DEPARTMENT OF ENVIRONMENTAL PROTECTION

Marc Elrich
County Executive

Willie Wainer
Acting Director

May 30, 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 – 1st 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 1st 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

First Quarter 2023
(January 2023 – March 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

May 30, 2023

May 19, 2023
Job No. 07222103.00

Sent Via Email on 05/25/2023

Ms. Kitty McIlroy
Project Manager
Northeast Maryland Waste Disposal Authority
100 S. Charles St, Tower II – Suite 402
Baltimore, MD 21201

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

Dear Ms. McIlroy:

SCS Field Services (SCS-FS) presents this report to the Northeast Maryland Waste Disposal Authority for the first quarter 2023 landfill gas (LFG) monitoring event at the subject landfill. The first quarter monitoring was conducted on March 1st, 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 first quarter structure monitoring was conducted on March 15th, 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). A slight detection at the landfill office 80 parts per million (ppm) (0.1% LEL) and in the men's bathroom 140ppm (0.2% LEL). No methane was detected in any of the other 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: Jamie Foster, Montgomery County

Table 1. Oaks Landfill - Monitoring Probes Data - 1st 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	3/1/2023 09:54	0.0	2.7	17.8	79.5	0.0	
MW-02	3/1/2023 09:33	0.0	2.6	16.9	80.5	0.0	
MW-03	3/1/2023 09:49	0.0	2.8	13.2	84.0	0.0	
MW-03A	3/1/2023 09:44	0.0	2.4	19.2	78.4	0.0	
MW-04	3/1/2023 10:37	0.0	1.2	19.7	79.1	0.0	
MW-05	3/1/2023 10:40	0.0	1.3	20.0	78.7	0.0	
MW-06	3/1/2023 10:08	0.0	1.8	19.7	78.5	-0.2	
MW-07	3/1/2023 10:13	0.0	1.1	20.9	78.0	0.0	
MW-08	3/1/2023 10:24	0.0	0.4	20.6	79.0	0.1	
MW-08A	3/1/2023 10:55	0.0	5.1	15.2	79.7	0.0	
MW-08B	3/1/2023 11:05	0.0	3.8	17.8	78.4	0.3	
MW-09	3/1/2023 11:11	0.0	1.2	20.4	78.4	0.0	
MW-10	3/1/2023 11:16	0.0	1.7	18.9	79.4	-0.1	
MW-11	3/1/2023 11:22	0.0	4.1	17.0	78.9	-0.1	
MW-12	3/1/2023 11:28	0.0	0.7	19.6	79.7	-0.7	
MW-13	3/1/2023 11:31	0.0	1.7	15.5	82.8	-0.1	
MW-14	3/1/2023 11:41	0.0	1.6	19.5	78.9	3.0	
MW-15	3/1/2023 11:55	0.0	5.6	17.4	77.0	0.3	
MW-16	3/1/2023 12:05	0.0	0.3	20.9	78.8	-0.1	
MW-17	3/1/2023 12:14	0.0	3.2	14.8	82.0	1.5	
MW-18	3/1/2023 12:21	0.0	3.9	14.5	81.6	-5.9	
MW-19	3/1/2023 12:27	0.0	1.6	20.3	78.1	-0.1	
MW-20	3/1/2023 12:31	0.0	2.4	14.6	83.0	-2.4	
MW-21	3/1/2023 12:46	0.0	5.7	0.5	93.8	0.5	
MW-22	3/1/2023 12:50	0.0	3.4	18.2	78.4	-0.1	
Calibration							
Calibration	3/1/2023 09:03	50.0	35.0	0.0	15.0	N/A	
Calibration	3/1/2023 09:07	0.0	0.3	20.9	78.8	N/A	
Calibration	3/1/2023 09:23	15.0	15.0	0.0	70.0	N/A	
Calibration	3/1/2023 09:25	0.0	0.1	11.0	88.9	N/A	
Calibration	3/1/2023 12:54	15.0	15.0	0.0	70.0	N/A	

Table 1. Oaks Landfill - Monitoring Probes Data - 1st Quarter 2023

Point Name	Record Date	CH4 (% by vol)	CO2 (% by vol)	O2 (% by vol)	Bal Gas (% by vol)	Rel Press ("H2O)	Comments
Calibration	3/1/2023 12:57	0.0	0.0	11.0	89.0	N/A	
Technicain/Weather							
Field Technician	**Record Date**	**Ambient Temp**	**Barometric Pressure**	**Wind Speed**	**Wind Direction**	**General Weather**	
KS (KILE SCOTT)	3/1/2023	58	29.24	6	NW	Light wind	

SCS FIELD SERVICES DAILY LOG

JOB NO.	07222103.00	**TASK NO.**	00001	**DATE**	03/01/2023	**PROJECT NAME**	Oaks
TEMP	58 ºF	**WEATHER**	Clear	**B.P.**	30.14 inHg	**WIND**	6 mph @ NW

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)	02 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 sump pumping, blower/flare check, and monthly probe monitoring

Blower/Flare data	Blower inlet (°F)	Blower outlet (°F)	Flare flow (scfm)	Flare (°F)	Blower amps (amps)
Initial	49	71	742.1	583	26.6

Assisted in pumping of CT sump 4

Performed a blower/flare check

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

Measured blower inlet/outlet bearing temperatures for the weekly checklist

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** 03/14/2023 **PROJECT NAME** OAKS

TEMP 39 Degrees F **WEATHER** Cloudy **B.P.** 29.84 R **WIND** N @ 20 mph

SCS-FS LABOR	HOURS	OT		HOURS	OT
William Jacks	3				
			DAILY TOTAL		

EQUIP, SVCS, , MLG	QTY	UNITS		QTY	UNITS
ATV					
TOOL TRUCK	1				
Sensit Gas Detector	1				

INSTRUMENT CALIBRATION (CAL. GAS)		CH4 (%-VOL)	CH4 (%-LEL)	02 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 office building had a standing base line on 80 ppm and 0.1% LEL throughout, with slight increases in offices.

Highest detection was in the men's restroom, peaking at 140 ppm and 0.2% LEL.

Levels are below any corrective level and no further action is needed.

PREPARED BY: William Jacks ACCEPTED BY: _____

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