



ANNEX G2

LANDFILL GAS MONITORING RESULTS

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.41	0.1	0.6	17.1
LFG2	3.19	0.1	0.4	19.9
LFG3	2.51	0.1	0.1	18.0
LFG4	2.22	0.1	0.1	19.2
LFG5	2.47	0.1	0.5	10.2
LFG6	2.2	0.1	0.3	19.1
LFG7	2.31	0.1	0.0	15.9
LFG8	2.12	0.1	0.1	18.8
LFG9	2.30	0.1	0.2	13.8
LFG10	1.92	0.1	0.1	18.6
LFG11	2.1	0.1	0.1	5.2
LFG12	1.84	0.1	0.1	18.2
LFG13	1.84	16.5	0.4	3.9
LFG14	1.81	0.1	0.1	17.7
LFG15	2.22	0.5	1.0	15.9
LFG16	2.11	0.0	0.1	18.9
LFG17	2.28	0.0	0.2	16.6
LFG18	2.43	0.0	0.7	15.3
LFG19	2.59	0.0	0.1	19.1
LFG20	2.54	0.0	0.5	17.7
LFG21	2.54	0.0	0.1	18.9
LFG22	2.47	0.0	0.1	18.8
LFG23	12.6	0.0	0.1	18.7
LFG24	5.71	0.0	0.1	18.9
GP1	Probe Bent	0.0	0.3	20.5
GP2 (shallow)	Probe Bent	0.0	1.4	17.5
GP2 (deep)	Probe Bent	0.0	0.1	20.2
GP3 (shallow)	Probe Bent	0.0	0.1	19.9
GP3 (deep)	Probe Bent	0.0	0.1	19.6
GP4 (shallow)	Probe Bent	0.0	0.5	18.9
GP4 (deep)	Probe Bent	0.0	0.2	18.9
GP5 (shallow)	Probe Bent	0.0	0.4	18.4
GP5 (deep)	37.62	0.0	0.1	18.6
GP6	35.83	0.0	0.9	17.2

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	35.47	0.0	0.1	18.8
GP12	1.9	0.1	0.1	20.2
GP15	2.21	0.1	0.0	19.1
P7	2.32	0.1	0.2	19.3
P8	2.48	0.1	0.1	19.3
P9	2.24	0.1	0.6	19.1

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	3.39	0.1	0.6	14.2
LFG2	3.38	0.1	0.7	20.9
LFG3	3.28	0.1	3.8	6.4
LFG4	2.77	0.1	1.7	3.6
LFG5	3.26	0.1	0.3	1.7
LFG6	3.05	0.1	0.4	19.4
LFG7	3.66	0.1	0.1	18.8
LFG8	4.26	0.1	0.1	20.0
LFG9	3.34	0.9	0.1	16.9
LFG10	3.31	1.3	0.2	9.2
LFG11	3.67	0.1	0.0	20.0
LFG12	3.27	0.3	0.0	20.1
LFG13	2.90	0.1	0.0	20.7
LFG14	2.79	0.3	0.0	20.5
LFG15	2.93	10.8	0.1	9.2
LFG16	3.74	0.1	0.1	20.2
LFG17	2.96	10.8	0.3	1.2
LFG18	3.97	0.1	0.1	20.4
LFG19	4.89	0.1	0.1	20.4
LFG20 ^(a)	N/A	N/A	N/A	N/A
LFG21	4.46	0.0	0.1	20.3
LFG22	4.4	0.0	0.1	20.3
LFG23	23.25	0.0	0.1	20.1
LFG24	6.32	0.0	0.1	20.1
GP1	Probe Bent	0.0	7.6	9.6
GP2 (shallow)	Probe Bent	0.0	1.1	18.0
GP2 (deep)	Probe Bent	0.0	0.2	19.9
GP3 (shallow)	Probe Bent	0.0	0.1	20.1
GP3 (deep)	Probe Bent	0.0	1.3	19.0
GP4 (shallow)	Probe Bent	0.0	1.0	19.5
GP4 (deep)	Probe Bent	0.0	4.2	15.3
GP5 (shallow)	Probe Bent	0.0	5.5	14.1
GP5 (deep)	39.94	0.0	0.1	20.0
GP6	40.06	0.0	5.6	15.2

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.7	0.0	0.1	20.0
GP12	2.68	0.1	0.2	19.9
GP15	3.11	0.1	0.0	20.1
P7	3.1	0.1	0.0	20.1
P8	3.33	0.1	0.2	20.9
P9	3.22	0.1	0.4	19.3

Note:

(a) The Monitoring well LFG20 was under maintenance.

