

Pollution of Lands, Surface and Groundwater with Heavy Metals around the Industrial Complex in Ferronickel

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Abstract: In this work, we analyze elements such as; As, Cd, Cr, Co, Fe, Mn, Ni, Pb dhe Zn, agricultural areas and elements as; As, Cr, Fe, Mn, Ni, and Zn, in surface waters and groundwater. In three soil sampling points; (S₁-Soil, S₂-Soil and S₃-Soil), higher concentration, the maximum value are shown as elements; Fe; 17561.61 mg/kg, Mn; 1035.97 mg/kg, Ni; 129.95 mg/kg and Cr; 180.843 mg/kg, as compared to the elements; Zn; 86.61 mg/kg, Pb; 85.06 mg/kg, Co; 33.83 mg/kg, As; 23.56 mg/kg and Cd; 10.72 mg/kg, to lower values, which are presented in the analyzed samples. While, in three surface water sampling points; (S₁-Surface water, ^{Drain tube} S₂-Surface water and S₃-Surface water), elements such as; Fe; 0.436 mg/dm³, Mn; 0.154 mg/dm³, Zn; 0.078 mg/dm³ and Ni; 0.068 mg/dm³, showed increased values compared with elements; As; 0.018 mg/dm³ and Cr; 0.018 mg/dm³. But, in three sampling points of ground water; (S₁-Groundwater, S₂-Groundwater and S₃-Groundwater), highest concentration shown as elements; Mn; 0.632 mg/dm³ and Fe; 0.282 mg/dm³, compared with the elements as; Zn; 0.042 mg/dm³, Cr; 0.034 mg/dm³, Ni; 0.028 mg/dm³, and As; 0.016 mg/dm³, the results presented in the analyzed samples.

Keywords: *Factory 'New Ferronickel', heavy metals, water, river, land,*

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