

## Fly Ash Quarterly Report

October 1, 2018 to December 31, 2018

The following quarterly fly ash report was sent to the Ministry of Environment and Climate Change Strategy on January 16, 2019.

Two fly ash loads were reprocessed on site as the cadmium content was above the Leachate Quality Standards of the Hazardous Waste Regulation. The remaining loads processed in the quarter passed the Leachate Quality Standards and pH requirements of the Hazardous Waste Regulation and were released for landfill disposal.

<b>October 1, 2018 to December 31, 2018</b>	
Number of loads tested	119
Number of samples submitted	122
Samples with leachable cadmium above the detection limit	13
Maximum leachable cadmium value (mg/L) of loads released for disposal	0.414
Samples with leachable lead above the detection limit	20
Maximum leachable lead value (mg/L) of loads released for disposal	3.97
Loads meeting Leachate Quality Standards and pH requirements of the Hazardous Waste Regulation	117
Loads reprocessed on site	2

Note: The number of samples submitted includes monthly fly ash composite samples.

date sample sent to lab	lab sample number	Covanta Sample ID	name of lab	date of report	pH 2:1	TCLP					
						initial pH	pH after HCl	pH of leaching fluid	final pH	cadmium	lead
2-Oct-18	L2174412-1	BURFA WMXU 2000740 Oct 1, 2018	ALS	3-Oct-18	11.68	12.26	12.04	2.88	12.02	<0.10	2.3
2-Oct-18	L2174412-2	BURFA WMXU 2000890 Oct 1, 2018	ALS	3-Oct-18	11.72	12.27	12.05	2.88	11.86	<0.050	0.6
4-Oct-18	L2176035-1	BURFA WMXU 2000550 Oct 3, 2018	ALS	5-Oct-18	11.67	12.37	12.22	2.9	12.16	<0.050	2.87
4-Oct-18	L2176035-2	BURFA WMXU 2000225 Oct 3, 2018	ALS	5-Oct-18	11.66	12.35	12.23	2.9	12.08	<0.050	1.69
5-Oct-18	L2176721-1	BURFA WMXU 2000143 Oct 4, 2018	ALS	9-Oct-18	11.65	12.31	12.13	2.9	11.49	<0.050	<0.25
5-Oct-18	L2176721-2	BURFA WMXU 2000420 Oct 4, 2018	ALS	9-Oct-18	11.64	12.32	12.29	2.9	12.02	<0.050	1.37
9-Oct-18	L2177569-1	BURFA WMXU 2000499 Oct 7, 2018	ALS	10-Oct-18	11.68	12.25	12.07	2.92	11.23	<0.050	<0.25
9-Oct-18	L2177569-2	BURFA WMXU 2001052 Oct 8, 2018	ALS	10-Oct-18	11.76	12.32	12.18	2.92	11.54	<0.050	<0.25
9-Oct-18	L2177569-3	BURFA WMXU 2000272 Oct 8, 2018	ALS	10-Oct-18	11.74	12.33	12.22	2.92	12.16	<0.050	2.15
10-Oct-18	L2178477-1	BURFA WMXU 2000251 Oct 9, 2018	ALS	11-Oct-18	11.75	11.99	12.02	2.92	10.53	<0.050	<0.25
