
Hazardous Effect of the application of Refinery Wastewater on the environment

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Abstract

Currently wastewater is causing a serious problem in many industrial areas as no proper recycling procedures are implemented. Wastewater from oil refinery in Khartoum produces high amounts of wastewater every daily and many recommendations were suggested e. g. to be used for irrigation of tree planting. In order to study the effect of the wastewater on the environment mainly the soil around the refinery, water samples were collected from the treatment pond in the refinery and soil samples from different sites were taken for quality assessment. The analysis of samples showed presence of high concentration of oil in the water and soil samples. Furthermore, a significant increase in concentration of some minerals was evident. Hence, it is recommended that application of refinery wastewater as irrigation water negatively affected soil quality and might cause soil pollution in the future.

Keywords: Refinery wastewater, soil pollution, wastewater quality