



ANNEX G2

LANDFILL GAS MONITORING RESULTS

TABLE G2.1 LANDFILL GAS MONITORING RESULTS AT PERIMETER LFG MONITORING WELLS (OCTOBER 2023)

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	3.4	0.1	1.6	16.1
LFG2	3.35	0.1	2.2	16.3
LFG3	3.2	0.1	0.0	19.4
LFG4	3.04	0.0	0.1	18.6
LFG5	2.84	0.0	0.1	13.7
LFG6	3.48	0.0	0.0	19.5
LFG7	2.84	0.0	0.0	18.9
LFG8	3.11	0.0	0.0	18.6
LFG9	3.31	0.0	0.0	19.4
LFG10	2.97	0.0	0.0	19.4
LFG11	2.44	0.0	0.0	16.5
LFG12	2.94	0.0	0.0	19.5
LFG13	3.2	0.0	0.0	19.7
LFG14	4.74	0.0	0.0	16.9
LFG15	4.34	0.0	0.0	19.6
LFG16	3.59	0.0	0.0	19.7
LFG17	3.94	0.0	0.0	19.6
LFG18	3.42	0.0	0.0	18.7
LFG19	3.41	0.0	0.1	18.5
LFG20	2.46	0.0	0.1	18.4
LFG21	4.92	0.0	0.3	18.6
LFG22	6.05	0.0	0.0	19.7
LFG23	14.4	0.0	0.0	19.7
LFG24	25.5	0.0	0.0	19.7
GP1	Probe Bent	0.0	6.8	9.7
GP2 (shallow)	Probe Bent	0.0	0.9	18.9
GP2 (deep)	Probe Bent	0.0	0.0	20.0
GP3 (shallow)	Probe Bent	0.0	0.2	19.7
GP3 (deep)	Probe Bent	0.0	0.1	19.8
GP4 (shallow)	Probe Bent	0.0	1.3	18.0
GP4 (deep)	Probe Bent	0.0	0.4	19.4
GP5 (shallow)	Probe Bent	0.0	1.7	10.7
GP5 (deep)	10.03	0.0	0.1	19.7
GP6	8.33	0.0	4.4	14.8

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	2.06	0.0	0.1	19.6
GP12	2.06	0.1	0.0	19.6
GP15	3.3	0.1	0.0	20.3
P7	2.75	0.1	0.1	19.7
P8	2.68	0.1	0.0	20.7
P9	2.45	0.2	0.0	18.4

TABLE G2.2 LANDFILL GAS MONITORING RESULTS AT PERIMETER LFG MONITORING WELLS (NOVEMBER 2023)

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.88	0.2	0.8	18.5
LFG2	2.69	0.2	0.9	18.9
LFG3	3.71	0.1	1.4	17.9
LFG4	3.25	0.0	0.1	19.2
LFG5	3.93	0.0	0.1	15.0
LFG6	3.74	0.0	0.1	19.4
LFG7	3.1	0.0	0.0	19.9
LFG8	2.98	0.0	0.0	19.9
LFG9	3.16	0.0	0.0	19.9
LFG10	2.89	0.0	0.0	19.7
LFG11	3.16	0.0	0.0	11.4
LFG12	2.82	0.0	0.0	19.7
LFG13	2.58	0.0	0.0	19.7
LFG14	2.64	0.0	0.0	19.7
LFG15	2.59	0.0	0.0	19.5
LFG16	3.14	0.0	0.1	19.5
LFG17	3.27	0.0	0.1	19.5
LFG18	3.91	0.0	0.2	19.4
LFG19	4.05	0.0	0.1	19.4
LFG20	3.95	0.1	1.1	17.5
LFG21	3.87	0.1	0.1	19.8
LFG22	3.52	0.2	0.1	19.9
LFG23	12.95	0.0	0.0	20.2
LFG24	6.52	0.0	0.0	20.1
GP1	Probe Bent	0.0	7.2	8.3
GP2 (shallow)	Probe Bent	0.0	0.8	18.7
GP2 (deep)	Probe Bent	0.0	5.2	14.7
GP3 (shallow)	Probe Bent	0.0	0.9	19.2
GP3 (deep)	Probe Bent	0.0	0.1	20.1
GP4 (shallow)	Probe Bent	0.0	0.5	19.6
GP4 (deep)	Probe Bent	0.0	0.2	20.2
GP5 (shallow)	Probe Bent	0.0	9.9	12.4
GP5 (deep)	40.2	0.0	0.0	20.0
GP6	38.43	0.0	1.2	18.1

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.65	0.0	0.6	19.4
GP12	2.77	0.1	0.0	18.9
GP15	2.76	0.0	0.1	20.0
P7	2.81	0.1	0.0	14.9
P8	2.82	0.0	0.1	20.1
P9	2.98	0.1	0.0	20.0

