

Deriving benefits from acid mine drainage

Management and Mitigation of Acid Mine Drainage in South Africa: Input for Mineral Beneficiation in Africa: 320-333

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ABSTRACT:

This chapter reports on the possibility of recovering valuable products (such as drinking water, metals, electricity, pigments and sulphur) from acid mine drainage (AMD) in South Africa. A lot of effort has been put into AMD remediation using different technologies; however, each of the proposed technologies has advantages and disadvantages that tend to limit their use. To compensate for the limitations of the proposed technologies, researchers should focus on AMD remediation, with subsequent recovery of valuable products from such efforts. With 360 Ml/day of AMD being generated from gold mines in South Africa, this issue should not be considered a mining challenge, but rather a resource that could be used as the basis for a new value-added beneficiation industry.