

DEVELOPMENTS IN RED MUD UTILISATION IN CHINA

Wanchao LIU

Chalco Zhengzhou Non-Ferrous Metals Research Institute Co., Ltd, Jiyuan Rd 82, Zhengzhou, China

wanchao_liu@hotmail.com

Extended Abstract

The disposal and utilisation of bauxite residue is significant in China, which is the biggest alumina producing country. The government and refineries are keeping high attention on the commercial utilisation of red mud. Nationally, there is around 10% of red mud utilised as a resource in China. The red mud were proposed to be divided into 4 kinds based on their chemical and phases compositions. Most of red mud originating from the sintering process is used for building materials production and dam or road construction. Almost all of red mud with high iron content, both from diaspore and gibbsitit bauxite, are treated for iron ore beneficiation. However, the utilisation of Bayer red mud from diaspore bauxite is more challenging. On the hand, most of red mud utilisation technologies are still in research, even failed in application because of economic reasons. Presently, more refineries focus on red mud neutralisation and reclamation of red mud disposal area, because it is a truth that, much more work is required on the utilisation of red mud.

Keywords: Red mud; commercially utilisation; neutralisation; reclamation

