



ANNEX G2

LANDFILL GAS MONITORING RESULTS

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.8	0.2	1.8	16.8
LFG2	2.86	0.2	1.7	17.4
LFG3	3.22	0.1	0.0	19.2
LFG4	3.12	0.1	0.0	18.9
LFG5	4.23	0.1	0.2	7.5
LFG6	3.02	0.1	0.1	19.2
LFG7	3.7	0.1	0.0	14.5
LFG8	3.41	0.0	0.0	19.1
LFG9	3.35	0.0	0.1	16.5
LFG10	3.08	0.0	0.0	19.2
LFG11	3.2	0.0	0.3	8.3
LFG12	3.42	0.0	0.0	19.3
LFG13	3.14	0.5	0.0	18.8
LFG14	3.58	0.0	0.0	19.6
LFG15	2.48	0.0	0.0	19.5
LFG16	3.73	0.0	0.0	19.3
LFG17	3.22	0.0	0.0	19.4
LFG18	4.15	0.0	0.0	19.4
LFG19	5.02	0.0	0.1	19.1
LFG20	4.59	0.0	0.1	19.2
LFG21	4.25	0.0	0.7	18.2
LFG22	0.31	0.0	0.0	19.0
LFG23	13.8	0.0	0.0	19.2
LFG24	7.02	0.0	0.1	19.2
GP1	Probe Bent	0.1	8.0	4.9
GP2 (shallow)	Probe Bent	0.1	0.2	19.8
GP2 (deep)	Probe Bent	0.1	8.2	8.4
GP3 (shallow)	Probe Bent	0.1	1.6	17.6
GP3 (deep)	Probe Bent	0.1	0.6	19.1
GP4 (shallow)	Probe Bent	0.1	0.4	19.3
GP4 (deep)	Probe Bent	0.1	0.2	19.3
GP5 (shallow)	Probe Bent	0.1	0.9	19.2
GP5 (deep)	39.77	0.1	0.1	19.3
GP6	38.83	0.0	1.7	19.0

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	37.55	0.0	0.0	19.3
GP12	1.22	0.2	0.1	19.2
GP15	3.12	0.2	0.1	19.2
P7	2.81	0.2	0.0	20.0
P8	2.90	0.2	0.1	20.2
P9	2.61	0.2	0.1	20.4

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	3.29	0.0	1.5	16.8
LFG2	1.93	0.0	2.2	16.3
LFG3	3.03	0.0	0.0	18.9
LFG4	2.65	0.0	0.0	18.8
LFG5	3.08	0.0	0.0	18.5
LFG6	3.12	0.0	0.1	18.2
LFG7	4.56	0.0	0.0	18.7
LFG8	2.85	0.0	0.0	20.1
LFG9	3.14	0.0	0.0	19.1
LFG10	3.72	0.0	0.0	15.6
LFG11	3.1	0.0	0.2	6.5
LFG12	2.78	0.0	0.0	20.0
LFG13	2.63	16.0	0.1	5.0
LFG14	3.11	0.0	0.0	18.0
LFG15	2.66	0.0	0.2	16.6
LFG16	4.16	0.0	0.0	19.9
LFG17	2.92	0.0	0.4	4.5
LFG18	4.23	0.0	0.0	19.8
LFG19	3.48	0.0	0.1	19.4
LFG20	3.16	0.0	3.2	13.0
LFG21	3.26	0.0	0.5	18.2
LFG22	2.86	0.0	0.1	18.8
LFG23	12.9	0.0	0.0	19.4
LFG24	6.35	0.0	0.0	19.4
GP1	Probe Bent	0.3	10.6	6.3
GP2 (shallow)	Probe Bent	0.2	0.8	18.8
GP2 (deep)	Probe Bent	0.2	0.3	18.8
GP3 (shallow)	Probe Bent	0.1	3.5	14.5
GP3 (deep)	Probe Bent	0.1	0.0	19.1
GP4 (shallow)	Probe Bent	0.1	0.4	18.1
GP4 (deep)	Probe Bent	0.1	0.2	18.9
GP5 (shallow)	Probe Bent	0.0	6.3	11.2
GP5 (deep)	39.33	0.0	0.6	18.6
GP6	38.56	0.0	2.7	16.0

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	36.86	0.0	0.0	19.1
GP12	2.45	0.0	0.0	18.1
GP15	3.08	0.0	0.1	19.7
P7	3.22	0.0	0.1	19.3
P8	2.81	0.0	0.1	19.5
P9	2.74	0.0	0.1	20.0

