

FOREST ROAD LANDFILL - YEARLY SUMMARY FOR 2016/17

LICENCE PERIOD: 25th Sept 2016 - 24th Sept 2017

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

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Ammonia	Oil and Grease	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS	Volumetric Flowrate		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	
9/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 2 - Surface Water Dam NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Nitrite	Ammonia	Oil and Grease	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L
7/12/2016	198	5	48	135	0.5	0.83	27	0.421	<0.1	<0.1	<0.1	<5	8.0	22	87	43	21	<50	29
29/03/2017	117	17	27	56	0.6	1.44	12	0.218	<0.1	0.8	<0.1	<5	9.4	12	47	21	22	<50	74
8/06/2017	202	2	69	147	0.3	0.59	27	0.133	0.5	0.08	0.67	<5	7.9	17	63	23	15	<50	16
26/09/2007	176	4	90	277	0.4	4.12	40	0.698	<0.1	<0.1	4.2	<5	7.8	28	102	56	35	<50	97

POINT 3 - Surface Water - Upstream NOTE: Monitoring Frequency - Special Frequency

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Ammonia	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS	Volumetric Flowrate	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	
9/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 4 - Surface Water - Downstream NOTE: Monitoring Frequency - Special Frequency

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Ammonia	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS	Volumetric Flowrate	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	
9/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 5 - Leachate NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Ammonia	Oil and Grease	OC/OP	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	pH Units	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L
8/12/2016	1428	31	187	925	0.9	2.04	151	3.1	<0.1	2.2	<5	<PQL	7.3	101	594	<10	70	<50	20
29/03/2017	350	5	170	763	0.8	0.06	91	0.38	119.5	3.5	<5	<PQL	7.4	77	440	67	92	<50	<2
8/06/2017	1653	11	251	733	0.8	1.08	133	3.3	6.86	80.1	<5	<PQL	7.1	88	473	2	86	<50	9
5/09/2017	606	5	154	823	0.5	<0.05	132	0.07	117.2	3.2	<5	<PQL	7.7	95	594	32	77	<50	3

POINT 6 - Leachate NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Ammonia	Oil and Grease	OC/OP	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS
	mg/L	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	ug/L	mg/L
8/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29/03/2017	331	5	135	493	0.6	<0.05	67	0.01	72.0	0.1	<5	<PQL	7.9	67	334	81	67	<50	4
8/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
5/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 7 - Leachate Overflow NOTE: Monitoring Frequency - Quarterly

Sample Date	Alkalinity	BOD	Calcium	Chloride	Fluoride	Iron	Magnesium	Manganaese	Nitrate	Ammonia	OC/OP	pH	Potassium	Sodium	Sulphate	TOC	Total Phenolics	TSS	VOC
	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	ug/L	mg/L	mg/L
9/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 8 - Groundwater Bore NOTE: Monitoring Frequency - Quarterly

Sample Date	Aluminium	Arsenic	BOD	Cadmium	Calcium	Chloride	Copper	DOC	Conductivity	Fluoride	Iron	Iron (Dissolved)	Lead	Magnesium	Manganese	Mercury	Ammonia	Nickel	Nox
-------------	-----------	---------	-----	---------	---------	----------	--------	-----	--------------	----------	------	------------------	------	-----------	-----------	---------	---------	--------	-----

	mg/L	mg/L	mg/L	mg/L	mg/L	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	mg/L	mg/L	
8/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
6/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 9 - Groundwater Bore

NOTE: Monitoring Frequency - Quarterly

Sample Date	Aluminium	Arsenic	BOD	Cadmium	Calcium	Chloride	Copper	DOC	Conductivity	Fluoride	Iron	Iron (Dissolved)	Lead	Magnesium	Manganese	Mercury	Ammonia	Nickel	Nox	
	mg/L	mg/L	mg/L	mg/L	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	mg/L	mg/L	
8/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
6/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 18 - Groundwater Bore

