

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 - January 2019

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10	BH11A	BH12A	BH13A
Sample Id:			230119-BR-BH3A	230119-BR-BH4A	0119-BR-BH5A	-	310119-BR-BH7A	081018-BR-BH8A	220119-BR-BH9C	220119-BR-BH10B	220119-BR-BH11A	230119-BR-BH12A	230119-BR-BH13A
Laboratory Report Number:			210160	210160	210160	-	210550	202501	210066	210066	210066	210160	210160
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			23 Jan 19	22 Jan 19	23 Jan 19	23 Jan 19	31 Jan 19	08 Oct 18	22 Jan 19	22 Jan 19	22 Jan 19	23 Jan 19	23 Jan 19
Parameters	PQL	Units	4th Quarter	4th Quarter	4th quarter	4th quarter	4th Quarter	3rd Quarter	4th Quarter	4th quarter	4th quarter	4th quarter	4th quarter
			2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019
Standing Water Level	0.01	mBTOC	3.2	4.39	7.33		2.83	16.93	16.95	3.3	23.86	10.28	3.86
pH (field)	0.1	pH units	7.16	6.67	6.85		7.11	7.71	7.38	7.03	6.74	6.75	6.95
Electrical Conductivity (field)	1	µS/cm	1005	1195	1228		1125	521	554	1526	1770	1889	1500
pH	0.1	pH units	7.3	7.0	7.2		7.3	7.5	7.6	7.3	7.0	7.1	7.4
Total Dissolved Solids	5	mg/L	820	850	810		630	340	340	1100	980	1200	1100
Total Organic Carbon	1	mg/L	9	9	22		8	2	8	35	14	19	10
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	45	43	140		56	47	51	77	120	180	99
Sulphate	5	mg/L	340	250	39		68	14	14	170	170	120	160
Ammonia as N	0.1	mg/L	0.52	<0.005	8.8		0.021	<0.005	0.036	0.96	0.91	4.6	1.5
Sodium (Na)	0.03	mg/L	39	33	97		38	40	28	51	95	140	110
Potassium (I) Ion	0.03	mg/L	12	10	19		2.9	1.2	1.9	14	7.2	20	14
Calcium (II) Ion	0.03	mg/L	170	200	160		160	80	89	270	220	210	200
Magnesium (II) Ion	0.03	mg/L	15	15	25		27	8	8.7	26	36	47	32

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:			220119-BR-BH14A	220119-BR-BH15	230119-BR-BH16	230119-BR-BH17	230119-BR-BH18	220119-BR-BH19A	220119-BR-BH20	220119-BR-BH22	230119-BR-BH23	230119-BR-BH24	230119-BR-BH25	220119-BR-LB02
Laboratory Report Number:			210066	210066	210160	210160	210160	210066	210066	210066	210160	210160	210160	-
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	-
Date Sampled:			22 Jan 19	22 Jan 19	23 Jan 19	23 Jan 19	23 Jan 19	22 Jan 19	22 Jan 19	22 Jan 19	23 Jan 19	23 Jan 19	23 Jan 19	22 Jan 19
Parameters	PQL	Units	4th quarter	4th quarter	4th Quarter	4th Quarter	4th Quarter	4th Quarter	4th Quarter	4th Quarter	4th Quarter	4th Quarter	4th Quarter	4th quarter
			2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019	2018/2019
Standing Water Level	0.01	mBTOC	3.97	5.05	1.38	5.42	27.23	3.57	2.45	3.5	3.3	12.91	7.36	Dry
pH (field)	0.1	pH units	6.76	7.35	6.72	6.98	6.65	6.99	6.95	7.33	6.92	6.51	7.22	
Electrical Conductivity (field)	1	µS/cm	1405	6.9	404.1	1222	1344	1090	980	1044	533	332.2	1328	
pH	0.1	pH units	6.9	7.7	6.9	7.3	7.1	6.9	7.2	7.4	7.4	6.5	7.6	
Total Dissolved Solids	5	mg/L	810	430	270	890	820	880	590	670	320	210	760	
Total Organic Carbon	1	mg/L	10	5	6	10	4	61	10	21	16	10	4	
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Chloride	20	mg/L	92	20	84	55	81	52	50	83	53	27	180	
Sulphate	5	mg/L	120	10	14	230	62	310	130	180	33	23	13	
Ammonia as N	0.1	mg/L	0.81	0.14	0.021	1.3	0.66	<0.005	0.37	0.75	0.014	<0.005	0.45	
Sodium (Na)	0.03	mg/L	92	15	44	45	49	42	44	74	31	13	130	
Potassium (I) Ion	0.03	mg/L	13	8.4	2.3	15	7.1	10	13	15	7.8	3.3	3.8	
Calcium (II) Ion	0.03	mg/L	210	120	28	200	200	210	180	130	64	51	140	
Magnesium (II) Ion	0.03	mg/L	40	21	4.7	22	25	20	23	21	7.9	5.8	19	

Kurnell Landfill Quarterly Subsurface Gas Results - January 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 ₄				CH ₄
					(%)				(%)
20	BH4A	<0.1	Nil	<0.1	<0.1	-	-	-	No Vehicle Access
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	0.2	<0.1	-18	<1	30	<0.1
25	BH18	<0.1	Nil	<0.1	<0.1	-	-	-	No Vehicle Access

BOLD Greater than the assessment criteria of 1.0 % CH₄