

Supplementary data for

Degradation of leachate from semi-anaerobic aged refuse biofilter by the ZVI/H₂O₂ process coupled with microwave irradiation: Optimization, organics transformation, and reaction mechanisms

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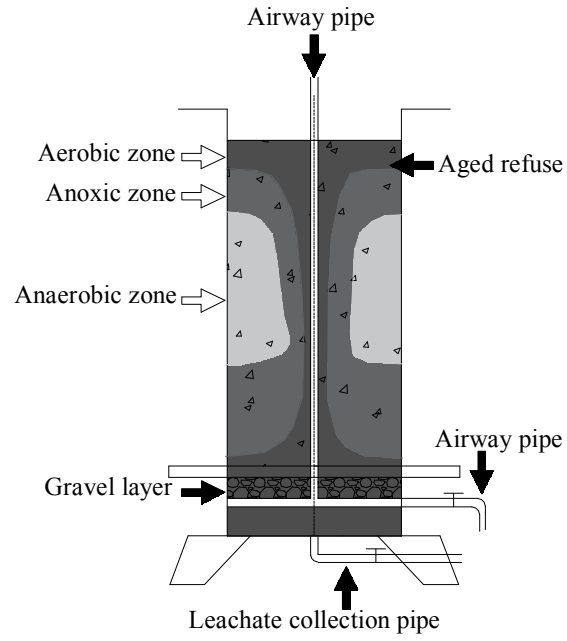


Fig. S1. The schematic of the semi-aerobic aged refuse biofilter.

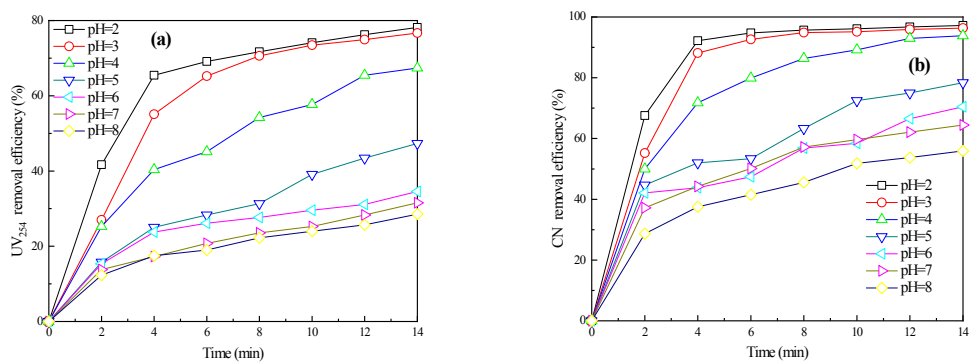


Fig. S2. Effects of initial pH on organics pollutants removal in the MW-ZVI/H₂O₂ process, (a) as indicated by changes in UV₂₅₄ and (b) as indicated by changes in color number (CN). Operating conditions were: [H₂O₂]₀ = 15 mL/L, [ZVI]₀ = 0.5 g/L and MW power = 450 W.

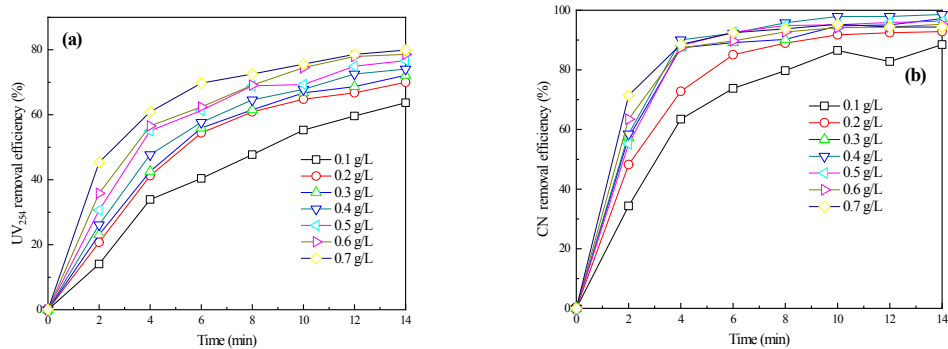


Fig. S3. Effects of zero valent iron (ZVI) dosage on organic pollutants removal in the MW-ZVI/H₂O₂ process (a) as indicated by changes in UV₂₅₄ and (b) as indicated by changes in color number (CN). Operating conditions were: initial pH = 3.0, $[H_2O_2]_0 = 15$ mL/L and MW power = 450 W.

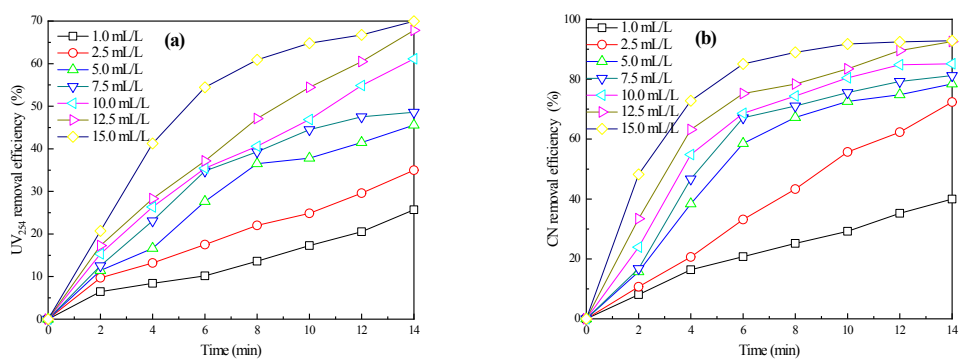


Fig. S4. Effects of hydrogen peroxide (H₂O₂) dosage on organic pollutants removal in the MW-ZVI/H₂O₂ process (a) as indicated by changes in UV₂₅₄ and (b) as indicated by changes in color number (CN). Operating conditions were: initial pH = 3.0, [ZVI]₀ = 0.5 g/L and MW power = 450 W.

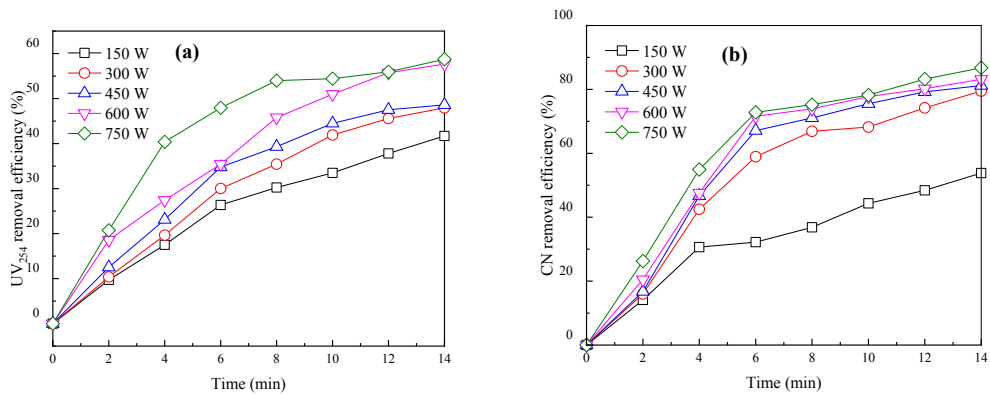


Fig. S5. Effects of microwave irradiation power on organic pollutants removal in the MW-ZVI/H₂O₂ process (a) as indicated by changes in UV₂₅₄ and (b) as indicated by changes in color number (CN). Operating conditions were: initial pH = 3.0, [ZVI]₀ = 0.5 g/L and [H₂O₂]₀ = 15 mL/L.