10-Oct-18	L2178477-2	BURFA WMXU 2000380 Oct 9, 2018	ALS	11-Oct-18	11.77	12.05	12.04	2.92	10.58	<0.050	<0.25
11-Oct-18	L2179378-1	BURFA WMXU 2000170 Oct 10, 2018	ALS	12-Oct-18	11.73	12.34	12.16	2.92	11.83	<0.050	0.66
11-Oct-18	L2179378-2	BURFA WMXU 2000267 Oct 10, 2018	ALS	12-Oct-18	11.76	12.32	12.18	2.92	12.1	<0.050	1.47
12-Oct-18	L2180015-1	BURFA WMXU 2001242 Oct 11, 2018	ALS	15-Oct-18	11.66	12.06	11.8	2.9	10.5	<0.050	<0.25
15-Oct-18	L2180919-1	BURFA WMXU 2000987 Oct 14, 2018	ALS	16-Oct-18	11.71	12.07	12.03	2.85	11.38	<0.050	<0.25
15-Oct-18	L2180919-2	BURFA WMXU 2000647 Oct 14, 2018	ALS	16-Oct-18	11.73	12.08	12.06	2.85	11.46	<0.050	<0.25
15-Oct-18	L2180938-1	BURFA WMXU 2000159 Oct 12, 2018	ALS	16-Oct-18	11.7	12.01	11.71	2.85	8.76	0.087	<0.25
15-Oct-18	L2180938-2	BURFA WMXU 2000797 Oct 12, 2018	ALS	16-Oct-18	11.71	12.04	11.98	2.85	10.48	<0.050	<0.25
16-Oct-18	L2181465-1	BURFA WMXU 2000605 Oct 15, 2018	ALS	17-Oct-18	11.76	12.37	12.28	2.9	12.2	<0.050	1.93
16-Oct-18	L2181465-2	BURFA WMXU 2000713 Oct 15, 2018	ALS	17-Oct-18	11.71	12.35	12.27	2.9	11.57	<0.050	<0.25
17-Oct-18	L2182604-1	BURFA WMXU 2001129 Oct 16, 2018	ALS	18-Oct-18	11.73	12.28	12.24	2.88	11.55	<0.050	<0.25
17-Oct-18	L2182604-2	BURFA WMXU 2006213 Oct 16, 2018	ALS	18-Oct-18	11.71	12.28	12.21	2.88	10.94	<0.050	<0.25
18-Oct-18	L2183399-1	BURFA WMXU 2000354 Oct 17, 2018	ALS	19-Oct-18	11.68	12.31	12.08	2.89	11.22	<0.050	<0.25
18-Oct-18	L2183399-2	BURFA WMXU 2000462 Oct 17, 2018	ALS	19-Oct-18	11.69	12.33	12.14	2.89	11.76	<0.050	0.6
19-Oct-18	L2184254-1	BURFA WMXU 6241 Oct 18, 2018	ALS	22-Oct-18	11.71	12.28	12.08	2.91	10.45	<0.050	<0.25
19-Oct-18	L2184254-2	BURFA WMXU 2000040 Oct 18, 2018	ALS	22-Oct-18	11.75	12.32	12.22	2.91	11.69	<0.050	0.41
24-Oct-18	L2186642-1	BURFA WMXU 2000626 Oct 23, 2018	ALS	25-Oct-18	11.69	12.36	12.21	2.9	10.98	<0.050	<0.25
24-Oct-18	L2186642-2	BURFA WMXU 2001031 Oct 23, 2018	ALS	25-Oct-18	11.71	12.34	12.28	2.9	11.08	<0.050	<0.25
25-Oct-18	L2187257-1	BURFA WMXU 2000668 Oct 24, 2018	ALS	26-Oct-18	11.66	12.17	11.99	2.87	10.47	<0.050	<0.25
26-Oct-18	L2187775-1	BURFA WMXU 2000565 Oct 25, 2018	ALS	29-Oct-18	11.63	12.23	11.84	2.9	10.59	<0.050	<0.25
29-Oct-18	L2188457-1	BURFA WMXU 2000502 Oct 28, 2018	ALS	30-Oct-18	11.66	12.2	12.03	2.88	10.22	<0.050	<0.25
29-Oct-18	L2188458-1	BURFA WMXU 2000689 Oct 26, 2018	ALS	30-Oct-18	11.67	12.19	12.13	2.88	10.57	<0.050	<0.25
