

GORDON ENVIRONMENTAL/PSC

TO: Robert Sanchez, Sandoval County Landfill

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

FROM: Mike Crepeau, P.E.; Gordon Environmental/PSC
Sarah Schnell; Gordon Environmental/PSC

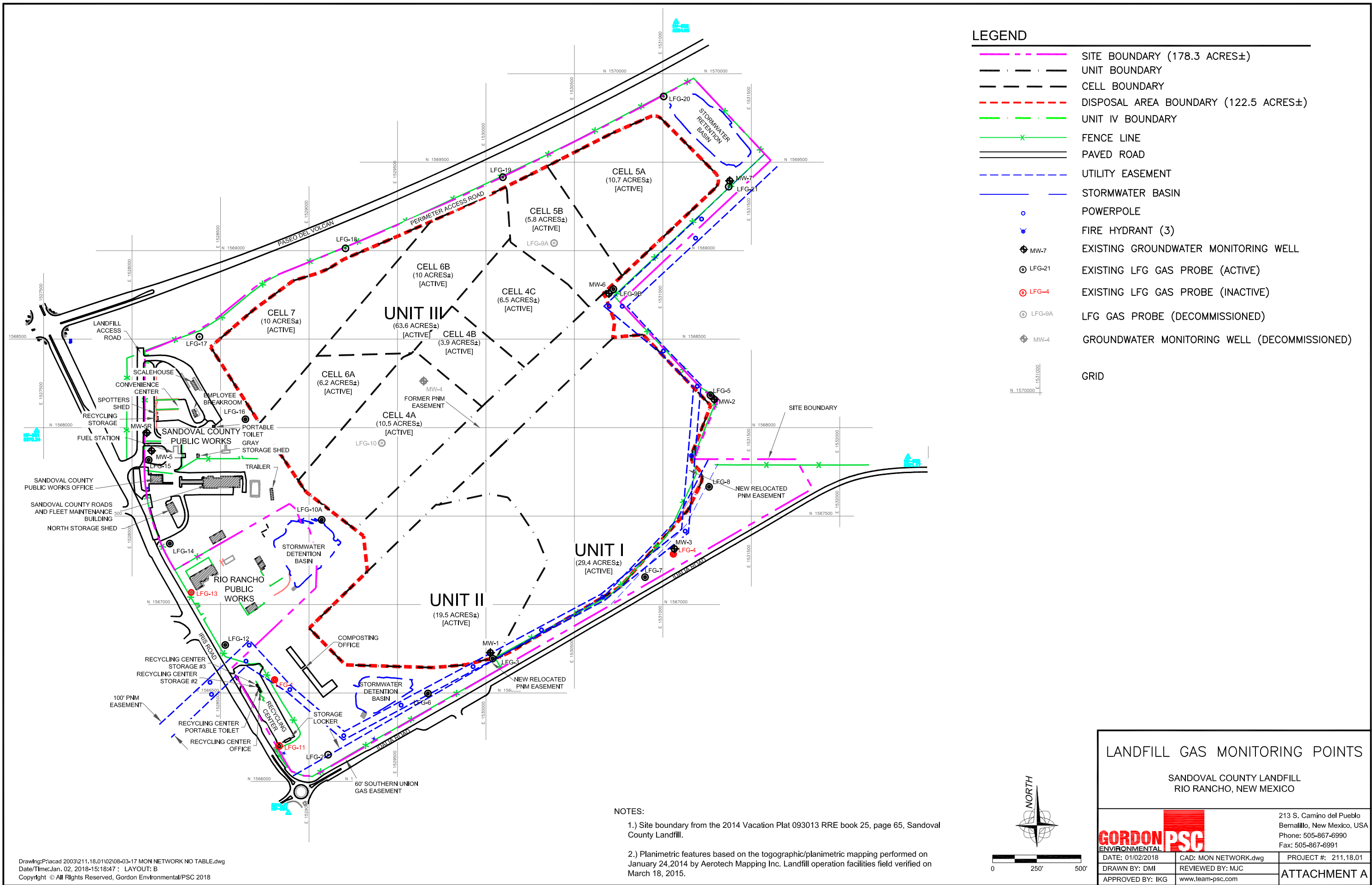
DATE: March 30, 2018

SUBJECT: Sandoval County Landfill:
February 2018 Landfill Gas Monitoring Event [211.18.01/01004117]

