

Annex G2

# Landfill Gas Monitoring Results

**Table G2.1 Landfill Gas Monitoring Results at Perimeter LFG Monitoring Wells (October 2022)**

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	4.69	0.0	1.0	14.8
LFG2	3.77	0.0	2.1	15.1
LFG3	3.62	0.0	1.8	13.5
LFG4	3.77	0.0	0.0	18.8
LFG5	3.49	0.0	0.2	8.3
LFG6	3.81	0.0	0.9	13.2
LFG7	3.38	0.0	0.0	17.7
LFG8	3.46	0.0	0.0	19.6
LFG9	3.60	0.0	0.2	8.7
LFG10	3.80	0.0	0.0	19.4
LFG11	3.47	0.0	0.2	9.4
LFG12	3.60	0.0	0.0	19.7
LFG13	4.10	24.1	0.0	3.9
LFG14	5.10	0.0	0.1	19.5
LFG15	4.97	0.0	0.0	17.1
LFG16	4.55	0.0	0.0	18.6
LFG17	4.82	0.0	0.0	17.5
LFG18	3.90	0.0	0.0	18.9
LFG19	3.76	0.0	0.0	18.8
LFG20	3.95	0.0	0.0	19.1
LFG21	5.39	0.0	0.0	19.7
LFG22	6.72	0.0	0.0	19.3
LFG23	14.65	0.0	4.0	15.0
LFG24	25.97	0.0	0.0	18.1
GP1	Probe bent	0.0	7.1	10.2
GP2 (shallow)	Probe broken		Unmeasurable due to broken probe	
GP2 (deep)	Probe broken		Unmeasurable due to broken probe	
GP3 (shallow)	Probe bent	0.0	0.4	18.8
GP3 (deep)	Probe bent	0.0	0.1	19.3
GP4 (shallow)	Probe bent	0.0	0.2	19.1
GP4 (deep)	Probe bent	0.0	0.1	19.2
GP5 (shallow)	Probe bent	0.0	7.6	14.0
GP5 (deep)	12.92	0.0	0.0	19.2
GP6	10.03	0.0	6.0	12.0
GP7	2.40	0.0	0.3	18.3
GP12	Probe bent	0.1	0.1	19.3
GP15	3.67	0.2	0.0	19.8
P7	3.21	0.1	0.0	19.5
P8	2.89	0.2	0.0	19.8
P9	2.88	0.2	0.0	20.1

**Table G2.2 Landfill Gas Monitoring Results at Perimeter LFG Monitoring Wells  
(November 2022)**

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.58	0.0	0.4	19.1
LFG2	2.47	0.0	1.2	19.1
LFG3	2.54	0.1	0.1	21.2
LFG4	2.5	0.0	0.1	21.2
LFG5	3.44	0.0	0.3	9.3
LFG6	2.49	0.0	0.1	21.1
LFG7	2.77	0.0	0.0	18.5
LFG8	2.7	0.0	0.1	21.3
LFG9	2.75	0.0	0.3	7.4
LFG10	2.41	0.0	0.0	21.4
LFG11	2.11	0.0	0.5	2.8
LFG12	2.56	0.0	0.0	21.4
LFG13	2.27	10.6	0.0	12.2
LFG14	2.06	0.0	0.2	12.8
LFG15	4.46	0.1	0.1	19.7
LFG16	2.62	0.1	0.1	20.9
LFG17	2.96	0.0	0.1	20.5
LFG18	2.95	0.0	0.1	20.4
LFG19	3.07	0.0	0.2	8.3
LFG20	2.99	0.0	0.8	19.6
LFG21	3.1	0.0	3.0	14.5
LFG22	2.77	0.0	2.3	12.3
LFG23	12.52	0.0	1.9	19.6
LFG24	6.36	0.0	0.5	20.1
GP1	Probe bent	0.0	6.4	13.4
GP2 (shallow)	Probe bent	0.0	0.5	19.6
GP2 (deep)	Probe bent	0.0	5.3	13.6
GP3 (shallow)	Probe bent	0.0	0.3	20.5
GP3 (deep)	Probe bent	0.0	0.2	20.6
GP4 (shallow)	Probe bent	0.0	0.2	20.6
GP4 (deep)	Probe bent	0.0	0.1	20.6
GP5 (shallow)	Probe bent	0.0	7.1	16.2
GP5 (deep)	38.81	0.0	0.0	20.7
GP6	36.18	0.0	2.8	17.5
GP7	36.24	0.0	0.0	20.8
GP12	2.01	0.0	0.1	21.1
GP15	2.55	0.0	0.1	21.0
P7	2.51	0.0	0.1	20.8
P8	2.64	0.0	0.1	21.0
P9	2.5	0.0	0.3	20.8

