

## Supporting information for

### Sulfate radical oxidation combined iron flocculation towards up-grading of biological effluent of coking wastewater

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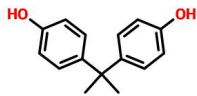
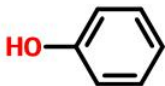
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Supporting table (Table S1, S2, S3)

## Supporting tables

Table S1. Characteristics of phenolic compounds

name	Molecular formula	structure	Pseudo first-order reaction rate constant	Reference
Bisphenol A	$C_{15}H_{16}O_2$		$0.025\text{min}^{-1a}$	1
Phenol	$C_6H_6O$		$1.2 \times 10^{-3}\text{h}^{-1b}$	2

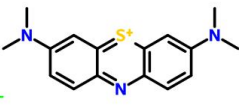
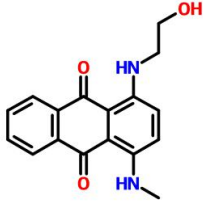
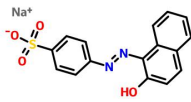
<sup>a</sup>, the molar ratio of oxidant to bisphenol was 3/1;

<sup>b</sup>, the molar ratio of oxidant to phenol was 42/1.

Table S2 Chloride ion concentration in EBCW

Operating time (minute)	0	5	10	15	25	35
Chloride ion concentration (mg•L <sup>-1</sup> )	4.7250	4.5660	4.9230	4.7090	5.011	4.8200

Table S3 chromogenic compounds in EBCW

name	Molecular formula	structure	Pseudo first-order reaction rate constant	Reference
Methylene Blue	$C_{16}H_{18}ClN_3S$		$14.8 \times 10^{-2} \text{min}^{-1a}$	3
Disperse Blue 3	$C_{17}H_{16}N_2O_3$		$2.19 \times 10^{-2} \text{min}^{-1b}$	4
Acid orange 7	$C_{16}H_{11}N_2NaO_4S$		$17.5 \times 10^{-2} \text{min}^{-1c}$	5

<sup>a</sup>, the molar ratio of oxidant to Methylene Blue was 640/1;

<sup>b</sup>, the molar ratio of oxidant to Rhodamine B was 600/1;

<sup>c</sup>, the molar ratio of oxidant to Acid Angelico 7 was 10/1.

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