Accepted Manuscript

Disinfection of water by adsorption combined with electrochemical treatment

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PII: S0043-1354(14)00083-9

DOI: 10.1016/j.watres.2014.01.043

Reference: WR 10446

To appear in: Water Research

Received Date: 6 August 2013

Revised Date: 20 January 2014

Accepted Date: 22 January 2014

Please cite this article as: Hussain, S.N., De-Las. Heras, N., Asghar, H.M.A., Brown, N.W., Roberts, E.P.L., Disinfection of water by adsorption combined with electrochemical treatment, *Water Research* (2014), doi: 10.1016/j.watres.2014.01.043.

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DISINFECTION OF WATER BY ADSORPTION COMBINED WITH ELECTROCHEMICAL TREATMENT

HIGHLIGHTS:

- Adsorption using a graphite flake adsorbent led to 6.5-log10 reduction in *E. coli*
- Adsorption with electrochemical treatment achieved >8.5 log10 reduction in *E. coli*
- Electrochemical disinfection was achieved in a chloride free environment
- The energy consumption required to achieve >8.5-log10 disinfection was 2 7 kWh m⁻³
- The adsorbent was effectively regenerated by electrochemical treatment enabling reuse

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