## Accepted Manuscript



Title: Sorption of arsenate on MgAl and MgFe layered double hydroxides derived from calcined dolomite

Author: Mari Yoshida Paulmanickam Koilraj Xinhong Qiu Tsuyoshi Hirajima Keiko Sasaki

 PII:
 S2213-3437(15)00123-2

 DOI:
 http://dx.doi.org/doi:10.1016/j.jece.2015.05.016

 Reference:
 JECE 656

To appear in:

 Received date:
 25-3-2015

 Accepted date:
 17-5-2015

Please cite this article as: Mari Yoshida, Paulmanickam Koilraj, Xinhong Qiu, Tsuyoshi Hirajima, Keiko Sasaki, Sorption of arsenate on MgAl and MgFe layered double hydroxides derived from calcined dolomite, Journal of Environmental Chemical Engineering http://dx.doi.org/10.1016/j.jece.2015.05.016

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

## 1 Highlights

- 2 > Single phase MgAl and MgFe LDHs were synthesized from calcined dolomite.
- 3 > Calcined dolomite was utilized as Mg source as well as precipitant.
- 4  $\succ$  Sorption density of arsenate was reflected by the exchange capacity of LDHs.
- 5  $\rightarrow$  Highest sorption density and coverage of arsenate was found with Mg<sub>2.3</sub>Al-LDH.
- 6 > Inner surface complexation happens in sorption of arsenate on  $Mg_4Fe-LDH$ .
- 7

Download English Version:

https://daneshyari.com/en/article/10277163

Download Persian Version:

https://daneshyari.com/article/10277163

Daneshyari.com