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Analysis of filtration stability of ground and slopes of the filled dam “Vranjaš”

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Key words: filtration stability, stability of slopes, filled dam, GeoStudio

ABSTRACT

The main characteristic of filled dams is their constant contact with water. Since water flows through pores of the porous environment, there is a tendency of rinsing of particles of building material of object and possibility of slipping of slopes due to decreasing of weight caused by action of hydrostatic force. Eventual collapsing of such objects would cause enormous consequences and therefore, their stability must not be endangered. According to previously mentioned, this paper conducted analysis of filtration stability of the ground and slopes of the filled dam “Vranjaš”. Since constructed object is not aligned with the project, comparison of obtained results of analyses for previous two cases was conducted. Software package GeoStudio was used for calculation. It is one of mostly used software programs for such kind of problem.

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