

## 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 2019

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10	BH11A	BH12A	BH13A
Sample Id:			100419-BR-BH3A	100419-BR-BH4A	100419-BR-BH5A	-	090419-BR-BH7A	090419-BR-BH8A	090419-BR-BH9C	090419-BR-BH10B	090419-BR-BH11A	100419-BR-BH12A	100419-BR-BH13A
Laboratory Report Number:			215398	215398	215398	-	215341	215341	215341	215341	215341	215398	215398
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			10 Apr 19	10 Apr 19	10 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	10 Apr 19	10 Apr 19
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
			2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020
Standing Water Level	0.01	mBTOC	3.3	4.07	7.27	DRY	2.7	16.93	5.7	2.89	23.71	10.18	3.82
pH (field)	0.1	pH units	7.76	7.33	7.13		7.23	7.65	6.96	7.13	6.91	7.13	7.32
Electrical Conductivity (field)	1	µS/cm	872	1163	1490		817	532	1500	1346	1869	1801	1597
pH	0.1	pH units	7.8	7	7.2		7.3	7.2	7.3	7.2	6.9	7.1	7.2
Total Dissolved Solids	5	mg/L	730	930	960		520	340	760	940	1500	1300	1300
Total Organic Carbon	1	mg/L	6	9	27		7	4	52	140	32	20	21
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	42	59	160		32	47	110	87	110	180	130
Sulphate	5	mg/L	300	330	40		22	32	100	170	520	130	200
Ammonia as N	0.1	mg/L	1	0.037	15		0.12	0.011	17	1.4	0.55	2.6	5.2
Sodium (Na)	0.03	mg/L	41	49	140		16	36	110	66	120	150	170
Potassium (I) Ion	0.03	mg/L	11	11	23		2	1.1	19	15	24	18	16
Calcium (II) Ion	0.03	mg/L	130	220	160		130	84	180	260	320	210	200
Magnesium (II) Ion	0.03	mg/L	17	15	27		23	8.2	25	26	31	43	46

**NOTES:**  
 nt = Not Tested

### Kurnell Landfill Quarterly Ground Water Analytical Results - January 2019 (continued)

Sample Location:			BH14	BH15	BH16	BH17	BH18	BH19	BH20	BH22	BH23	BH24	BH25	LB2
Sample Id:			090419-BR-BH14A	090419-BR-BH15	090419-BR-BH16	100419-BR-BH17	100419-BR-BH18	090419-BR-BH19A	090419-BR-BH20	090419-BR-BH22	090419-BR-BH23	090419-BR-BH24	100419-BR-BH25	-
Laboratory Report Number:			215341	215341	215341	215398	215398	215341	215341	215341	215341	215341	215398	-
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	-
Date Sampled:			09 Apr 19	09 Apr 19	09 Apr 19	10 Apr 19	10 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	09 Apr 19	10 Apr 19	09 Apr 19
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
			2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020	2019/2020
Standing Water Level	0.01	mBTOC	3.83	4.58	1	5.4	27.13	3.33	2.15	2.77	2.8	12.75	7.33	Dry
pH (field)	0.1	pH units	6.95	7.3	7.55	7.16	7.01	7.28	7.2	7.37	7.3	7.03	7.54	
Electrical Conductivity (field)	1	µS/cm	1349	797	424	1140	1357	572	385.7	966	704	486.6	1254	
pH	0.1	pH units	6.8	7.5	7.2	7.2	7.1	7.1	6.9	7.5	7.3	6.8	7.6	
Total Dissolved Solids	5	mg/L	820	450	260	860	910	420	360	630	410	290	780	
Total Organic Carbon	1	mg/L	36	6	10	9	4	41	16	12	16	6	8	
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Chloride	20	mg/L	110	63	70	55	94	27	29	78	77	26	190	
Sulphate	5	mg/L	160	8	14	210	71	130	82	140	34	28	10	
Ammonia as N	0.1	mg/L	0.8	0.16	0.019	0.63	1.5	0.033	0.081	0.35	0.014	<0.005	0.56	
Sodium (Na)	0.03	mg/L	110	32	56	55	73	19	32	75	60	13	150	
Potassium (I) Ion	0.03	mg/L	10	7.5	2.7	17	6	6.6	8.9	14	8.1	2.7	4	
Calcium (II) Ion	0.03	mg/L	200	120	38	200	190	91	84	140	87	91	140	
Magnesium (II) Ion	0.03	mg/L	37	23	5.3	20	31	8.2	13	19	13	6.3	19	

**Kurnell Landfill Quarterly Subsurface Gas Results - April 2019**

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	<0.1	<0.1	-18	<1	30	0.1
22	BH8B	<0.1	Nil	-0.1	<0.1	-18	<1	30	<0.1
23	BH12A	<0.1	Nil	-0.1	<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>