29-Oct-18	L2188458-2	BURFA WMXU 2000930 Oct 26, 2018	ALS	30-Oct-18	11.69	12.31	12.27	2.88	11.93	<0.050	1.04
30-Oct-18	L2189216-1	BURFA WMXU 2001181 Oct 29, 2018	ALS	31-Oct-18	11.65	12.12	11.48	2.88	9.05	<0.050	<0.25
31-Oct-18	L2190051-1	BURFA WMXU 6278 Oct 30, 2018	ALS	1-Nov-18	11.6	12.15	11.98	2.85	11.05	<0.050	<0.25
31-Oct-18	L2190051-2	BURFA WMXU 2001108 Oct 30, 2018	ALS	1-Nov-18	11.65	12.19	12	2.85	10.83	<0.050	<0.25
1-Nov-18	L2190763-1	BURFA WMXU 2000631 Oct 31, 2018	ALS	2-Nov-18	11.64	12.24	12.27	2.86	11.82	<0.050	0.48
5-Nov-18	L2191965-1	FA 1810	ALS	14-Nov-18	11.68	12.26	12.14	2.88	11.52	<0.050	<0.25
2-Nov-18	L2191398-1	BURFA WMXU 2000101 Nov 1, 2018	ALS	5-Nov-18	12.31	12.24	11.74	2.88	11.74	<0.050	0.26
5-Nov-18	L2191967-1	BURFA WMXU 2001073 Nov 4, 2018	ALS	6-Nov-18	11.7	12.2	12.16	2.87	10.81	<0.050	<0.25
5-Nov-18	L2191967-2	BURFA WMXU 2001047 Nov 4, 2018	ALS	6-Nov-18	11.77	12.34	12.24	2.87	12.17	<0.050	2.19
6-Nov-18	L2192681-1	BURFA WMXU 2000821 Nov 5, 2018	ALS	7-Nov-18	11.8	12.25	12.02	2.89	11.51	<0.050	<0.25
6-Nov-18	L2192681-2	BURFA WMXU 2000971 Nov 5, 2018	ALS	7-Nov-18	11.78	12.25	12.1	2.89	11.73	<0.050	0.47
7-Nov-18	L2193385-1	BURFA WMXU 2000441 Nov 6, 2018	ALS	8-Nov-18	11.69	12.31	12.13	2.87	11.39	<0.050	<0.25
8-Nov-18	L2194292-1	BURFA WMXU 2000694 Nov 7, 2018	ALS	9-Nov-18	11.67	12.08	11.85	2.9	9.95	<0.050	<0.25
8-Nov-18	L2194292-2	BURFA WMXU 2000098 Nov 7, 2018	ALS	9-Nov-18	11.67	12.19	12.12	2.9	10.71	<0.050	<0.25
8-Nov-18	L2194292-3	BURFA WMXU 2000776 Nov 7, 2018	ALS	9-Nov-18	11.71	12.2	12.16	2.9	11.17	<0.050	<0.25
9-Nov-18	L2194859-1	BURFA WMXU 2000122 Nov 8, 2018	ALS	13-Nov-18	11.72	12.18	11.31	2.88	9.78	<0.050	<0.25
9-Nov-18	L2194859-2	BURFA WMXU 2000816 Nov 8, 2018	ALS	13-Nov-18	11.42	11.98	10.7	2.88	8.38	0.203	<0.25
13-Nov-18	L2195773-1	BURFA WMXU 6179 Nov 10, 2018	ALS	14-Nov-18	11.64	12.03	11.3	2.92	9.22	0.061	<0.25
13-Nov-18	L2195773-2	BURFA WMXU 2000842 Nov 11, 2018	ALS	14-Nov-18	11.68	12.15	11.56	2.92	10.36	<0.050	<0.25
13-Nov-18	L2195773-3	BURFA WMXU 2000734 Nov 12, 2018	ALS	14-Nov-18	11.71	12.29	11.98	2.92	11.27	<0.050	<0.25
13-Nov-18	L2195773-4	BURFA WMXU 2000483 Nov 12, 2018	ALS	14-Nov-18	11.72	12.26	11.92	2.92	10.67	<0.050	<0.25
14-Nov-18	L2196619-1	BURFA WMXU 2001200 Nov 13, 2018	ALS	15-Nov-18	11.41	12.08	11.44	2.84	9.95	<0.050	<0.25
14-Nov-18	L2196619-2	BURFA WMXU 2000230 Nov 13, 2018	ALS	15-Nov-18	11.41	12.04	11.53	2.84	9.85	<0.050	<0.25
