



## **Physical modification of soil induced by high-pressure water jets in remediation process**

Ciccu R. (1), Bortolussi A. (2), **Grosso B.** (1), Cigagna M. (1), Tronci P. (1)

(1) DIGITA Department of Geoengineering and Environmental Technology of Cagliari's University, (2) CNR National Research Council

Water jet technology is already use in different process of soil remediation. A new approach to the problem takes into consideration the application of high pressure water jets for the implementation of reactive barriers. In that case one of the advantages in the increasing of soil's permeability induced by the jets in a process of fracturing, disaggregating and removing of finer particles of the material. This work deals with the research activity carried out and the result obtained during a study conducted to evaluate the volumes involved in the process as a function of the operative parameters and the physical modification induced by jets action. In conclusion some consideration on the industrial applications and economical appraisal of the method are reported.