

Supplementary material

Table S1

Pseudo-first-order kinetic parameters of 2, 4-DCP degradation in the presence of different anions

Inhibitor	Conc(mM)	k_{obs} (10^{-3}min^{-1})	R^2	pH initial - final
Cl^-	0	15.1	0.99	7.0-7.1
	5	13.9	0.98	7.0-7.1
	10	16.8	0.99	7.0-7.2
	100	35.5	0.99	7.0-7.3
	200	52.5	0.99	7.0-7.2
CO_3^{2-}	0	21.1,	0.99	5.1-4.5
	5	28.4	0.95	8.2-9.4
	10	31.3	0.99	10.1-10.7
	100	38.9	0.99	11.2-11.5
	200	31.1	0.95	11.6-11.8
NO_3^-	0	31.6	0.99	7.0-7.1
	5	36.8	0.99	7.0-7.1
	10	44.9	0.96	7.0-7.2
	100	61.0	0.99	7.0-7.3
	200	66.5	0.99	7.0-7.2

Process condition: $[2, 4\text{-DCP}]_0 = 6 \mu\text{M}$, $[\text{PS}]_0 = 900 \mu\text{M}$

Table S2

Water quality table of December

Source water	TOC	$\text{Cl}^- (\text{mg L}^{-1})$	$\text{HCO}_3^- (\text{mg L}^{-1})$	$\text{NO}_3^- (\text{mg L}^{-1})$	pH
Pure water	0	0	0	0	7.02 ± 0.01
Xidong water works	3.95 ± 0.2	42.5 ± 6	136.6 ± 4	0.031 ± 0.02	7.20 ± 0.3
Xijiu reservoir	6.31 ± 0.3	51.0 ± 3	128.0 ± 5	0.070 ± 0.01	7.30 ± 0.1
Henshan reservoir	6.89 ± 0.5	63.0 ± 5	134.0 ± 8	0.005 ± 0.003	7.26 ± 0.2