15-Nov-18	L2197172-1	BURFA WMXU 2000858 Nov 14, 2018	ALS	16-Nov-18	11.7	12.13	11.89	2.88	10.37	<0.050	<0.25
15-Nov-18	L2197172-2	BURFA WMXU 2001010 Nov 14, 2018	ALS	16-Nov-18	11.7	12.06	11.73	2.88	10.29	<0.050	<0.25
16-Nov-18	L2197809-1	BURFA WMXU 2000138 Nov 15, 2018	ALS	19-Nov-18	11.56	12.2	11.6	2.9	9.47	<0.050	<0.25
16-Nov-18	L2197809-2	BURFA WMXU 2000591 Nov 15, 2018	ALS	19-Nov-18	11.6	12.26	11.93	2.9	10.16	0.061	<0.25
19-Nov-18	L2198290-1	BURFA WMXU 2000673 Nov 18, 2018	ALS	20-Nov-18	11.56	11.98	11.31	2.89	7.68	0.414	<0.25
19-Nov-18	L2198290-2	BURFA WMXU 2000478 Nov 18, 2018	ALS	20-Nov-18	11.6	12.18	12.04	2.89	9.97	<0.050	<0.25
19-Nov-18	L2198290-3	BURFA WMXU 2001216 Nov 17, 2018	ALS	20-Nov-18	11.58	12.13	11.7	2.89	9.38	<0.050	<0.25
20-Nov-18	L2199087-1	BURFA WMXU 2000210 Nov 19, 2018	ALS	21-Nov-18	11.65	11.98	11.07	2.85	7.53	0.159	<0.25
20-Nov-18	L2199087-2	BURFA WMXU 2000360 Nov 19, 2018	ALS	21-Nov-18	11.66	12.01	11.2	2.85	8.09	0.223	<0.25
20-Nov-18	L2199087-3	BURFA WMXU 2000246 Nov 19, 2018	ALS	21-Nov-18	11.72	12.27	12.06	2.85	10.3	<0.050	<0.25
21-Nov-18	L2199905-1	BURFA WMXU 2001052 Nov 20, 2018	ALS	22-Nov-18	11.53	12.19	11.79	2.86	10.35	<0.050	<0.25
23-Nov-18	L2201112-1	BURFA WMXU 2000539 Nov 22, 2018	ALS	26-Nov-18	11.59	12.27	11.89	2.87	10.33	<0.050	<0.25
23-Nov-18	L2201112-2	BURFA WMXU 6286 Nov 22, 2018	ALS	26-Nov-18	11.6	12.25	11.93	2.87	10.66	<0.050	<0.25
23-Nov-18	L2201112-3	BURFA WMXU 2000987 Nov 22, 2018	ALS	26-Nov-18	11.6	12.25	11.89	2.87	10.64	<0.050	<0.25
26-Nov-18	L2201644-1	BURFA WMXU 2000380 Nov 24, 2018	ALS	27-Nov-18	11.61	12.29	12.06	2.84	10.97	<0.050	<0.25
26-Nov-18	L2201644-2	BURFA WMXU 2000272 Nov 24, 2018	ALS	27-Nov-18	11.64	12.21	12.09	2.84	10.95	<0.050	<0.25
26-Nov-18	L2201644-3	BURFA WMXU 2000863 Nov 24, 2018	ALS	27-Nov-18	11.63	12.28	12.1	2.84	10.6	<0.050	<0.25
27-Nov-18	L2202181-1	BURFA WMXU 6099 Nov 26, 2018	ALS	28-Nov-18	11.64	12.34	12.11	2.88	11.45	<0.050	0.35
27-Nov-18	L2202181-2	BURFA WMXU 6394 Nov 26, 2018	ALS	28-Nov-18	11.63	12.26	11.99	2.88	11.26	<0.050	<0.25
28-Nov-18	L2202920-1	BURFA WMXU 2001047 Nov 27, 2018	ALS	29-Nov-18	11.65	12.28	12.03	2.88	11.17	<0.050	<0.25
28-Nov-18	L2202920-2	BURFA WMXU 2000328 Nov 27, 2018	ALS	29-Nov-18	11.65	12.29	12.15	2.88	11.01	<0.050	<0.25
29-Nov-18	L2203542-1	BURFA WMXU 2000689 Nov 28, 2018	ALS	30-Nov-18	11.61	12.22	12.13	2.9	10.59	<0.050	<0.25
