



**“Gheorghe Asachi” Technical University of Iasi, Romania**



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## **NEW STRATEGIES AND ALTERNATIVES FOR CLOSING HISTORIC INDUSTRIAL LANDFILLS. CASE STUDY: COPȘA MICĂ, ROMANIA**

**Voicu-Teodor Muica<sup>1</sup>, Alexandru Ozunu<sup>1,2\*</sup>, Zoltán Török<sup>1</sup>**

<sup>1</sup>*Faculty of Environmental Science and Engineering, Research Institute for Sustainability and Disaster Management  
Based on High Performance Computing, Babeș-Bolyai University, Cluj-Napoca, Romania*

<sup>2</sup>*University of the Free State, DIMTEC, Bloemfontein, South Africa*

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### **Abstract**

Continuous global economic development, necessary to ensure a high standard of living and comfort of human society, has produced and continues to produce enormous pressures on the environment. This was done through consumption of natural raw materials with the risk of depletion, emissions to all environmental factors (water, air, soil) with detrimental consequences on vegetation, fauna, climate change, human health and, last but not least, by massive waste generation. For this reason, the European Union has embarked on an extensive process of changing its policy in the field of environment and economy, based on the principles of the new concept of "Circular Economy". These principles can also be applied to existing historical industrial landfills, which can become important sources of alternative raw materials. One such case is the historical industrial waste landfill of Sometra SA from Copșa Mică, Sibiu County. This paper presents a comparison of three different possible methods for closing the landfill, of which an optimum Closure Project which combines both the legislation in force on waste storage and the legislation in force on waste management is chosen. The presented methods are chosen based on expert analysis by relevant authorities and all interested parties, bearing in mind legislative limitations, requirements as well as economic and social issues. The method selected ultimately brings the most benefits, both in an environmental and economic capacity. In conclusion, we can state that the chosen method could be used as a prime example of the closure of a historical industrial landfill.

*Keywords:* alternative raw materials, Circular Economy, historical industrial landfill, industrial waste, integrated waste management

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\* Author to whom all correspondence should be addressed: e-mail: [alexandru.ozunu@gmail.com](mailto:alexandru.ozunu@gmail.com); [alexandru.ozunu@ubbcluj.ro](mailto:alexandru.ozunu@ubbcluj.ro)