

TO:	Chris Perea, Sandoval County Landfill
cc:	George Schuman, Permit Section Manager, NMED Solid Waste Bureau
FROM:	Andrew Yuhas; Parkhill Diego Y. Ramirez; Parkhill
DATE:	March 12, 2021
SUBJECT:	Sandoval County Landfill: February 2021 Landfill Gas Monitoring Event [01802320]

On February 25, 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.

Attachment B- Landfill Gas Monitoring Field Log

Monitoring Personnel: Diego Y. Ramirez
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'
Monitoring Date: 2/25/2021

Weather Information

Date and amount of last precipitation 2/19/2021 - 0.06 in
Temp: 41 °F
Wind Speed: 12 mph
Wind Direction: E (observed at site)
Barometric Pressure: 30.15 (↓) inches mercury (Hg)
Weather Conditions: Sunny, Windy

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000

Date and Time Last Calibrated: 02/25/2021; 0921

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	1110	0.0	0.2	20.3	79.5
LFG-3	1126	0.0	0.1	20.4	79.5
LFG-5	1136	0.0	2.5	18.1	79.4
LFG-6	1117	0.0	0.3	20.2	79.5
LFG-7	1244	0.0	0.5	19.8	79.7
LFG-8	1252	0.2	0.6	19.7	79.5
LFG-9B	1142	0.0	0.0	20.3	79.7
LFG-10A	1047	0.0	0.0	20.6	79.4
LFG-12	1056	0.0	0.3	20.4	79.3
LFG-14	1037	0.0	0.1	20.6	79.3
LFG-15	1008	0.0	0.2	20.9	78.9
LFG-16	1216	0.0	0.1	20.7	79.2
LFG-17	1211	0.0	0.2	20.6	79.2
LFG-18	1206	0.0	0.0	20.8	79.2
LFG-19	1200	0.0	0.3	20.3	79.4
LFG-20	1154	0.0	0.1	20.5	79.4
LFG-21	1148	0.0	0.0	20.5	79.5

Landfill Structures

Scalehouse (ticket office)	0955	0.0	0.0	21.3	78.7
Scalehouse (supervisor's office)	0954	0.0	0.0	21.3	78.7
Employee Breakroom	0951	0.0	0.0	21.4	78.6
Spotter's Shed	0929	0.0	0.0	22.1	77.9
Recycling Storage	0947	0.0	0.0	21.4	78.6
Portable Toilet	1001	0.0	0.0	21.2	78.8
Gray Storage Shed	1220	0.0	0.0	20.6	79.4
Composting Office	1051	0.0	0.0	20.6	79.4
Public Works Dept. Admin.	1018	0.0	0.0	21.0	79.0
Roads & Fleet Maintenance Bldg.	1026	0.0	0.0	21.0	79.0
Trailer	--	--	--	--	--
North Storage Shed	1032	0.0	0.0	20.9	79.1

Ambient Readings

Near Employee Lounge	1021	0.0	0.0	21.2	78.8
Near Employee Lounge	1254	0.0	0.0	20.7	79.3

Signature(s): Diego Y. Ramirez



Attachment C - Landfill Gas Monitoring Field Log

Monitoring Personnel: Diego Y. Ramirez
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'
Monitoring Date: 02/25/21

Weather Information

Date and amount of last precipitation 02/19/21; 0.06"
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Wind Direction: E (observed at site)
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LFG-15	1003	0.0	0.2	20.9	78.9
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LFG-17	1211	0.0	0.2	20.6	79.2
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