29-Nov-18	L2203542-2	BURFA WMXU 2001108 Nov 28, 2018	ALS	30-Nov-18	11.63	12.31	12.21	2.9	11.28	<0.050	<0.25
3-Dec-18	L2204810-1	BURFA WMXU 2000797 Nov 30, 2018	ALS	4-Dec-18	11.66	12.15	11.6	2.9	9.77	<0.050	<0.25
3-Dec-18	L2204810-2	BURFA WMXU 2001036 Nov 30, 2018	ALS	4-Dec-18	11.71	12.2	11.66	2.9	9.96	<0.050	<0.25
4-Dec-18	L2205648-1	FA1811	ALS	10-Dec-18	11.75	12.18	11.95	2.89	10.49	<0.050	<0.25

date sample sent to lab	lab sample number	Covanta Sample ID	name of lab	date of report	pH 2:1	TCLP					
						initial pH	pH after HCl	pH of leaching fluid	final pH	cadmium	lead
3-Dec-18	L2204810-3	BURFA WMXU 2000930 Dec 2, 2018	ALS	4-Dec-18	11.69	12.21	11.79	2.9	10.1	<0.050	<0.25
3-Dec-18	L2204810-4	BURFA WMXU 2001073 Dec 2, 2018	ALS	4-Dec-18	11.69	12.29	12.01	2.9	10.46	<0.050	<0.25
4-Dec-18	L2205507-1	BURFA WMXU 2000565 Dec 3, 2018	ALS	5-Dec-18	11.66	12.15	11.37	2.86	9.41	<0.050	<0.25
4-Dec-18	L2205507-2	BURFA WMXU 2000740 Dec 3, 2018	ALS	5-Dec-18	11.64	12.1	11.24	2.86	8.9	0.072	<0.25
5-Dec-18	L2206301-1	BURFA WMXU 2001221 Dec 4, 2018	ALS	6-Dec-18	11.63	12.16	11.79	2.87	10.27	<0.050	<0.25
6-Dec-18	L2207020-1	BURFA WMXU 2000333 Dec 5, 2018	ALS	7-Dec-18	11.66	12.21	11.96	2.87	10.44	<0.050	<0.25
6-Dec-18	L2207020-2	BURFA WMXU 2000668 Dec 5, 2018	ALS	7-Dec-18	11.65	12.26	12.12	2.87	10.41	<0.050	<0.25
6-Dec-18	L2207020-3	BURFA WMXU 2000631 Dec 5, 2018	ALS	7-Dec-18	11.63	12.26	12.15	2.87	11.32	<0.050	<0.25
7-Dec-18	L2207700-1	BURFA WMXU 2000077 Dec 6, 2018	ALS	10-Dec-18	11.61	12.14	11.77	2.87	10.33	<0.050	<0.25
7-Dec-18	L2207700-2	BURFA WMXU 2000890 Dec 6, 2018	ALS	10-Dec-18	11.65	12.23	12.03	2.87	11.17	<0.050	<0.25
10-Dec-18	L2208158-1	BURFA WMXU 2000605 Dec 9, 2018	ALS	11-Dec-18	11.63	12.24	11.99	2.87	10.72	<0.050	<0.25
10-Dec-18	L2208158-2	BURFA WMXU 2000626 Dec 9, 2018	ALS	11-Dec-18	11.65	12.28	12.12	2.87	10.76	<0.050	<0.25
11-Dec-18	L2208759-1	BURFA WMXU 2001237 Dec 10, 2018	ALS	12-Dec-18	11.6	12.12	11.72	2.87	9.21	0.116	0.26
11-Dec-18	L2208759-2	BURFA WMXU 2000267 Dec 10, 2018	ALS	12-Dec-18	11.58	12.28	12.15	2.87	10.35	<0.050	<0.25
13-Dec-18	L2210175-1	BURFA WMXU 2000122 Dec 12, 2018	ALS	14-Dec-18	11.6	12.01	11.37	2.9	8.88	0.131	<0.25
13-Dec-18	L2210175-2	BURFA WMXU 2000502 Dec 12, 2018	ALS	14-Dec-18	11.66	12.15	11.75	2.9	9.98	<0.050	<0.25
14-Dec-18	L2210899-1	BURFA WMXU 2000225 Dec 13, 2018	ALS	17-Dec-18	11.61	12.32	12.08	2.88	10.37	<0.050	<0.25
