



ANNEX G2

LANDFILL GAS MONITORING RESULTS

**TABLE G2.1 LANDFILL GAS MONITORING RESULTS AT PERIMETER LFG MONITORING WELLS (JULY 2024)**

<b>Location</b>	<b>Water Level (mPD)</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
LFG1	2.93	0.3	1.5	17.5
LFG2	2.9	0.4	0.0	20.7
LFG3	2.83	0.1	0.0	19.5
LFG4	3.07	0.1	0.0	19.6
LFG5	3.29	0.4	0.1	13.1
LFG6	2.63	0.1	0.0	19.7
LFG7	2.81	0.0	0.0	19.4
LFG8	2.84	0.0	0.0	19.7
LFG9	2.91	0.0	0.0	19.9
LFG10	2.49	0.0	0.0	18.8
LFG11	3.29	0.0	0.0	19.7
LFG12	2.78	0.0	0.0	19.6
LFG13	2.68	0.0	0.0	19.6
LFG14	2.99	0.0	0.0	19.3
LFG15	2.89	0.0	0.0	19.4
LFG16	3.69	0.0	0.3	18.5
LFG17	2.98	0.0	0.0	19.3
LFG18	4.24	0.0	0.1	19.1
LFG19	4.23	0.0	0.0	19.3
LFG20	4.50	0.0	0.0	19.1
LFG21	4.16	0.0	0.0	19.3
LFG22	3.70	0.0	0.0	19.2
LFG23	12.88	0.0	0.0	18.9
LFG24	6.81	0.0	0.0	18.9
GP1	Probe Bent	0.0	7.7	6.2
GP2 (shallow)	Probe Bent	0.0	0.2	19.6
GP2 (deep)	Probe Bent	0.0	0.1	19.8
GP3 (shallow)	Probe Bent	0.0	0.6	19.1
GP3 (deep)	Probe Bent	0.0	0.3	19.2
GP4 (shallow)	Probe Bent	0.0	0.1	16.8
GP4 (deep)	Probe Bent	0.0	0.4	18.0
GP5 (shallow)	Probe Bent	0.0	0.0	18.0
GP5 (deep)	40.47	0.0	0.1	18.9
GP6	39.34	0.0	1.5	16.9

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.72	0.0	0.9	17.7
GP12	2.35	0.3	0.0	20.1
GP15	2.68	0.2	0.1	19.5
P7	2.72	0.2	0.0	19.8
P8 (a)	N/A	N/A	N/A	N/A
P9	2.6	0.2	0.0	19.3

**Note:**

(a) The Monitoring well P8 was under maintenance.

**TABLE G2.2 LANDFILL GAS MONITORING RESULTS AT PERIMETER LFG MONITORING WELLS (AUGUST 2024)**

<b>Location</b>	<b>Water Level (mPD)</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
LFG1	3.07	0.2	1.7	16.2
LFG2	2.83	0.2	1.0	18.8
LFG3	3.14	0.2	0.1	18.0
LFG4	3.24	0.1	0.0	19.8
LFG5	2.91	0.1	0.1	18.9
LFG6	2.86	0.1	0.2	18.3
LFG7	3.61	0.0	0.0	18.6
LFG8	3.01	0.0	0.1	19.5
LFG9	3.24	0.0	0.0	19.8
LFG10	3.41	0.0	0.0	20.0
LFG11	4.03	0.0	0.0	20.0
LFG12	3.03	0.0	0.0	20.0
LFG13	2.65	0.0	0.0	20.2
LFG14	2.86	0.3	0.0	20.3
LFG15	2.61	0.3	0.5	17.8
LFG16	3.1	0.0	0.5	17.6
LFG17	3.22	1.1	2.8	2.7
LFG18	5.41	0.0	0.2	19.2
LFG19	4.31	0.0	0.0	19.3
LFG20	4.36	0.0	0.0	19.0
LFG21	4.14	0.0	0.0	19.6
LFG22	3.82	0.0	0.0	19.5
LFG23	12.94	0.0	0.0	19.4
LFG24	6.91	0.0	0.0	19.5
GP1	Probe Bent	0.1	7.3	4.4
GP2 (shallow)	Probe Bent	0.0	0.6	18.9
GP2 (deep)	Probe Bent	0.0	0.1	19.7
GP3 (shallow)	Probe Bent	0.0	0.2	19.6
GP3 (deep)	Probe Bent	0.0	0.2	19.5
GP4 (shallow)	Probe Bent	0.0	0.9	18.8
GP4 (deep)	Probe Bent	0.0	0.5	19.4
GP5 (shallow)	Probe Bent	0.0	8.4	18.6
GP5 (deep)	42.57	0.0	0.1	19.5
GP6	40.32	0.0	1.6	17.1

