



ANNEX G2

LANDFILL GAS MONITORING RESULTS

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	3.03	0.2	1.7	18.0
LFG2	3.19	0.2	1.1	19.2
LFG3	3.15	0.1	0.1	18.6
LFG4	3.03	0.1	0.0	19.7
LFG5	3.41	0.1	0.2	11.3
LFG6	3.03	0.1	0.1	19.7
LFG7	3.37	0.1	0.1	18.4
LFG8	3.21	0.1	0.0	20.0
LFG9	3.15	0.1	0.0	20.0
LFG10	3.19	0.1	0.0	20.0
LFG11	3.3	0.1	0.0	20.0
LFG12	3.23	0.1	0.0	19.8
LFG13	2.81	0.1	0.0	19.9
LFG14	3.34	0.1	0.1	20.0
LFG15	3.11	0.1	0.2	19.2
LFG16	3.38	0.1	0.9	17.8
LFG17	3.77	0.1	2.0	8.7
LFG18	4.43	0.1	0.2	19.8
LFG19	4.51	0.1	0.0	20.3
LFG20	4.63	0.1	0.0	20.2
LFG21 ^(a)	N/A	N/A	N/A	N/A
LFG22 ^(a)	N/A	N/A	N/A	N/A
LFG23	13	0.1	0.0	20.3
LFG24	7.16	0.1	0.0	20.3
GP1	Probe Bent	0.1	0.1	0.5
GP2 (shallow)	Probe Bent	0.1	0.6	15.9
GP2 (deep)	Probe Bent	0.1	0.2	19.9
GP3 (shallow)	Probe Bent	0.1	1.0	18.9
GP3 (deep)	Probe Bent	0.1	0.2	20.0
GP4 (shallow)	Probe Bent	0.1	0.5	19.8
GP4 (deep)	Probe Bent	0.1	1.3	18.5
GP5 (shallow)	Probe Bent	0.1	8.9	12.9
GP5 (deep)	42.98	0.1	0.1	20.2
GP6 ^(b)	N/A	N/A	N/A	N/A

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.97	0.1	1.2	18.8
GP12	2.62	0.2	0.5	19.6
GP15	2.92	0.2	0.0	19.9
P7	2.94	0.2	0.1	20.0
P8	3.06	0.2	0.1	19.9
P9	2.95	0.2	0.0	19.8

Note:

- (a) Monitoring well LFG21 and LFG22 are not accessible due to the landscape reparation work.
(b) Monitoring well GP6 is under maintenance.

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.68	0.0	0.8	17.1
LFG2	2.77	0.0	0.7	18.7
LFG3	2.95	0.0	0.0	20.0
LFG4	2.64	0.0	0.0	20.2
LFG5	3.26	0.0	0.1	18.1
LFG6	2.53	0.0	0.1	20.1
LFG7	2.94	0.0	0.0	19.9
LFG8	2.7	0.0	0.1	19.7
LFG9	2.72	0.0	0.0	19.9
LFG10	2.73	0.0	0.0	19.9
LFG11	2.75	0.0	0.0	19.9
LFG12	3.28	0.0	0.7	16.2
LFG13	2.49	13.0	0.2	5.8
LFG14	2.63	0.0	0.1	19.8
LFG15	2.61	0.0	0.1	20.2
LFG16	3.14	0.0	1.6	14.8
LFG17	3.03	0.0	1.6	9.9
LFG18	3.71	0.0	2.0	16.3
LFG19	4.08	0.0	0.1	20.2
LFG20	4.17	0.0	0.1	20.2
LFG21 ^(a)	N/A	N/A	N/A	N/A
LFG22 ^(a)	N/A	N/A	N/A	N/A
LFG23	12.7	0.0	0.0	20.4
LFG24	6.58	0.0	0.0	20.3
GP1	Probe Bent	0.3	7.9	9.6
GP2 (shallow)	Probe Bent	0.3	0.6	19.3
GP2 (deep)	Probe Bent	0.3	0.9	18.6
GP3 (shallow)	Probe Bent	0.2	0.4	19.2
GP3 (deep)	Probe Bent	0.2	0.1	19.7
GP4 (shallow)	Probe Bent	0.1	0.5	19.1
GP4 (deep)	Probe Bent	0.1	0.4	19.2
GP5 (shallow)	Probe Bent	0.1	3.8	16.8
GP5 (deep)	39.33	0.1	0.1	19.5
GP6	38.08	0.1	2.1	15.6

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.34	0.0	0.1	19.5
GP12	2.15	0.0	0.1	19.9
GP15	2.71	0.0	0.0	20.0
P7	2.71	0.0	0.0	20.0
P8	2.68	0.0	0.0	20.0
P9	2.64	0.0	0.0	20.0

Note:

(a) Monitoring well LFG21 and LFG22 are not accessible due to safety considerations.

