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***Evaluation of the Effect of Fly Ash on the Hydraulic Properties  
of the Coarse Soils Reinforced by Geotextiles in Earth Dams***

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***Abstract***

***To determine the effect of fly ash on the hydraulics properties of the coarse soils, reinforced by geotextiles in earth dams, various mixtures of fly ash in reinforced sand have been considered and the role of fly ash in flow rate and hydraulics gradients investigated. The results of experiments show with increasing the fly ash ratio in coarse soils, the flow rate decreases significantly and may reach 0.006 of the flow rate in pure sand. Also from the hydraulics view points, the most suitable ratio in the base layer, reinforced by geotextiles, is proposed 20% at most.***

***Key words: Geotextiles, fly ash, earth dam, hydraulics gradient, reinforced sand***