<b>Location</b>	<b>Water Level (mPD)</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
GP7	36.88	0.0	0.3	18.5
GP12	2.49	0.0	0.2	18.8
GP15	3.43	0.1	0.0	19.5
P7	2.9	0.0	0.2	18.7
P8	3.17	0.2	0.1	19.4
P9	3.02	0.1	0.0	19.4

**TABLE G2.3 LANDFILL GAS MONITORING RESULTS AT PERIMETER LFG MONITORING WELLS  
(SEPTEMBER 2024)**

<b>Location</b>	<b>Water Level (mPD)</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
LFG1	3.21	0.0	1.5	14.3
LFG2	2.97	0.0	1.3	18.0
LFG3	3.14	0.0	0.3	19.4
LFG4	2.84	0.0	0.0	19.7
LFG5	2.17	0.0	0.1	19.9
LFG6	2.92	0.0	0.5	15.9
LFG7	3.31	0.0	0.1	17.9
LFG8	3.36	0.0	0.1	18.1
LFG9	3.12	0.0	0.2	8.7
LFG10	3.04	0.0	0.2	10.1
LFG11	3.57	0.0	0.2	11.5
LFG12	3.06	0.0	0.0	19.4
LFG13	2.96	10.1	0.0	19.1
LFG14	2.69	0.0	0.1	18.2
LFG15	2.91	0.0	1.2	7.6
LFG16	3.15	0.0	0.0	19.1
LFG17	3.43	0.0	0.1	19.1
LFG18	4.75	0.0	0.3	16.6
LFG19	5.16	0.0	0.5	10.4
LFG20	5.63	0.0	0.4	18.5
LFG21	4.83	0.0	0.2	19.6
LFG22 <sup>(a)</sup>	N/A	N/A	N/A	N/A
LFG23	12.93	0.0	0.0	19.6
LFG24	6.96	0.0	0.0	19.4
GP1	Probe Bent	0.0	1.0	17.4
GP2 (shallow)	Probe Bent	0.0	0.6	19.1
GP2 (deep)	Probe Bent	0.0	0.9	18.5
GP3 (shallow)	Probe Bent	0.0	1.3	16.5
GP3 (deep)	Probe Bent	0.0	0.1	19.4
GP4 (shallow)	Probe Bent	0.0	0.4	19.2
GP4 (deep)	Probe Bent	0.0	1.1	18.4
GP5 (shallow)	Probe Bent	0.0	10.1	19.5
GP5 (deep)	41.85	0.0	0.5	18.9
GP6 <sup>(b)</sup>	N/A	N/A	N/A	N/A

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	37.27	0.0	1.5	17.4
GP12	2.56	0.0	0.3	19.8
GP15	2.88	0.0	0.0	20.1
P7	2.94	0.0	0.0	19.9
P8	3.16	0.0	0.1	19.9
P9	2.64	0.0	0.0	20.0

**Note:**

- (a) Monitoring well LFG22 is not accessible due to the landscape reparation work.
- (b) Monitoring well GP6 is under maintenance.

