

Kurnell Landfill Environmental Monitoring Locations

EPA ID No.	Monitoring Location	Easting	Northing
3	BH3A	331557.559	6233612.570
4	BH4A	331555.149	6233531.497
5	BH5A	331325.514	6233723.575
6	BH6A	331588.552	6233160.367
7	BH7A	331293.2	6233053.87
8	BH8A	331005.488	6233233.894
9	BH9C	331540.67	6233420.14
11	BH10A	331819.08	6233299.27
12	BH11A	331350.35	6233170.05
13	BH12A	331166.433	6233699.572
14	BH13A	331447.247	6233662.638
15	BH14	331997.150	6233370.046
16	BH15	332482.813	6233510.587
17	BH16	332149.279	6233032.038
18	BH17	331432.560	6233696.015
19	BH18	330761.63	6233399.46
26	BH19B	332003	6233379
27	BH20	332200.120	6233439.830
28	BH22	332446.162	6233300.895
29	BH23	332254.027	6233075.673
30	BH24	331709.001	6232960.575
31	BH25	330974	6233693
1	LB02	331246	6233411

Kurnell Landfill Quarterly Subsurface Gas Results - 7 August 2023

EPA ID No.	Well ID	Initial well pressure above atmospheric (kPa)	Initial vent	Flow Rate L/hr	Initial well concentrations	Maximum vacuum on well (psi)	Recovery time (min)	Total volume purged (L)	Well concentrations following purging
					CH ₄				CH ₄
					(%)				(%)
20	BH4A	0.3	Nil	0.2	<0.1	10	<1	12	<0.1
22	BH8B	0.1	Nil	0.0	<0.1	10	<1	12	<0.1
23	BH12A	0.1	Nil	0.2	<0.1	10	<1	12	<0.1
24	BH13A	0.7	Nil	0.3	<0.1	10	<1	12	<0.1
25	BH18	0.1	Nil	0.2	<0.1	No Access			

Kurnell Landfill Quarterly Ground Water Analytical Results - August 2023

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10B	BH11A	BH12A	BH13A
Sample Id:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10B	BH11A	BH12A	BH13A
Laboratory Report Number:			329952	329952	329952	329952	329952	329952	329952	329952	329952	329952	329952
Laboratory:			Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab
Date Sampled:			08 Aug 23	08 Aug 23	08 Aug 23	07 Aug 23	08 Aug 23	08 Aug 23	08 Aug 23	08 Aug 23	07 Aug 23	08 Aug 23	08 Aug 23
Parameters	PQL	Units	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter
			2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024
Standing Water Level	0.01	mBTOC	3.37	4.13	7.15	14.13	2.31	16.45	5.64	4.21	23.20	10.09	3.71
pH (field)	0.1	pH units	7.9	6.84	7.3	6.99	7.24	7.54	6.81	7	6.33	7.2	7.5
Electrical Conductivity (field)	1	µS/cm	1,200	449	2100	1,928	655	476.5	765	2180	2302	2000	1500
pH	0.1	pH units	7.9	7.2	7.3	7.4	7.6	7.8	7.2	7.1	6.7	7.2	7.5
Total Dissolved Solids	5	mg/L	870	610	1100	1200	460	270	510	1500	2,200	1200	880
Total Organic Carbon	1	mg/L	10	13	56	61	11	3	7	57	73	33	28
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	41	31	270	190	19	25	29	130	77	240	130
Sulphate	5	mg/L	480	210	42	34	10	7	78	150	1000	54	92
Ammonia as N	0.1	mg/L	0.85	0.13	34	10	<0.005	<0.005	0.72	2.5	5.6	9.3	18
Sodium (Na)	0.03	mg/L	41	24	160	120	11	15	22	110	44	170	120
Potassium (I) Ion	0.03	mg/L	14	12	31	17	1	0.9	6.4	15	18	19	27
Calcium (II) Ion	0.03	mg/L	230	170	180	240	120	89	150	440	560	260	160
Magnesium (II) Ion	0.03	mg/L	20	12	36	34	18	9.2	9.4	49	20	29	23

NOTES:

nt = Not Tested

Kurnell Landfill Quarterly Ground Water Analytical Results - August 2023														
Monitoring Location:			BH14	BH15	BH16	BH17	BH18	BH19B	BH20	BH22	BH23	BH24	BH25	LB02
Sample Id:			BH14A	BH15	BH16	BH17	BH18	BH19B	BH20	BH22	BH23	BH24	BH25	LB02
Laboratory Report Number:			329952	329952	329952	329952	329952	329952	329952	329952	329952	330490	329952	329952
Laboratory:			Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab
Date Sampled:			07 Aug 23	07 Aug 23	07 Aug 23	08 Aug 23	07 Aug 23	07 Aug 23	07 Aug 23	07 Aug 23	07 Aug 23	11 Aug 23	08 Aug 23	07 Aug 23
Parameters	PQL	Units	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter	2nd Quarter
			2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024	2023/2024
Standing Water Level	0.01	mBTOC	3.10	4.79	1.03	5.39	26.91	4.23	1.88	3.81	3.04	12.53	7.27	12.66
pH (field)	0.1	pH units	7.28	7.34	7.03	7.4	6.68	7.17	7.15	7.36	7.21	6.8	7.6	6.88
Electrical Conductivity (field)	1	µS/cm	2523	1575	356.3	2000	1,268	974	2051	1264	341.2	450	1600	5,090
pH	0.1	pH units	7.5	7.7	7	7.4	7.2	7.3	7.3	7.7	7.6	6.8	7.6	7.1
Total Dissolved Solids	5	mg/L	2100	1200	190	1100	790	690	1400	890	180	300	900	2600
Total Organic Carbon	1	mg/L	38	20	11	23	4	43	53	28	18	4	17	210
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	210	150	32	90	88	85	210	97	12	25	220	390
Sulphate	5	mg/L	1000	310	8	380	49	160	420	260	4	12	49	180
Ammonia as N	0.1	mg/L	0.062	0.05	1.8	49	1.8	2	7.5	5.8	0.18	<0.005	0.81	240
Sodium (Na)	0.03	mg/L	190	140	21	130	49	80	190	88	6.8	18	130	390
Potassium (I) Ion	0.03	mg/L	21	24	4	47	5	17	26	16	4	4	5	150
Calcium (II) Ion	0.03	mg/L	510	220	34	210	210	140	270	170	62	63	180	330
Magnesium (II) Ion	0.03	mg/L	70	29	8.5	21	33	11	56	21	10	6.5	28	100