Electronic Supplementary Information

Iron-based metal–organic framework as novel dispersive solid-phase extraction sorbents for efficient adsorption of tetrabromobisphenol A from environment water samples

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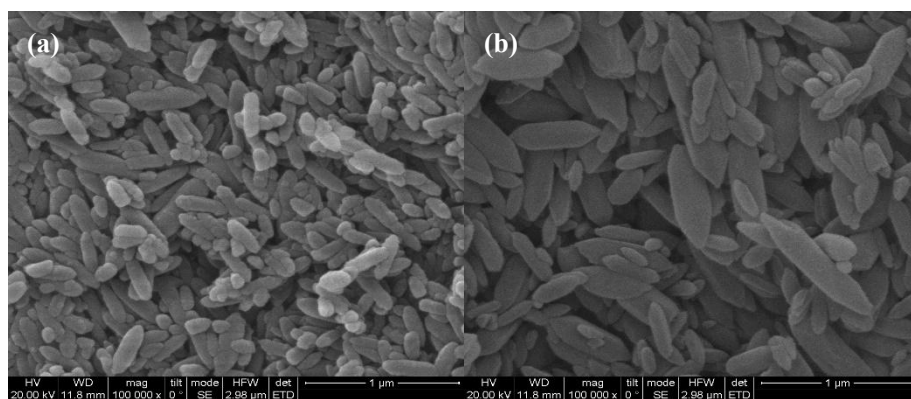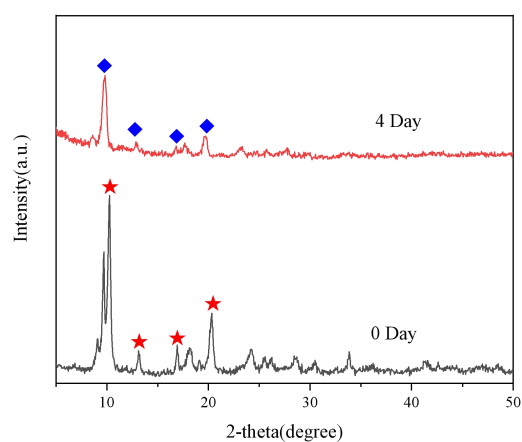
Fig. S1. The SEM image of Fe-MIL-88-NH$_2$ before(a) and after(b)

adsorption.

Fig. S2. The XRD of Fe-MIL-88-NH$_2$ before(a) and after(b) adsorption.
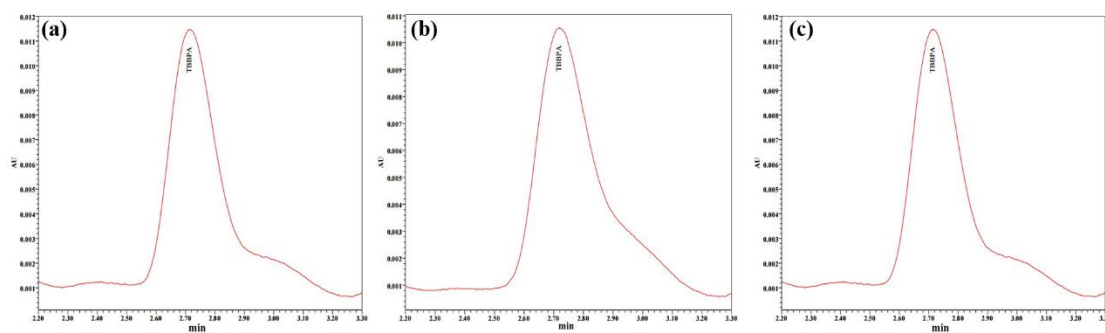

Fig. S3. The chromatogram of the real samples (a) river water, (b) lake water and (c) plastic

products factory wastewater.

Table S1. Adsorption isotherm parameters of TBBPA on Fe-MIL-88-NH$_2$

Compound	Langmuir			Freundlich		
	Q_{max}	K_L	R^2	K_F	$1/n$	R^2
	$(mg\ g^{-1})$	$(mL\ mg^{-1})$		$(mg^{1-1/n}\ L^{1/n}g^{-1})$		
TBBPA	46.05	0.17	0.95	8.27	0.39	0.91

Table S2. The parameters of pseudo-first-order and pseudo-second-order models for the adsorption

of TBBPA on Fe-MIL-88-NH$_2$.

Kinetic model	pseudo-first-order kinetic model			pseudo-second-order kinetic model		
	$Q_e(mg \cdot g^{-1})$	$k_1(min^{-1})$	R^2	$Q_e(mg \cdot g^{-1})$	$k_2(g \cdot (mg \cdot min)^{-1})$	R^2
Value	63.51	0.0539	0.4157	22.75	0.0412	0.9996