

Contribution to the reuse of mud: study case of Fouma El Gharsa dam (Wilaya of Biskra)

The study of physical and mechanical characteristics was performed in the laboratory, the granulometric study is performed by a laser beam particle size analyser.

The use of the X-ray diffraction analysis enabled studying samples crystallography and semi-quantitative analysis for the determination of the clay minerals. Chips stability study was performed by means of infrared spectroscopy.

By using the atomic absorption spectroscopy, chemical analysis and measurement of the various constituent elements of the mud revealed a high organic matter rate.

The recommendations and proposals are oriented towards the reuse of this mud in the following areas:

- The reuse in the field of agriculture as a fertilizer and the establishment of new agricultural lands in southern Algeria;
- The reuse of the mud in the field of building materials (production of sand-lime bricks, stabilized-earth concrete in the pozzolan-cement mixture).