

## Kurnell Landfill Environmental Monitoring Locations

<b>EPA ID No.</b>	<b>Monitoring Location</b>	<b>Easting</b>	<b>Northing</b>
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	BH19	331786.065	6233268.677
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 - April 2020

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10	BH11A	BH12A	BH13A
Sample Id:			BH3A-27/4/20	BH4A-23/4/20	BH5A-23/4/20	BH6A-23/4/20	BH7A-23/4/20	BH8A-22/4/20	BH9C-23/4/20	BH10B-22/4/20	BH11A-22/4/20	BH12A-23/4/20	BH13A-23/4/20
Laboratory Report Number:			241664	241434	241434	241434	241348	241348	241434	241348	241348	241434	241434
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			27 Apr 20	23 Apr 20	23 Apr 20	23 Apr 20	23 Apr 20	22 Apr 20	23 Apr 20	22 Apr 20	22 Apr 20	23 Apr 20	23 Apr 20
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
			2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021
Standing Water Level	0.01	mBTOC	3.29	4.12	7.22	10.45	2.39	16.59	5.66	2.82	23.5	10.08	2.78
pH (field)	0.1	pH units	7.89	6.93	7.02	7.28	7.55	7.7	7.14	7.39	6.95	6.95	7.37
Electrical Conductivity (field)	1	µS/cm	999	1225	1567	759	860	753	1059	2037	1487	1653	1167
pH	0.1	pH units	7.7	7	7.3	6.8	7.2	7.5	7.3	7.1	6.9	7.2	7.4
Total Dissolved Solids	5	mg/L	770	1000	1000	560	510	520	680	1300	970	1100	1000
Total Organic Carbon	1	mg/L	4	9	26	12	4	1	27	30	15	16	6
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	49	93	180	34	48	120	60	230	130	180	100
Sulphate	5	mg/L	340	390	36	130	34	34	77	110	110	110	260
Ammonia as N	0.1	mg/L	1.4	0.016	22	0.061	0.068	<0.005	12	18	2.8	2.8	2
Sodium (Na)	0.03	mg/L	33	58	120	22	25	45	57	160	92	92	74
Potassium (I) Ion	0.03	mg/L	11	11	25	4.8	2.3	1.4	13	24	5.8	5.8	9.7
Calcium (II) Ion	0.03	mg/L	150	200	160	130	140	110	140	280	200	200	180
Magnesium (II) Ion	0.03	mg/L	19	14	31	16	22	11	24	28	34	34	29

**NOTES:**

nt = Not Tested

### Kurnell Landfill Quarterly Ground Water Analytical Results - April 2020 (continued)

Sample Location:			BH14	BH15	BH16	BH17	BH18	BH19	BH20	BH22	BH23	BH24	BH25	LB2
Sample Id:			BH14A-27/4/20	BH15-22/4/20	BH16-22/4/20	BH17-23/4/20	BH18-23/4/20	BH19A-22/4/20	BH20-22/4/20	BH22-22/4/20	BH23-22/4/20	BH24-23/4/20	BH25-23/4/20	LB02-22/4/20
Laboratory Report Number:			241664	241348	241348	241434	241434	241348	241348	241348	241348	241348	241348	241348
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			27 Apr 20	22 Apr 20	22 Apr 20	23 Apr 20	23 Apr 20	22 Apr 20	22 Apr 20	22 Apr 20	22 Apr 20	23 Apr 20	23 Apr 20	22 Apr 20
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
			2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021	2020/2021
Standing Water Level	0.01	mBTOC	3.98	4.7	1.05	5.36	26.97	3.5	2.3	3.16	3	12.57	7.27	15.26
pH (field)	0.1	pH units	7.01	8.03	7.7	7.06	7.09	7.86	7.72	7.65	7.45	7.19	7.47	7.09
Electrical Conductivity (field)	1	µS/cm	1128	705	462.5	1201	1310	508	746	687	893	474.5	1276	5240
pH	0.1	pH units	6.8	7.6	7.2	7	7.1	7.1	7.4	7.5	7.2	6.6	7.5	-
Total Dissolved Solids	5	mg/L	790	410	260	840	880	330	520	430	540	330	790	-
Total Organic Carbon	1	mg/L	25	11	4	11	3	57	15	17	11	4	4	-
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	110	49	77	80	83	27	67	57	96	50	210	380
Sulphate	5	mg/L	88	71	18	63	67	92	100	75	60	73	16	1
Ammonia as N	0.1	mg/L	2.2	0.019	0.009	0.52	0.3	0.11	<0.005	0.19	0.59	<0.005	0.67	300
Sodium (Na)	0.03	mg/L	85	38	45	60	56	25	74	39	62	28	110	450
Potassium (I) Ion	0.03	mg/L	11	5.8	2.7	15	6.2	5.6	7.4	11	7.1	4	3.7	130
Calcium (II) Ion	0.03	mg/L	200	130	43	190	190	92	72	91	110	66	140	130
Magnesium (II) Ion	0.03	mg/L	37	15	5.2	17	30	7.1	21	12	11	4.8	19	77

**Kurnell Landfill Quarterly Subsurface Gas Results - April 2020**

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 <sub>4</sub>				CH <sub>4</sub>
					(%)				(%)
20	BH4A	<0.1	Nil	0.7	<0.1	-18	<1	30	<0.1
22	BH8B	<0.1	Nil	0.3	<0.1	-18	<1	30	<0.1
23	BH12A	<0.1	Nil	0.5	<0.1	-18	<1	30	<0.1
24	BH13A	<0.1	Nil	<0.1	<0.1	-18	<1	30	<0.1
25	BH18	<0.1	Nil	<0.1	0.1	-18	<1	30	<0.1

**BOLD** Greater than the assessment criteria of 1.0 % CH<sub>4</sub>