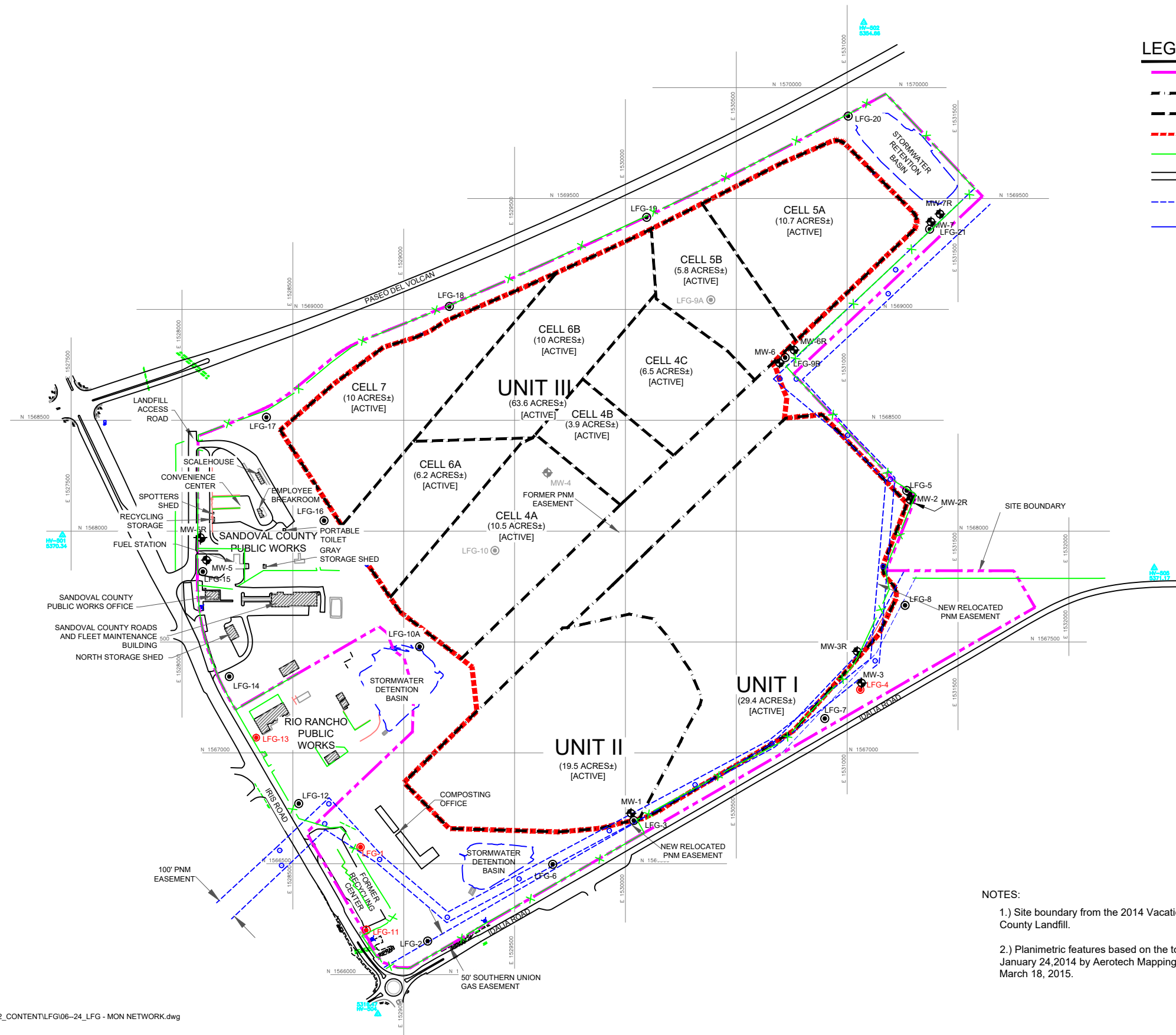
DATE: September 19, 2024

SUBJECT: Sandoval County Landfill:
September 2024 Landfill Gas Monitoring Event [04303724.00]

On September 19, 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 within the 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**.

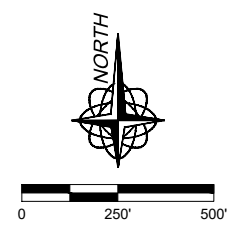
Monitoring was performed using a CES Landtec™ GEM-5000® portable gas analyzer to measure methane (CH₄), oxygen (O₂), carbon dioxide (CO₂), and balance gas (typically nitrogen) in and around facility structures and in the perimeter probes. The GEM-5000® records gas measurements in terms of percent by 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-5000® 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-5000® 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±)
	FENCE LINE
	PAVED ROAD
	UTILITY EASEMENT
	STORMWATER BASIN
	POWERPOLE
	FIRE HYDRANT (3)
	EXISTING GROUNDWATER MONITORING WELL
	EXISTING LFG GAS PROBE (ACTIVE)
	EXISTING LFG GAS PROBE (INACTIVE)
	LFG GAS PROBE (DECOMMISSIONED)
	GROUNDWATER MONITORING WELL (DECOMMISSIONED)
	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: A:\2024\43037.24\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\LFG\06-24_LFG - MON NETWORK.dwg
 Date/Time: Sep. 19, 2024-15:50:43 ; LAYOUT: B (LS)
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Parkhill SEPTEMBER 2024 LANDFILL GAS MONITORING EVENT