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

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
LFG1	2.89	0.1	1.1	14.9
LFG2	3.85	0.1	1.5	16.4
LFG3	3.35	0.0	0.0	19.6
LFG4	3.31	0.0	0.0	19.3
LFG5	2.79	0.0	0.0	19.4
LFG6	3.08	0.0	0.3	17.9
LFG7	3.68	0.0	0.0	19.1
LFG8	3.46	0.0	0.0	18.1
LFG9	2.94	0.0	0.0	18.2
LFG10	2.99	0.0	0.0	18.9
LFG11	2.91	0.0	0.0	18.8
LFG12	3.07	0.1	0.0	18.9
LFG13	2.63	1.0	0.0	18.1
LFG14	3.16	0.1	0.0	18.1
LFG15	2.49	0.0	0.0	18.2
LFG16	3.52	0.1	0.0	19.8
LFG17	2.92	0.1	0.0	19.8
LFG18	4.14	0.1	0.0	19.9
LFG19	4.21	0.1	0.0	19.5
LFG20	5.12	0.2	0.1	19.2
LFG21	4.26	0.2	0.2	18.7
LFG22	4.16	0.2	0.2	18.3
LFG23	12.91	0.1	0.0	20.1
LFG24	6.75	0.1	0.0	20.2
GP1	No safe access due to tree falling blocked the road access			
GP2 (shallow)	No safe access due to tree falling blocked the road access			
GP2 (deep)	No safe access due to tree falling blocked the road access			
GP3 (shallow)	No safe access due to tree falling blocked the road access			
GP3 (deep)	No safe access due to tree falling blocked the road access			
GP4 (shallow)	No safe access due to tree falling blocked the road access			
GP4 (deep)	No safe access due to tree falling blocked the road access			
GP5 (shallow)	No safe access due to tree falling blocked the road access			
GP5 (deep)	No safe access due to tree falling blocked the road access			
GP6	No safe access due to tree falling blocked the road access			

Location	Water Level (mPD)	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
GP7	No safe access due to tree falling blocked the road access			
GP12	2.45	0.1	0.3	18.1
GP15	No safe access due to tree falling blocked the road access			
P7	2.98	0.0	0.1	19.9
P8	No safe access due to tree falling blocked the road access			
P9	No safe access due to tree falling blocked the road access			

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.2	0.0	19.2
UU02	0.1	0.0	19.1
UU03	0.1	0.0	19.3
UU04	0.1	0.0	19.4
UU05	0.0	0.0	19.4
UU06	0.0	0.0	19.5
UU07	0.1	0.0	19.2
UU08	0.0	0.0	19.2
UU09	0.0	0.0	19.8
UU10	0.0	0.0	19.6
UU11	0.0	0.0	19.6
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	19.5
UU14	0.0	0.0	19.4
UU15	0.0	0.0	19.6
UU16	0.0	0.0	19.5
UU17	Voided due to latest site programme and on-going operation work		
UU18	0.0	0.0	19.5
UU19	0.0	0.0	19.3
UU20	0.0	0.0	19.4
UU21	0.0	0.0	19.4
UU22	0.0	0.0	19.4
UU23	0.0	0.0	19.4
UU24	0.0	0.0	19.5
UU25	0.0	0.0	19.5
UU26	0.0	0.0	19.5
UU27	0.0	0.0	19.5
UU28	0.0	0.0	19.6

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.0	18.8
UU02	0.0	0.0	18.8
UU03	0.1	0.0	18.4
UU04	0.0	0.0	18.4
UU05	0.0	0.0	18.5
UU06	0.0	0.0	18.6
UU07	0.0	0.0	18.8
UU08	0.0	0.0	18.9
UU09	0.1	0.0	20.1
UU10	0.1	0.0	20.0
UU11	0.2	0.0	20.1
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.2	0.0	20.2
UU14	0.2	0.1	20.2
UU15	0.1	0.0	19.8
UU16	0.1	0.0	19.7
UU17	Voided due to latest site programme and on-going operation work		
UU18	0.1	0.0	19.5
UU19	0.0	0.0	18.9
UU20	0.1	0.0	19.4
UU21	0.1	0.0	19.3
UU22	0.1	0.0	19.2
UU23	0.0	0.0	19.2
UU24	0.0	0.0	18.9
UU25	0.0	0.0	19.0
UU26	0.0	0.0	18.8
UU27	0.0	0.0	18.6
UU28	0.0	0.0	18.6

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

Location	Methane (% (v/v))	Carbon Dioxide (% (v/v))	Oxygen (% (v/v))
UU01	0.0	0.0	19.5
UU02	0.0	0.0	19.4
UU03	0.0	0.0	19.4
UU04	0.0	0.0	19.4
UU05	0.0	0.0	19.4
UU06	0.0	0.0	19.3
UU07	0.2	0.0	20.4
UU08	0.0	0.0	19.4
UU09	0.0	0.0	19.6
UU10	0.0	0.0	19.6
UU11	0.0	0.0	19.5
UU12	Voided due to latest site programme and on-going operation work		
UU13	0.0	0.0	19.4
UU14	0.0	0.0	19.5
UU15	0.0	0.0	19.5
UU16	0.1	0.0	20.1
UU17	Voided due to latest site programme and on-going operation work		
UU18	0.0	0.0	19.4
UU19	0.1	0.0	20.2
UU20	0.0	0.0	19.5
UU21	0.0	0.0	19.5
UU22	0.0	0.0	19.5
UU23	0.0	0.0	19.6
UU24	0.0	0.0	19.4
UU25	0.0	0.0	19.5
UU26	0.0	0.0	19.6
UU27	0.0	0.0	19.5
UU28	0.0	0.0	19.4

TABLE G2.7 LANDFILL GAS BULK GAS SAMPLING MONITORING RESULTS

Parameters	LFG2	LFG8
Methane (% (v/v))	<0.020	<0.020
Carbon Dioxide (% (v/v))	<0.020	<0.020
Oxygen (% (v/v))	20.6	20.5
Nitrogen (% (v/v))	76.5	76.4
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)
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No flammable gas surface emission detected in the reporting period.