

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 2020

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10	BH11A	BH12A	BH13A
Sample Id:			-	130120-JS-BH4A	150120-LP-BH5A	140120-JS-BH6A	140120-JS-BH7A	-	130120-JS-BH9C	150120-LP-BH10B	251019-JS-BH12A	130120-JS-BH12A	130120-JS-BH13A
Laboratory Report Number:			-	234429	234567	234515	234515	-	234429	234567	229308	234429	234429
Laboratory:			-	EnviroLab	EnviroLab	EnviroLab	EnviroLab	-	EnviroLab	EnviroLab	EnviroLab	EnviroLab	EnviroLab
Date Sampled:			15 Jan 20	13 Jan 20	15 Jan 20	14 Jan 20	14 Jan 20	15 Jan 20	13 Jan 20	15 Jan 20	25 Oct 19	13 Jan 20	13 Jan 20
Parameters	PQL	Units	4th quarter	4th quarter	4th quarter	4th quarter	4th quarter	4th quarter	4th quarter	4th quarter	3rd quarter	4th quarter	4th 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	nt	4.31	7.36	10.79	2.82	nt	5.99	3.1	10.2	10.29	3.87
pH (field)	0.1	pH units	nt	7.29	7.24	6.85	7.27	nt	7.45	7.09	6.99	7.05	7.29
Electrical Conductivity (field)	1	µS/cm	nt	1212	1544	801	794	nt	828	2019	1860	1788	1850
pH	0.1	pH units	nt	7	7.1	6.5	7.1	nt	7	7.1	7.5	7	7.1
Total Dissolved Solids	5	mg/L	nt	900	940	580	540	nt	680	1300	1300	1200	1200
Total Organic Carbon	1	mg/L	nt	7	19	9	3	nt	10	27	22	23	16
Carbonate Alkalinity (CO3-2)	1	mg/L	nt	<5	630	250	420	nt	<5	750	<5	<5	<5
Chloride	20	mg/L	nt	49	160	34	27	nt	59	98	210	230	130
Sulphate	5	mg/L	nt	360	31	140	26	nt	100	200	110	88	160
Ammonia as N	0.1	mg/L	nt	0.045	19	0.035	0.006	nt	4.5	13	5.6	9.1	3.6
Sodium (Na)	0.03	mg/L	nt	32	130	18	17	nt	39	140	170	170	150
Potassium (I) Ion	0.03	mg/L	nt	11	24	2.3	2.1	nt	8	19	26	26	16
Calcium (II) Ion	0.03	mg/L	nt	210	170	140	140	nt	150	290	200	180	220
Magnesium (II) Ion	0.03	mg/L	nt	14	28	14	25	nt	11	27	39	35	42
Hexavalent Chromium	0.005	mg/L	nt	<0.005	<0.005	<0.050	<0.005	nt	<0.005	<0.005	<0.50	<0.005	<0.005
Aluminium	10	µg/L	nt	10	<10	10	<10	nt	40	10	<10	10	10
Arsenic	1	µg/L	nt	<1	92	4	5	nt	8	10	200	3	10
Barium	1	µg/L	nt	45	52	55	24	nt	60	240	29	110	34
Cadmium	0.1	µg/L	nt	0.9	<0.1	<0.1	<0.1	nt	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium	1	µg/L	nt	1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Cobalt	1	µg/L	nt	<1	2	<1	<1	nt	<1	<1	<1	3	2
Copper	1	µg/L	nt	16	3	6	6	nt	18	<1	2	9	8
Lead	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Manganese	5	µg/L	nt	23	700	120	38	nt	46	520	450	160	500
Mercury	0.05	µg/L	nt	<0.05	<0.05	<0.05	<0.05	nt	<0.05	<0.05	<0.05	<0.05	<0.05
Zinc	1	µg/L	nt	39	22	22	26	nt	76	11	16	66	55
Nitrate as N	0.005	mg/L	nt	0.58	1.2	0.37	4.7	nt	0.67	0.02	<0.050	0.58	0.068
Nitrite as N	0.005	mg/L	nt	0.026	<0.005	0.024	0.19	nt	0.009	<0.005	<0.005	<0.005	0.006
Total Suspended Solids	5	mg/L	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Benzene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Toluene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Ethylbenzene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
meta-xylene	2	µg/L	nt	<2	<2	<2	<2	nt	<2	<2	<2	<2	<2
o-xylene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
TRH C6- C9	10	µg/L	nt	<10	<10	<10	<10	nt	<10	<10	<10	<10	<10
TRH C6-C10	10	µg/L	nt	<10	<10	<10	<10	nt	<10	<10	<10	<10	<10
TRH C10- C14	50	µg/L	nt	<50	53	<50	<50	nt	<50	84	<50	70	65
TRH C15-C28	100	µg/L	nt	<100	190	<100	<100	nt	<100	140	<100	300	170
TRH C29-C36	100	µg/L	nt	<100	<100	<100	<100	nt	<100	<100	<100	<100	<100
Hexachlorobenzene	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
alpha-BHC	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
gamma-BHC (Lindane)	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
b-BHC	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
d-BHC	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Aldrin	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor epoxide	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Chlordane - cis	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Chlordane - trans	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan alpha	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
4,4-DDE	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Dieldrin	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
4,4-DDD	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan II	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
4,4-DDT	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin aldehyde	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Methoxychlor	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos-ethyl	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Diazinon	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2

Kurnell Landfill Quarterly Ground Water Analytical Results - January 2020

Monitoring Location:			BH3A	BH4A	BH5A	BH6A	BH7A	BH8A	BH9C	BH10	BH11A	BH12A	BH13A
Dimethoate	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Ethion	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Fenitrothion	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Ronnel	0.2	µg/L	nt	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	<0.2	<0.2
Naphthalene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Acenaphthylene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Acenaphthene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Fluorene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Phenanthrene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Anthracene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Fluoranthene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Pyrene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Benzo(a)anthracene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Chrysene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Benzo(b)&(k)fluoranthene	2	µg/L	nt	<2	<2	<2	<2	nt	<2	<2	<2	<2	<2
Indeno(1,2,3-cd)pyrene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Dibenzo(a,h)anthracene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	1	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Benzo(a)pyrene	5	µg/L	nt	<1	<1	<1	<1	nt	<1	<1	<1	<1	<1
Total Phenolics	0.05	mg/L	nt	<0.05	<0.05	<0.05	<0.05	nt	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoride	0.1	mg/L	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Phosphorus	0.05	mg/L	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

NOTES:
 nt = Not Tested

Kurnell Landfill Quarterly Subsurface Gas Results - January 2020

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	-0.7	<0.1	-18	<1	30	<0.1
24	BH13A	<0.1	Nil	-0.5	<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