

Impact of El-Matrouha Landfill on Oued El-Kebir (North East of Algeria)

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Abstract : The Landfill of El Matrouha is located in El-Tarf town (extreme north east of Algeria), the Landfill is present as a gigantic wild dump. This waste dump occupies an area of over four hectares, tons of rubbish that is sent daily are scattered over kilometers, reaching farmland located west of the town, the landfill is close to a temporary Oued, which supply Oued Guergour the last tributary Oued El Kebir. The landfills are causing serious environmental damage, following the infiltration of leachates, which contribute to the degradation of water quality, in the context of this problem, the purpose of the work is focused on assessing the impact of this landfill on Oued El-Kebir, for this a series of sampling and analysis of the soil and water of this Oued was performed; The results show that the soil collected reveal the sandy texture facilitating infiltration and percolation of leachate from the landfill; the physicochemical analysis of the quality of the river water reveals high levels of sulfates in fact this element is one of the essential constituents of the mineral fraction of the waste presenting a risk of pollution by this element, The recorded values for nutrients are sub-standard, for trace elements analysis shows very low metal load on the river except for lead, which is present at high concentrations exceeding all standard.

Keywords : Algeria, landfill, leachates, Oued El-kebir

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