

[1] 王郑,王同明,朱骏,等.凹凸棒石复合滤料吸附工艺应急处理苯酚污染[J].自然灾害学报,2009,02:155-159.

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凹凸棒石复合滤料吸附工艺应急处理苯酚污

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Title: Trial study on emergency treatment of phenol-polluted water by using ACFM adsorption process

作者: 王郑¹; 王同明²; 朱骏³; 吴伟⁴

1. 南京林业大学土木工程学院, 江苏 南京 210037;
2. 义乌市规划管理处, 浙江 义乌 322000;
3. 扬州自来水总公司, 江苏 扬州 225002;
4. 无锡市排水管理处, 江苏 无锡 214023

Author(s): WANG Zheng¹; WANG Tong-ming²; ZHU Jun³; WU Wei⁴

1. College of Civil Engineering, Nanjing Forestry University, Nanjing 210037, China;
2. Yiwu Construction and Planning Bureau, Yiwu 322000, China;
3. Yangzhou Water Supply General Company, Yangzhou 225002, China;
4. Wuxi Drainage Management Office

关键词: 凹凸棒石复合滤料; 吸附工艺; 应急处理; 苯酚污染

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摘要: 苯酚污染应急处理对于水厂保障城市水质安全具有十分重要的意义。研究中用长江水模拟突发苯酚水污染,利用凹凸棒石复合滤料(ACFM)进行吸附性能试验。结果表明,ACFM对于温度、pH值和反应时间等控制因素要求较低,对苯酚的吸附性能曲线符合弗兰德里希(Freundlich)吸附模式,在苯酚的平衡质量浓度为0.002mg/L时,ACFM对其吸附容量为1.08mg/kg。对突发性的水源水苯酚污染,使用ACFM吸附过滤工艺完全能够达到要求的处理效果,该滤料具有广阔的应用前景。

Abstract: Emergency treatment of phenol pollution water is important for water supply company to ensure water supply safety. This study used imitating abruptphenol water pollution with Changjiang River

water for raw water, then carried through adsorption capability experiment using attapulgite composite filter material (ACFM). The result expresses that the attapulgite composite filter material having low requirement for control factor including temperature, pH value and reaction time. ACFM's phenol adsorbing characteristic curve matches the Freundlich adsorption mode. While the equilibrium mass concentration of phenol being 0.002 mg/L, ACFM's adsorption capacity is 1.08 mg/kg. In a word, for abrupt phenol water pollution, the process of ACFM's adsorption and filtration is an effective process for the emergency treatment. The filter material has wide application prospect.

参考文献/REFERENCES

- [1] 张晓建·加强城市供水应急处理技术和应急系统建设的研究[J].给水排水,2007,33(11):1.
- [2] 王郑,王祝来,荆肇乾·城市应急备用水源及输水通道建设研究-以南京为例[J].自然灾害学.2008,17(4):49-52.
- [3] 江苏省环保厅.2007年度江苏省环境状况公报(全文)[EB/OL].(2008-6-