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	0.53	0.0	1.3	13.0
LFG2	3.14	0.0	1.6	18.3
LFG3	3.21	0.0	3.4	18.1
LFG4	3.08	0.0	0.1	19.9
LFG5	3.32	0.0	0.1	6.1
LFG6	3.28	0.0	0.2	19.8
LFG7	3.49	0.0	0.3	18.5
LFG8	3.18	0.0	0.1	20.2
LFG9	2.97	0.0	0.3	13.4
LFG10	2.98	0.0	0.2	18.7
LFG11	1.39	0.0	0.1	20.4
LFG12	2.99	0.0	0.1	20.1
LFG13	2.64	0.0	0.1	20.1
LFG14	3.18	0.0	0.1	20.3
LFG15	2.73	0.0	0.1	20.3
LFG16	3.24	0.0	0.2	20.1
LFG17	3.27	0.0	1.8	4.3
LFG18	4.63	0.0	0.2	20.1
LFG19	3.89	0.0	0.1	20.2
LFG20 ^(a)	N/A	N/A	N/A	N/A
LFG21	4.24	0.0	0.1	20.2
LFG22	4.12	0.0	0.1	20.3
LFG23	12.92	0.0	0.1	20.2
LFG24	6.52	0.0	0.1	20.2
GP1	Probe Bent	0.0	1.9	15.0
GP2 (shallow)	Probe Bent	0.0	0.8	19.2
GP2 (deep)	Probe Bent	0.0	0.1	20.1
GP3 (shallow)	Probe Bent	0.0	0.2	20.2
GP3 (deep)	Probe Bent	0.0	0.8	19.8
GP4 (shallow)	Probe Bent	0.0	0.6	19.7
GP4 (deep)	Probe Bent	0.0	0.5	19.8
GP5 (shallow)	Probe Bent	0.0	5.4	12.4
GP5 (deep)	43.25	0.0	0.2	20.0
GP6	41.53	0.0	0.7	18.1

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.93	0.0	0.2	19.8
GP12	2.71	0.0	1.3	17.7
GP15	3.01	0.0	0.1	20.2
P7	3.25	0.0	0.1	20.0
P8	3.24	0.0	0.1	20.2
P9	2.96	0.0	0.3	19.9

Note:

(a) The Monitoring well LFG20 was under maintenance.

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.1	0.1	18.5
UU02	0.1	0.1	19.2
UU03	Voided due to latest site programme and on-going operation work		
UU04	0.1	0.1	19.6
UU05	0.1	0.1	19.8
UU06	0.1	0.0	19.9
UU07	0.1	0.1	19.6
UU08	0.1	0.0	19.6
UU09	0.1	0.0	19.7
UU10	0.1	0.0	19.6
UU11	0.1	0.0	19.4
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.1	0.0	19.9
UU14	0.1	0.0	19.9
UU15	0.1	0.0	20.1
UU16	0.1	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	0.1	0.0	20.0
UU20	0.1	0.0	20.0
UU21	0.1	0.0	20.0
UU22	0.1	0.0	19.9
UU23	0.1	0.0	20.0
UU24	0.1	0.0	20.0
UU25	0.1	0.0	19.0
UU26	0.1	0.0	20.1
UU27	0.1	0.0	20.0
UU28	0.1	0.0	20.0

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.1	20.3
UU02	0.0	0.1	20.1
UU03	0.0	0.1	19.7
UU04	0.0	0.1	19.6
UU05	0.0	0.1	18.1
UU06	0.0	0.1	18.0
UU07	0.0	0.1	19.5
UU08	0.0	0.1	17.8
UU09	0.0	0.1	17.7
UU10	0.0	0.1	17.7
UU11	0.0	0.1	17.8
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.1	17.8
UU14	0.0	0.1	17.8
UU15	0.0	0.1	17.8
UU16	0.0	0.1	18.1
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	18.2
UU21	0.0	0.0	18.2
UU22	0.0	0.0	18.4
UU23	0.0	0.0	18.4
UU24	0.0	0.0	18.4
UU25	0.0	0.0	18.4
UU26	0.0	0.0	18.6
UU27	0.0	0.0	18.7
UU28	0.0	0.0	18.7

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.1	20.0
UU02	0.0	0.1	20.0
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	Voided due to latest site programme and on-going operation work		
UU06	0.0	0.1	20.4
UU07	0.0	0.1	20.3
UU08	0.0	0.1	20.5
UU09	0.0	0.1	20.3
UU10	0.0	0.1	20.1
UU11	0.0	0.1	20.2
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.1	20.5
UU14	0.0	0.1	20.1
UU15	0.0	0.1	20.1
UU16	0.0	0.1	20.5
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	20.5
UU21	0.0	0.1	20.5
UU22	0.0	0.1	20.5
UU23	0.0	0.1	20.5
UU24	0.0	0.1	20.5
UU25	0.0	0.1	20.5
UU26	0.0	0.1	20.5
UU27	0.0	0.1	20.5
UU28	0.0	0.1	20.5

TABLE G2.7 LANDFILL GAS BULK GAS SAMPLING MONITORING RESULTS

Parameters	LFG2	LFG8
Methane (% (v/v))	<0.020	<0.020
Carbon Dioxide (% (v/v))	0.624	0.089
Oxygen (% (v/v))	17.2	20.4
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)
15:18	22°16'34"	114°16'38"	Sunny	28.8	095	1.5	13
15:43	22°16'24"	114°16'26"	Sunny	28.2	220	3.3	16
15:55	22°16'31"	114°16'27"	Sunny	28.4	192	4.0	11