
TO: Chris Perea, Sandoval County Landfill

cc: Erica Gordan, NMED Solid Waste Bureau

FROM: Richard Salas; Parkhill

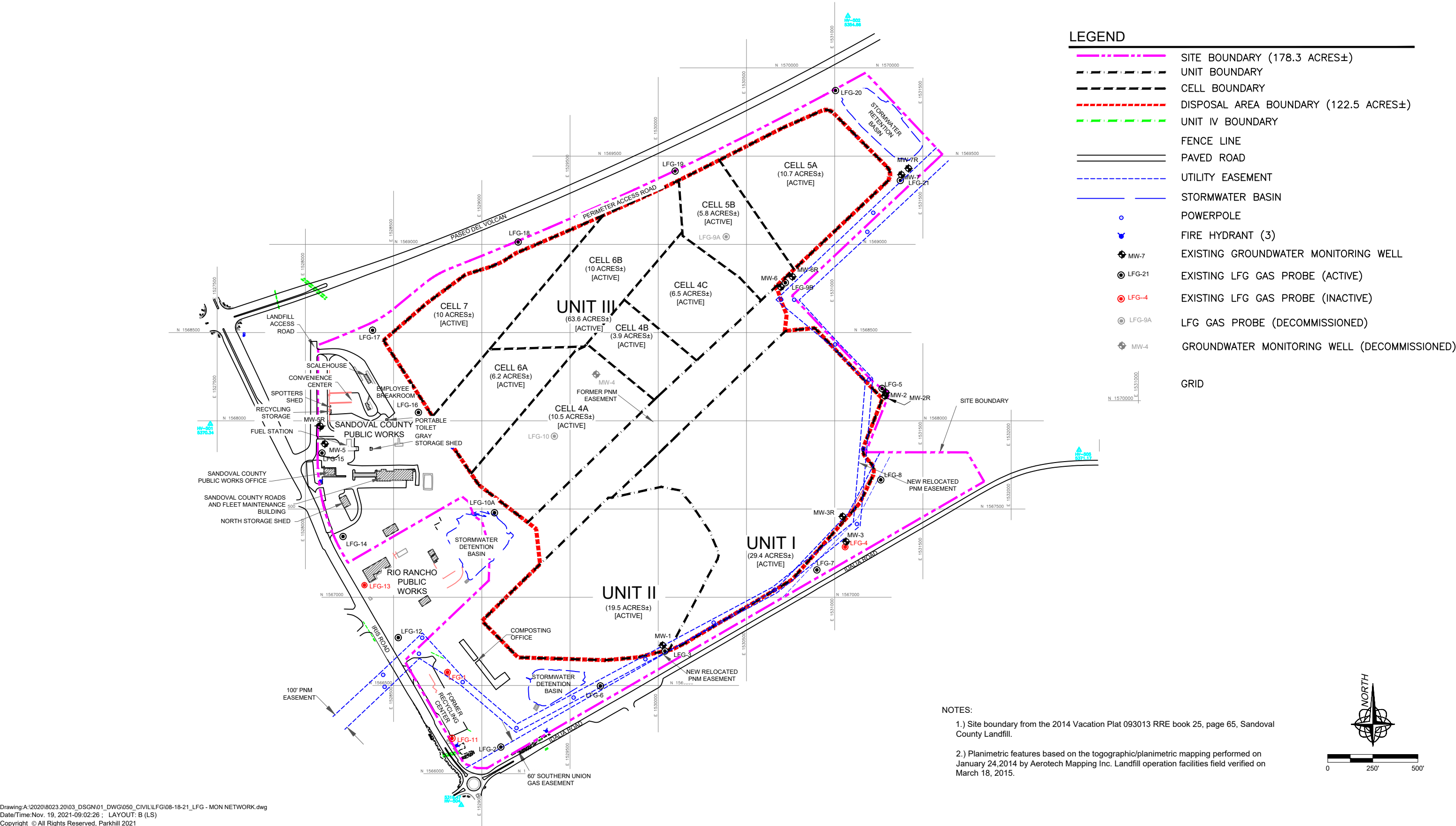
DATE: November 19, 2021

SUBJECT: Sandoval County Landfill:
November 2021 Landfill Gas Monitoring Event [01811521]

On November 17, 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-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. 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-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-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: Richard Salas
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'
Monitoring Date: 11/17/2021

Weather Information

Date and amount of last precipitation: 10/27/2021 0.01 in
Temp: 53 °F
Wind Speed: 1 mph
Wind Direction: N (observed at site)
Barometric Pressure: 30.04 inches mercury (Hg)
Weather Conditions: Sunny, partly cloudy, calm

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 5000

Date and Time Last Calibrated: 11/17/2021 1020

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	1101	0.0	0.5	19.7	79.8
LFG-3	1049	0.0	0.3	20.1	79.6
LFG-5	1039	0.0	3.7	17.1	79.2
LFG-6	1054	0.0	0.6	19.5	79.9
LFG-7	1243	0.0	0.8	19.7	79.5
LFG-8	1235	0.0	0.6	19.9	79.5
LFG-9B	1131	0.0	0.3	19.4	80.3
LFG-10A	1122	0.0	0.2	19.8	80.0
LFG-12	1116	0.0	0.3	19.8	79.9
LFG-14	1216	0.0	0.2	20.1	79.7
LFG-15	1221	0.0	0.2	20.2	79.6
LFG-16	1207	0.0	0.2	20.1	79.7
LFG-17	1200	0.0	0.2	19.9	79.9
LFG-18	1154	0.0	0.0	20.0	80.0
LFG-19	1150	0.0	0.6	19.3	80.1
LFG-20	1144	0.0	0.1	19.9	80.0
LFG-21	1136	0.0	0.1	20.0	79.9

Landfill Structures

Scalehouse (ticket office)	1353	0.0	0	21.2	78.8
Scalehouse (supervisor's office)	1352	0.0	0	21.2	78.8
Employee Breakroom	1328	0.0	0	21.0	79.0
Spotter's Shed	1331	0.0	0	21.2	78.8
Recycling Storage	1333	0.0	0	21.2	78.8
Portable Toilet	1335	0.0	0	21.3	78.7
Gray Storage Shed	1347	0.0	0	21.3	78.7
Composting Office	1340	0.0	0	21.2	78.8
Public Works Dept. Admin.	1310	0.0	0	21.4	78.6
Roads & Fleet Maintenance Bldg.	1318	0.0	0	20.7	79.3
North Storage Shed	1322	0.0	0	20.9	79.1

Ambient Readings

Office	1036	0.1	0	20.5	79.4
Near LFG 5	1420	0.0	0	21.5	78.5

Signature(s):



Attachment C - Landfill Gas Monitoring Field Log

Monitoring Personnel: Richard Salas
Methane Monitoring Type: Dedicated Probe

Probe Depth: 30'

Monitoring Date: 11/17/2021

Weather Information

Date and amount of last precipitation: 10/27/21 0.01 in

Temp: 53 °F

Wind Speed: 1 mph

Wind Direction: N (observed at site)

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LFG-8	1235	0	0.6	19.9	79.5
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LFG-10A	1122	0	0.2	19.8	80.0
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LFG-19	1150	0	0.6	19.3	80.1
LFG-20	1144	0	0.1	19.9	80.0
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