**TABLE G2.4 LANDFILL GAS MONITORING AT SERVICE VOIDS, UTILITIES PITS AND MANHOLE (JULY 2024)**

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



**TABLE G2.5 LANDFILL GAS MONITORING AT SERVICE VOIDS, UTILITIES PITS AND MANHOLE (AUGUST 2024)**

<b>Location</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
UU01	0.0	0.0	19.8
UU02	0.0	0.0	19.8
UU03	Voided due to latest site programme and on-going operation work		
UU04	0.0	0.0	19.7
UU05	0.0	0.0	19.7
UU06	0.0	0.0	19.7
UU07	0.0	0.0	19.7
UU08	0.0	0.0	19.6
UU09	0.1	0.0	19.7
UU10	0.1	0.0	19.7
UU11	0.1	0.0	19.7
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.1	0.1	19.7
UU14	0.1	0.1	19.8
UU15	0.1	0.0	19.7
UU16	0.1	0.0	19.6
UU17	Voided due to latest site programme and on-going operation work		
UU18	Voided due to latest site programme and on-going operation work		
UU19	Voided due to latest site programme and on-going operation work		
UU20	0.1	0.0	19.5
UU21	0.1	0.0	19.4
UU22	0.1	0.0	19.4
UU23	0.1	0.0	19.3
UU24	0.1	0.0	19.2
UU25	0.0	0.0	19.2
UU26	0.0	0.0	19.1
UU27	0.0	0.0	19.0
UU28	0.0	0.0	18.9

**TABLE G2.6 LANDFILL GAS MONITORING AT SERVICE VOIDS, UTILITIES PITS AND MANHOLE (SEPTEMBER 2024)**

<b>Location</b>	<b>Methane (% (v/v))</b>	<b>Carbon Dioxide (% (v/v))</b>	<b>Oxygen (% (v/v))</b>
UU01	0.0	0.0	19.4
UU02	0.0	0.0	19.9
UU03	Voided due to latest site programme and on-going operation work		
UU04	Voided due to latest site programme and on-going operation work		
UU05	0.0	0.0	19.7
UU06	Not accessible due to the safety consideration		
UU07	0.0	0.1	19.3
UU08	0.0	0.1	18
UU09	0.0	0.0	19.6
UU10	0.0	0.0	19.5
UU11	0.0	0.0	19.6
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	19.6
UU14	0.0	0.0	19.6
UU15	0.0	0.0	19.6
UU16	0.0	0.0	19.7
UU17	Voided due to latest site programme and on-going operation work		
UU18	Voided due to latest site programme and on-going operation work		
UU19	Voided due to latest site programme and on-going operation work		
UU20	0.0	0.0	19.7
UU21	0.0	0.0	19.7
UU22	0.0	0.0	19.7
UU23	0.0	0.0	19.7
UU24	0.0	0.0	19.7
UU25	0.0	0.0	19.7
UU26	0.0	0.0	19.7
UU27	0.0	0.0	19.7
UU28	0.0	0.0	19.8

**TABLE G2.7 LANDFILL GAS BULK GAS SAMPLING MONITORING RESULTS**

Parameters	LFG2	LFG8
Methane (% (v/v))	<0.020	<0.020
Carbon Dioxide (% (v/v))	1.14	0.16
Oxygen (% (v/v))	19.2	20.1
Nitrogen (% (v/v))	79.5	76.9
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)
13:47	22°16'34"	114°16'27"	Sunny	31.9	139	1.6	23
14:04	22°16'32"	114°16'44"	Sunny	33.2	122	0.6	28
14:08	22°16'32"	114°16'42"	Sunny	33.0	101	0.8	23
14:10	22°16'33"	114°16'41"	Sunny	32.9	124	2.5	21
14:15	22°16'34"	114°16'37"	Sunny	32.8	297	0.5	16
14:18	22°16'30"	114°16'36"	Sunny	32.2	233	2.6	7
14:23	22°16'26"	114°16'35"	Sunny	32.7	168	1.9	7
14:32	22°16'26"	114°16'26"	Sunny	32.2	173	1.9	7
14:36	22°16'21"	114°16'26"	Sunny	31.2	138	2.0	8
14:54	22°16'17"	114°16'37"	Sunny	31.9	245	1.2	13
15:07	22°16'16"	114°16'30"	Sunny	31.3	072	1.9	25