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.92	0.0	0.9	17.6
LFG2	2.78	0.0	0.4	19.7
LFG3	3.24	0.0	1.6	18.0
LFG4	2.44	0.0	0.1	20.3
LFG5	3.03	0.0	0.2	16.2
LFG6	2.72	0.0	0.1	20.2
LFG7	2.99	0.0	0.1	20.4
LFG8	2.74	0.0	0.1	20.4
LFG9	2.86	0.0	0.2	18.2
LFG10	2.71	0.0	0.1	20.4
LFG11	2.9	0.0	0.2	18.5
LFG12	2.63	0.0	0.1	20.4
LFG13	2.3	11.0	0.4	8.6
LFG14	2.43	0.0	0.1	20.2
LFG15	2.56	0.0	0.2	20.1
LFG16	N/A ^(a)	0.0	0.2	20.2
LFG17	2.92	0.0	0.1	20.1
LFG18	3.48	0.0	2.0	18.4
LFG19	3.67	0.0	0.2	20.3
LFG20	4.04	0.0	0.3	20.0
LFG21 ^(b)	N/A	N/A	N/A	N/A
LFG22 ^(b)	N/A	N/A	N/A	N/A
LFG23	12.32	0.0	0.1	21.1
LFG24	6.84	0.1	0.1	20.8
GP1	Probe Bent	0.1	3.2	16.1
GP2 (shallow)	Probe Bent	0.1	0.5	20.5
GP2 (deep)	Probe Bent	0.1	1.2	18.5
GP3 (shallow)	Probe Bent	0.1	0.1	20.4
GP3 (deep)	Probe Bent	0.1	0.1	20.4
GP4 (shallow)	Probe Bent	0.1	1.1	19.2
GP4 (deep)	Probe Bent	0.1	0.8	19.8
GP5 (shallow)	Probe Bent	0.1	6.0	18.1
GP5 (deep)	39.48	0.1	0.1	20.6
GP6	37.16	0.1	0.8	18.8

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.46	0.1	1.2	19.6
GP12	2.66	0.0	0.1	20.0
GP15	2.69	0.0	0.2	20.2
P7	2.78	0.0	0.2	19.8
P8	2.71	0.0	0.2	20.1
P9	2.87	0.0	0.1	20.2

Note:

- (a) The dip level of Monitoring well LFG16 could not be measured due to thick grass layer.
- (b) Monitoring well LFG21 and LFG22 are not accessible due to safety considerations.

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.2	0.0	19.9
UU02	0.1	0.1	19.6
UU03	Voided due to latest site programme and on-going operation work		
UU04	0.1	0.0	19.9
UU05	0.1	0.0	19.9
UU06	0.1	0.0	20.0
UU07	0.1	0.0	20.0
UU08	0.1	0.0	20.0
UU09	0.1	0.0	20.0
UU10	0.1	0.0	19.9
UU11	0.1	0.0	20.0
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.1	0.0	20.0
UU14	0.1	0.0	19.9
UU15	0.1	0.0	20.0
UU16	0.1	0.0	20.0
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	20.0
UU21	0.1	0.0	19.9
UU22	0.1	0.0	19.9
UU23	0.1	0.0	19.9
UU24	0.1	0.0	19.9
UU25	0.1	0.0	20.0
UU26	0.1	0.0	20.0
UU27	0.1	0.0	20.0
UU28	0.1	0.0	20.1

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.0	19.2
UU02	0.0	0.0	20.0
UU03	Voided due to latest site programme and on-going operation work		
UU04	0.0	0.0	20.1
UU05	0.0	0.0	20.4
UU06	0.0	0.0	20.4
UU07	0.0	0.0	20.2
UU08	0.0	0.0	20.4
UU09	0.0	0.0	20.3
UU10	0.0	0.0	20.4
UU11	0.0	0.0	20.3
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	20.3
UU14	0.0	0.0	20.3
UU15	0.0	0.0	20.3
UU16	0.0	0.0	20.3
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	20.3
UU21	0.0	0.0	20.3
UU22	0.0	0.0	20.2
UU23	0.0	0.0	20.2
UU24	0.0	0.0	20.2
UU25	0.0	0.0	20.2
UU26	0.0	0.0	20.2
UU27	0.0	0.0	20.2
UU28	0.0	0.0	20.4

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.1	20.2
UU02	0.0	0.1	20.1
UU03	Voided due to latest site programme and on-going operation work		
UU04	0.0	0.1	20.1
UU05	0.0	0.1	20.4
UU06	0.0	0.1	20.4
UU07	0.0	0.1	20.4
UU08	0.0	0.1	20.4
UU09	0.0	0.1	21.1
UU10	0.0	0.1	21.1
UU11	0.0	0.1	21.1
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.1	21.1
UU14	0.0	0.1	21.1
UU15	0.1	0.1	20.9
UU16	0.0	0.1	20.9
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	0.1	20.8
UU21	0.0	0.1	20.8
UU22	0.0	0.1	20.8
UU23	0.0	0.1	20.8
UU24	0.0	0.1	20.8
UU25	0.0	0.1	20.8
UU26	0.0	0.1	20.8
UU27	0.0	0.1	20.8
UU28	0.0	0.1	20.9

TABLE G2.7 LANDFILL GAS BULK GAS SAMPLING MONITORING RESULTS

Parameters	LFG4	LFG6
Methane (% (v/v))	<0.020	<0.020
Carbon Dioxide (% (v/v))	0.063	0.128
Oxygen (% (v/v))	20.5	20.3
Nitrogen (% (v/v))	76.4	76.5
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)
11:32	22°16'32"	114°16'44"	Cloudy	24.7	253	1.6	18
11:36	22°16'33"	114°16'41"	Cloudy	24.7	302	0.9	12
11:39	22°16'33"	114°16'37"	Cloudy	24.1	070	3.4	13
11:43	22°16'28"	114°16'35"	Cloudy	24.7	042	2.5	7
11:49	22°16'21"	114°16'37"	Cloudy	24.5	357	2.4	8
11:59	22°16'17"	114°16'33"	Cloudy	25.2	323	1.5	10