**Table G2.3 Landfill Gas Monitoring Results at Perimeter LFG Monitoring Wells  
(December 2022)**

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.58	0.0	0.0	20.6
LFG2	2.47	0.0	0.0	20.6
LFG3	2.54	0.0	0.0	20.7
LFG4	2.5	0.0	0.0	20.6
LFG5	3.44	0.0	0.2	13.6
LFG6	2.49	0.0	0.0	20.6
LFG7	2.77	0.0	0.0	20.6
LFG8	2.7	0.0	0.0	20.6
LFG9	2.75	0.0	0.0	20.5
LFG10	2.41	0.0	0.0	20.4
LFG11	2.11	0.0	0.1	10.6
LFG12	2.56	0.0	0.0	20.4
LFG13	2.27	1.6	0.1	16.6
LFG14	2.06	0.0	0.0	20.1
LFG15	4.46	0.0	0.1	19.7
LFG16	2.62	0.0	0.1	20.3
LFG17	2.96	0.0	0.1	20.3
LFG18	2.95	0.0	0.1	20.4
LFG19	3.07	0.0	0.1	20.2
LFG20	2.99	0.0	0.1	20.4
LFG21	3.1	0.0	0.1	20.4
LFG22	2.77	0.0	0.1	20.6
LFG23	12.52	0.0	4.7	15.1
LFG24	6.36	0.0	0.2	20.3
GP1	Probe bent	0.2	6.0	14.6
GP2 (shallow)	Probe bent	0.1	1.2	17.8
GP2 (deep)	Probe bent	0.1	8.0	9.6
GP3 (shallow)	Probe bent	0.1	0.6	19.7
GP3 (deep)	Probe bent	0.0	0.3	20.3
GP4 (shallow)	Probe bent	0.0	1.1	19.5
GP4 (deep)	Probe bent	0.1	0.1	20.5
GP5 (shallow)	Probe bent	0.0	5.5	16.8
GP5 (deep)	38.81	0.0	0.1	20.6
GP6	36.18	0.0	6.5	13.1
GP7	36.24	0.0	0.1	20.7
GP12	2.01	0.0	0.0	20.6
GP15	2.55	0.0	0.1	20.7
P7	2.51	0.0	0.0	20.6
P8	2.64	0.0	0.0	20.6
P9	2.5	0.0	0.1	20.6

**Table G2.4 Landfill Gas Monitoring Results at Service Voids, Utilities Pits and Manholes (October 2022)**

<b>Location</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
UU01	0.0	0.0	19.6
UU02	0.0	0.0	19.6
UU03	0.0	0.0	19.6
UU04	0.0	0.0	19.5
UU05	0.0	0.0	19.4
UU06	0.0	0.0	19.4
UU07	0.1	0.0	19.9
UU08	0.0	0.0	19.8
UU09	0.0	0.0	19.6
UU10	0.0	0.0	19.4
UU11	0.0	0.0	18.3
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	19.8
UU14	0.0	0.0	19.8
UU15	0.0	0.0	19.8
UU16	0.0	0.0	19.9
UU17	Voided due to latest site programme and on-going operation work		
UU18	0.0	0.0	20.1
UU19	0.1	0.0	19.4
UU20	0.0	0.0	18.6
UU21	0.0	0.0	18.8
UU22	0.0	0.0	19.3
UU23	0.0	0.0	19.7
UU24	0.0	0.0	19.1
UU25	0.0	0.0	19.2
UU26	0.0	0.0	19.4
UU27	0.0	0.0	18.7
UU28	0.0	0.0	19.1

