



## **Evaluation of the aquifer impacted by the landfill of Linares, Mexico**

**H. de León** (1), L. Lizárraga (1), F. Medina (1), J. Návar (2) and V. Yutsis (1)

(1) Facultad de Ciencias de la Tierra /UANL, Linares, México, (2) Facultad de Ciencias Forestales /UANL, Linares, México (hdeleon@mail.uanl.mx, vyutsis@ccr.dsi.uanl.mx, famedina@mail.uanl.mx Fax: 0049-821-2142020)

Solid wastes generated by the population of Linares were deposited in the municipal landfill during the last 21 years. Water quality was analyzed in water samples extracted from several hydraulic wells located near the landfill, as well as in areas where other pollution sources exist (barite deposits, pig farms, septic tanks and latrines). Taking several official norms as a basis the results showed contamination by total and suspended solids, total and fecal coliforms, nitrates and DNAPLs (dense non aqueous phase liquids) such a mercury, barium and arsenic. It was observed that main directions of the ground water influence in the migration of contaminants, determining that the most vulnerable zones are located mainly downward the municipal landfill, in the same orientation that ground water flows.