



## **Reduction of soil pollution by using waste of the limestone in the cement industry**

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In the cement manufacturing process (wet) a residue is generated in the flotation process. This builds up causing contamination of soil, groundwater and agricultural land unusable type.

In this study to reduce soil and water pollution 10% of the dose of cement was replaced by waste of origin limestone. Concretes were produced with 3 doses of cement and mechanical strengths of each type of concrete to 7, 28 and 90 days were determined. the results indicate that the characteristics of calcareous residue can replace up to 10% of the dose of cement without significant decreases in strength occurs. It is noted that use of the residue reduces the initial resistance, so that the dose of cement should not be less than 200 kg of cement per m<sup>3</sup>.

The results allow recommends the use of limestone waste since it has been observed decrease in soil and water contamination without prejudice construction material

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