NOTE: Monitoring Frequency - Quarterly

Sample Date	Aluminium	Arsenic	BOD	Cadmium	Calcium	Chloride	Copper	DOC	Conductivity	Fluoride	Iron	Iron (Dissolved)	Lead	Magnesium	Manganese	Mercury	Ammonia	Nickel	Nox
	mg/L	mg/L	mg/L	mg/L	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	mg/L	mg/L
8/12/2016	0.43	NA	3	NA	108	143	NA	3	1.30	<0.2	0.96	<0.05	NA	11	0.34	NA	<0.1	NA	3.2
31/03/2017	0.89	NA	2	NA	97	138	NA	1	1.30	<0.2	1.81	<0.05	NA	10	0.04	NA	<0.1	NA	3.7
6/06/2017	0.41	NA	<2	NA	115	155	NA	3	1.30	<0.2	0.70	<0.05	NA	11	0.13	NA	0.01	NA	3.7
22/09/2017	0.37	NA	<2	NA	116	148	NA	<1	1.30	<0.2	0.95	<0.05	NA	11	0.12	NA	<0.1	NA	4.1

POINT 19 - Groundwater Bore

NOTE: Monitoring Frequency - Quarterly

Sample Date	Aluminium	Arsenic	BOD	Cadmium	Calcium	Chloride	Copper	DOC	Conductivity	Fluoride	Iron	Iron (Dissolved)	Lead	Magnesium	Manganese	Mercury	Ammonia	Nickel	Nox
	mg/L	mg/L	mg/L	mg/L	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	mg/L	mg/L
8/12/2016	0.38	NA	19	NA	265	514	NA	4	2.9	0.4	0.88	0.12	NA	110	0.39	NA	0.21	NA	<0.1
31/03/2017	0.05	NA	2	NA	230	495	NA	1	2.6	0.4	0.21	<0.05	NA	102	0.04	NA	<0.1	NA	5.6
6/06/2017	0.07	NA	4	NA	229	466	NA	5	2.4	0.4	0.20	<0.05	NA	93	0.04	NA	0.02	NA	7.5
22/09/2017	0.37	NA	<2	NA	116	148	NA	<1	2.3	<0.2	0.95	<0.05	NA	11	0.12	NA	<0.1	NA	4.1

POINT 20 - Groundwater Bore

NOTE: Monitoring Frequency - Quarterly

Sample Date	Aluminium	Arsenic	BOD	Cadmium	Calcium	Chloride	Copper	DOC	Conductivity	Fluoride	Iron	Iron (Dissolved)	Lead	Magnesium	Manganese	Mercury	Ammonia	Nickel	Nox	
	mg/L	mg/L	mg/L	mg/L	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	mg/L	mg/L	
8/12/2016	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31/03/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
6/06/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22/09/2017	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

POINT 13 - Methane

NOTE: Monitoring Frequency - Quarterly

Sample Date	Methane %/volume
20/01/2017	<0.05
31/03/2017	<0.05
2/06/2017	<0.05
29/09/2017	<0.05

POINT 15 - Methane

NOTE: Monitoring Frequency - Quarterly

Sample Date	Methane %/volume
20/01/2017	<0.05
31/03/2017	<0.05
2/06/2017	<0.05
29/09/2017	<0.05

POINT 16 - Methane

NOTE: Monitoring Frequency - Quarterly

Sample Date	Methane %/volume
20/01/2017	<0.05
31/03/2017	<0.05
2/06/2017	<0.05
29/09/2017	<0.05

VOC
mg/L
<PQL
<PQL
<PQL
<PQL

VOC
mg/L
DRY
<PQL
DRY
DRY

Volumetric Flowrate
kL/day
DRY
DRY
DRY
DRY

Oil and Grease	OC/OP	pH	Phosphorus	Potassium	Sodium	Soluble Phosphorus	Sulphate	TOC	Total Phenolics	Zinc
-----------------------	--------------	-----------	-------------------	------------------	---------------	---------------------------	-----------------	------------	------------------------	-------------

