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Two-stage anoxic/oxic combined membrane bioreactor system for landfill leachate treatment: Pollutant removal erformances and microbial community

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## **ACCEPTED MANUSCRIPT**

Two-stage anoxic/oxic combined membrane bioreactor system for landfill leachate treatment: Pollutant removal erformances and microbial community

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Abstract: In this study, a laboratory-scale two-stage anoxic/oxic (A/O) combined membrane bioreactor (MBR) was operated for 113 d for the treatment of landfill leachate. The average removal of chemical oxygen demand (COD), ammonia (NH<sub>4</sub><sup>+</sup>-N) and total nitrogen (TN) achieved 80.60%, 99.04% and 74.87%, respectively. A mass balance evaluation suggested that the removal of COD, NH<sub>4</sub><sup>+</sup>-N and TN occurred mainly in the second A/O process, and the total removal capacity of COD, NH<sub>4</sub><sup>+</sup>-N and TN were 125.6 g/d, 24.35 g/d and 22.40 g/d, respectively. High-throughput sequencing analysis indicated that the *Proteobacteria*  Download English Version:

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