CONTRIBUTION TO THE PREDICTION OF COLLAPSE OF THE TRACKS AIRFIELDS BUILT ON SALINE SOILS

M. CHIKHAOUI
Laboratoire Environnement, Eau, Géomécanique et Ouvrages (LEEGO), Faculté de Technologie, Département: génie civil Université Ferhat Abbas Sétif, UFAS, Algérie

Ammar NECHNECH
Laboratoire Environnement, Eau, Géomécanique et Ouvrages (LEEGO), Faculté de génie civil, Université des sciences et de la technologie houari Boumediene, USTHB, Algérie

Smail HADDADI & Khadidja AIT-MOKHTAR
Laboratoire Environnement, Eau, Géomécanique et Ouvrages (LEEGO), Faculté de génie civil, Université des sciences et de la technologie houari Boumediene, USTHB, Algérie
mch_gcg16@yahoo.ca

ABSTRACT

The problem of saline soils for receiving airfield runways remained relatively unexplored until recent years. Consequently, few studies are conducted to characterize the impact of airport operations and aircraft on this soil.

The characterization of the real problems of saline soils, and studying the behavior of their collapse as a result coupled thermal, mechanical and hydraulic,, remain poorly known in geotechnical airport (such as instabilities and collapses of the airfield runways), environmental (insulation household waste and even nuclear) and the study of various risks (drought, instability of underground cavities).

To account for the effect of coupling hydro - thermomechanical in predicting the collapse of saline soils, the proposed solutions for improvement of its grounds such as; the geosynthetic reinforcement, drainage and so on. Can Becomes necessary for the proper design of airfield runways for such a catastrophe averted.

Keywords: Saline soils, sabkha, environmental prediction, airports, runways, hydro coupling - thermomechanical disaster