KOOTINGAL LANDFILL - YEARLY SUMMARY FOR 2015/16

LICENCE PERIOD: 17th Oct 2015 - 16th Oct 2016

POINT 1 - Surface Water NOTE: Monitoring Frequency - Special Frequency

Sample Date	Alkalinity	Calcium	Chloride	Chromium	Conductivity	Dissolved Oxygen	Fluoride	Iron	Magnesium	Manganese	Nitrate	Nitrite	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	Temperature	TKN	TOC	Total Phenolics	TSS	Volumteric Flow Rate	Zinc
	mg/L	mg/L	mg/L	mg/L	mS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	oC	mg/L	mg/L	ug/L	mg/L	kL/day	mg/L
9/12/2015	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
2/03/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/06/2016	146	45	51	<0.01	0.55	7.6	<0.2	1.02	12	0.044	3.3	0.13	0.52	<PQL	7.9	61	15	<10	13.8	3.6	35	<0.05	6	<1	0.02
21/09/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 2 - Leachate NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	Calcium	Chloride	Chromium	Conductivity	Dissolved Oxygen	Fluoride	Iron	Magnesium	Manganese	Nitrate	Nitrite	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	Temperature	TKN	TOC	Total Phenolics	TSS	Zinc
	mg/L	mg/L	mg/L	mg/L	mS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	oC	mg/L	mg/L	ug/L	mg/L	mg/L
9/12/2015	285	71	76	<0.05	0.83	2.70	<0.2	7.20	20.0	0.7	<0.1	<0.1	0.3	<PQL	7.7	94	28	<10	NA	13.1	65	<0.05	141	<0.1
2/03/2016	253	67	52	<0.01	0.73	14.9	0.3	1.80	15	0.3	<0.1	<0.1	<0.1	<PQL	8.8	66	21	<10	29.4	6.3	48	<0.05	122	<0.1
16/06/2016	142	38	45	<0.01	0.84	5.1	<0.2	0.67	10	0.05	1.5	0.1	0.7	<PQL	7.3	56	15	<10	11.4	4.0	20	<0.05	3	0.02
21/09/2016	183	45	48	<0.05	0.73	4.0	<0.2	2.31	13	0.18	0.2	<0.1	0.4	<PQL	7.4	62	22	3	19.0	4.1	35	<0.05	5	0.01

POINT 3 - Leachate Overflow NOTE: Monitoring Frequency - Special Frequency

Sample Date	Alkalinity	Calcium	Chloride	Chromium	Conductivity	Dissolved Oxygen	Fluoride	Iron	Magnesium	Manganese	Nitrate	Nitrite	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	Temperature	TKN	TOC	Total Phenolics	TSS	Volumteric Flow Rate	Zinc
	mg/L	mg/L	mg/L	mg/L	mS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	oC	mg/L	mg/L	ug/L	mg/L	kL/day	mg/L
9/12/2015	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
2/03/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
16/06/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21/09/2016	179	45	38	<0.05	0.49	14.4	0.3	1.5	15	0.1	<0.1	<0.1	<0.1	<PQL	8.3	42	17	16	19.1	2.9	32	<0.05	7	NIL	<0.005

POINT 4 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganese	Nitrate	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	TDS	TOC	Total Phenolics
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L
9/12/2015	397	<2	75	77	1.4	0.2	52	0.2	3.9	<0.1	<PQL	6.6	11	77	50	632	8	<0.05
2/03/2016	407	<2	70	74	1.5	1.7	62	0.2	2.5	<0.1	NA	6.8	13	90	66	692	<1	<0.05
16/06/2016	354	<2	58	54	1.2	0.3	47	0.11	3.0	0.02	NA	6.7	10	62	53	547	6	<0.05
21/09/2016	435	<2	67	57	1.7	0.1	57	0.04	2.3	<0.1	NA	6.7	13	96	40	640	5	<0.05

POINT 5 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganese	Nitrate	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	TDS	TOC	Total Phenolics
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L
9/12/2015	731	<2	204	258	1.1	7.1	114	5.1	4.6	<0.1	<PQL	6.7	13	250	380	1766	7	<0.05
2/03/2016	723	<2	196	280	1.1	7.5	139	4.7	3.9	<0.1	NA	6.7	13	256	370	1918	<1	<0.05
16/06/2016	749	<2	194	299	1.1	1.04	125	5.3	3.8	0.02	NA	6.8	12	254	400	1774	7	<0.05
21/09/2016	750	<2	207	283	1.2	0.70	133	5.0	3.4	<0.1	NA	6.7	12	279	384	1838	7	<0.05

POINT 6 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganese	Nitrate	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	TDS	TOC	Total Phenolics
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L
9/12/2015	751	<2	138	124	1.3	0.7	77	0.6	<0.1	<0.1	<PQL	6.7	11	148	40	1054	12	<0.05
2/03/2016	739	<2	140	139	1.3	2.5	83	0.5	0.1	<0.1	NA	6.8	11	153	54	1112	<1	<0.05
16/06/2016	692	<2	117	124	1.2	1.0	76	0.5	0.01	0.04	NA	6.8	10	137	65	938	8	<0.05
21/09/2016	657	<2	112	96	1.4	0.1	73	0.4	<0.1	<0.1	NA	6.7	10	138	49	936	8	<0.05

POINT 7 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganese	Nitrate	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	TDS	TOC	Total Phenolics
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L
9/12/2015	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
2/03/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
16/06/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21/09/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY