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DURABILITY OF CEMENT STABILIZED POND ASH

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ABSTRACT

In India, major portion of electricity is produced by burning of coal as a fuel in thermal power plants leaving behind the residue in the forms of Fly ash, bottom ash and Pond ash. Ash utilization for construction of side embankments of roads, rivers and railways after improvement in engineering properties is a good solution to manage the ash. In this study, durability tests were conducted on six mixes of Pond Ash containing 3%, 6%, 9%, 12%, 15% and 18% of cement at 7 and 28 days curing age. It was observed that durability increases with increase in cement content. It was also observed that with increase in curing age, the durability increases. By conducting compaction test, it is clear that Optimum Moisture Content (OMC) decreased and Maximum Dry Density (MDD) increased with increase in cement content.

KEYWORDS: Pond Ash, Durability, Optimum Moisture Content (OMC), Maximum Dry Density (MDD)

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