

## 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	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 - July 2019

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10	BH11A	BH12A	BH13A
Sample Id:			241019-JS-BH3A	251019-JS-BH4A	241019-JS-BH5A	251019-JS-BH6A	241019-JS-BH7	-	241019-JS-BH9c	241019-JS-BH10B	251019-JS-BH11A	251019-JS-BH12A	251019-JS-BH13A
Laboratory Report Number:			229199	229308	229199	229308	229199	-	229199	229199	229308	229308	229308
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	-	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			24 Oct 19	25 Oct 19	24 Oct 19	25 Oct 19	24 Oct 19	25 Oct 19	24 Oct 19	24 Oct 19	25 Oct 19	25 Oct 19	25 Oct 19
Parameters	PQL	Units	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd 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	3.37	4.33	7.23	10.66	5.45	nt	5.9	3	23.71	10.2	3.85
pH (field)	0.1	pH units	7.75	7.22	6.79	6.49	7.08	nt	6.9	6.95	6.84	6.99	7.18
Electrical Conductivity (field)	1	µS/cm	956	1201	1692	955	1220	nt	830	1730	1430	1860	1619
pH	0.1	pH units	7.6	7.1	6.9	7	7	nt	6.9	7	7.4	7.5	7.8
Total Dissolved Solids	5	mg/L	740	980	1100	800	870	nt	570	1400	1000	1300	1200
Total Organic Carbon	1	mg/L	6	7	26	52	9	nt	30	23	13	22	13
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	nt	<5	<5	<5	<5	<5
Chloride	20	mg/L	42	52	170	49	59	nt	32	120	110	210	120
Sulphate	5	mg/L	310	260	27	230	120	nt	86	210	120	110	180
Ammonia as N	0.1	mg/L	1.1	0.033	23	0.11	0.9	nt	0.19	1.7	1.4	5.6	2.7
Sodium (Na)	0.03	mg/L	32	38	140	32	40	nt	26	83	100	170	140
Potassium (I) Ion	0.03	mg/L	12	11	32	10	19	nt	5.9	16	5.9	26	16
Calcium (II) Ion	0.03	mg/L	170	240	190	210	230	nt	160	380	210	200	240
Magnesium (II) Ion	0.03	mg/L	21	17	33	23	22	nt	9	36	36	39	42

**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:			241019-JS-BH14A	241019-JS-BH15	241019-JS-BH16	241019-JS-BH17	251019-JS-BH18	241019-JS-BH9c	241019-JS-BH20	241019-JS-BH22	241019-JS-BH23	251019-JS-BH24	251019-JS-BH25	-
Laboratory Report Number:			229199	229199	229199	229199	229308	229199	229199	229199	229199	229308	229308	-
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	-
Date Sampled:			24 Oct 19	24 Oct 19	24 Oct 19	24 Oct 19	25 Oct 19	24 Oct 19	24 Oct 19	24 Oct 19	24 Oct 19	25 Oct 19	25 Oct 19	25 Oct 19
Parameters	PQL	Units	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd quarter	3rd 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	3.22	4.79	1.17	5.45	27.13	5.9	2.48	3.16	3.57	12.77	7.35	17.5
pH (field)	0.1	pH units	6.87	7.46	7	7.08	7.18	6.9	7.24	7.48	7.35	6.87	7.55	6.96
Electrical Conductivity (field)	1	µS/cm	976	774	467	1220	1300	830	566	574	551	405.1	1329	3918
pH	0.1	pH units	7.1	7.6	6.9	7	7.5	6.9	7.3	7.5	7.2	7.1	8	nt
Total Dissolved Solids	5	mg/L	640	510	320	870	910	570	480	420	420	220	810	nt
Total Organic Carbon	1	mg/L	21	4	9	9	3	30	9.9	16	15	6	5	nt
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	nt
Chloride	20	mg/L	70	65	89	59	83	32	45	43	61	19	180	nt
Sulphate	5	mg/L	44	19	14	120	52	86	85	76	23	21	10	nt
Ammonia as N	0.1	mg/L	1.3	0.038	0.026	0.9	1.4	0.19	0.2	0.084	0.56	<0.005	0.55	nt
Sodium (Na)	0.03	mg/L	62	29	47	40	62	26	31	36	30	12	130	nt
Potassium (I) Ion	0.03	mg/L	12	7	2.6	19	7.8	5.9	5.7	12	9	3	4.2	nt
Calcium (II) Ion	0.03	mg/L	190	120	30	230	200	160	92	83	80	79	150	nt
Magnesium (II) Ion	0.03	mg/L	34	20	6.1	22	30	9	13	12	9.7	6.1	20	nt

**Kurnell Landfill Quarterly Subsurface Gas Results - October 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	0.3	<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	0.2	<0.1	-18	<1	30	<0.1

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