

LEACHATE EFFLUENT QUALITY RESULTS, MILE 24 REGIONAL SANITARY LANDFILL: 2013 - 2015

Parameter	2014					2015					Max.	Min.	Avg.	Effluent Limits Regs-other industries	Max. Limits agreed with DOE	Avg. Limits agreed with DOE	Units
	Qtr 4 Dec 2013	Qtr 1 Mar 2014	Qtr 2 Jun 2014	Qtr 3 Sept 2014	Qtr 4 Dec 2014	Qtr 1 Mar 2015	Qtr 2 Jun 2015	Qtr 3 Sept 2015	Qtr 4 Dec 2015								
Total Coliforms	8.15E+03	3.52E+02	1.20E+03	7.50E+02	9.33E+01	4.00E+01	2.40E+04	90	4.30E+02	2.40E+04	3.00E+00	2.93E+03	0-10			MPN/100mL	
Fecal Coliforms	8.08E+03	7.00E+02	1.20E+03	7.50E+02	9.33E+01	4.00E+01	2.30E+02	40	4.00E+01	2.40E+04	2.30E+01	2.08E+03	0		1000	MPN/100mL	
pH	7.82	8.74	9.42	9.06	7.78	9.06	7.45	9.08	10.39	10.39	7.15	8.62	6-9	6-9	6-9		
Temperature	27.43	30.07	35.30	31.30	27.60	35.80	27.70	26	27.00	35.80	25.80	30.02	33			°C	
Conductivity	797.22	908.22	914.00	920.50	594.56	861.00	505.00	946.67	117.50	1074.00	117.50	709.83				µS/cm	
Chloride	38.52	215.30	146.76	115.43	80.09	129.28	81.47	146.32	194.48	394.01	7.87	108.57	600			mg/L	
Total Hardness	181.89	116.64	80.28	81.97	66.85	<2.00	45.42	66.39	78.69	229.29	45.42	96.83				mg/L	
Color *	11.67	11.67	10.00	10.25	<5.0	50.00	<10	10.0	50.00	50.00	5.00	13.95	7			Pt-Co	
Dissolved Oxygen *	5.86	9.40	4.21	5.69	7.05	3.17	3.62	7.55	6.03	12.92	1.10	6.53	5			mg/L	
Biochemical Oxygen Demand	47.08	32.89	24.92	12.70	8.60	22.39	15.32	19.66	21.95	79.92	3.47	23.56	50	175	75	mg/L	
Chemical Oxygen Demand	157.78	174.94	259.79	214.87	93.18	284.63	171.05	243.46	271.44	285.06	36.00	171.01	100			mg/L	
Total Suspended Solids	87.01	44.22	85.94	57.14	20.05	100.10	32.85	37.16	116.37	173.31	13.00	54.75	50	130	50	mg/L	
Total Dissolved Solids	431.01	557.64	626.71	636.03	389.26	609.88	358.39	706.97	709.10	709.10	113.08	484.37	2000			mg/L	
Nitrates	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.10	3	50	20	mg/L
Fats and Oils	3.98	5.94	3.98	3.98	3.98	5.18	3.98	3.98	5.35	5.94	3.98	4.57	10			mg/L	
Ammonia Nitrogen	12.20	5.39	3.28	0.30	0.30	0.32	0.30	0.30	0.30	18.59	0.30	4.52	1			mg/L	
Total Phosphorus	< 4.00	< 4.00	<4.00	<4.00	< 4,00	<4.00	<4.00	<4.00	<4.00	4.00	4.00	4.00	4.00	5			mg/L
Arsenic	0.017	0.013	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.021	0.001	0.007	1	1		mg/L	
Boron	0.136	0.207	0.100	0.100	0.100	0.100	0.320	0.270	2.500	2.500	0.027	0.283	5			mg/L	
Cadmium		N.D.	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.1	2		mg/L	
Copper	0.001	0.005	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.001	0.033	1	3		mg/L	
Hexavalent Chromium		N.D.	0.050	0.050	0.050	0.050	0.050	0.050	0.100	0.100	0.050	0.050	1	2		mg/L	
Phenol	0.088	0.016	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.132	0.010	0.023	0.2	1		mg/L	
Iron	9.781	2.871	0.348	0.345	0.172	0.260	0.267	0.216	1.732	14.530	0.162	2.392	20	20		mg/L	
Manganese	1.239	0.216	0.050	0.050	6.320	0.050	0.050	0.096	0.050	12.590	0.050	1.144	5			mg/L	
Mercury	0.0003	0.0007	0.0005	0.0050	0.0005	0.0005	0.0005	0.0005	0.0005	0.0050	0.0001	0.0007	0.05	0.05		mg/L	
Nickel	0.008	0.012	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.008	0.069	1	3		mg/L	
Lead	N.D.	N.D.	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.1	0.1		mg/L	
Sodium	54.200	73.133	76.521	113.086	59.469	91.530	57.370	95.900	91.260	133.320	8.036	67.916				mg/L	
Zinc	0.019	0.021	0.050	0.050	0.053	0.050	0.050	0.050	0.050	0.053	0.006	0.035	1	5		mg/L	
										N.D → 0	< 4.00 → 0	< 0.30 → 0					