

Bauxite Mine Rehabilitation and Bauxite Residue Management: A Global Perspective

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Abstract

The United Nations expects the global population to reach 11.2 billion by 2100. The shared sustainability challenge is to provide not only basic needs, but to meet expectations for an improving quality of life. Crucially, this progress must be achieved while ensuring the environment remains ecologically and economically viable and able to meet the needs of future generations. Aluminium in its many applications has a vital role to play in successfully addressing this sustainability challenge. By continuously working to minimize environmental impacts and maximize benefits its products offer, the aluminium industry is committed to ensuring that aluminium is part of the solution for a sustainable future. The International Aluminium Institute (IAI) is the global forum of the aluminium industry representing over 60% of bauxite, alumina and aluminium production. The IAI began a program to report on the bauxite mining and rehabilitation activities of the worldwide industry back in the 1990's. For the past seven years, the International Aluminium Institute has been involved in research into the management of bauxite residue. This paper will review the most recent bauxite mine rehabilitation data and best practices of bauxite residue management.

Keywords: Bauxite, mine rehabilitation, bauxite residue, land use, sustainability.

