

Economics of Light Weight Aggregate Production from Fly Ash

Joseph J. Biernacki and Anil K. Vazralla

Tennessee Technological University

Keywords: fly ash, light weight aggregate, process, economics

The economics of production of light weight aggregate for use in portland cement concrete based products has been investigated. Processes involving a wide range of binder systems including phosphate cements, geopolymerization, pozzolanic reaction, alkali activation and sintering were compared. While the economic models are simple, they provide a basis upon which some process decisions can be made as well as provide an indication of the relevant costs associated with each process type.

Submitted for consideration in the World of Coal Ash 2007 Conference, held May 7-10, 2007.