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UNCONFINED COMPRESSIVE STRENGTH OF CEMENT STABILIZED POND ASH

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ABSTRACT

Now a day, ash obtained from thermal power plants can be utilized in the construction of embankments and compacted fills. Ash is a pozzolanic material and its engineering properties can be improved by the addition of cement or lime to it in small quantity. In this study, an effort is made to improve the unconfined compressive strength of Pond Ash deposit by adding cement in it by varying water content in the mix. Ash-Cement mixes were prepared with varying cement content as 3%, 6%, 9%, 12% and 15% for testing unconfined compressive strength. Standard Proctor test was also conducted on the mixes to study Dry density and Optimum moisture content. Results shows that Optimum Moisture Content decreased and Maximum Dry Density increased with increase in cement content in Pond Ash-Cement mixes. The Unconfined Compressive Strength increased with increase in cement content and curing age.

KEYWORDS: Cement, Optimum Moisture, Pozzolanic & Dry Density

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