

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 Ground Water Analytical Results - May 2022

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:			295881	296153	295881	295881	295881	295881	296153	295881	295881	295881	295881
Laboratory:			Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab
Date Sampled:			17 May 22	23 May 22	17 May 22	17 May 22	17 May 22	17 May 22	23 May 22	17 May 22	17 May 22	17 May 22	17 May 22
Parameters	PQL	Units	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter
			2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023
Standing Water Level	0.01	mBTOC	3.36	3.10	6.72	13.71	0.93	15.24	4.60	3.39	22.35	9.41	3.30
pH (field)	0.1	pH units	6.6	7.13	6.92	6.99	5.58	5.78	7.01	6.92	6.82	6.64	6.89
Electrical Conductivity (field)	1	µS/cm	1,319	1,136	1,849	1,991	316	723	1,131	1,990	3,435	1,910	902
pH	0.1	pH units	7.5	6.9	7.2	6.8	5.7	6	7	6.6	6.8	7.1	6.6
Total Dissolved Solids	5	mg/L	1000	730	920	1100	550	420	670	1500	2800	1300	620
Total Organic Carbon	1	mg/L	<5	7	26	48	4	3	12	63	100	15	14
Carbonate Alkalinity (CO3-2)	1	mg/L	190	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	45	42	150	1	1	34	48	77	3	170	30
Sulphate	5	mg/L	370	330	14	2	1	17	99	210	3	74	65
Ammonia as N	0.1	mg/L	1.3	<0.005	15	15	0.041	0.021	0.99	2.7	41	4.1	0.024
Sodium (Na)	0.03	mg/L	58	34	130	140	19	32	36	100	82	140	35
Potassium (I) Ion	0.03	mg/L	14	11	20	21	2	1	8.2	14	25	29	4
Calcium (II) Ion	0.03	mg/L	180	200	150	210	120	92	180	390	860	190	140
Magnesium (II) Ion	0.03	mg/L	21	13	30	29	18	9.2	26	47	23	37	12

NOTES:

nt = Not Tested

Kurnell Landfill Quarterly Ground Water Analytical Results - May 2022														
Sample Location:			BH14	BH15	BH16	BH17	BH18	BH19B	BH20	BH22	BH23	BH24	BH25	LB2
Sample Id:			BH14A	BH15	BH16	BH17	BH18	BH19B	BH20	BH22	BH23	BH24	BH25	LB02
Laboratory Report Number:			295881	295881	NA	295881	295881	295881	295881	295881	295881	NA	297284	296153
Laboratory:			Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab
Date Sampled:			17 May 22	17 May 22	NA	17 May 22	17 May 22	17 May 22	17 May 22	17 May 22	17 May 22	NA	06 Jun 22	23 May 22
Parameters	PQL	Units	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter
			2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023	2022/2023
Standing Water Level	0.01	mBTOC	3.31	3.71	nt	5.00	26.00	3.42	0.22	1.53	1.58	nt	6.55	14.25
pH (field)	0.1	pH units	6.89	7.68	nt	6.64	6.49	5.62	7.16	7.22	6.81	nt	7.19	7.07
Electrical Conductivity (field)	1	µS/cm	2,393	800	nt	1,732	1,297	613	1,385	1,084	651	nt	1,369	5,690
pH	0.1	pH units	6.8	7.7	nt	7.1	6.8	5.6	7.2	7.1	6.6	nt	7.4	7
Total Dissolved Solids	5	mg/L	2100	570	nt	1200	40	600	1200	830	630	nt	850	2400
Total Organic Carbon	1	mg/L	34	3	nt	17	7	9	54	16	10	nt	9	190
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	nt	<5	<5	<5	<5	<5	<5	nt	<5	<5
Chloride	20	mg/L	120	1	nt	110	41	19	76	1	1	nt	210	500
Sulphate	5	mg/L	640	<1	nt	100	3	110	380	<1	<1	nt	60	140
Ammonia as N	0.1	mg/L	0.68	0.023	nt	5.3	<0.005	2	0.34	5	0.48	nt	0.51	260
Sodium (Na)	0.03	mg/L	210	26	nt	110	24	20	110	66	28	nt	120	420
Potassium (I) Ion	0.03	mg/L	14	5.9	nt	15	6.6	5	19	14	7.9	nt	4	150
Calcium (II) Ion	0.03	mg/L	310	100	nt	200	200	120	190	120	98	nt	150	250
Magnesium (II) Ion	0.03	mg/L	53	17	nt	26	22	12	53	13	12	nt	21	93

Kurnell Landfill Quarterly Subsurface Gas Results - 18 and 20 January 2022

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	<0.1	Nil	0.0	0.4	1	<1	24	0.3
22	BH8B	<0.1	Nil	-0.1	0.4	1	<1	12	0.3
23	BH12A	<0.1	Nil	-0.1	0.3	1	<1	12	0.3
24	BH13A	<0.1	Nil	-0.1	0.3	No vehicle access			
25	BH18	<0.1	Nil	0.1	0.5	5	<1	12	0.3

BOLD Greater than the assessment criteria of 1.0 % CH₄