

SUPPORTING INFORMATION

**Degradation of tri (2-chloroethyl) phosphate by microwave enhanced
heterogeneous Fenton process using iron oxide containing waste**

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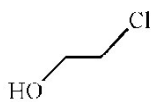
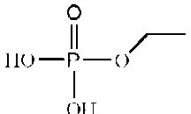
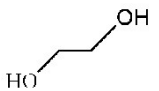
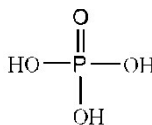
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Table S1. The physical and chemical properties of the iron ore tailings after the eighth reuse cycles.

The physical properties	Surface area(m ² g ⁻¹): 1.2	pH: 5.31
	(%) Sand (2000-50 μm): 70.01	(%) Silt (50-2 μm): 26.16
	(%) Clay (<2 μm): 3.83	-
The chemical composition (percentage referred to oxide form)	(%) Fe ₂ O ₃ : 65.72	(%) SiO ₂ : 10.73
	(%) CaO: 9.10	(%) ZnO: 4.44
	(%) MgO: 1.96	(%) K ₂ O: 1.02
	(%) Al ₂ O ₃ : 1.05	(%) SO ₃ : 0.968
	(%) P ₂ O ₅ : 0.844	(%) Cl: 0.68
	(%) CuO: 0.58	(%) BaO: 0.421
	(%) Cr ₂ O ₃ : 0.432	(%) MoO ₃ : 0.42
	(%) MnO: 0.432	(%) TiO ₂ : 0.277
	(%) Nd ₂ O ₃ : 0.308	(%) Sb ₂ O ₃ : 0.29
	(%) V ₂ O ₅ : 0.18	(%) ZrO ₂ : 0.16

Table S2. The intermediate products of TCEP degraded by microwave enhanced heterogeneous Fenton process using iron oxide containing waste.

No.	EI-MS spectrum ions	Possible structure
1	93 (999); 95 (366); 73 (321); 137 (232); 103 (156); 139 (82); 43 (75); 94 (75); 101 (69); 45 (66)	
2	211 (999); 255 (305), 133 (273); 73 (249); 270 (199); 212 (149), 45 (132); 135 (117), 227 (117); 75 (107)	
3	147 (999); 73 (546); 191 (240); 66 (195); 103 (185); 148 (161); 45 (98); 149 (82); 59 (62); 74 (57)	
4	299 (999); 73 (288); 300 (242); 314 (184); 301 (132); 147 (108); 45 (95); 283 (57); 207 (50); 211 (47)	
5	73 (999); 147 (615); 45 (183); 148 (101); 74 (95); 66 (94); 43 (74); 72 (70); 75 (66); 190 (60)	