

# GORDON ENVIRONMENTAL/PSC

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**TO:** Chris Perea, Sandoval County Landfill

**cc:** George Schuman, Permit Section Manager, NMED Solid Waste Bureau

**FROM:** Mike Crepeau, P.E.; Gordon Environmental/PSC  
Tyler Zack, EIT; Gordon Environmental/PSC

**DATE:** July 07, 2020

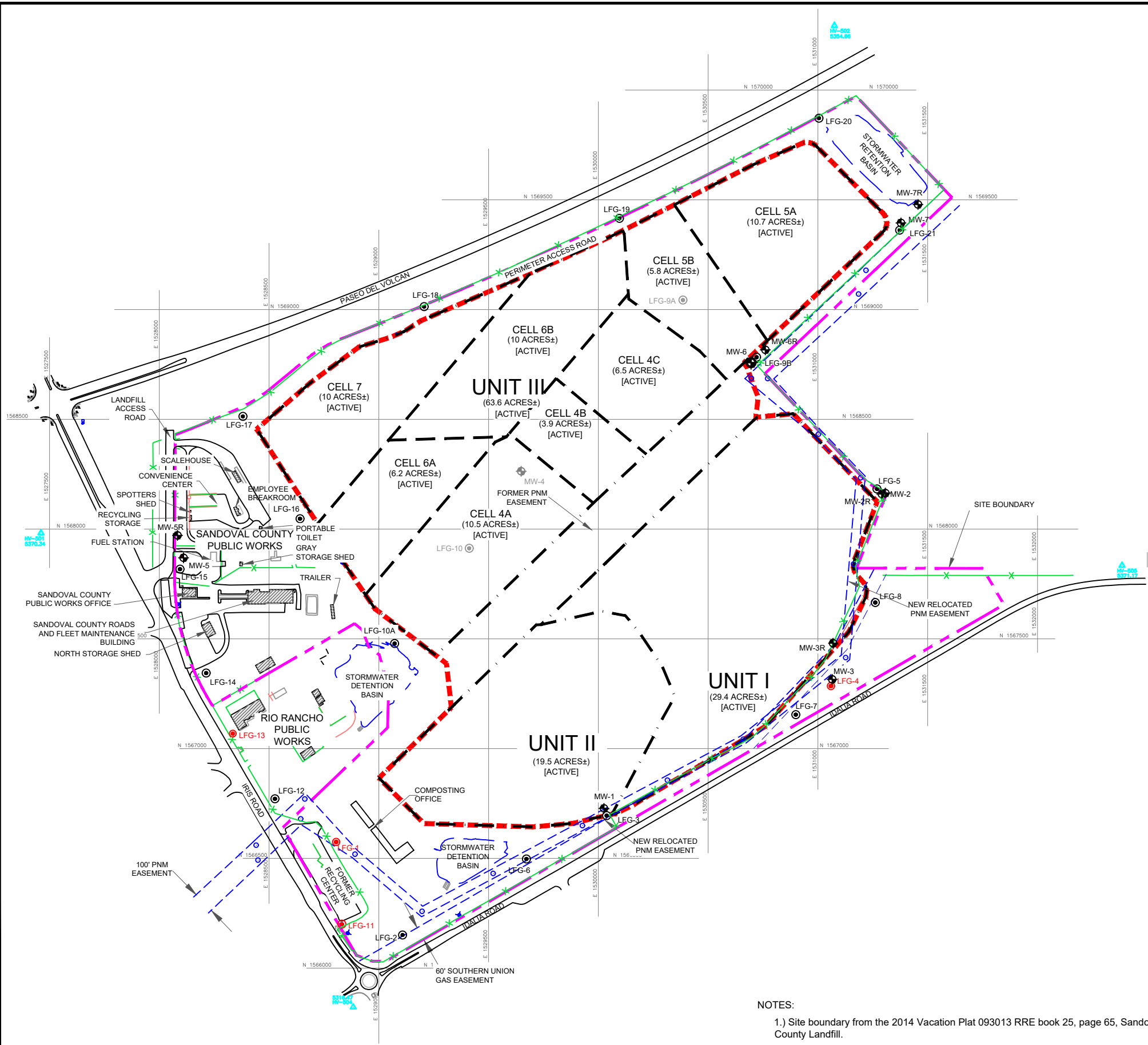
**SUBJECT:** Sandoval County Landfill:  
June 2020 Landfill Gas Monitoring Event [01004119]

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On June 05, 2020, Gordon Environmental/PSC 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 eleven (11) 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 (CH<sub>4</sub>), oxygen (O<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), 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% CH<sub>4</sub>, 35% CO<sub>2</sub>, and 4% O<sub>2</sub> 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.



