Estimation of the pollution risk induced by the mining wastes of the El Abed mine, Tlemcen, Algeria

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The post-mining, rehabilitation of mine sites and estimation of the risk of pollution caused by mine tailing, is one of the current environmental challenges. It is important to study the risk of pollution in order to reduce, eliminate or even prevent them. The El Abed mine opened in 1952 for the exploitation of Pb-Zn. It is shut down in 2002 without any rehabilitation plan. Our work consists of estimating the pollution risk induced by the El Abed mine basin tailing using kinetic tests (ASTM standards), especially since static tests give neutral to basic pH (absence of acid mine drainage, AMD) in a site where sulfur supply (PbS, ZnS) is substantial. At the end we will discuss some ways of valorization of the contents of the basin tailing.

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