On February 14, 2018, 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 sixteen (16) 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-500® 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-500® 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 in any probe or structure. 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-500® 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-500® 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 SANDOVAL COUNTY LANDFILL SANDOVAL COUNTY, NM

Monitoring Personnel: Sarah Schnell, Mark Shepard
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'
Monitoring Date: 2/14/2018

Weather Information

Date and amount of last precipitation 02/14/18 (0.07 in.)
Temp: 45 °F
Wind Speed: 0-5 mph
Wind Direction: WSW (observed at site)
Barometric Pressure: 24.841 (1) inches mercury (Hg)
Weather Conditions: Mostly Cloudy

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 500

Date and Time Last Calibrated: 02/14/18; 11:10

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	1453	0	0.1	21.8	78.1
LFG-3	1503	0	1.0	21.1	77.9
LFG-5	1231	0	3.2	18.9	77.9
LFG-6	1458	0	0.0	21.8	78.2
LFG-7	1544	0	0.2	21.5	78.3
LFG-8	1538	0	0.3	21.3	78.3
LFG-9B	1250	0	0.0	21.9	78.1
LFG-10A	1419	0	0.0	22.0	78.0
LFG-12	1427	0	0.2	21.7	78.1
LFG-14	1409	0	0.0	22.0	78.0
LFG-15	1523	0	0.1	21.6	78.3
LFG-16	1343	0	0.0	21.7	78.3
LFG-17	1338	0	0.1	21.5	78.4
LFG-18	1332	0	0.2	21.5	78.3
LFG-19	1324	0	0.0	21.6	78.4
LFG-20	1312	0	0.1	21.9	78.0
LFG-21	1256	0	0.0	21.8	78.2

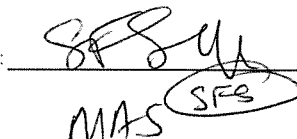
Landfill Structures

Scalehouse (ticket office)	1515	0	0.0	21.8	78.2
Scalehouse (supervisor's office)	1517	0	0.0	21.9	78.1
Employee Breakroom	1118	0	0.0	22.0	78.0
Spotter's Shed	1123	0	0.0	22.1	77.9
Recycling Storage	1121	0	0.0	22.0	78.0
Portable Toilet	1510	0	0.0	21.8	78.2
Gray Storage Shed	1126	0	0.0	22.1	77.9
Composting Office	1449	0	0.0	22.2	77.8
Public Works Dept. Admin.	1400	0	0.0	21.9	78.1
Roads & Fleet Maintenance Bldg.	1354	0	0.0	22.0	78.0
Trailer	1349	0	0.0	22.0	78.0
North Storage Shed	1406	0	0.0	22.1	77.9
Recycling Center Office	1437	0	0.0	22.2	77.8
Storage Locker	1440	0	0.0	22.2	77.8
Recycling Center Storage #2	1433	0	0.0	22.1	77.9
Recycling Center Storage #3	1435	0	0.0	22.2	77.8
Recycling Center Portable Toilet	1444	0	0.0	22.2	77.8

Ambient Readings

Near Employee Lounge	1114	0	0.0	22.0	78.0
Near LFG-7	1544	0	0.0	21.8	78.2

Signature(s):


MAS (SFS)

ATTACHMENT C
LANDFILL GAS MONITORING FIELD LOG
SANDOVAL COUNTY LANDFILL
SANDOVAL COUNTY, NM

Monitoring Personnel: Sarah Schnell / MAS
Methane Monitoring Type: Dedicated Probe
Probe Depth: 30'

Weather Information

Date and amount of last precipitation: 02/14/18, 0.07"
Temp: 45 °F
Wind Speed: 0-5 mph

Wind Direction: WSW (observed at site)
Barometric Pressure: 24.841 (4) inches mercury (Hg)
Weather Conditions: Mostly Cloudy

Equipment Information

Monitoring Equipment Used: CES-LandTec™ GEM 2000[®] 500

Date and Time Last Calibrated: 02-14-18; 11:10 am

Permanent Landfill Gas Monitoring Probes

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LFG-21	1256	0	0	21.8	78.2

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Gray Storage Shed	1126	0	0	22.1	77.9
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Public Works Dept. Admin.	1400	0	0	21.9	78.1
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Trailer	1349	0	0	22.0	78.0
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Recycling Center Portable Toilet	1444	0	0	22.2	77.8

Ambient Readings

Near Employee Lounge	1114	0	0	22.2	77.8
Near MW-3	1544	0	0	21.8	78.2

Signature(s):

SF Schnell

MAS

QFS