

CAPACITY OF ABSORPTION OF THE SEDIMENT IN A LANDFILL OF THE VIII REGION. BIO-BIO, CHILE.

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This work has the purpose of investigating the capacity of retention and purification of the sediment (soil) of heavy metals in the leachate (Cd, Cr, Ni, Zn, Pb), coming from the domestic waste in the landfill drain currently working in the VIII Region. We introduced the soil, without altering its natural structure, in a 1 meter long column of glass. Then, we introduced the leach from the top, analyzing the concentration of heavy metals in the liquid and sediments at every 0.25 m of the column. Knowing and understanding the behavior of the well-known components of the leach and the sediment of the column has been the main task of the experiment that has allowed the evaluation of the environmental risk that can cause to groundwater. The results state that the absence of solids in suspension, deeper than 0.25 m, and of heavy metals, shows an accumulation (increase) as Cd and Zn, but in the case of Ni and Pb, the contrary occurs; when Zn increases Pb decreases and vice versa.