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The nitrogen removal performance and microbial communities in a two-stage deep sequencing constructed wetland for advanced treatment of secondary effluent

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1 **Title**

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15

16 **Abstract**

17 The advanced treatment of secondary effluent was conducted in a two-stage deep

18 sequencing constructed wetland (DSCW) which comprised a denitrification chamber

19 (W1) and a nitrification chamber (W2). The results showed that a superior  $\text{NO}_3^-$ -N

20 removal rate was observed in W1 with a C/N ratio of 6.5, and a high  $\text{NH}_4^+$ -N removal

21 rate was obtained when the W2 was operated with 6-h duration of idle. In the long-term

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