

Table S.1. pH and alkalinity results of Lakeview, Nanticoke and Atikokan fly ash leaching experiments over time during 50 days of reaction. (Alkalinity: in mmol·L⁻¹).

Lakeview	fly ash				fly ash + PCD				fly ash + TCD			
	pH		alkalinity		pH		alkalinity		pH		alkalinity	
Water:ash	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1
10 days	7.65	8.29	0.75	0.62	11.06	11.16	7.48	4.86	12.39	12.18	46.15	43.03
20 days	8.29	8.02	1.26	0.56	11.16	11.10	4.62	3.55	12.55	11.86	47.70	41.01
30 days	8.13	8.19	0.87	0.58	11.11	11.16	3.66	2.76	12.39	12.23	44.89	42.85
40 days	8.02	8.13	1.17	0.87	11.11	11.00	2.91	2.77	12.33	11.86	45.72	41.83
50 days	8.08	8.13	1.47	1.19	10.95	10.75	3.06	2.19	12.12	11.53	47.16	43.11
Nanticoke	fly ash				fly ash + PCD				fly ash + TCD			
	pH		alkalinity		pH		alkalinity		pH		alkalinity	
Water:ash	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1
10 days	8.56	8.93	1.68	1.31	11.38	10.84	6.99	5.05	12.18	11.86	49.58	43.28
20 days	9.04	9.09	1.43	1.06	11.22	11.05	5.05	3.93	12.28	12.31	45.03	42.72
30 days	8.77	9.36	1.35	1.25	11.16	10.84	5.54	3.21	11.80	12.19	46.64	43.53
40 days	8.99	9.04	1.89	1.31	10.84	11.11	4.40	3.50	12.39	12.07	45.34	43.00
50 days	8.88	9.36	1.42	1.17	10.95	11.27	3.35	3.06	12.23	12.18	47.95	43.96
Atikokan	fly ash				fly ash + PCD				fly ash + TCD			
	pH		alkalinity		pH		alkalinity		pH		alkalinity	
Water:ash	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1	6:1	12:1
10 days	11.75	11.32	16.90	11.16	12.39	11.91	44.09	31.43	12.12	11.86	75.28	58.51
20 days	11.69	11.80	20.71	13.53	11.86	11.69	46.59	29.37	11.91	11.80	84.32	51.32
30 days	11.37	11.53	22.74	13.50	11.80	12.02	54.76	32.50	12.28	11.69	92.26	56.15
40 days	11.69	11.75	21.57	13.41	12.02	12.07	47.95	32.21	11.75	11.64	123.60	65.30
50 days	11.75	11.59	22.88	13.41	11.96	12.02	48.53	32.42	12.28	11.69	167.35	77.83