

Percarbonate Oxidation of Landfill Leachate towards Removal of Ultraviolet Quenchers

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Supplementary Materials

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Table S1. Change in the UV_{254nm} absorbance (cm⁻¹) of different organic fractions of Leachate A and B after oxidation with 0.01 M and 0.2 M SPC for 24 hours.

Organics	Leachate A (UV ₂₅₄ absorbance, cm ⁻¹)			% Change		Leachate B (UV ₂₅₄ absorbance, cm ⁻¹)			% Change	
	Raw	0.01 M SPC	0.2 M SPC	0.01 M SPC	0.2 M SPC	Raw	0.01 M SPC	0.2 M SPC	0.01 M SPC	0.2 M SPC
Humic acids	4.10	0.40	0.12	-90.3	-97.0	1.33	1.24	0.94	-6.5	-29.3
Fulvic acids	2.21	1.46	1.63	-33.8	-26.2	6.18	5.25	5.18	-15.1	-16.1
Hydrophilics	9.80	8.67	7.37	-11.5	-24.8	8.28	8.35	8.41	0.8	1.5
Total	16.12	10.53	9.13	-34.7	-43.4	15.80	14.84	14.54	-6.1	-8.0

Table S2. Change in the concentration (mgL⁻¹) of different organic fractions of Leachate A and B after oxidation with 0.01 M and 0.2 M SPC for 24 hours.

Organics	Leachate A (Organics concentration, mgL ⁻¹)			% Change		Leachate B (Organics concentration, mgL ⁻¹)			% Change	
	Raw	0.01 M SPC	0.2 M SPC	0.01 M SPC	0.2 M SPC	Raw	0.01 M SPC	0.2 M SPC	0.01 M SPC	0.2 M SPC
Humic acids	661	221	147	-66.6	-77.8	289	196	114	-32.3	-60.6
Fulvic acids	1769	1792	1802	1.3	1.8	604	553	485	-8.4	-19.6
Hydrophilics	11056	9717	9440	-12.1	-14.6	878	887	904	1.0	3.0
Total	13486	11731	11388	-13.0	-15.6	1771	1636	1504	-7.6	-15.1