



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Marc Elrich
County Executive

Willie Wainer
Acting Director

August 3, 2023

Andrew Grenzer, Section Head
Investigation and Remediation Section
Solid Waste Operations Division
Land and Materials Administration
1800 Washington Boulevard, Suite 605
Baltimore MD 21230-1719

Re: Oaks Landfill – 2nd Quarter 2023 Landfill Gas Monitoring Probe Report

Dear Mr. Grenzer,

The Montgomery County Department of Environmental Protection (DEP), Recycling and Resource Management Division (RRMD) has enclosed the quarterly landfill gas monitoring probe report for the 2nd Quarter of 2023.

If you have any questions, please call me at 240-777-6574 or email me at Jamie.Foster@montgomerycountymd.gov.

Sincerely,

A handwritten signature in cursive script that reads "Jamie Foster".

Jamie C. Foster, Senior Engineer
Recycling and Resource Management Division
Department of Environmental Protection

Enclosure

Oaks Landfill

Landfill Gas Monitoring Report

Second Quarter 2023
(April 2023 – June 2023)

Prepared By:

SCS Field Services
11260 Roger Bacon Drive, Ste. 300
Reston, VA 20190

For:

Oaks Landfill
6001 Olney-Laytonsville Road
Laytonsville, Maryland 20882

Presented To:

Maryland Department of the Environment
1800 Washington Blvd. Suite 605
Baltimore, MD 21230

August 3, 2023

July 12, 2023
Job No. 07222103.00

Sent Via Email on 08/01/2023

Mr. Jamie Foster
Senior Engineer
Department of Environmental Protection
16101 Frederick Road
Derwood, MD 20855

Subject: Second Quarter 2023 Landfill Gas (LFG) Probe Monitoring Data for the Oaks Landfill,
Montgomery County, Maryland.

Dear Mr. Foster:

SCS Field Services (SCS-FS) presents this report to the Northeast Maryland Waste Disposal Authority for the second quarter 2023 landfill gas (LFG) monitoring event at the subject landfill. The second quarter monitoring was conducted on May 4th, as part of our LFG compliance services at the landfill. A Landtec GEM 5000 infrared gas analyzer was used to monitor the compliance monitoring probes. Each probe was monitored for the following parameters:

- Methane
- Carbon Dioxide
- Oxygen
- Balance Gas (typically nitrogen in LFG)
- Static Pressure

There was no detection of methane at any of the tested probes. The testing results are presented in Table 1 (attached).

The second quarter structure monitoring was conducted on June 13th, at the landfill office, guard station, blower/flare station and leachate building, as part of our LFG compliance services at the landfill. A Sensit HXG-3 combustible gas sensor (which is capable of detecting methane concentrations less than 0.1 percent by volume in air). No methane was detected in any of the structures.

Mr. Jamie Foster
July 12, 2023
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SCS-FS appreciates the opportunity to provide our services. Please contact either of the undersigned should you require further information or assistance.

Sincerely,



William Jacks, Jr.
OM&M Superintendent
SCS Field Services



Mike Gibbons
Project Manager
SCS Field Services

Table 1. Oaks Landfill - Monitoring Probes Data - 2nd Quarter 2023

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
MW-01	5/4/2023 11:42	0.0	3.0	17.3	79.7	0.0	
MW-02	5/4/2023 11:23	0.0	3.1	17.1	79.8	0.0	
MW-03	5/4/2023 11:49	0.0	3.4	12.8	83.8	-0.6	
MW-03A	5/4/2023 11:54	0.0	2.3	18.7	79.0	-0.1	
MW-04	5/4/2023 12:29	0.0	1.6	19.2	79.2	-0.2	
MW-05	5/4/2023 12:32	0.0	1.7	19.0	79.3	0.1	
MW-06	5/4/2023 12:02	0.0	1.9	19.2	78.9	0.0	
MW-07	5/4/2023 12:09	0.0	0.7	20.6	78.7	-0.1	
MW-08	5/4/2023 12:17	0.0	0.9	19.5	79.6	-0.1	
MW-08A	5/4/2023 14:10	0.0	5.2	15.2	79.6	0.0	
MW-08B	5/4/2023 12:52	0.0	2.6	17.0	80.4	-0.1	
MW-09	5/4/2023 14:04	0.0	1.2	19.5	79.3	0.0	
MW-10	5/4/2023 12:57	0.0	2.4	17.4	80.2	0.0	
MW-11	5/4/2023 13:01	0.0	3.4	17.2	79.4	0.0	
MW-12	5/4/2023 13:05	0.0	2.6	19.3	78.1	-0.8	
MW-13	5/4/2023 13:08	0.0	2.0	19.4	78.6	0.7	
MW-14	5/4/2023 13:16	0.0	1.6	20.6	77.8	-2.4	
MW-15	5/4/2023 13:24	0.0	1.4	20.8	77.8	-0.1	
MW-16	5/4/2023 13:31	0.0	0.3	20.9	78.8	0.0	
MW-17	5/4/2023 13:38	0.0	4.6	11.5	83.9	0.0	
MW-18	5/4/2023 13:46	0.0	6.5	12.5	81.0	0.0	
MW-19	5/4/2023 13:50	0.0	1.4	19.5	79.1	-0.1	
MW-20	5/4/2023 13:54	0.0	0.8	15.7	83.5	-5.3	
MW-21	5/4/2023 11:10	0.0	5.1	1.7	93.2	5.3	
MW-22	5/4/2023 11:17	0.0	3.6	16.9	79.5	0.0	
Calibration							
Calibration	5/4/2023 09:01	50.0	35.0	0.0	15.0		
Calibration	5/4/2023 09:04	0.0	0.3	20.9	78.8		
Calibration	5/4/2023 10:48	15.0	15.0	0.0	70.0		
Calibration	5/4/2023 10:54	0.0	0.0	11.0	89.0		