**TABLE G2.3 LANDFILL GAS MONITORING RESULTS AT PERIMETER LFG MONITORING WELLS
(DECEMBER 2023)**

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.96	0.2	0.2	20.2
LFG2	2.51	0.2	0.5	20.2
LFG3	2.77	0.0	1.4	20.0
LFG4	2.81	0.0	0.0	19.4
LFG5	4.01	0.0	0.0	17.5
LFG6	3.4	0.0	0.1	19.1
LFG7	2.71	0.0	0.0	19.4
LFG8	2.64	0.0	0.1	19.5
LFG9	2.56	0.0	0.2	17.1
LFG10	2.57	0.0	0.0	16.8
LFG11	2.41	0.0	0.1	10.3
LFG12	2.48	0.0	0.0	20.1
LFG13	2.34	15.9	0.3	5.9
LFG14	2.01	0.0	0.0	19.8
LFG15	2.16	0.0	0.0	19.8
LFG16	2.91	0.0	0.0	19.9
LFG17	3.05	0.0	0.0	19.9
LFG18	3.69	0.0	1.1	17.3
LFG19	4.36	0.0	0.3	19.1
LFG20	3.64	0.0	0.0	19.9
LFG21	3.79	0.0	0.0	19.9
LFG22	3.64	0.0	0.0	19.9
LFG23	12.76	0.0	0.0	19.8
LFG24	6.54	0.0	0.0	19.8
GP1	Probe Bent	0.0	0.1	20.1
GP2 (shallow)	Probe Bent	0.0	0.8	18.8
GP2 (deep)	Probe Bent	0.0	0.1	20.1
GP3 (shallow)	Probe Bent	0.0	0.1	20.1
GP3 (deep)	Probe Bent	0.0	0.2	19.9
GP4 (shallow)	Probe Bent	0.0	0.5	19.6
GP4 (deep)	Probe Bent	0.0	0.2	19.8
GP5 (shallow)	Probe Bent	0.0	0.1	19.8
GP5 (deep)	39.15	0.0	0.1	19.8
GP6	37.67	0.0	0.1	19.7

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.70	0.0	0.1	19.7
GP12	2.43	0.2	0.0	20.7
GP15	3.53	0.1	0.0	20.1
P7	3.28	0.1	0.4	19.1
P8	2.97	0.1	0.0	20.3
P9	2.82	0.1	0.0	20.1

TABLE G2.4 LANDFILL GAS MONITORING AT SERVICE VOIDS, UTILITIES PITS AND MANHOLE (OCTOBER 2023)

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.1	0.0	19.4
UU02	0.1	0.0	19.6
UU03	0.0	0.0	19.5
UU04	0.0	0.0	19.5
UU05	0.0	0.0	19.6
UU06	0.0	0.0	19.6
UU07	0.0	0.0	19.5
UU08	0.0	0.0	19.5
UU09	0.0	0.0	19.6
UU10	0.0	0.0	19.7
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	19.8
UU15	0.0	0.0	19.8
UU16	0.0	0.0	19.8
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	0.0	0.0	19.5
UU20	0.0	0.0	19.7
UU21	0.0	0.0	19.7
UU22	0.0	0.0	19.8
UU23	0.0	0.0	19.9
UU24	0.0	0.0	19.8
UU25	0.0	0.0	19.8
UU26	0.0	0.0	19.8
UU27	0.0	0.0	19.8
UU28	0.0	0.0	19.8

TABLE G2.5 LANDFILL GAS MONITORING AT SERVICE VOIDS, UTILITIES PITS AND MANHOLE (NOVEMBER 2023)

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

TABLE G2.6 LANDFILL GAS MONITORING AT SERVICE VOIDS, UTILITIES PITS AND MANHOLE (DECEMBER 2023)

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.0	20.0
UU02	0.0	0.0	19.8
UU03	0.0	0.0	19.9
UU04	0.0	0.0	20.0
UU05	0.0	0.0	20.2
UU06	0.0	0.0	20.2
UU07	0.0	0.0	19.9
UU08	0.0	0.0	20.0
UU09	0.0	0.0	20.3
UU10	0.0	0.0	20.3
UU11	0.0	0.0	20.2
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	20.2
UU14	0.0	0.0	20.2
UU15	0.0	0.0	20.1
UU16	0.0	0.0	20.1
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	0.0	0.0	20.0
UU20	0.0	0.0	20.0
UU21	0.0	0.0	20.2
UU22	0.0	0.0	20.2
UU23	0.0	0.0	20.1
UU24	0.0	0.0	20.1
UU25	0.0	0.0	20.1
UU26	0.0	0.0	20.1
UU27	0.0	0.0	20.3
UU28	0.0	0.0	20.3

TABLE G2.7 LANDFILL GAS BULK GAS SAMPLING MONITORING RESULTS

Parameters	LFG2	LFG8
Methane (% (v/v))	0.750	0.096
Carbon Dioxide (% (v/v))	<0.020	<0.020
Oxygen (% (v/v))	19.3	20.3
Nitrogen (% (v/v))	77	76.6
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)
10:46	22°16'29"	114°16'10"	Sunny	22.1	313	2.7	12
10:50	22°16'26"	114°16'34"	Sunny	23.2	311	3.2	15
10:57	22°16'19"	114°16'35"	Sunny	22.3	331	5.0	15
11:03	22°16'17"	114°16'33"	Sunny	22.7	88	3.2	17
11:09	22°16'50"	114°16'21"	Sunny	23.0	124	3.0	17
11:11	22°16'20"	114°16'27"	Sunny	23.4	335	2.9	17
11:30	22°16'29"	114°16'27"	Sunny	23.2	9	3.0	5