

## عنوان مقاله:

Assessment of water quality due to Wolfram mining in Portugal

## محل انتشار:

مجله معدن و محیط زیست، دوره 1، شماره 2 (سال: 1389)

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## خلاصه مقاله:

Water has an important role in creating pollution problems in the mining regimes influencing the surrounding surface environment. The purpose of this study is to make an assessment of groundwater quality in an underground mine site in Portugal with a view of determining the pollution potential of groundwater. In the corresponding surface area of this underground mine, intersections of four faults form rock blocks which delimit the surface subsidence influencing the flow pattern of the surface streams and the groundwater table resulting in inflow of groundwater and rainwater into mining excavations. When this water comes into contact with the virgin rock mass containing pyrites in presence of atmospheric air, acid mine water is formed. This acidic water reacts with the broken rock material dissolving metallic sulphides into solution and also carrying suspended solids. When discharged in the Boldeh?o River, these waters produce diverse environmental impact levels such as pH low and Zn high levels risk cause for irrigation, pH, Cu, Fe and Mn high level risk for consumption human, and pH, Cu and Zn cause high level for fishes.

## کلمات کلیدی:

Mine water quality, the Boldeh?o River, Panaqueira mine, Wolfram mine

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/369514>

