

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	BH19B	332003	6233379
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 - October 2021

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10B	BH11A	BH12A	BH13A
Sample Id:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10B	BH11A	BH12A	BH13A
Laboratory Report Number:			280507	280507	280507	280376	280376	280376	280376	280376	280376	280507	280507
Laboratory:			EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			15 Oct 21	15 Oct 21	15 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	15 Oct 21	15 Oct 21
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
			2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022
Standing Water Level	0.01	mBTOC	3.40	4.18	7.38	10.76	1.66	16.74	6.12	4.52	23.70	10.21	3.90
pH (field)	0.1	pH units	3.09	1.76	6.31	1.72	868	7.79	1.1	2.11	2.79	5.1	4.68
Electrical Conductivity (field)	1	µS/cm	1,328	1,284	1,654	675	7.3	661	620	2,373	1,310	1,966	1,718
pH	0.1	pH units	7.7	6.8	7.2	6.4	7.3	7.5	6.9	7	6.8	7.1	7.2
Total Dissolved Solids	5	mg/L	940	1,000	860	450	620	440	470	1,900	970	1,100	1,000
Total Organic Carbon	1	mg/L	7	7	23	16	5	2	11	48	8	14	13
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	20	mg/L	57	56	140	38	50	72	19	200	100	170	120
Sulphate	5	mg/L	320	430	34	72	49	30	53	450	200	88	190
Ammonia as N	0.1	mg/L	0.99	<0.005	18	<0.005	<0.005	0.005	0.024	7.5	2	8.6	5.6
Sodium (Na)	0.03	mg/L	51	55	110	32	40	52	23	150	84	130	110
Potassium (I) Ion	0.03	mg/L	11	10	19	3	3	1	4	21	6.4	27	16
Calcium (II) Ion	0.03	mg/L	180	230	140	98	160	100	130	500	220	180	180
Magnesium (II) Ion	0.03	mg/L	20	17	27	10	27	9.8	7.5	62	34	32	25

NOTES:

nt = Not Tested

Kurnell Landfill Quarterly Ground Water Analytical Results - October 2021 (continued)

Sample Location:			BH14	BH15	BH16	BH17	BH18	BH19B	BH20	BH22	BH23	BH24	BH25	LB2
Sample Id:			BH14A	BH15	BH16	BH17	BH18	BH19B	BH20	BH22	BH23	BH24	BH25	-
Laboratory Report Number:			280376	280376	280376	280507	280376	280376	280376	280376	280376	280376	280507	-
Laboratory:			Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	Envirolab	-
Date Sampled:			14 Oct 21	14 Oct 21	14 Oct 21	15 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	14 Oct 21	15 Oct 21	14 Oct 21
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
			2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022	2021/2022
Standing Water Level	0.01	mBTOC	3.90	5.09	1.25	5.57	9.03	4.56	2.63	3.38	3.66	12.77	7.36	15.14
pH (field)	0.1	pH units	1.35	0.78	0.9	2.6	1184	2.53	1.97	2.43	5.14	4.39	0.47	7.1
Electrical Conductivity (field)	1	µS/cm	1,078	697	655	1,469	8	683	1,466	665	435.8	459	1,469	5,105
pH	0.1	pH units	7	7.5	7	7.1	7.8	7.1	7	7.4	6.9	6.6	7.4	-
Total Dissolved Solids	5	mg/L	750	510	370	790	630	620	1,200	410	280	380	810	-
Total Organic Carbon	1	mg/L	28	6	6	14	3	58	17	7	17	6	6	-
Carbonate Alkalinity (CO3-2)	1	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-
Chloride	20	mg/L	110	43	110	82	55	24	120	49	53	28	170	-
Sulphate	5	mg/L	56	39	18	110	36	82	450	87	8	77	53	-
Ammonia as N	0.1	mg/L	0.69	0.087	0.02	3.3	1.3	<0.005	0.14	0.1	0.039	<0.005	0.66	-
Sodium (Na)	0.03	mg/L	110	40	77	74	49	24	150	43	30	30	110	-
Potassium (I) Ion	0.03	mg/L	6.6	5.6	2	18	6.8	4	7.5	7.7	7	5	4	-
Calcium (II) Ion	0.03	mg/L	150	130	40	180	200	150	210	77	48	91	140	-
Magnesium (II) Ion	0.03	mg/L	30	19	12	17	31	22	48	14	10	8.8	20	-

Kurnell Landfill Quarterly Subsurface Gas Results - October 2021

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	-15	<1	30	<0.1
22	BH8B	<0.1	Nil	<0.1	<0.1	-15	<1	30	<0.1
23	BH12A	<0.1	Nil	<0.1	<0.1	-15	<1	30	<0.1
24	BH13A	<0.1	Nil	<0.1	<0.1	-15	<1	30	<0.1
25	BH18	<0.1	Nil	0.1	<0.1	-15	<1	60	<0.1

BOLD Greater than the assessment criteria of 1.0 % CH₄