

Dial A Dump (EC) Pty Ltd
Groundwater Quality Monitoring



Licensee: Dial A Dump (EC) Pty Ltd
 Address: Genesis Waste Facility,
 Honeycomb Drive, Eastern Creek
 EPL Nos. 1342

RAW LEACHATE	Pollutant	Units	2016				2017				2018			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Alkalinity (total) as CaCO ₃	mg/L	2,540	3,120	2,940	3,350	3,980	3,600	3,600	3,770	3,590	3,670	4,200	3,200
	Aluminium	mg/L					2.26				0.28			
	Aluminium (filtered)	mg/L	0.1											
	Arsenic (filtered)	mg/L	0.03			0.043	0.065				0.032			
	Barium (filtered)	mg/L	0.967				3.04				1.92			
	Benzene	µg/L	7				4				<5			
	Cadmium (filtered)	mg/L	<0.0001			<0.0001	0.0003				<0.0001			
	Calcium (filtered)	mg/L				149	98	126	75	123	84	98	72	66
	Chloride	mg/L	418	427	428	484	636	593	600	553	513	544	620	130
	Chromium (III+VI) (filtered)	mg/L	0.105			0.199	0.274				0.194			
	Cobalt (filtered)	mg/L					0.004				0.004			
	Copper (filtered)	mg/L	0.128			0.102	2.22				0.003			
	EC (field)	uS/cm	7,400	6,320	8,300	7,400	7,930	7,487	6,840	5,724	6,683	7,102	8,760	8,898
	Ethylbenzene	µg/L	18				4				<5			
	Fluoride	mg/L	0.5	0.5	0.7	0.3	0.6	0.6	1	0.8	0.7	0.4	0.7	0.7
	Fluoride (filtered)	mg/L												0.7
	Lead	mg/L				0.013	0.03				0.005			
	Lead (filtered)	mg/L	0.003											
	Magnesium (filtered)	mg/L		71	57	68	54	71	54	74	73	74	57	49
	Manganese (filtered)	mg/L	0.22	0.502	0.314		0.621			0.316	0.251	0.334	0.26	0.25
	Mercury (filtered)	mg/L	<0.0001			<0.0001	<0.0001				<0.0001			
	Nitrate (as N)	mg/L			<0.1	<0.01	<0.1	<0.01	<0.01	<0.1	5	<0.1	<0.05	<0.1
	Nitrite (as N)	mg/L			0.42	<0.01	0.02	0.05	0.14	<0.1	93.9	<0.1	<0.05	<0.05
	Ammonia	mg/L	103	197	289	254	395	309	436	358	240	378	360	250
	pH (field)	-	7.55	7.22	7.5	7.3	7.48	7.4	7.3	7.06	7.2	7.3	7.32	7.1
	DDT+DDE+DDD	µg/L	<0.5				<0.5				<0.5			
	Fenthion	µg/L	<0.5				<0.5				<0.5			
	Phenol	µg/L	3.8				0.09				<1			
	PAHs (Sum of total)	µg/L	1				<0.5				5.5			
	Phenolics Total	µg/L												
	Phosphorus	mg/L	0.51	1	0.91	0.9		0.78		1.01		0.98	2	2.5
	PAHs (Sum of positives)	µg/L					4,350				2,940			
	+C10-C16 (Sum of total)	µg/L	1,770											
	Potassium (filtered)	mg/L	62	63	73	86	92	92	127	119	103	108	83	63
	Redox	mg/L	-13.7	-348	-10.6	-326.8	-20.6	-50.6	-246.9	75.2	-22.6	-75	94	-158
	Xylene Total	µg/L	30				7				<5			
	Sodium (filtered)	mg/L	1,030	1,170	1,030	1,120	1,270	1,060	938	1,300	1,410	1,350	1,700	940
	Standing water level	mg/L	-37.91	-39.581	-36.567	-37.382	-40.254	-32.491	-30.668	-31.84	-34.699	-37.33	-39.32	-41.58
	Sulphate	mg/L	60	<10	<1	4	<1	52	15	<10	17	14	12	130
	Toluene	µg/L	18				<2				<5			
	TDS	mg/L	3,440	2,830	3,210	3,100	3,120	3,900	4,190	4,250	3,980	4,210	4,600	3,300
	TOC	mg/L	134				760				446	354		
	Total Suspended Solids	mg/L	9	21	8	64	44	38	15	29	20	300	31	
	Xylene (m & p)	µg/L	17				5				<5			
	Zinc (filtered)	mg/L	0.069			0.099	0.617				0.027			

