Supplementary Information for
Enhanced Debromination of Tetrabromobisphoenol A by
Zero-valent Copper Nanoparticles Modified Green Rusts

Liping Fang\textsuperscript{a}, Ru Liu\textsuperscript{b}, Ling Xu\textsuperscript{b}, Ji Li\textsuperscript{b}, Li-Zhi Huang\textsuperscript{c,*}, Fangbai Li\textsuperscript{a}

\textsuperscript{a} Guangdong Key Laboratory of Integrated Agro-environmental Pollution Control and Management, Guangdong Institute of Eco-Environmental Science & Technology, No. 808, Tianyuan Road, Guangzhou 510650, China.

\textsuperscript{b} Faculty of Material Science and Chemistry, China University of Geosciences, No. 388, Lumo Road, Wuhan 430074, China

\textsuperscript{c} School of Civil Engineering, Wuhan University, No. 8, East Lake South Road, Wuhan, P.R. China
Figure S1. XRD of the GR(Cl)-Cu$^{2+}$ and GR(Cl).

Figure S2. Effect of pH on TBBPA reduction by GR(Cl) and GR(Cl)-Cu NPs.
Figure S3. Effect of pH on pseudo first order reaction rate of TBBPA reduction by GR(Cl) and GR(Cl)-Cu NPs.

Figure S4. Cu\(^{2+}\) content in GR(Cl)-Cu\(^{2+}\) system (0.5%). The concentration is normalized to the reaction aqueous volume.
Figure S5. Cu$_2$O generation after GR(Cl)-Cu NPs reaction with TBBPA. High Cu NPs dosage (10%) in GR(Cl)-Cu NPs was used for Cu$_2$O measurement.
Figure S6. Mass spectra of potential intermediates from the degradation of TBBPA by GR(Cl)-Cu NPs.