**Supporting Information**

**Micro-aeration assisted with electrogenic respiration enhanced the microbial catabolism and ammonification of aromatic amines in industrial wastewater**

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**1. Materials and Methods**

**1.1 Micro-aerobic reactors construction**

One tube connected with a valve was inserted into the anode chamber and opened to meet the micro-aerobic. Anaerobic control group was set by turning off the gas valve to cut off the air into the anodic headspace.



**Fig. S1.** The schematic diagram of Micro-aeration assisted with electrogenic bioreactor

**1.2 Biofilm samples collection**

The manually shaken part is considered to be the biological layer on the surface of the electrode, which is called the incompact “Outer” biofilm. The biological layer remaining on the electrode and mechanically shaken part by vortex shaker is called the compact “Inner” biofilm.

**2. Results**



**Fig. S2.** Hierarchical clustering of dioxygenase genes from the suspension (S), outer (Ou) and inner (In) electrode biofilm communities. Black represents no hybridization above background level and red represents positive hybridization. The color intensity indicates differences in signal intensity



**Fig. S3.** Hierarchical clustering of cytochrome c genes from the suspension (S), outer (Ou) and inner (In) electrode biofilm communities. Black represents no hybridization above background level and red represents positive hybridization. The color intensity indicates differences in signal intensity.