

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:			020719-BR-BH3A	030719-BR-BH4A	020719-BR-BH5A	020719-BR-BH6A	020719-BR-BH7A	020719-BR-BH8A	020719-BR-BH9C	020719-BR-BH10B	020719-BR-BH11A	030719-BR-BH12A	030719-BR-BH13A
Laboratory Report Number:			220887	220913	220887	220887	220887	220887	220887	220887	220887	220913	220913
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			02 Jul 19	03 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	03 Jul 19	03 Jul 19
Parameters	PQL	Units	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd 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	4.05	7.33	10.64	2.61	9.87	5.72	2.88	23.74	10.13	3.78
pH (field)	0.1	pH units	7.69	6.88	6.98	6.6	7.46	8.17	7.07	7.13	6.79	6.99	7.33
Electrical Conductivity (field)	1	µS/cm	729	1067	925	754	712	455.9	1110	1506	1263	1713	1093
pH	0.1	pH units	7.7	7.1	7.2	6.6	7.4	7.7	7	7.1	7	7.3	7.6
Total Dissolved Solids	5	mg/L	670	830	1000	660	500	310	810	1300	1400	1100	1100
Total Organic Carbon	1	mg/L	5	8	27	110	4	<1	150	120	28	22	13
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	37	51	160	55	26	42	85	99	130	200	120
Sulphate	5	mg/L	280	270	84	230	21	12	88	250	300	92	200
Ammonia as N	0.1	mg/L	1.1	0.061	19	0.15	0.076	0.01	13	1.7	0.97	5.1	3.8
Sodium (Na)	0.03	mg/L	34	38	120	29	17	26	71	62	120	140	130
Potassium (I) Ion	0.03	mg/L	12	11	27	6.4	2	1	16	15	25	23	17
Calcium (II) Ion	0.03	mg/L	130	210	170	170	120	76	190	320	240	220	220
Magnesium (II) Ion	0.03	mg/L	17	15	28	14	22	7.2	23	32	36	41	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:			020719-BR-BH14A	020719-BR-BH15	020719-BR-BH16	020719-BR-BH17	030718-BR-BH18	020719-BR-BH19A	020719-BR-BH20	020719-BR-BH22	020719-BR-BH23	020719-BR-BH24	030719-BR-BH25	-
Laboratory Report Number:			220887	220887	220887	220887	220913	220887	220887	220887	220887	220887	220887	-
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	-
Date Sampled:			02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	03 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19	02 Jul 19
Parameters	PQL	Units	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd quarter	2nd 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	3.88	4.5	1.05	5.4	27.11	3.44	2.28	2.8	2.87	12.75	7.3	17.8
pH (field)	0.1	pH units	6.88	7.33	7.12	7.08	7.02	7.46	7.34	7.43	7.33	6.72	7.55	7.14
Electrical Conductivity (field)	1	µS/cm	486.9	381.7	378.1	677	1280	253.2	522	820	256.7	375	664	2974
pH	0.1	pH units	7	7.6	6.6	7.3	7.2	7	6.9	7.6	7.3	6.7	7.7	-
Total Dissolved Solids	5	mg/L	700	510	240	820	800	360	460	610	340	280	730	-
Total Organic Carbon	1	mg/L	26	3	7	8	3	51	12	12	7	9	4	-
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-
Chloride	20	mg/L	82	67	84	54	90	32	51	72	50	12	180	-
Sulphate	5	mg/L	59	12	16	180	60	140	140	130	23	21	54	-
Ammonia as N	0.1	mg/L	0.98	0.1	0.03	0.54	1.9	0.018	0.048	0.12	0.032	0.009	0.61	-
Sodium (Na)	0.03	mg/L	68	28	47	43	58	21	37	52	28	12	120	-
Potassium (I) Ion	0.03	mg/L	9.3	7	2.9	21	6.4	6.6	9.6	13	6.2	3.1	3.9	-
Calcium (II) Ion	0.03	mg/L	150	110	25	190	190	94	90	110	66	73	140	-
Magnesium (II) Ion	0.03	mg/L	27	20	6.6	19	32	8.6	14	16	7.5	5.6	18	-

Kurnell Landfill Quarterly Subsurface Gas Results - July 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	-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 % CH₄