



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Marc Elrich
County Executive

Willie Wainer
Acting Director

December 21, 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 – 4th 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 4th Quarter of 2023.

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

Sincerely,

Jamie Foster

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

Enclosure

Oaks Landfill

Landfill Gas Monitoring Report

Fourth Quarter 2023
(October 2023 – December 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

December 21, 2023

December 14, 2023
Job No. 07222103.00

Sent Via Email on 12/18/2023

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

Subject: Third 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 third quarter 2023 landfill gas (LFG) monitoring event at the subject landfill. The third quarter monitoring was conducted on September 12th, 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 third quarter structure monitoring was conducted on September 19th, at the landfill office, guard station, blower/flare station and leachate building, as part of our LFG compliance services at the landfill. A Sensit HX-6 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.

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

cc: Sean Sullivan SCS Engineers

Table 1. Oaks Landfill - Monitoring Probes Data - 3rd Quarter 2023

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
Calibration	9/12/2023 08:52	50.0	35.1	0.0	14.9	N/A	
Calibration	9/12/2023 08:55	0.0	0.2	20.9	78.9	N/A	
Calibration	9/12/2023 09:39	15.0	15.0	0.0	70.0	N/A	
Calibration	9/12/2023 09:41	0.0	0.0	11.0	89.0	N/A	
Calibration	9/12/2023 12:57	0.0	0.0	11.0	89.0	N/A	
Calibration	9/12/2023 13:00	15.0	15.0	0.0	70.0	N/A	
MW-01	9/12/2023 10:01	0.0	2.6	16.7	80.7	-0.1	
MW-02	9/12/2023 12:51	0.0	3.2	17.8	79.0	-0.1	
MW-03	9/12/2023 10:07	0.0	4.3	13.6	82.1	0.0	
MW-03A	9/12/2023 10:18	0.0	3.3	17.7	79.0	-0.1	
MW-04	9/12/2023 10:48	0.0	1.8	18.5	79.7	-0.1	
MW-05	9/12/2023 10:50	0.0	1.6	18.9	79.5	-0.1	
MW-06	9/12/2023 10:28	0.0	2.7	18.2	79.1	-0.1	
MW-07	9/12/2023 10:31	0.0	0.6	19.8	79.6	-0.2	
MW-08	9/12/2023 10:36	0.0	1.1	18.8	80.1	-0.1	
MW-08A	9/12/2023 10:59	0.0	5.5	15.3	79.2	-0.1	
MW-08B	9/12/2023 11:19	0.0	4.6	16.1	79.3	-0.2	
MW-09	9/12/2023 11:25	0.0	1.6	18.6	79.8	-0.2	
MW-10	9/12/2023 12:42	0.0	3.1	17.4	79.5	0.1	
MW-11	9/12/2023 11:31	0.0	5.7	15.4	78.9	-0.1	
MW-12	9/12/2023 11:35	0.0	3.4	17.0	79.6	-0.1	
MW-13	9/12/2023 11:38	0.0	2.5	17.2	80.3	-0.1	
MW-14	9/12/2023 11:48	0.0	7.9	9.3	82.8	-0.1	
MW-15	9/12/2023 12:35	0.0	1.5	20.0	78.5	-0.1	
MW-16	9/12/2023 11:55	0.0	3.5	17.2	79.3	-0.1	
MW-17	9/12/2023 12:01	0.0	2.6	16.0	81.4	-0.1	
MW-18	9/12/2023 12:07	0.0	9.5	12.8	77.7	-0.1	
MW-19	9/12/2023 12:11	0.0	2.9	15.2	81.9	3.6	
MW-20	9/12/2023 12:17	0.0	4.8	13.9	81.3	-0.1	

Table 1. Oaks Landfill - Monitoring Probes Data - 3rd Quater 2023

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
MW-21	9/12/2023 12:29	0.0	9.3	10.9	79.8	-0.1	
MW-22	9/12/2023 12:26	0.0	4.6	17.2	78.2	-0.1	
Technician/Weather							
Field Technician	Record Date	Ambient Temp	Barometric Pressure	Wind Speed	Wind Direction	General Weather	
KILE SCOTT	9/12/2023	84	29.43	2	SE	Light wind	
KILE SCOTT	9/19/2023	75	29.46	10	SE	Moderate wind	

SCS FIELD SERVICES

DAILY LOG

JOB NO. 07223153.00 **TASK NO.** 00001 **DATE** 09/12/2023 **PROJECT NAME** Oaks

TEMP 84 °F **WEATHER** Clear **B.P.** 30.03 inHg **WIND** SE @ 2 mph

SCS-FS LABOR	HOURS	OT	HOURS	OT
Kile Scott	8.0			
			DAILY TOTAL	8.0

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	G508076	50.0		20.9	35.1	
		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	69	91	779.9	573	27.0
Final	71	97	771.2	548	27.0

Performed an initial blower/flare check; flare gas quality was 28.3% CH4 and 6.1% O2 with 779.9 scfm of flow and -22.17 inches of vacuum At the blower inlet.

Completed weekly wellfield monitoring with wells HCS1, HCS2, and HCS3.

Completed monthly probe monitoring; all probes had 0% CH4.

Performed a final blower/flare check; flare gas quality was 27.9% CH4 and 5.6% O2 with 771.2 scfm of flow and -21.62 inches of vacuum At the blower inlet.

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. 07223153.00 **TASK NO.** 2 **DATE** 09/19/2023 **PROJECT NAME** OAKS

TEMP 56 Degrees F **WEATHER** Clear **B.P.** 30.06 R **WIND** NW @ 6 mph

SCS-FS LABOR	HOURS	OT	HOURS	OT
William Jacks	8			
			DAILY TOTAL	

EQUIP, SVCS, , MLG	QTY	UNITS	QTY	UNITS
TOOL TRUCK	1			
Sensit Gas Detector	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 on site and the BFS was operating properly.
SCS-FS conducted leak detection at landfill structures using a Sensit HX-6.
The water treatment plant showed no detection within all portions of the facility.
The site offices and garage areas showed no detection within all portions of the facilities.
SCS-FS performed vegetation control at the Blower/Flare Station.
SCS-FS examined areas of the landfill and condensate sumps for issues and assessed corrective actions.

PREPARED BY: William Jacks ACCEPTED BY: _____

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