

Accepted Manuscript

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PII: S1385-8947(18)31384-6
DOI: <https://doi.org/10.1016/j.cej.2018.07.143>
Reference: CEJ 19541

To appear in: *Chemical Engineering Journal*

Received Date: 13 May 2018
Revised Date: 19 July 2018
Accepted Date: 21 July 2018

Please cite this article as: Y. Zhao, R. Liu, O.W. Awe, Y. Yang, C. Shen, Acceptability of land application of alum-based water treatment residuals – An explicit and comprehensive review, *Chemical Engineering Journal* (2018), doi: <https://doi.org/10.1016/j.cej.2018.07.143>

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Acceptability of land application of alum-based water treatment residuals – An explicit and comprehensive review

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Abstract: The generation of water treatment residuals (WTRs) has long been a dilemma for the water treatment industry. Identifying sustainable final disposal methods of WTRs to replace the current landfilling can provide significant social and environmental benefits. Land use of biosolids is clarified as a Best Practicable Environmental Option through EU, other institutions and regulatory agencies. However, at present, this is not the case for WTRs due to the widely varying characteristics, inconsistent perceptions that no agronomic benefits are realized, and a lack of regulations. The present review is to identify the factors regulating the failure or success of land application of WTRs based on the vast yet non-uniform information extracted from previous studies. Herein, pH and type/quality of soil, pH

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