

"CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD"

Leaching of Mo, Cd, Zn, As and Pb of Fly Ash from Figueira, Paraná Power Plant

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Abstract

Fly ashes are frequently disposed inadequately on soil at thermoelectric power plants proximities, where toxic elements may be leached by the rain, transported to natural water sources and absorbed by plants and animals in soil. Fly ash columns were leached using a solution that simulated an acid rain for one year to evaluate the liberation of As, Cd, Zn, Pb and Mo. The results had showed that some of these elements, such as Mo, As and Cd were leached in amounts that may cause underground water contamination.

Keywords: ash, coal, metal, leaching and thermoelectric.