LANDFILL GAS MONITORING POINTS

Parkhill.com SANDOVAL COUNTY LANDFILL
 RIO RANCHO, NEW MEXICO

Date: 9/19/2024
 Project No: 43037.24
 Sheet: EXHIBIT A

Exhibit B - Landfill Gas Monitoring Field Log

Monitoring Personnel: Tyler Zack
 Methane Monitoring Type: Dedicated Probe
 Probe Depth: 30'
 Monitoring Date: 9/19/2024

Weather Information

Date and amount of last precipitation 09/17/24 0.11in
 Temp: 66 °F
 Wind Speed: 5-10 mph
 Wind Direction: N (observed at site)
 Barometric Pressure: 30.16 inches mercury (Hg)
 Weather Conditions: Mostly Sunny

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 5000
 Date and Time Last Calibrated: 9/19/24: 0929

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	1036	0.0	0.3	20.4	79.3
LFG-3	1045	0.0	0.0	20.7	79.3
LFG-5	1053	0.0	2.9	18.0	79.1
LFG-6	1041	0.0	0.0	20.8	79.2
LFG-7	1207	0.0	0.4	20.8	78.8
LFG-8	1212	0.0	0.4	20.8	78.8
LFG-9B	1059	0.0	0.1	20.6	79.3
LFG-10A	1024	0.0	0.1	20.6	79.3
LFG-12	1030	0.0	0.3	20.3	79.4
LFG-14	948	0.0	0.1	20.6	79.3
LFG-15	1018	0.0	0.3	20.4	79.3
LFG-16	1149	0.0	0.1	21.0	78.9
LFG-17	1125	0.0	0.0	21.1	78.9
LFG-18	1132	0.0	0.0	21.1	78.9
LFG-19	1139	0.0	0.1	20.8	79.1
LFG-20	1115	0.0	0.0	21.0	79.0
LFG-21	1106	0.0	0.1	20.6	79.3

Landfill Structures

Scalehouse (ticket office)	1004	0.0	0.1	20.7	79.2
Scalehouse (supervisor's office)	1006	0.0	0.1	20.7	79.2
Employee Breakroom	1002	0.0	0.1	20.8	79.1
Spotter's Shed	958	0.0	0.1	20.7	79.2
Recycling Storage	959	0.0	0.1	20.7	79.2
Portable Toilet	1012	0.0	0.1	20.8	79.1
Gray Storage Shed	1009	0.0	0.1	20.8	79.1
Composting Office	1152	0.0	0.0	21.1	78.9
Public Works Dept. Admin.	934	0.0	0.1	20.8	79.1
Roads & Fleet Maintenance Bldg.	938	0.0	0.1	20.8	79.1
North Storage Shed	945	0.0	0.1	20.8	79.1

Ambient Readings

Office	931	0.0	0.1	20.9	79.0
Near LFG 8	1215	0.0	0.0	21.5	78.5

Signature(s): 

Exhibit C - Landfill Gas Monitoring Field Log

Monitoring Personnel: Tyler Zack

Methane Monitoring Type: Dedicated Probe

Probe Depth: 30'

Monitoring Date: 9/19/24

Weather Information

Date and amount of last precipitation: 9/17/24 0.11"

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Wind Direction: North (observed at site)

Barometric Pressure: 30.16 inches mercury (Hg)

Weather Conditions: Mostly Sunny

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LFG-5	1053	0	2.4	18.0	79.1
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LFG-10A	1024	0	0.1	20.6	79.3
LFG-12	2030	0	0.3	20.3	79.4
LFG-14	0948	0	0.1	20.6	79.3
LFG-15	1618	0	0.3	20.4	79.3
LFG-16	1149	0	0.1	20.0	78.9
LFG-17	1175	0	0	21.1	78.9
LFG-18	1132	0	0	21.1	78.9
LFG-19	1139	0	0.1	20.8	79.1
LFG-20	1115	0	0	21.0	79.0
LFG-21	1106	0	0.1	20.6	79.3

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Composting Office	1152	0	0	21.1	78.9
Public Works Dept. Admin.	0924	0	0.1	20.8	79.1
Roads & Fleet Maintenance Bldg.	0938	0	0.1	20.8	79.1
North Storage Shed	0945	0	0.1	20.8	79.1

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Signature(s):