14-Dec-18	L2210899-2	BURFA WMXU 2000164 Dec 13, 2018	ALS	17-Dec-18	11.61	12.27	12.1	2.88	10.4	<0.050	<0.25
17-Dec-18	L2211348-1	BURFA WMXU 2000499 Dec 16, 2018	ALS	18-Dec-18	11.66	12.28	12.02	2.9	10.46	<0.050	<0.25
17-Dec-18	L2211348-2	BURFA WMXU 2001052 Dec 16, 2018	ALS	18-Dec-18	11.67	12.16	11.78	2.9	10.22	<0.050	<0.25
18-Dec-18	L2211920-1	BURFA WMXU 2000478 Dec 17, 2018	ALS	19-Dec-18	11.59	12.27	11.87	2.87	10.27	<0.050	<0.25
18-Dec-18	L2211920-2	BURFA WMXU 2000879 Dec 17, 2018	ALS	19-Dec-18	11.54	12.06	11.14	2.87	8.79	0.148	<0.25
19-Dec-18	L2212596-1	BURFA WMXU 6082 Dec 18, 2018	ALS	20-Dec-18	11.69	12.31	11.75	2.91	12.15	<0.050	3.97
19-Dec-18	L2212596-2	BURFA WMXU 2000101 Dec 18, 2018	ALS	20-Dec-18	11.66	12.08	11.23	2.91	9.76	<0.050	<0.25
20-Dec-18	L2213348-1	BURFA WMXU 2000694 Dec 19, 2018	ALS	21-Dec-18	11.62	12.22	11.94	2.87	10.22	<0.050	<0.25
20-Dec-18	L2213348-2	BURFA WMXU 2000816 Dec 19, 2018	ALS	21-Dec-18	11.65	12.27	12.16	2.87	11.3	<0.050	<0.25
21-Dec-18	L2213800-1	BURFA WMXU 2000210 Dec 20, 2018	ALS	24-Dec-18	11.61	12.07	11.35	2.88	9.22	<0.050	<0.25
21-Dec-18	L2213800-2	BURFA WMXU 2001216 Dec 20, 2018	ALS	24-Dec-18	11.66	12.31	12.14	2.88	12.07	<0.050	2.47
24-Dec-18	L2214336-1	BURFA WMXU 2000360 Dec 23, 2018	ALS	28-Dec-18	11.58	12.26	12.03	2.9	10.16	<0.050	<0.25
24-Dec-18	L2214336-2	BURFA WMXU 2000631 Dec 23, 2018	ALS	28-Dec-18	11.61	12.26	12.12	2.9	10.74	<0.050	<0.25
27-Dec-18	L2214531-1	BURFA WMXU 2000190 Dec 24, 2018	ALS	28-Dec-18	11.6	12.01	11.78	2.9	9.93	<0.050	<0.25
27-Dec-18	L2214531-2	BURFA WMXU 2000821 Dec 24, 2018	ALS	28-Dec-18	11.63	12.16	11.87	2.9	10.2	<0.050	<0.25
28-Dec-18	L2214959-1	BURFA WMXU 2000138 Dec 27, 2018	ALS	31-Dec-18	11.66	12.24	12.12	2.89	10.89	<0.050	<0.25
28-Dec-18	L2214959-2	BURFA WMXU 2000230 Dec 27, 2018	ALS	31-Dec-18	11.67	12.22	12.06	2.89	10.69	<0.050	<0.25
31-Dec-18	L2215270-1	BURFA WMXU 2001200 Dec 30, 2018	ALS	3-Jan-19	11.6	12.21	11.75	2.87	10.02	<0.050	<0.25
31-Dec-18	L2215270-2	BURFA WMXU 2000781 Dec 30, 2018	ALS	3-Jan-19	11.63	12.25	11.93	2.87	10.22	<0.050	<0.25
2-Jan-19	L2215551-1	BURFA A WMXU 2001176 Dec 31, 2018	ALS	3-Jan-19	11.64	12.3	12.06	2.87	11.24	<0.050	<0.25
2-Jan-19	L2215551-2	BURFA A WMXU 2000966 Dec 31, 2018	ALS	3-Jan-19	11.64	12.31	12.05	2.87	10.95	<0.050	<0.25
4-Jan-19	L2216690-1	FA 1812	ALS	10-Jan-19	11.61	12.3	12.07	2.9	10.45	<0.050	<0.25