**Table G2.5 Landfill Gas Monitoring Results at Service Voids, Utilities Pits and Manholes (November 2022)**

<b>Location</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
UU01	0.0	0.0	20.9
UU02	0.0	0.0	20.9
UU03	0.1	0.0	20.8
UU04	0.1	0.0	20.8
UU05	Unmeasurable due to overflow of water		
UU06	0.2	0.0	20.6
UU07	0.1	0.0	20.9
UU08	0.2	0.0	20.6
UU09	Inaccessible due to on-going construction work		
UU10	0.0	0.0	20.3
UU11	0.0	0.0	20.6
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	20.3	79.7
UU14	0.0	20.4	79.5
UU15	0.0	20.4	79.6
UU16	0.0	20.3	79.7
UU17	Voided due to latest site programme and on-going operation work		
UU18	0.0	20.3	79.6
UU19	0.0	20.9	79.0
UU20	0.0	20.6	79.4
UU21	0.0	20.6	79.4
UU22	0.0	20.5	79.5
UU23	0.0	20.5	79.5
UU24	0.0	20.1	79.8
UU25	0.0	20.1	79.8
UU26	Inaccessible due to on-going construction work		
UU27	0.0	20.6	79.4
UU28	0.0	20.5	79.4

**Table G2.6 Landfill Gas Monitoring Results at Service Voids, Utilities Pits and Manholes (December 2022)**

<b>Location</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
UU01	0.0	0.0	20.2
UU02	0.0	0.0	20.2
UU03	0.0	0.0	20.1
UU04	0.0	0.0	20.2
UU05	0.0	0.0	20.4
UU06	0.0	0.0	20.3
UU07	0.0	0.0	20.0
UU08	0.0	0.0	20.2
UU09	0.0	0.0	19.9
UU10	0.0	0.0	19.9
UU11	0.0	0.0	20.0
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	20.0
UU14	0.0	0.0	19.9
UU15	0.0	0.0	19.9
UU16	0.0	0.1	20.2
UU17	Voided due to latest site programme and on-going operation work		
UU18	Inaccessible due to on-going construction work		
UU19	0.0	0.0	20.0
UU20	0.0	0.1	20.2
UU21	0.0	0.1	20.1
UU22	0.0	0.1	20.1
UU23	0.0	0.1	20.1
UU24	0.1	0.1	20.4
UU25	0.1	0.1	20.5
UU26	0.1	0.1	20.3
UU27	0.2	0.1	20.6
UU28	0.1	0.1	20.5

**Table G2.7 Landfill Gas Bulk Gas Sampling Monitoring Results**

Parameters	LFG1	LFG8
Methane (% (v/v))	<0.0200	<0.020
Carbon Dioxide (% (v/v))	0.419	0.138
Oxygen (% (v/v))	15.6	17.2
Nitrogen (% (v/v))	80.6	79.2
Carbon Monoxide (% (v/v))	<0.020	<0.020
Hydrogen (% (v/v))	<0.020	<0.020
Ethane (ppmv)	<1.0	<1.0
Propane (ppmv)	<1.0	<1.0
Butane (ppmv)	<1.0	<1.0

**Table G2.8 Flammable Gas Surface Emission Monitoring Results**

Time	GPS Coordinates Latitude (N) Longitude (E)	Weather Condition	Temperature (°C)	Wind Direction (Deg)	Wind Speed (m/s)	Monitoring Results (ppm)	
14:54	22°16'26"	114°16'35"	Sunny	26.4	146	0.9	25
16:01	22°16'26"	114°16'34"	Sunny	25.8	185	1.7	11