Valorization of dam sediments in the road sector

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Abstract

In environmental geotechnics, the valorization of dredged materials and their use in the realization of certain works of public works is a way more and more explored by researchers in recent years, and therefore constitutes a research axis in harmony with the concept sustainable development. In this modest work, we proposed an experimental program based on the characterization tests of the sediments of the dams in order to solve an environmental and economic problem; therefore, to study the possibility of reusing the sediments in applications, such as road works, foundations, etc. For these reasons, tests of immediate Proctor and CBR were carried out on the sediments alone compared with those on sediments treated with lime and sea water. We show in this study the influence of adding lime and sea water as a corrector both particle size and mechanical to improve these geotechnical state parameters, these optimal characteristics of densification and lift as well than their mechanical resistance classes.