RAW LEACHATE		2016				2017				2018			
Pollutant	Units	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TPH													
C10-C14	µg/L	500				970				940			
C10-C16	mg/L	0.62				1.23				1.12			
C15-C28	µg/L	1,190				3,210				2,000			
C16-C34	mg/L	1.08				2.96				2.05			
C29-C36	µg/L	80				170				<50			
C34-C40	mg/L	<0.1				<0.1				<0.1			
C6-C10	mg/L	0.2				0.09				<0.1			
C6-C9	µg/L	240				130				<100			
F2 minus Naphthalene	mg/L	0.62				1.22				1.12			
Organochlorine Pesticides													
4,4-DDE	µg/L	<0.5				<0.5				<0.5			
a-BHC	µg/L	<0.5				<0.5				<0.5			
Aldrin	µg/L	<0.5				<0.5				<0.5			
Aldrin + Dieldrin	µg/L	<0.5				<0.5				<0.5			
b-BHC	µg/L	<0.5				<0.5				<0.5			
chlordan	µg/L	<0.5				<0.5				<0.5			
Chlordane (cis)	µg/L	<0.5				<0.5				<0.5			
Chlordane (trans)	µg/L	<0.5				<0.5				<0.5			
d-BHC	µg/L	<0.5				<0.5				<0.5			
DDD	µg/L	<0.5				<0.5				<0.5			
DDT	µg/L	<2				<2				<2			
Dieldrin	µg/L	<0.5				<0.5				<0.5			
Endosulfan I	µg/L	<0.5				<0.5				<0.5			
Endosulfan II	µg/L	<0.5				<0.5				<0.5			
Endosulfan sulphate	µg/L	<0.5				<0.5				<0.5			
Endrin	µg/L	<0.5				<0.5				<0.5			
Endrin aldehyde	µg/L	<0.5				<0.5				<0.5			
Endrin ketone	µg/L	<0.5				<0.5				<0.5			
γ-BHC (Lindane)	µg/L	<0.5				<0.5				<0.5			
Heptachlor	µg/L	<0.5				<0.5				<0.5			
Heptachlor epoxide	µg/L	<0.5				<0.5				<0.5			
Methoxychlor	µg/L	<2				<2				<2			
Organophosphorous Pesticides													
Fenitrothion	µg/L												
Ronnel	µg/L												
Azinophos methyl	µg/L	<0.5				<0.5				<0.5			
Bromophos-ethyl	µg/L	<0.5				<0.5				<0.5			
Carbophenothion	µg/L	<0.5				<0.5				<0.5			
Chlorfenvinphos	µg/L	<0.5				<0.5				<0.5			
Chlorpyrifos	µg/L	<0.5				<0.5				<0.5			
Chlorpyrifos-methyl	mg/L	<0.0005				<0.0005				<0.0005			
Diazinon	µg/L	<0.5				<0.5				<0.5			
Dichlorvos	µg/L	<0.5				<0.5				<0.5			
Dimethoate	µg/L	<0.5				<0.5				<0.5			
Ethion	µg/L	<0.5				<0.5				<0.5			
Malathion	µg/L	<0.5				<0.5				<0.5			
Methyl parathion	µg/L	<2				<2				<2			
Monocrotophos	µg/L	<2				<2				<2			
Prothiofos	µg/L	<0.5				<0.5				<0.5			