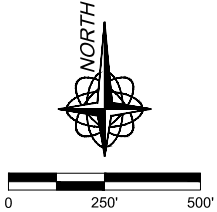
LEGEND

- 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
- 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.



ENVIRONMENTAL MONITORING POINTS

SANDOVAL COUNTY LANDFILL  
RIO RANCHO, NEW MEXICO



333 Rio Rancho Blvd. N.E.  
Rio Rancho, New Mexico  
Phone: 505-867-6990  
Fax: 505-867-6991

DATE: 07/06/2020	CAD: MON NETWORK.dwg	PROJECT #: 01004119
DRAWN BY: TSZ	REVIEWED BY: MJC	
APPROVED BY: MJC	www.team-psc.com	ATTACHMENT A

Attachment C - Landfill Gas Monitoring Field Log

Monitoring Personnel: Tyler Zack

Methane Monitoring Type: Dedicated Probe

Probe Depth: 30'

Monitoring Date: 6/5/2020

Weather Information

Date and amount of last precipitation 6/2/2020 ; 0.80 in

Temp: 77 °F

Wind Speed: 5 mph

Wind Direction: N (observed at site)

Barometric Pressure: 29.84 (S) inches mercury (Hg)

Weather Conditions: Partly Cloudy

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000

Date and Time Last Calibrated: 6/5/20 ; 0856

Permanent Landfill Gas Monitoring Probes

Monitoring Probe ID	Time of Measurement	CH <sub>4</sub> (% in air)	CO <sub>2</sub> (% in air)	O <sub>2</sub> (% in air)	Balance Gas (% in air)
LFG-2	1026	0.0	0.2	19.6	80.2
LFG-3	1043	0.0	0.0	19.5	80.5
LFG-5	1055	0.0	3.0	16.5	80.5
LFG-6	1035	0.0	0.2	19.0	80.8
LFG-7	1152	0.0	0.4	19.5	80.1
LFG-8	1159	0.0	0.4	19.5	80.1
LFG-9B	1105	0.0	0.0	19.7	80.3
LFG-10A	1003	0.0	0.0	19.3	80.7
LFG-12	1013	0.0	0.2	19.3	80.5
LFG-14	0956	0.0	0.0	19.5	80.5
LFG-15	0950	0.0	0.1	19.3	80.6
LFG-16	1141	0.0	0.0	20.3	79.7
LFG-17	1135	0.0	0.1	19.8	80.1
LFG-18	1130	0.0	0.0	20.3	79.7
LFG-19	1124	0.0	0.3	19.1	80.6
LFG-20	1118	0.0	0.1	19.3	80.6
LFG-21	1112	0.0	0.0	19.5	80.5

Landfill Structures

Scalehouse (ticket office)	0929	0.0	0.0	19.6	80.4
Scalehouse (supervisor's office)	0930	0.0	0.0	19.6	80.4
Employee Breakroom	0925	0.0	0.0	19.7	80.3
Spotter's Shed	0933	0.0	0.0	19.6	80.4
Recycling Storage	0935	0.0	0.0	19.6	80.4
Portable Toilet	0939	0.0	0.0	19.7	80.3
Gray Storage Shed	0937	0.0	0.0	19.7	80.3
Composting Office	1020	0.0	0.0	19.8	80.2
Public Works Dept. Admin.	0904	0.0	0.0	19.9	80.1
Roads & Fleet Maintenance Bldg.	0912	0.0	0.0	19.8	80.2
Trailer	0914	0.0	0.0	19.8	80.2
North Storage Shed	0907	0.0	0.0	19.8	80.2

Ambient Readings

Near Employee Lounge	0923	0.0	0.0	19.8	80.2
Near Employee Lounge	1145	0.0	0.0	20.4	79.6

Signature(s): \_\_\_\_\_

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