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Authors: Ting Tang, Zhengbo Yue, Jin Wang, Tianhu Chen, Chengsong Qing



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Goethite promoted biodegradation of 2,4-dinitrophenol under nitrate reduction condition

Ting Tang¹, Zhengbo Yue^{1,2}, Jin Wang¹, Tianhu Chen¹, Chengsong Qing¹

¹School of Resources and Environmental Engineering, Hefei University of Technology, Hefei, Anhui, 230009, China

² CAS Key Laboratory of Urban Pollutant Conversion, University of Science and Technology of China

Corresponding Author:

Zhengbo Yue

E-mail: zbyue@hfut.edu.cn

Tel: 86-551-62901523;

Fax: 86-551-62901524;

Highlights

- Goethite improved the degradation rate of 2,4-DNP under nitrate reduction condition
- Goethite decreased the toxic effect of 2,4-DNP on N₂ production process
- Intermediate product of 2,4-DNP was not detectable when goethite was available
- Goethite enhanced the abundance of nitrate reducing and hydrocarbon degrading microbe

ABSTRACT

Iron oxide may interact with other pollutants in the aquatic environments and further influence their toxicity, transport and fate. The current study was conducted to

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