

HEAVY METALS IN THE SURROUNDING WATER AND SEDIMENTS OF TAILING DAM OF SASA MINE

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Discharge of contaminated water associated with the storage of slag flotation in the tailing dam, represent a serious environmental problem that affects both surface and groundwater.

Water and sediments samples were analyzed for heavy metals in the vicinity of the Sasa Mine, along the Kamenicka and Bregalnica rivers flows into the Vardar River. The investigation results showed high concentrations of certain heavy metals (Mn, Zn, Cd, Pb and Cu) in water and sediments that pass or derived from the vicinity of the mine Sasa. The concentrations of this metals are highest near tailing dam of SASA mine. Going to the inflow into the Lake Kalimanci concentration of these metals are reduced to almost clean water and sediments at the exit of the Lake. This may indicate that standing water in the Lake resulted in the sedimentation of the heavy metals.

Keywords: heavy metal, water, sediments