Table 1. Oaks Landfill - Monitoring Probes Data - 2nd Quarter 2023

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
Calibration	5/4/2023 14:18	15.0	15.0	0.0	70.0		
Calibration	5/4/2023 14:22	0.0	0.0	11.0	89.0		
Technician/Weather							
Field Technician	Record Date	Ambient Temp	Barometric Pressure	Wind Speed	Wind Direction	General Weather	
KS (KILE SCOTT)	5/4/2023	60.0	29.0	7.0	SE	Light wind	



SCS FIELD SERVICES

DAILY LOG

JOB NO. 07222103.00 **TASK NO.** 00001 **DATE** 05/04/2023 **PROJECT NAME** Oaks

TEMP 60 °F **WEATHER** Cloudy **B.P.** 29.90 inHg **WIND** 7 mph @ SE

SCS-FS LABOR	HOURS	OT	HOURS	OT
Kile Scott	6.0			
			DAILY TOTAL	6.0

EQUIP, SVCS, , MLG	QTY	UNITS	QTY	UNITS
Truck	1	1		
GEM 5000	1	1		
MX4	1	1		

INSTRUMENT CALIBRATION (CAL. GAS)		CH4 (%-VOL)	CH4 (%-LEL)	O2 LOW SCALE (%-VOL)	CO2 (%-VOL)	H2S (PPM)
MODEL	S/N					
GEM 5000	G508314	50.0		20.9	35.0	
		15.0		11.0	15.0	

SUMMARY	Arrived on site for a blower/flare check, weekly wellfield monitoring, and monthly probe monitoring				
Blower/Flare data	Blower inlet (°F)	Blower outlet (°F)	Flare flow (scfm)	Flare (°F)	Blower amps (amps)
Initial	55	81	713.4	392	26.1
Final	57	83	695.2	414	25.9

Performed a blower/flare check.

Continued weekly wellfield monitoring; well HCA5 was still flooded and could not be monitored this week.

Well EW18 was rechecked and had no methane so it will remain fully closed. Similarly, well EW16 was able to be monitored and had Methane when it normally doesn't and will be rechecked again next week to make sure it doesn't still have methane and need to be opened.

Completed monthly probe monitoring; all probes were clean and had 0 methane.

PREPARED BY: Kile Scott ACCEPTED BY: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

JOB NO. 07222103.00 **TASK NO.** 1 **DATE** 06/13/2023 **PROJECT NAME** OAKS

TEMP 62 Degrees F **WEATHER** Cloudy **B.P.** 29.77 R **WIND** NW @ 7 mph

SCS-FS LABOR	HOURS	OT	HOURS	OT
William Jacks	10			
			DAILY TOTAL	

EQUIP, SVCS, , MLG	QTY	UNIT S	QTY	UNITS
TOOL TRUCK	1			
ATV	1			
GEM 5000	1			

INSTRUMENT CALIBRATION (CAL. GAS)		CH4 (%-VOL)	CH4 (%-LEL)	O2 LOW SCALE (%-VOL)	CO2 (%-VOL)	H2S (PPM)
MODEL	S/N					
GEM 5000	394					

SUMMARY
SCS-FS arrived onsite to conduct evaluation of the landfill extraction system,
SCS-FS conducted the Second Quarter Structure monitoring at landfill structures and no methane was detected in any structures.
SCS-FS conducted checks around the landfill to determine oxygen intrusion areas.
During the inspection of the site, a number of PVC leachate cleanout flanges were found to be broken, possible allowing slight oxygen leaks.
SCS-FS found a stick-up HDPE pipe at well HC-14 and believes this may need to be pumped out to re-establish vacuum past this point.
SCS-FS will conduct further troubleshooting of landfill extraction system.
Aptim BFS was restarted and operated normally.

PREPARED BY: William Jacks ACCEPTED BY: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.