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## INTEGRATED TAILING DAMS MANAGEMENT IN BAIA MARE AREA, ROMANIA

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### Abstract

The paper presents the waste management of tailing dam facilities from Baia Mare area, Romania, an old mining region where the extraction and the processing of gold-silver ore and the complex ore is a tradition. The main characteristic of tailing dam facilities from that area is that they are in the final phase of their life cycle, respectively in the closure, post-closure or conservation phase. This is one of the reasons why implementing the suitable management for those mining facilities represents a challenge, in terms of enhancing the environmental performances and providing economical benefits.

In order to adopt the adequate management techniques, the paper analyses the chemical contents of tailings from the studied facilities, the geological particularities of rocks in that area and the characteristics of the drainage collected in the ditches from the base of tailings dam facilities.

The purpose of mine waste management proposed for the tailing dams of Baia Mare region is to reduce the environmental impact generated by tailing dam facilities and maximize the environmental performances in the region.

*Key words:* ecological rehabilitation, life cycle, mine waste management, monitoring, tailing dams

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