RAW LEACHATE	Pollutant	Units	2019				2020				2021			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Alkalinity (total) as CaCO3	mg/L	3,700	3,400	3600	3,800	3,100	2,900	3,600	3,600	3,300	3,600	3,800	
	Aluminium	mg/L												
	Aluminium (filtered)	mg/L	0.09				0.07				0.03			
	Arsenic (filtered)	mg/L	0.017				0.059				0.009			
	Barium (filtered)	mg/L	1.9				2.3				2.1			
	Benzene	µg/L	10				13				1			
	Cadmium (filtered)	mg/L	<0.0001				<0.0001				<0.0001			
	Calcium (filtered)	mg/L	100	69	82	82	90	87	55	36	42	76	99	
	Chloride	mg/L	500	430	490	480	300	340	400	400	450	390	370	
	Chromium (III+VI) (filtered)	mg/L	0.12				0.085				0.075			
	Cobalt (filtered)	mg/L	0.007				0.003				0.004			
	Copper (filtered)	mg/L	0.006				0.001				0.016			
	EC (field)	uS/cm	9,275	5,524	8716	7,550	9,835	8,184	5,805	7,059	7,290	9,254	8,592	
	Ethylbenzene	µg/L	16				19				<1			
	Fluoride	mg/L	0.7	0.6		0.6	0.4	0.4	0.5	0.4	0.7	0.6	0.5	
	Fluoride (filtered)	mg/L	0.7	0.6										
	Lead	mg/L												
	Lead (filtered)	mg/L	<0.001				<0.001				0.002			
	Magnesium (filtered)	mg/L	70	55	67	71	57	55	41	28	31	64	76	
	Manganese (filtered)	mg/L	0.24	0.21		0.29	0.19	0.25	0.24	0.24	0.24	0.25	0.31	
	Mercury (filtered)	mg/L	<0.00005				<0.00005				<0.00005			
	Nitrate (as N)	mg/L	<0.005	<0.005		<0.050	0.060	<0.005	4.7	<0.01	<0.01	<0.01	0.19	
	Nitrite (as N)	mg/L	<0.005	<0.005		<0.050	<0.050	<0.005	0.092	<0.005	<0.01	<0.01	1.2	
	Ammonia	mg/L	320	220	220	290	250	260	240	310	230	290	330	
	pH (Field)		7.09	7.42	7.05	7.09	7.36	6.91	7.24	7.09	7.22	7.12	7.01	
	DDT+DDE+DDD	µg/L												
	Fenthion	µg/L												
	Phenol	µg/L	<0.05											
	PAHs (Sum of total)	µg/L	31											
	Phenolics Total	µg/L					<50				<50			
	Phosphorus	mg/L	1.3	1.3		1.1	0.7	0.9	1.5	0.9	1.2	0.8	1.1	
	PAHs (Sum of positives)	mg/L					0.053				0			
	+C10-C16 (Sum of total)	µg/L												
	Potassium (filtered)	mg/L	84	83	86	81	59	63	75	81	78	82	110	
	Redox	mg/L	-281.4	-151	-248.8	-232.8	-309.2	-244.5	-149.2	50.6		-203.4		
	Xylene Total	µg/L	<10											
	Sodium (filtered)	mg/L	1,100	1,000	1200	1,100	880	1,100	900	660	740	1,100	1,100	
	Sulphate	mg/L	93	3	7	4	2	3	55	12	36	18	76	
	Toluene	µg/L	<10				10				<1			
	TDS	mg/L	4,100	4,200	4800	3,500	3,000	2,900	3,600	3,900	5,400	4,000	4,200	
	TOC	mg/L	360				210				190			
	Total Suspended Solids	mg/L	5	6	8	6	34	29	6	<5	17	24	6	
	Xylene (m & p)	µg/L	<20				12				<2			
	Zinc (filtered)	mg/L	0.021				0.012				0.031			

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